Evidence Note

Our ref	14847/MS/MT
Date	04 May 2017
То	Waverley Local Plan Examination
From	Lichfields on behalf of Waverley Developer Forum

Subject Objectively assessed housing needs in Waverley and West Surrey

1.0 Introduction

- 1.1 This note is prepared by Lichfields on behalf of Wates Developments and to support the examination matters statement of the Waverley Developer Forum. It deals with matters of objectively assessed needs (OAN) and follows the Lichfields 'Review of the West Surrey SHMA' produced in September 2016¹ and submitted as part of representations to the Pre-submission Local Plan.
- 1.2 The purpose of this note is to consider any changes since our previous review and to also provide supplementary evidence on OAN to the examination, based on the initial matters and questions set out by the Inspector (ID-3). Ultimately it sets out Lichfields' conclusion that the appropriate OAN for Waverley is no less than **630 dpa** (11,970 over the plan period 2013-2032) with unmet needs from Woking to be addressed in addition.

2.0 Demographic-led Needs

2.1 The PPG is clear in respect of assessing needs across at the housing market area (HMA) level;

"Local planning authorities should assess their development needs working with the other local authorities in the relevant housing market area ... in line with the duty to cooperate. This is because such needs are rarely constrained precisely by local authority administrative boundaries. (ID 2a-007)

"Needs should be assessed in relation to the relevant functional area, ie housing market area, functional economic area in relation to economic uses... (ID 2a-008)"

"A housing market area ... [reflects] the key functional linkages between places where people live and work... Local planning authorities should work with all the other constituent authorities under the duty to cooperate. (ID 2a-010)

2.2 It also highlights the role of the population and household projections, as the 'starting point for assessing need (ID 2a-015), stating that;

"Wherever possible, local needs assessments should be informed by the latest available information. The National Planning Policy Framework is clear that Local Plans should be kept up-to-date. A meaningful change in the housing situation should be considered in this context, but this does not automatically mean that housing assessments are rendered outdated every time new projections are issued. (ID 2a-016)

¹ The review was produced under Lichfields' previous trading name (Nathaniel Lichfield & Partners / NLP) '

Consistency across the HMA

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- 2.3 The NPPF at para 159 requires local authorities to have "<u>a clear understanding</u> of housing needs in their area" and to do this through "a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries".
- 2.4 Assessment of need across an HMA is highlighted at length in the PPG and is necessary in making robust assessments of need, not least because statistical fluctuations in the population and household projections at a local authority are often levelled out when looking at the HMA. Issues can arise where authorities within a HMA 'pick and mix' different population and/or household projections to underpin their evidence base if sources are inconsistent, this can lead to unmet housing need as lower projections in one authority are often offset by increased projections elsewhere in the HMA. It will also mean a local authority could, logically, not have a "clear understanding" of the needs in their area, conflicting with para 159.
- 2.5 The last assessment of housing need which was produced for the HMA using consistent data and assumptions was the West Surrey SHMA (September 2015) (CD2/02). That SHMA is in front of this examination, and there is not a HMA-wide update to take account of the 2014-based projections. These were available prior to submission of the plan, hence the Council would have been aware of them, however, evidently chose not to update their evidence to take these into account.
- 2.6 We note that the authors of the West Surrey SHMA (GL Hearn) have undertaken an Addendum Update to the West Surrey SHMA for Guildford only². However, this does not form an updated, HMA-wide assessment, and as such it is not clear from that assessment (and there is no suggestion within it) that there is any impact of using different data and assumptions on the concluded needs of Waverley or the HMA overall. It is of note that the Guildford update, despite Guildford's starting point projections increasing, actually concludes on a reduced OAN compared to that in the SHMA; the robustness of this has not has not been reviewed by Lichfields given it is not evidence directed to Waverley. However, one can say that it would be inconsistent with the guidance and with the principle purpose of HMAs to selectively 'update' housing needs assessments for areas within the HMA, especially where that assessment seeks to reduce needs in that specific area. To do so would likely lead to unmet need in the HMA, since the implications across the HMA as a whole have not been assessed on a consistent basis.
- 2.7 The issue of consistency across HMAs was raised by the Inspector into the West Oxfordshire Local Plan. Following the publication of the Oxfordshire-wide SHMA, West Oxfordshire Council commissioned further evidence and attempted to conclude that their housing need was lower than concluded in that SHMA. The Inspector, in his interim findings (December 2015), rejected the Council's attempts to justify a lower number, noting;

"Joint working across an HMA is essential to ensure a reasonably consistent approach and to avoid unintended distortions in the market. In addition, the credibility of the SHMA is the foundation on which much of the current planning work for the rest of Oxfordshire is based. That does not mean it should be beyond criticism, but a Council should be particularly mindful of the wider implications of criticisms and of the reasoning supporting any local adjustments." (para 3.4)

² <u>http://www.guildford.gov.uk/newlocalplan/CHttpHandler.ashx?id=23816&p=0</u>

"The Council's evidence to support its housing requirement has been worked-up independently of its partners in the rest of the HMA without due regard for consistency across the HMA and the potential wider implications of its actions" (para 10.1)

"...The SHMA provides a recommended housing figure for West Oxon ... If... the Council wants to do further work... then it is essential that the methodology is first shared with its partner authorities in the HMA and that the Council considers any concerns raised. The conclusions of the Council's work will also need to be shared and the implications considered..." (para 10.5).

'Meaningful Change'

2.8

Aside from the need to assess needs at a HMA level, the PPG requires that only a 'meaningful change' in the projections should be considered in the context of keeping evidence and plans up-to-date. To assess whether this 'meaningful change' has occurred in West Surrey, a comparison between the two sets of projections is considered below.

The difference between the 2012-based and 2014-based Projections

2.9 The projected change in households in the 2012- and 2014-based projections for the HMA is shown in Table 1. It shows that <u>across the HMA</u>, the difference in household growth between the two projections is 72 per annum (c.5%). Overall, household growth in the 2012-based projections is 18% across the HMA between 2013 and 2033, compared to 17% in the 2014-based projections. On this basis, we do not consider that the new projections show a 'meaningful' change in the position, warranting a full re-assessment of housing need in the HMA, in particular in light of the other factors affecting the OAHN calculation, which are explored below and also as the SHMA uses an adjusted position with the effect of bringing the 2012-based projections closer to the subsequent 2014-based projections (CD2/02 SHMA Table 19 page 61 – household growth of 25,969 over the period).

		2012-bas	ed (househ	olds)	2014-based (households)									
	2013	2013 2033		% Change	Annual Change	2013	2033	Total Change	% Change	Annual Change				
Guildford	55,093	65,304	10,211	19%	511	55,325	66,723	11,398	21%	570				
Waverley	49,835	59,132	9,297	19%	465	49,694	57,246	7,552	15%	378				
Woking	39,839	46,581	6,742	17%	337	39,764	45,631	5,867	15%	293				
НМА	144,767	171,017	26,250	18%	1,313	144,783	169,600	24,817	17%	1,241				

Table 1 2012-based and 2014-based Household Projections for West Surrey HMA

Source: DCLG Live Table 406 - Note: The above show households, which are converted to dwellings by application of a vacancy/second home rate. The 465 households per annum figure for Waverley corresponds with 471 households per annum in the SHMA (following adjustments the SHMA makes) and the 493 dwellings per annum figure concluded as the demographic-led need (CD2/02 Table 20).

Other factors affecting OAN

2.10

Although the PPG notes the importance of assessments being up-to-date, the fact that assessments also take into account a range of factors, aside from projections, has been addressed by Inspectors at numerous examinations who re-iterate the PPG, for example:

• "On 29 May 2014 the Office for National Statistics published its 2012-based Subnational Population Projections for England and I have been urged to revisit the issue of housing numbers. According to national guidance, the starting point for assessing housing need should be the household projections published by the Department for Communities and

Local Government and account may also be taken of, amongst other things, local demographic evidence and the Strategic Housing Market Assessment (SHMA). The population projections are, therefore, only part of the picture and I do not consider that reopening the debate to discuss the population projections would lead to any clear and reliable conclusions regarding objectively assessed need." (IR into the Leeds City Council Core Strategy, para. 11);

"After the close of the Hearings, the 2012-based household projections were published and were the subject of consultation and comment. These new projections start from a base position some 10-14% below the SHMA figures. The advice in PPG is that, although local needs assessments should be informed by the latest available information, housing assessments are not rendered out of date by every new projection – what matters is whether the change is meaningful...In this case the new projections show a lower level of need than that assessed in the SHMA – the new projections suggest a need around 10% lower than previously assessed. However the new projections are based on a different set of population estimates and use different headship rates. Supported by a sound evidence base, the RLP is looking to provide 588 d.p.a, which is above the level indicated in the new projections. But the approach of the RLP is not exclusively based on population data, as it also factors in employment issues, suppression in household formation and market signals. These matters can be reassessed during the RLP review, and do not necessitate any change to the RLP at present." (IR into the Test Valley Council Revised Local Plan paras 40-41).

Other demographic evidence in West Surrey

- 2.11 The West Surrey SHMA looks at alternative migration scenarios which differed from the official projections. These included a long term migration trend scenario (CD2/02 para 4.62) and a London migration trend scenario (CD2/02 para 4.67); these showed the direction of travel for housing needs across the HMA when compared to the official [2012-based] projections was upwards.
- 2.12 In particular, the issue of changing demographic trends with London will play a role in increasing housing need in the area, as highlighted in the Lichfields report 'Review of West Surrey SHMA' (para. 3.5b). Indeed, this scenario was assessed in the West Surrey SHMA but did not influence its conclusions on OAN.
- 2.13 It is important to note that these are <u>not</u> London's unmet needs. Rather, the increase in need across the South East is associated with changes in migration patterns that the Greater London Authority think will happen (as set out in the London SHMA, 2013) as the wider economy improves, leading to more out-migration from London than seen during the recession. This is <u>irrespective</u> of London's capacity for housing, and is a [assumed] demographic change associated with economic factors. The Mayor of London has highlighted these changes to migration patterns to a number of local planning authorities across the South East³, and given the proximity of the HMA to London and the functional linkages it has with the capital, it would be reasonable (indeed necessary) to take this into account when looking at demographic-led needs in West Surrey.
- 2.14 Both of these alternative migration scenarios assessed within the SHMA would suggest the demographic-led needs were higher than that within the 2012-based projection scenario

³ Mayor of London - Responses to Local Plan consultations from outside London - <u>https://www.london.gov.uk/what-we-do/planning/who-we-work/local-plan-responses-within-and-outside-london</u>

ultimately adopted by the SHMA. However, in light of the 2014-based projections, they would lend significant support to the 493dpa scenario being a middling and reasonable assessment of likely demographic change, consistent across the HMA.

Summary

- 2.15 The PPG sets a clear requirement for needs to be considered at a HMA level, and the potential issues created by adopting a 'pick and mix' approach within a HMA have been highlighted by the Inspector into the West Oxfordshire Local Plan. It would be inappropriate, in this case, without consideration of the impacts across the HMA, to uncritically adopt the new projections for Waverley. Whilst they are self-evidently lower on a Waverley specific basis, other migration scenarios in the SHMA provide counterbalancing higher scenarios than that adopted as the starting point for the SHMA. In any case, the PPG only requires 'meaningful change' to be considered; again when looking at the HMA, the change between the projections is in our opinion not meaningful. The Council's current evidence relies upon a HMA-wide SHMA which uses the 2012-based projections and it did not seek to amend this position prior to submission of the Plan and we consider this remains a reasonable position to take in the context of all the evidence.
- 2.16 Inspectors elsewhere have highlighted that assessments do not only take account of the household projections, re-iterating the overall approach set out in the PPG, which requires planmakers to look at other demographic evidence, market signals, employment-led needs and affordable housing. In the case of West Surrey, the Council's evidence shows that alternative demographic scenarios (including one which takes into account additional in-migration from London) would place upward pressure on housing need; to revert to a lower position based solely on the new projections would be contrary to the SHMA's findings and the overall direction of travel of housing needs in the HMA.

3.0 Market Signals

3.1 The PPG sets out a clear two-stepped process to addressing market signals within the calculation of OAN:

1 Firstly, to determine **whether** a market signals uplift is necessary. This is set out in PPG ID2a-019 within the first sub-paragraph as follows:

"Appropriate comparisons of indicators should be made... A worsening trend in any of these indicators will require upward adjustment to planned housing numbers compared to ones based solely on household projections."

2 Secondly, when a market signals uplift is required, to identify **what scale** that should be set at with guidance given that it should be set at a level that could be expected to improve affordability. This is set out in PPG ID2a-019 within the second and third sub-paragraphs as follows:

"In areas where an upward adjustment is required, plan makers should set this adjustment at a level that is reasonable... <u>they should increase planned supply by an</u> <u>amount that</u>, on reasonable assumptions and consistent with principles of sustainable development, <u>could be expected to improve affordability</u>, and monitor the response of the market over the plan period."

3.2 In respect of the evidence underpinning the Waverley local plan, the first step is not in dispute between the Developer Forum and the Council. The SHMA (CD2/O2) assesses the market

signals and concludes that affordability pressures in the West Surrey HMA are "*significant*" (page 115 - key messages), with affordability pressures described as "*severe*" and that an upward adjustment should be applied (para 7.47). It is the second step that is in dispute, and whether the SHMAs response to this can be viewed to be one that "*on reasonable assumptions… could be expected to improve affordability*".

3.3 For clarity, the SHMA's response to market signals in West Surrey is to adjust household formation ('headship') rates for the 25-34 year age band, so that they increase back to their 2001 levels (para 7.53). The outcome of applying this in the SHMA is a c.**7.0%** uplift (+100 dpa) on the SHMA's concluded demographic-led, household projection-based, needs across the West Surrey HMA. In Waverley specifically, this is only a **5.3%** uplift (+26 dpa annum). Lichfields disagree with the way the SHMA has applied this as a market signals uplift, as set out in our original review (paras 3.20-3.24). Whilst it is considered these criticisms still apply, given the Inspectors initial note in his matters and issues (ID-3), we have focussed on providing evidence on what a combined scale of OAN uplift to improve affordability in Waverley and the HMA would be.

The principle of market signals uplift to improve affordability

- 3.4 The purpose of a market signals uplift is to ensure the Government's housing aims (as expressed in the NPPF) are met and to ensure this is reflected in assessments of need by making "upward adjustment to planned housing numbers compared to ones based solely on household projections" (PPG ID2a-020) where market signals indicate such an adjustment is necessary. The principle of providing 'more' than 'unvarnished' household projections in England has long been established through successive assessments of the country's problems with lack of housing supply.
- 3.5 A literature review of these assessments is included at **Appendix 1**. They demonstrate, over a sustained period, a consensus over the need to increase supply above household projections to deliver improvements in housing affordability. This has continued to underpin successive Governments' approach to assessing housing need, including within the PPG and more recently as recognised within the Housing White Paper. Across these reports, the evidence would suggest that at the national level an uplift of between **20.9% and 44.2%** above the number of homes implied by household projections alone would be necessary to deliver improvements in affordability.
- 3.6 Under the current planning system, achieving a national outcome for housing supply is the product of implementing a large number of individual local plans. As such it is fundamentally necessary to link any local strategies to the overarching national principles which are driving Government policy (i.e. 'think global, act local'). Each area will have its role to play in contributing towards the Government's aims; some more than others, based on their circumstances. This is explicitly acknowledged in the SHMA by GL Hearn (CD2/02 key messages, page 115 bullet point 3).
- 3.7 It is acknowledged that housing supply is but one factor influencing the affordability of housing (availability of credit and household incomes being two other key influencers), but the role of the planning system in increasing supply to achieve this is clearly an important lever available to government, and one that it seeks to apply through PPG-compliant assessments of OAN.
- 3.8 Whilst the above places the market signals uplift within the national context, how this overarching principle, is applied to local evidence in Waverley and West Surrey is considered below.

How do we define an improvement in affordability?

- 3.9 The PPG states that the ratio between lower quartile house prices and the lower quartile income or earnings can be used to measure affordability and this is the metric around which we have focused our analysis in this paper. Although the PPG (ID: 2a-020) sets out that plan maker should *"increase planned supply by an amount that... could be expected to improve affordability"*, the reference case for that improvement is not stated. The PPG (ID2a-003) requires that the assessment of need *"should be proportionate and does not require local councils to consider purely hypothetical future scenarios, only future scenarios that could be reasonably expected to occur."* In this regard, any improvement to affordability should be one that is reasonably expected to occur.
- 3.10 Measuring improvements in affordability should make reference not only to *current* levels of affordability but also to any forecast *change* in affordability were housing supply to progress at a level consistent with official projections. This must be set in the context that the lower quartile affordability ratio in Waverley was 15.54 in 2016, a significant increase on recent years (see most recent data released March 2017 in **Appendix 2**).
- 3.11 The Office for Budget Responsibility (OBR) produces forecasts of both house prices and wages and analysis on the inter-relationship between the two factors⁴. We present analysis later in this note (and at **Appendix 3**) which applies these assumptions to Waverley; this forecasts that if housing supply increased at the level proposed in submission local plan (i.e. at 571 dpa over the remainder of the plan period from 2016, accounting for completions in the first three years 2013-15), the affordability ratio would worsen to around 16.6 by the end of the plan period in 2032.
- 3.12 On this basis, we consider that, any increase in planned supply (as required by the PPG⁵) should as a minimum be such as to stabilise, and preferably improve given it is above the rest of the HMA, the current affordability ratio in Waverley (15.54). Even stabilising the affordability ratio at the current level would represent a better outcome than the reference case of continued worsening affordability in the District. This is a goal that was recognised by the NHPAU in its work and by the House of Lords Select Committee on Economic Affairs⁶ both of which we review in **Appendix 1**.

An evidence based market signals uplift for Waverley and West Surrey

- 3.13 There are numerous methodological approaches that can be adopted in seeking to quantify an appropriate market signals uplift for Waverley based on local evidence of affordability and market signals in the District and the HMA. The PPG does not set out a single definitive approach. Indeed, it suggests (ID: 2a-020) that the approach is one where having established that an uplift is required:
 - 1 the adjustment should be one that is reasonable;
 - 2 The scale of adjustment should be related to the relative scale of affordability constraints and other indicators of high demand. The greater the improvement in affordability needed, the larger should be the additional supply response;

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⁶ 'Building more homes' 1st Report of Session 2016–17 (15 July 2016) House of Lords Select Committee on Economic Affairs (HL Paper 20) - paragraphs 81 and 84

http://www.publications.parliament.uk/pa/ld201617/ldselect/ldeconaf/20/20.pdf

⁴ 'Working paper No.6: Forecasting house prices' (July 2014) Office for Budgetary Responsibility, Toby Auterson (paragraph 3.12) - <u>http://budgetresponsibility.org.uk/docs/dlm_uploads/WPo6-final-v2.pdf</u>

 $^{^5}$ ID 2a- paragraph 20 $3^{\rm rd}$ sub-paragraph

- 3 Plan makers should not attempt to estimate the precise impact of an increase in housing supply;
- 4 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;
- 5 They should then monitor the response of the market over the plan period.
- 3.14 On the most simple basis, applying the scale of uplifts identified as required to address affordability at the national level of between 20.9% and 44.2% would indicate a housing supply requirement of between 596 and 711 dpa in Waverley (based on the SHMAs 493 dpa starting point) and between 1,633 and 1,948 dpa across the HMA (SHMAs 1,351 dpa starting point). Naturally, such an approach assumes other Local Plans would also make appropriate adjustments for their market signals in accordance with Government policy.⁷
- 3.15 However, it is also clear that we need to look at the circumstances of Waverley in identifying an appropriate scale of uplift, given the greater problems of affordability in that district. We have therefore looked at a range of alternative approaches at the local level, and then draw these together to arrive at a conclusion as to the appropriate uplift.

1. OBR house price forecast and University of Reading model

3.16 The Office for Budget Responsibility (OBR) produced Working paper No.6 Forecasting house prices in July 2014⁸. The report identifies the following with regards to future average earnings growth and median house price growth (the components of an affordability ratio) in paragraph 3.12:

"Using some long-run assumptions for real income growth (2.2 per cent a year, including growth in the number of households of 1 per cent a year) and housing supply (keeping pace with the number of households), and assuming the housing discount rate and wage share variable are stationary, the model predicts around 3.3 per cent real house price growth a year in steady state. In addition, assuming consumer price inflation in line with the Bank of England's 2 per cent target implies 5.3 per cent a year nominal house price growth in steady state."

- 3.17 The University of Reading's affordability model, as set out previously, found a high price elasticity (-2.0) in relation to increases in stock at regional level in England, implying in effect that for every 1% increase in supply, relative prices would be expected to fall by 2%.
- 3.18 Based on the analysis contained in the above two reports, affordability calculations undertaken by Lichfields for Waverley District (See Appendix 3) would suggest that 809 dpa are needed over the plan period in order to maintain an affordability ratio of 15.54 by 2032, all other things being equal. By comparison, provision of 519 dpa would, all other things being equal, lead to the lower quartile affordability ratio increasing to 18.40 by 2032. Delivery of 809dpa would represent an uplift of 64.1% above the baseline demographic starting point of 493dpa.

 ⁷ Evidence later in this document (and at Appendix 3) suggests this is now taking place across many SHMAs.
 ⁸ 'Working paper No.6: Forecasting house prices' (July 2014) Office for Budgetary Responsibility, Toby Auterson - <u>http://budgetresponsibility.org.uk/docs/dlm_uploads/WP06-final-v2.pdf</u>

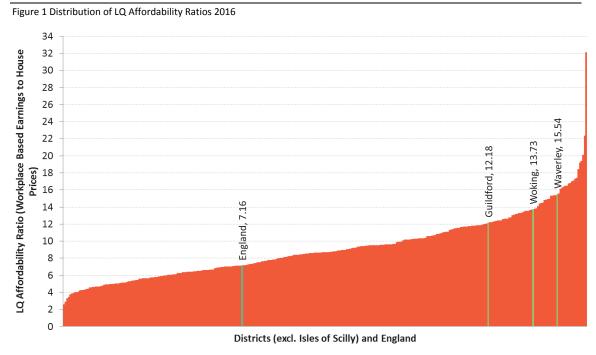
- 3.19 There has been some significant degree of economic change since July 2014. Updating the model to account for the OBR's March 2017 economic outlook⁹ would indicate average house price growth of 4.80% per annum and average wage growth of 4.34% per annum over the period to 2022 (the horizon of OBR's economic outlook). This is a narrowing between the two in comparison to OBR's 2014 paper. Applying this assumption over the plan period to 2032 would indicate **635dpa**, equivalent to an uplift of **28.8%** against the SHMAs starting point, would necessary to hold the affordability ratio constant at 15.54 over the plan period. Using this approach, self-evidently, reducing the ratio below 15.54 would necessitate an even greater scale of delivery. This OBR based modelling is independent of the demographics/household projection based estimates, and therefore the 635+ dpa conclusion remains relevant even if a different view on demographic projections were arrived at; it is the scale of delivery, that on this basis, 'could be expected to improve affordability'.
- 3.20 Even then, it should be noted the above modelling assumes a price elasticity of -2.0 which could be seen as cautious. Recent research by Regeneris¹⁰ indicates that at a Local Authority level a price elasticity of -1.0 is more appropriate (1% increase in supply brings about 1% fall in price) and better reflects factors at the local authority level (paras 4.19-4.22). However, this would involve taking a different view to the OBR position.

2. Mid Sussex weighted apportionment of national needs

3.21 Waverley is relatively worse in respect of affordability than the national equivalent, with a lower quartile affordability ratio of 15.54 compared with 7.16 nationally. All other things being equal, to improve affordability across the Country, Waverley, and its housing market area peers, would need to make a proportionately greater uplift than those where affordability issues are less acute. If we accept the national position set out above - that the minimum national level of delivery required is c.250,000 dpa (e.g. as in the July 2016 House of Lords Select Committee report – see paragraph 81) - then this would imply a 35,000 dwelling uplift above the 2012-based and 2014-based household projections (both at c.215k dpa). We can then consider how this required uplift should be shared between 320+ Local Planning Authorities across the country in order to seek to hold the affordability ratio (at least at a national level) constant. In doing so, we broadly adopt a localised version of the approach adopted by the NHPAU as summarised in Appendix 1.

⁹ Economic and fiscal outlook (March 2017) Office for Budgetary Responsibility -<u>http://cdn.budgetresponsibility.org.uk/March2017EFO-231.pdf</u>

¹⁰ Why supply matters: the elasticity of house prices at a local level (January 2016) Regeneris Consulting - <u>https://drive.google.com/file/d/0B3JZDh2pal1PaVJncno2dU92Tk0/view</u>



Source: ONS

3.22

We have modelled three alternative scenarios for market signals uplifts across the country, with outcomes as follows:

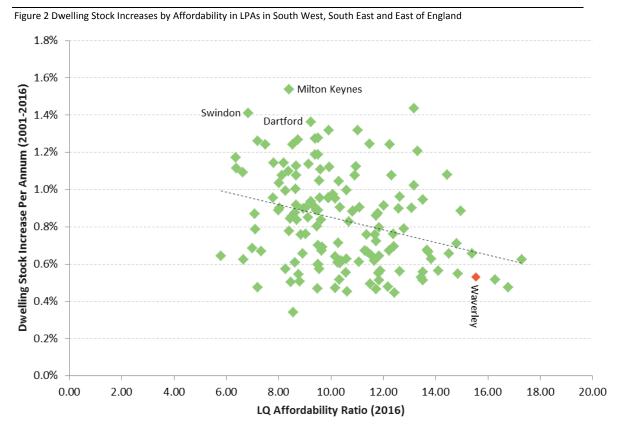
- Each district with an affordability ratio above the national ratio makes a market signals uplift in proportion to its difference with the national figure this would see Waverley address 1.00% of the overall 35,000 dwelling uplift, equating to 349 dpa and a 50.5% uplift on the starting point. Similarly Guildford would address 0.6% or 209 dpa (a 40.4% uplift) and Woking 0.78% or 274 dpa (an 80.3% uplift). This would be equivalent to a 61.6% uplift across the HMA;
- Each district with an affordability ratio above the national ratio makes a market signals uplift in proportion to its difference with the national figure (weighted 50%) and its projected household growth (weighted 50%) this would see Waverley address 155 dpa of the overall amount (0.59%), equating to a 31.4% uplift. Similarly Guildford would address 134 dpa (a 25.9% uplift) and Woking 99 dpa (a 29.0% uplift). This would be equivalent to a 28.7% uplift across the HMA; and
- Every district (whether above or below the national ratio) makes a market signals uplift in proportion to its difference with the lowest affordability ratio, Copeland at 2.6, (weighted 50%) and its projected household growth (weighted 50%) this would see Waverley address 109 dpa of the overall amount, equating to a 22.1% uplift. Similarly Guildford would address 115 dpa (a 22.2% uplift) and Woking 76 dpa (a 22.3% uplift). This would be equivalent to a 22.2% uplift across the HMA.
- 3.23 Given a) is simply weighted by the affordability ratio, and takes no account of the baseline scale of growth anticipated in the district, it is considered that using the approach indicated at b) and c) would better reflect the scale of uplift that, when adopted in LPAs across the country, could provide sufficient housing to hold the affordability ratio steady in each location. This would suggest an uplift of between **22%** and **31%** for Waverley and **22%** and **29%** for the HMA as a whole.

3. Benchmarking stock increases

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Waverley has historically delivered very modest growth in its stock of homes in comparison to other authorities in the South and East of England. It is notable that Waverley, with completions at around 0.53% of stock annually over the period 2001-2016, is below the majority of other areas. Even at the proposed housing requirement, of 519 dwellings per annum, this would reflect growth of c.1.0% per annum, below what many other areas have achieved, even during a period including recession.



Source: Dwelling Stock Increases from CLG Live Table 125, LQ Affordability Ratio from ONS Affordability Ratio series

- 3.25 As illustrated in Figure 2, areas including, Milton Keynes, Swindon and Dartford have all delivered new housing at a rate of up to 1.5% of stock per annum (and in some cases, more if looking at the period pre-recession), and see generally lower affordability ratios. On a comparative basis, this analysis demonstrates that, all else being equal, a greater growth rate in housing stock could help to moderate affordability pressures (albeit clearly it is not the only factor).
- 3.26 If Waverley were to increase rates of delivery to 1.2%-1.4% of stock per annum, as seen in numerous locations elsewhere, this would be equivalent to a delivery rate of 630-735dpa (against a 2016 dwelling stock of 52,490 as per CLG Live Table 125). At the lower end this represents an uplift of **27.8%** on the starting point of 493dpa and could be seen to be a level of stock increase which could reasonably be expected to moderate increases in affordability to levels seen in those more affordable comparator locations where housing stock has been growing at such a rate.

4. Benchmarking market signal uplifts elsewhere

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- 3.27 As set out in Lichfields' previous review, it is considered that benchmarking Waverley against market signal uplifts applied elsewhere in the Country is a relevant and helpful indicator of the scale of market signals uplift considered reasonable against the PPG. This is done in respect of Canterbury and Eastleigh at Table 3.2 of the Lichfields review, both being locations where Inspectors have used flat rate uplifts for considering market signals adjustments. At **Appendix 3** we set out a table of where Market Signal uplifts are being applied either through current SHMAs or in Inspector's findings on Local Plans. Whilst the position is varied, it does on a general basis confirm two principles:
 - 1 that such percentage rate adjustments are being applied in numerous authorities across the Country reflecting the guidance in the PPG; and
 - 2 that broadly the more acute the affordability problem (as indicated by the affordability ratio) the greater the adjustment that SHMA consultants, Councils and Inspectors are applying.
- 3.28 On a linear extrapolation of these uplifts, Waverley at a lower quartile affordability ratio of 15.54 would correspond with a market signals uplift in excess of that applied in any comparable location, i.e. of 25%+ (see graph at Appendix 3). Under such an approach, it was Lichfields judgement, as set out in our review, that a minimum 20% uplift for Waverley would be the most appropriate response to market signals in the District (see para 3.28) and that this should be applied sequentially with the headship adjustment; i.e. a combined market signals and household formation adjustment of **26.4%** to the SHMAs starting point. This continues to fit appropriately with how uplifts are being applied elsewhere in the country, and would also begin to bring the Waverley concluded need to a level of uplift above the demographic baseline similar to that applied in Guildford and Woking (albeit in those parts of the HMA for different reasons).

Bringing the market signals evidence together

- 3.29 Bringing the range of techniques and evidence together, Table 2 illustrates the range of potential 'market signals' applicable based on national and locally specific evidence. The median estimate of uplift across all the approaches is 27.1%, and there is a clear clustering of uplifts between 25% and 30%, with six of the nine approaches pointing towards that level of market signals uplift as the minimum necessary to improve affordability in Waverley.¹¹
- 3.30 In particular, our affordability modelling specifically for Waverley, based on OBR assumptions, suggests that delivery of the housing requirement at 519dpa will be associated with a further deterioration in the lower quartile affordability ratio from 15.54 to as high as 18.40 over the plan period. Against that reference case, it is considered that a market signals uplift would need to be one that delivers dwellings in excess of 635 dpa, in order to deliver an improvement affordability over the plan period. That level of growth remains necessary independent of any conclusions on other aspects of the OAN calculation. In simple terms, an increase in excess of c.29% on the SHMAs demographic starting point would be needed to reduce the house price to earnings affordability ratio below its current level. It should, therefore, be viewed as a minimum against a reference point of the SHMAs 493dpa starting point.

¹¹ As a point of note, notwithstanding our criticisms of the SHMA approach, our analysis and conclusion is presented agnostic of whether the market signals uplift is applied sequentially with a headship rate adjustment (as we consider it should in the context of the PPG) or in a combined manner being one and the same (as the SHMA has done); our conclusions have focused on the scale of supply/delivery likely necessary in Waverley to address/improve affordability across all demographics.

Approach/Source	-	verley Supply ure	Uplift & HMA Supply Figure				
	Uplift to baseline 493dpa (%)	Implied supply (dpa)	Uplift to baseline 1,315dpa (%)	Implied supply (dpa) before other uplifts (+275)			
National Based							
Barker Review increase on households	20.9%	596	20.9%	1,590			
NHPAU Supply Range	25.6%	619	25.6%	1,652			
Bramley & Watkins	25%	616	25%	1,644			
House of Lords Select Committee	39.5%	688	39.5%	1,834			
Redfern Review	44.2%	711	44.2%	1,896			
Local Based							
OBR based affordability modelling	28.8%	635	~	~			
Weighted apportionment of national uplift	22.1%-31.4%	602-648	22.2%-28.7%	1,607-1,692			
Benchmarking stock increases (1.2% p.a.)	27.8%	630	38.4%	1,820			
Benchmarking market signal uplifts	26.4%	623	27.6%	1,678			

Table 2 Synthesis of Market Signals Analysis

3.31 Based on the above, it continues to be our judgement and conclusion that the uplift for market signals is fully justified at a level which would bring supply up to a level of **c.625-635dpa** and that, based on the evidence, that would be the minimum level that is commensurate with stabilising the affordability ratio at the current level and delivering improvements over the reference case.

4.0 Employment

- 4.1 The PPG sets out, under the header "how should employment trends be taken into account?", that "Plan makers should make an assessment of the likely change in job numbers based on past trends and/or economic forecasts..." (ID2a-018).
- 4.2 As set out in Lichfields original review submitted to the pre-submission consultation (paras 3.7-3.15), it is considered that the SHMA is defective in the way that it incorporates economic growth and alignment into the assessment of housing needs, in particular:
 - 1 Opting to not use an economic forecast for Waverley as the basis for considering job growth (SHMA Scenario 1: Experian based scenario March 2015 of 8,640 jobs 2013-2033) despite opting to use economic forecasts as the basis for the assessment in the other two authorities in the HMA, presenting an apparent internal inconsistency in approach within the SHMA; and
 - Placing an overreliance on 'Scenario 3' (1,690 jobs 2013-2033), which is derived from a trend-based scenario (Scenario 2, 2,050 jobs 2013-33), but down-rated to purportedly better align with the Waverley Economic Strategy, this clearly being an application of constraint (or policy) to the likely change in job numbers based on past trends and/or economic forecasts.

- 4.3 Lichfields continue to consider the criticisms of the SHMA made in this respect apply and consider there is no robust rationale for using either Scenario 3 or Scenario 2, in preference to, and at the exclusion of, Scenario 1 drawing upon established economic forecasts.
- 4.4 We note in this respect the separate representations of RPS (also advising the developer forum) on behalf of Thakeham Homes to the submission consultation. Their report uses a combination of up-to-date economic forecasts from three leading forecasting houses, arriving at an economic forecast-based job growth estimate of 10,070dpa. When modelled, using OBR projections of economic activity rate change, this level of job growth would be aligned with a housing requirement of 625dpa. Lichfields consider this analysis provides an indication of the scale of upward pressure over the SHMAs conclusion (519dpa) that properly addressing economic alignment would have.

5.0 Affordable housing needs

5.1 In line with the NPPF (para 47, 159), Local Planning Authorities should;

"...use their evidence based to ensure their Local Plan meets the full, objectively assessed needs for market and affordable housing..."

"Local Planning Authorities should...prepare a SHMA which...addresses the need for all types of housing, including affordable."

5.2 The PPG sets out an approach to identifying affordable housing needs (ID 2a-022 to ID 2a-029), and states that total affordable housing need should be;

"...considered in the context of its likely delivery as a proportion of mixed market and affordable housing developments...an increase in the total housing figures included in the plan should be considered where it could help deliver the required number of affordable homes."

Affordable needs in the HMA

- 5.3 Table 46 of the West Surrey SHMA identifies a need for 314 affordable dwellings per annum in Waverley, and 1,144 affordable dpa in the HMA overall. The Lichfields 'Review of the West Surrey SHMA' sets out (at para 3.35) why this should be regarded as a minimum, particularly given the assumptions around income that it is based on.
- 5.4 The PPG requires an assessment of its likely delivery to consider whether there is a need to uplift or adjust the OAN and planned housing supply in order to address affordable housing needs. The SHMA identified that at a delivery of 35%, affordable housing needs would (for Waverley) generate a total need for 897 dpa. However, Policy AHN1 of the Submission Local Plan states that the Council will seek a minimum of 30% provision of affordable housing. At 30% delivery, a total of **1,047 dpa** would be needed to meet affordable housing needs in full.

An appropriate uplift to address affordable needs

5.5 The West Surrey SHMA does not incorporate its findings in respect of affordable housing needs into the conclusion on OAN in any meaningful way. It considers that to meet full affordable housing needs would be unrealistic (CD2/02 para 6.62), that there are other ways in which to address needs (CD2/02 para 6.63-65) and does not make reference to affordable housing needs in its conclusion on OAN (CD2/02 para 10.36 onwards). The Lichfields 'Review of the West Surrey SHMA' sets out (at paras 3.42-57) a detailed criticism of the SHMA's approach, and those points continue to stand.

- 5.6 However, overall it is necessary to consider what influence affordable housing needs should have on OAN. Taking into account affordable need within the calculation of OAN does not necessarily involve a mechanistic uplift, or an indication that such identified needs must be met in full. It has to be a scenario which, on a reasonable basis, could be expected to occur. This is set out in the "Kings Lynn" judgment, which is set out in detail in the Lichfields report (para 3.38). In summary, the judgment states that affordable housing needs (para 36) "should have an important influence increasing the derived FOAN since they are significant factors in providing for housing needs within an area." (our emphasis) This is clear that affordable housing needs are a substantive and highly material driver of any conclusion on full OAN.
- 5.7 The fact that the SHMA omits any reference to affordable housing needs in its conclusion, despite acknowledging the scale of these needs is ultimately contrary to King's Lynn. The scale of affordable housing needs in Waverley provide further and supporting justification for the uplift to the demographic-led needs for economic factors and for market signals, as set out above.

6.0 Unmet housing needs in the HMA

- 6.1 The NPPF sets out (para 47) that Local Planning Authorities should "use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area" (our emphasis). This is amplified in the plan-making tests of soundness within the NPPF (para 182) which identifies "the plan should be prepared based on a strategy which seeks to meet objectively assessed development and infrastructure requirements, including unmet requirements from neighbouring authorities..." The starting point for considering the housing market area would be met. This is also lent weight through recent judgments in the courts, including St Modwen vs SoS CLG and East Riding of Yorkshire Council¹² which sets out (para 77): "The aim is to assess housing needs fully and objectively, and the needs are those of the market area and not those of the district council's area. The NPPF would read very differently if "housing market areas" was another phrase for planning authority areas, as it could so easily have said had that been intended."
- 6.2 The SHMA identifies a concluded OAN for the HMA of 1,729dpa. For the reasons set out above in respect of Waverley, we consider this is an underestimate and not the product of a robust assessment in line with the requirements of the NPPF and PPG. Notwithstanding, and noting that Guildford is seeking only to meet its own OAN, recently reduced to 654dpa (from 693dpa) through the Guildford focussed SHMA update (April 2017)¹³, there remains a significant element of unmet need within the HMA within Woking. Woking's adopted Core Strategy plans for 292dpa to 2027, against an OAN within the SHMA of 517 dpa (an unmet need of 225 dpa or **3,150 homes** total over the 14 years which the respective plan periods overlap for; 2013-2033 for Waverley and to 2027 for Woking).
- 6.3 This unmet need appears to be fully acknowledged by Waverley Borough Council. The Council's 'Statement of Compliance with the Duty to Co-operate' (CD1/19) at para 4.23 acknowledges in respect of Woking's adopted Core Strategy that *"That Plan seeks to deliver 292 homes per annum. That is less than the current identified OAN and the OAN identified in the SHMA that existed at the time."* It goes on to state at para 4.25 that Waverley Borough Council does not

¹² St Modwen Developments Ltd vs (1) Secretary of State for Communities and Local Government and (2) East Riding of Yorkshire Council [2016] EWHC 968 (Admin) - CO/3653/2015

¹³ See Guildford Proposed Submission Local Plan (Reg 19) consultation: <u>http://www.guildford.gov.uk/newlocalplan/proposedsubmission</u>

consider it can sustainably accommodate the unmet needs nor has the Council been formally asked to do so by Woking.

- 6.4 Woking Borough Council most recently (January-February 2017) consulted upon their 'Site Allocations DPD' which is primarily directed at delivering the 292dpa adopted housing requirement. However, this has included undertaking a Green Belt review, with Woking Borough Council consulting on options to amend Green Belt boundaries and remove land with capacity for c.1,200 homes from the Green Belt (from options totalling c. 2,400 homes), but to remain as unallocated 'safeguarded' land to meet ongoing housing needs beyond Woking's current plan period. These consultations on the Site Allocations DPD¹⁴ make clear from Woking Borough Council's perspective that the purpose of that safeguarded land is not to meet any unmet need now, but to ensure Green Belt boundaries can endure beyond the plan period¹⁵.
- 6.5 Within the two step process envisioned by the NPPF, to firstly define OAN in the housing market area and then secondly seek to meet it unless the adverse impacts would significantly and demonstrably outweigh the benefits, we continue to consider the starting point for considering a housing requirement in Waverley must be an OAN that includes properly addressing the unmet needs that exist in the HMA. As such, the OAN for Waverley consistent with meeting housing needs across the HMA, would need to be a figure that fully reflected and addressed the 225dpa unmet need associated with Woking. Any concluded figure that excluded those unmet needs would not be consistent with the requirement of paragraph 182 of the Framework.
- 6.6 Even were Woking's proposed 1,200 homes 'safeguarded land' to come forward in this plan period to meet current needs (which is not the currently advanced or evidenced position), it would still leave a significant shortfall, of 1,950 dwellings¹⁶, equivalent to 98 dpa, to be addressed by Waverley – a Borough which is unconstrained by those constraints listed in NPPF footnote 9 relative to Woking.
- 6.7 The above should be seen as a minimum position as it is predicated upon the OAN set forth in the SHMA being robust for Woking. In our view it contains many of the same flaws, particularly in respect of market signals and affordable housing needs, as within Waverley, and therefore the unmet need to address could well be greater.

7.0 Summary and conclusions

- 7.1 Drawing together the above, we conclude that the full OAN for Waverley can be no less than 630dpa plus 225dpa unmet needs for the HMA. This is based upon the following, which provides a summary of our approach, addressing the fundamental defects within the SHMA:
 - 1 **Demographic-led needs** the SHMA uses a starting point of 493 dpa based on the 2012-based projections, uplifting this for 'improving affordability' by way of headship rate adjustments to give a figure (and full OAN) of 519 dpa. Across the HMA, the starting point is 1,351 dpa, albeit the headship rate adjustments are (unlike in Waverley) applied to an economic-led scenario.

¹⁴ <u>http://www.woking2027.info/allocations</u>

¹⁵ See for example paras 2.1-2.11 in Woking 'Draft Site Allocations Development Plan Document Response to key issues and matters submitted during the Regulation 18 consultation'

http://www.woking2027.info/allocations/responsereg18/issuesmatters.pdf

¹⁶ 3,150 unmet needs 2013-2027 (the overlapping plan period) less the 1,200 that would under this hypothetical scenario come forward.

Consistency is key when assessing demographic-led needs across a HMA – in this case the SHMA represents the most recent HMA-wide position on needs, and the Council has not sought to update this in light of the new projections. In any case, the PPG is clear that 'meaningful change' should be considered – growth across the HMA has only been slightly reduced, and as such does not constitute a 'meaningful change', triggering the need to update the evidence. A range of other evidence, including the two alternative migration scenarios considered in the SHMA, lend weight to adopting **493dpa** as an appropriate demographic-led need for Waverley.

- 2 **Market signals** A market signals uplift is necessary in Waverley and across the housing market area in order to address poor and worsening market signals, including severe affordability problems in Waverley, where the ratio of lower quartile house prices to lower quarter earnings are 15.54. Lichfields has brought together a range of evidence demonstrating what scale of market signals uplift could reasonably be expected to improve affordability in Waverley. This has included a wide-ranging review of evidence at the national level as well as bespoke modelling of affordability at the local level based on an OBR derived methodology and assumptions. The conclusion arrived at is that an uplift to **c.625-635dpa** would be necessary to improve affordability in Waverley, equivalent to a c.27%-29% uplift on the demographic-led need of 493dpa compared to the 5.3% applied in the SHMA.
- 3 **Employment alignment** The OAN should seek to ensure alignment with potential economic growth and job change. The job growth scenarios relied upon by the SHMA are unduly low, and clearly reflect the application of constraint to the economy. We do not consider this is robust and note alternative work by RPS which we have reviewed and would suggest economic alignment at **625dpa**.
- 4 Affordable housing needs the SHMA identifies a substantial need for affordable housing in Waverley and the HMA; 314 and 1,144 affordable dwellings per annum respectively. However, for Waverley, the delivery assumed in the SHMA is higher than in the Submission Local Plan, meaning that the SHMA under-estimates the true level of total overall delivery required to meet affordable housing needs in full. We consider this is 1,047 dpa. Notwithstanding, the SHMA makes no reference to affordable housing needs' influence on OAN, despite the High Court establishing that they should have a 'strong influence'. The PPG is not prescriptive on how any uplift should be made, however given market signals and employment alignment suggest a significant uplift on demographic-led needs in Waverley is necessary, the need for affordable housing provides further justification for an uplift of such a scale, which would also deliver greater levels of affordable housing.
- 5 **Concluded OAN for Waverley** Overall and drawing together the above, the market signals evidence and employment alignment scenario would both suggest a housing need of **c.630dpa**. This would also secure an increase in the delivery of affordable housing needs, ensuring the concluded OAN properly responds and addresses the acute scale of affordable housing needs the area faces.
- 7.2 Whilst the above concludes on an overall OAN for Waverley of 630 dpa over the plan period 2013-2032, we consider that in addition Waverley should be seeking to meet the evidenced 225 dpa unmet need from the rest of the HMA. This would suggest an overall OAN consistent with meeting needs across the HMA would total c.850 dwellings per annum in Waverley. Whilst this assessment of housing need only provides the first step, it is this scale of housing delivery which Waverley need to be applying within the tilted balancing exercise required by paragraph 14 of

the framework; to meet those needs unless the adverse impacts of doing so would significantly and demonstrably outweigh the benefits.

Appendices

Appendix 1: The evidential basis for a market signals uplift to improve affordability Appendix 2: ONS lower quartile affordability ratio data Appendix 3: OBR based affordability forecasting for Waverley Appendix 4: Market signals uplifts applied in other locations

Appendix 1: The evidential basis for a market signals uplift to improve affordability

Barker Review

LICHFIELDS

- 1 The Barker Review of Housing Supply¹⁷ was a seminal report that continues to influence government policy. Published in 2004 and using a baseline figure of 140,000 private sector dwelling starts in 2002-03, the report concluded that to reduce the long term price trend from 2.7% per annum seen prior to 2004, to the 1.1% per annum seen as an average across the EU, would require an increase of 120,000 additional private homes per annum, totalling 260,000 per annum to 2026, alongside an increased provision of social sector housing. The Barker Review concluded that such a level would be necessary for *"improving the housing market"* and ensure that *"affordability is increasingly improved over time"* (paras 1.39 and 1.40).
- In making such a recommendation, the Review acknowledged that this was in excess of projected rates of household formation (at that point estimated at 179,000 per annum). Even today, with household projections in England at around 210,000 households per annum¹⁸ and equating to around 215,000 dwellings per annum (incorporating a notional 2.5% vacancy rate), the 260,000 dwellings per annum concluded within the Barker Review as necessary to increasingly improve affordability would represent a national average uplift of **20.9%** above the demographic projection.
- 3 Flowing from the Barker Review, Government commissioned the development of an Affordability model by Reading University, designed to relate affordability to housing supply in the medium to long term. The key findings from the 2007 version of the model was that the elasticity of house prices with respect to housing stock is found to be relatively high, at -2.0 i.e. a 1% increase in stock at the regional level leads to a 2% fall in house prices, everything else being equal (RD20, page 32). This has informed much subsequent work by Government.

National Housing & Planning Advice Unit (NHPAU)

4 The NHPAU was founded by Government as a direct response to the recommendations of the Barker Review. In October 2007, it published work entitled 'Developing a target range for the supply of new homes across England'¹⁹ flowing from analytical modelling (using the Reading University model) on the impact of the Government's housing supply target for housing affordability prospects over the medium and long-term. Its conclusion was that a supply range from a minimum of 240,000 dpa (the Government's annual target at that point) and a high 280,000 dpa should be tested (Table 18), going on to identify (para 4.68):

"NHPAU believes that there is a realistic possibility of stabilising the affordability of market housing over the long-term if a supply target for 270,000 net additions to stock, in the right place and of the right type can be adopted through the planning system for delivery before or by 2016."

¹⁷ 'Review of Housing Supply, Delivering Stability: Securing our Future Housing Needs' (March 2004), Kate Barker - <u>http://news.bbc.co.uk/nol/shared/bsp/hi/pdfs/17_03_04_barker_review.pdf</u>

¹⁸ CLG 2014-based household projections, which at the national level represent the same level of annual growth projected in the earlier 2012-based household projections.

¹⁹ 'Developing a target range for the supply of new homes across England' (October 2007), NHPAU -

http://webarchive.nationalarchives.gov.uk/20120919132719/http://www.communities.gov.uk/documents/housing/pdf/523984.pdf

- 5 At 270,000 dwellings per annum, this would represent a national average **25.6%** uplift above the bare demographic projection of the **2014**-based household projections.
- 6 Crucially, the NHPAU concluded that if stabilising affordability in each region is the goal, then the most efficient way to achieve that is to proportionately increase supply in the areas where affordability is most severe. Thus it focussed 80% of its uplifts (over the then RSS targets) across the South East, the South West and the East of England.

Bramley & Watkins

- 7 Academic research by Bramley & Watkins²⁰ has looked at the potential for modelling housing markets at a local level to inform planning decisions. One aspect it considers is affordability impacts of supply changes at the sub-regional level. It includes modelled scenarios that conclude "very high" increases in supply (over other elements within the model) across the South East, defined as 35%, can deliver notable improvements to affordability, including some improvement to affordability in London. This implies that high uplifts just short of **35%**, such as around **25%** in high value areas surrounding London, would be sufficient to address affordability at a local level (i.e. without spill-over benefits to surrounding areas).
- 8 Interestingly, this methodological approach is applied by Bramley to a review of the Bristol Area SHMA for Business West^{21.} It concludes that an uplift of 50-60% is appropriate compared to 7.5% suggested by the SHMA.

House of Lords Select Committee on Economic Affairs

- 9 In July 2016, the House of Lords Select Committee on Economic Affairs published their report 'Building More Homes'²² which was the output of the House of Lords' inquiry into the housing market. It reflects on past failure to build sufficient numbers of homes, highlighting how supply has substantially undershot the recommended amounts within the Barker Review. It also draws upon evidence provided to the inquiry by HM Treasury (HMT) which indicated (para 81) that "*The modelling suggests that in order to keep the house prices to earnings ratio constant, somewhere between 250,000 and 300,000 homes per year need to be built.*" albeit the report goes on to note (footnote 91) that "*Due to low interest rates building 250,000–300,000 homes above may now be insufficient to keep the price: earnings ratio constant*"
- 10 Ultimately based on the evidence brought to the inquiry, the select committee concluded that:

"To address the housing crisis at least 300,000 new homes are needed annually for the foreseeable future."

11 At 300,000 dwellings per annum, this represents a **39.5**% uplift on the 2014-based household projection equivalent, and although at the upper end of the range identified by

²⁰ 'Housebuilding, demographic change and affordability as outcomes of local planning decisions; exploring interactions using a sub-regional model of housing markets in England' (2 October 2014) Bramley & Watkins, Heriott Watt University (Published in Progress in Planning 2015) - <u>https://pureapps2.hw.ac.uk/portal/en/publications/housebuilding-demographic-change-and-affordability-as-outcomes-of-local-planning-decisions(23dfd394-4dc7-406d-ado5-3ee18fdd8497).html</u>

 ²¹ Business West: Wider Bristol Housing Market Area Strategic Housing Assessment 2015: Commentary by Bramley http://initiativewest.co.uk/content/uploads/2015/12/Final-Bramley-WoE-SHMA-critique-30Nov2015.pdf
 ²² 'Building more homes' 1st Report of Session 2016–17 (15 July 2016) House of Lords Select Committee on Economic Affairs (HL Paper 20) - http://www.publications.parliament.uk/pa/ld201617/ldselect/ldeconaf/20/20.pdf

HMT, the qualification within the report suggests it would be the figure necessary to keep the affordability ratio constant.

Redfern Review

12 The Redfern Review²³ was an independent review of the causes of falling home ownership, and associated housing market challenges. Published in November 2016, it was informed by a housing market model and built by Oxford Economics which looked at the impacts of different supply assumptions on prices and home ownership. The review ultimately concludes (para 33):

"...looking forward, if the number of households in the UK were to grow at around 200,000 per year, new supply of 300,000 dwellings per year over a decade would be expected to cut house price inflation by around 5 percentage points (0.5 percentage points a year)... In other words boosting housing supply will have a material impact on house prices, but only if sustained over a long period."

13 The accompanying report by Oxford Economics²⁴ identifies that *"To put downward pressure on prices new supply would need to outstrip underlying household formation"*. It actually models a boost in housing supply of 100,000 above their baseline forecast of 210,000 dwellings per annum, concluding that 310,000 dpa *"helps to keep prices in check"* up to 2026, albeit still rising marginally. Although no corresponding analysis is presented on the affordability ratio (i.e. accounting for changes in income over that period), the adoption of 310,000dpa as a figure to keep prices in check would represent a **44.2%** uplift over the demographic baseline suggested by the 2014-based projections. A lower percentage would be sufficient to hold affordability constant if household incomes increased in a corresponding manner.

 ²³ 'The Redfern Review into the decline of home ownership' (16 November 2016) - <u>http://www.redfernreview.org/wp-content/uploads/2016/01/TW082_RR_online_PDF.pdf</u>
 ²⁴ 'Forecasting UK house prices and home ownership' (November 2016) Oxford Economics http://www.redfernreview.org/wp-content/uploads/2016/11/20161114-Redfern-Review-modelling-paper.pdf

Appendix 2: ONS lower quartile affordability ratio data

In 2016, Government moved responsibility for the relevant datasets on the lower quartile affordability ratio from CLG to ONS.

CLG had used a ratio of lower quartile earnings (work-place based) to lower quartile house prices (based on CLG derived land registry data) to present this. This data series is used and referenced in both the West Surrey SHMA (2014) and the previous Lichfields review report and has formed the basis of considering affordability for Waverley in the Local Plan evidence.

ONS now present two lower quartile data-sets, neither of which are directly comparable with the previous CLG data (due to a different sub-set of land registry house price data used), but both of which provide a back-series:

- i Ratio of lower quartile earnings (work-place based, i.e. of jobs based in the area) to lower quartile house prices (ONS house price statistics derived from land registry); and
- ii Ratio of lower quartile earnings (residence based, i.e. of people living in the area) to lower quartile house prices (ONS house price statistics derived from land registry).

These were most recently updated on 17 March 2017 providing data for 2016 set out as follows for Waverley, the other HMA authorities, Surrey and England.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Waverley	5.85	6.53	6.60	7.76	7.86	9.04	9.70	10.76	11.27	11.48	11.32	12.00	10.32	11.51	11.58	12.14	13.11	13.89	14.46	15.54
Guildford	4.92	5.92	6.13	7.25	8.04	8.18	9.16	9.92	9.69	10.50	10.71	10.46	9.18	9.74	10.19	9.86	10.28	10.78	10.86	12.18
Woking	5.67	5.33	5.89	6.39	6.91	7.87	8.15	9.47	9.25	8.78	9.59	9.98	10.99	10.64	12.31	11.48	11.64	13.02	13.99	13.73
Surrey	5.29	5.85	6.19	7.20	7.68	8.12	9.04	9.67	9.87	9.91	10.44	10.47	9.43	10.34	10.57	10.36	10.89	11.14	11.96	12.73
England	3.57	3.57	3.77	3.85	4.08	4.51	5.21	6.27	6.82	7.17	7.21	6.91	6.48	6.86	6.72	6.58	6.57	6.91	7.11	7.16

Table 3 Lower Quartile Affordability Ratio - Workplace Based Earnings

Source: ONS (17 March 2017)

Figure 3 Lower Quartile Affordability Ratio - Workplace Based Earnings



Source: ONS (17 March 2017)

2014

10.33

10.00

9.73

10.30

6.91

2015

10.70

10.92

11.85

11.09

7.11

2016

11.93

12.14

12.29

11.96

7.16

Table 4 Lower Quartile Affordability Ratio - Residence Based Earnings 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 Waverley 8.17 9.21 10.08 10.22 9.96 10.97 10.22 9.26 9.92 10.71 10.75 10.69 Guildford 7.62 8.10 9.33 8.98 10.04 8.97 9.49 9.58 9.90 9.68 10.52 8.16

9.35

9.73

7.21

10.44

9.73

6.91

9.34

8.66

6.48

10.15

9.50

6.86

9.12

9.42

6.72

9.09

9.58

6.58

9.61

9.75

6.57

9.89

9.30

7.16

Source: ONS (17 March 2017)

7.71

7.75

4.51

Woking

Surrey

England

Figure 4 Lower Quartile Affordability Ratio - Residence Based Earnings

8.18

8.56

5.20

9.83

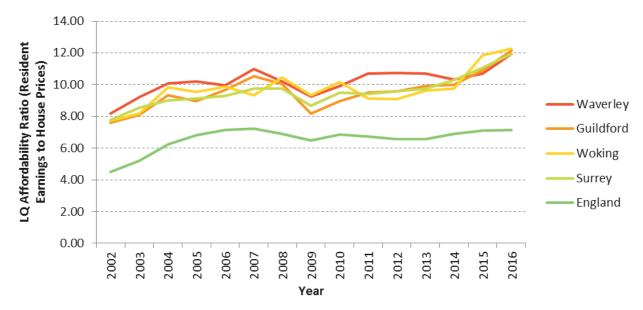
9.02

6.25

9.54

9.13

6.81



Source: ONS (17 March 2017)

Pg 25/30 Lichfields.uk 13750103v1

LICHFIELDS

Appendix 3: OBR based affordability forecasting for Waverley

OBR 2014-based forecast assumptions

Affordability Calculator																	
Local Authority	Waverley																
Inflation (1.00 if none)	1	1	Implicit growt	th in OBR Mo	del	566											
Earnings Rate of increase (proportional) (Source: OBR)	1.0220						on that hous	ehold growt	h of 1.0% per	annum will	occur (and th	at this housi	ng will be de	elivered to me	et that need).	Therefore, any	'increase' in
Housing Price Rate of increase (proportional) (Source: OBR)	1.033		supply in the					0					0		,		
······································						,											
Change in ratio if 1.0% household growth needs met, i.e. 1.1% housing growt	ł 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
LQ Earnings	£19,950	£20,388.90	£20,837	£21,296	£21,764	£22,243	£22,733	£23,233	£23,744	£24,266	£24,800	£25,346	£25,903	£26,473	£27,055.49	£27,650.71	£28,259.03
LQ House Price	£310,000	£320,230	£330,798	£341,714	£352,990	£364,639	£376,672	£389,102	£401,943	£415,207	£428,909	£443,063	£457,684	£472,787	£488,389	£504,506	£521,155
LQ Ratio	15.54	15.71	15.88	16.05	16.22	16.39	16.57	16.75	16.93	17.11	17.29	17.48	17.67	17.86	18.05	18.25	18.44
Number of houses	52,490	53,015	53,545	54,080	54,621	55,168	55,719	56,276	56,839	57,408	57,982	58,561	59,147	59,739	60,336	60,939	61,549
		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
TOTAL annual dwelling increase	571	Agains	t 1% growth	5													
No Houses	52,490	53,061	53,632	54,203	54,774	55,345	55,916	56,487	57,058	57,629	58,200	58,771	59,342	59,913	60,484	61,055	61,626
Supply Change above underlying assumptions		0.09%	0.08%	0.06%	0.05%	0.04%	0.03%	0.02%	0.01%	0.00%	-0.01%	-0.02%	-0.03%	-0.04%	-0.05%	-0.06%	-0.06%
Price Change		-0.18%	-0.15%	-0.13%	-0.11%	-0.08%	-0.06%	-0.04%	-0.02%	0.00%	0.02%	0.04%	0.06%	0.08%	0.09%	0.11%	0.13%
reduction)	£310,000	£319,685	£329,748	£340,204	£351,067	£362,354	£374,082	£386,268	£398,931	£412,090	£425,764	£439,976	£454,745	£470,095	£486,050	£502,633	£519,871
New Ratio	15.54	15.68	15.82	15.98	16.13	16.29	16.46	16.63	16.80	16.98	17.17	17.36	17.56	17.76	17.96	18.18	18.40
Plan Period Requirement: Requirement from model 2016-2032																	
Already delivered 2013-2015																	
Total 2013-2032																	
Delivery over plan period p.a.	. 519																
Affordability Calculator																	
Local Authority	Waverley																
Inflation (1.00 if none)	1	1	Implicit growt	th in OBR Mo	del	566											
Earnings Rate of increase (proportional) (Source: OBR)	1.0220	٦	The OBR mod	el is based o	n an embedo	ded assumpti	on that hous	ehold growt	h of 1.0% per	annum will	occur (and th	at this housi	ng will be de	elivered to me	et that need).	Therefore, any	'increase' in
Housing Price Rate of increase (proportional) (Source: OBR)	1.033	5	supply in the	model, for co	onsidering th	ne University				neaured again	nst this impli	it growth in	the ODD me				
						ie oniversity	of Readings	price elastic	ity (-2.0), is n	icuarca agai	not this impli-	at growth in	the Obk hit	odel.			
Change in ratio if 1.0% household growth needs met, i.e. 1.1% housing growt	h 2016	2017	2018	2019	2020	2021	of Readings 2022	price elastic 2023	ity (-2.0), is m 2024	2025	2026	2027	2028	odel. 2029	2030	2031	2032
	f 2016 £19,950	2017 £20,388.90	2018 £20,837	2019 £21,296	2020 £21,764										2030 £27,055.49	2031 £27,650.71	2032 £28,259.03
Change in ratio if 1.0% household growth needs met, i.e. 1.1% housing growt LQ Earnings LQ House Price		-				2021	2022	2023	2024	2025	2026	2027	2028	2029			
LQ Earnings	£19,950	£20,388.90	£20,837	£21,296	£21,764	2021 £22,243	2022 £22,733	2023 £23,233	2024 £23,744	2025 £24,266	2026 £24,800	2027 £25,346	2028 £25,903	2029 £26,473	£27,055.49	£27,650.71	£28,259.03
LQ Earnings LQ House Price	£19,950 £310,000	£20,388.90 £320,230	£20,837 £330,798	£21,296 £341,714	£21,764 £352,990	2021 £22,243 £364,639	2022 £22,733 £376,672	2023 £23,233 £389,102	2024 £23,744 £401,943	2025 £24,266 £415,207	2026 £24,800 £428,909	2027 £25,346 £443,063	2028 £25,903 £457,684	2029 £26,473 £472,787	£27,055.49 £488,389	£27,650.71 £504,506	£28,259.03 £521,155
LQ Earnings LQ House Price LQ Ratio	£19,950 £310,000 15.54	£20,388.90 £320,230 15.71	£20,837 £330,798 15.88	£21,296 £341,714 16.05	£21,764 £352,990 16.22	2021 £22,243 £364,639 16.39	2022 £22,733 £376,672 16.57	2023 £23,233 £389,102 16.75	2024 £23,744 £401,943 16.93	2025 £24,266 £415,207 17.11	2026 £24,800 £428,909 17.29	2027 £25,346 £443,063 17.48	2028 £25,903 £457,684 17.67	2029 £26,473 £472,787 17.86	£27,055.49 £488,389 18.05	£27,650.71 £504,506 18.25	£28,259.03 £521,155 18.44
LQ Earnings LQ House Price LQ Ratio	£19,950 £310,000 15.54	£20,388.90 £320,230 15.71 53,015 1.00%	£20,837 £330,798 15.88 53,545	£21,296 £341,714 16.05 54,080	£21,764 £352,990 16.22 54,621	2021 £22,243 £364,639 16.39 55,168	2022 £22,733 £376,672 16.57 55,719	2023 £23,233 £389,102 16.75 56,276	2024 £23,744 £401,943 16.93 56,839	2025 £24,266 £415,207 17.11 57,408	2026 £24,800 £428,909 17.29 57,982	2027 £25,346 £443,063 17.48 58,561	2028 £25,903 £457,684 17.67 59,147	2029 <u>£</u> 26,473 <u>£</u> 472,787 17.86 59,739	£27,055.49 £488,389 18.05 60,336	£27,650.71 £504,506 18.25 60,939	£28,259.03 £521,155 18.44 61,549
LQ Earnings LQ House Price LQ Ratio Number of houses	£19,950 £310,000 15.54 52,490	£20,388.90 £320,230 15.71 53,015 1.00%	£20,837 £330,798 15.88 53,545 1.00%	£21,296 £341,714 16.05 54,080 1.00%	£21,764 £352,990 16.22 54,621	2021 £22,243 £364,639 16.39 55,168	2022 £22,733 £376,672 16.57 55,719	2023 £23,233 £389,102 16.75 56,276	2024 £23,744 £401,943 16.93 56,839	2025 £24,266 £415,207 17.11 57,408	2026 £24,800 £428,909 17.29 57,982	2027 £25,346 £443,063 17.48 58,561	2028 £25,903 £457,684 17.67 59,147	2029 <u>£</u> 26,473 <u>£</u> 472,787 17.86 59,739	£27,055.49 £488,389 18.05 60,336	£27,650.71 £504,506 18.25 60,939	£28,259.03 £521,155 18.44 61,549
LQ Earnings LQ House Price LQ Ratio Number of houses TOTAL annual dwelling increase	£19,950 £310,000 15.54 52,490 915	£20,388.90 £320,230 15.71 53,015 1.00% Against	£20,837 £330,798 15.88 53,545 1.00% t 1% growth	£21,296 £341,714 16.05 54,080 1.00% 349	£21,764 £352,990 16.22 54,621 1.00%	2021 £22,243 £364,639 16.39 55,168 1.00%	2022 £22,733 £376,672 16.57 55,719 1.00%	2023 £23,233 £389,102 16.75 56,276 1.00%	2024 £23,744 £401,943 16.93 56,839 1.00%	2025 £24,266 £415,207 17.11 57,408 1.00%	2026 £24,800 £428,909 17.29 57,982 1.00%	2027 £25,346 £443,063 17.48 58,561 1.00%	2028 £25,903 £457,684 17.67 59,147 1.00%	2029 £26,473 £472,787 17.86 59,739 1.00%	£27,055.49 £488,389 18.05 60,336 1.00%	£27,650.71 £504,506 18.25 60,939 1.00%	£28,259.03 £521,155 18.44 61,549 1.00%
LQ Earnings LQ House Price LQ Ratio Number of houses TOTAL annual dwelling increase No Houses	£19,950 £310,000 15.54 52,490 915	f20,388.90 f320,230 15.71 53,015 1.00% Against 53,405	£20,837 £330,798 15.88 53,545 1.00% t 1% growth 54,320	£21,296 £341,714 16.05 54,080 1.00% 349 55,235	£21,764 £352,990 16.22 54,621 1.00% 56,150	2021 <u>f22,243</u> <u>f364,639</u> 16.39 55,168 1.00% 57,065	2022 £22,733 £376,672 16.57 55,719 1.00% 57,980	2023 f23,233 f389,102 16.75 56,276 1.00% 58,895	2024 £23,744 £401,943 16.93 56,839 1.00% 59,810	2025 £24,266 £415,207 17.11 57,408 1.00% 60,725	2026 £24,800 £428,909 17.29 57,982 1.00% 61,640	2027 £25,346 £443,063 17.48 58,561 1.00% 62,555	2028 £25,903 £457,684 17.67 59,147 1.00% 63,470	2029 <u>£26,473</u> <u>£472,787</u> 17.86 59,739 1.00% 64,385	£27,055.49 £488,389 18.05 60,336 1.00% 65,300	£27,650.71 £504,506 18.25 60,939 1.00% 66,215	£28,259.03 £521,155 18.44 61,549 1.00% 67,130
LQ Earnings LQ House Price LQ Ratio Number of houses TOTAL annual dwelling increase No Houses Supply Change above underlying assumptions	£19,950 £310,000 15.54 52,490 915	f20,388.90 f320,230 15.71 53,015 1.00% Against 53,405 0.74%	£20,837 £330,798 15.88 53,545 1.00% t 1% growth 54,320 0.71%	£21,296 £341,714 16.05 54,080 1.00% 349 55,235 0.68%	£21,764 £352,990 16.22 54,621 1.00% 56,150 0.66%	2021 f22,243 f364,639 16.39 55,168 1.00% 57,065 0.63%	2022 £22,733 £376,672 16.57 55,719 1.00% 57,980 0.60%	2023 £23,233 £389,102 16.75 56,276 1.00% 58,895 0.58%	2024 £23,744 £401,943 16.93 56,839 1.00% 59,810 0.55%	2025 £24,266 £415,207 17.11 57,408 1.00% 60,725 0.53%	2026 £24,800 f428,909 17.29 57,982 1.00% 61,640 0.51%	2027 £25,346 £443,063 17.48 58,561 1.00% 62,555 0.48%	2028 £25,903 £457,684 17.67 59,147 1.00% 63,470 0.46%	2029 £26,473 £472,787 17.86 59,739 1.00% 64,385 0.44%	£27,055.49 £488,389 18.05 60,336 1.00% 65,300 0.42%	£27,650.71 £504,506 18.25 60,939 1.00% 66,215 0.40%	£28,259.03 £521,155 18.44 61,549 1.00% 67,130 0.38%
LQ Earnings LQ House Price LQ Ratio Number of houses TOTAL annual dwelling increase No Houses Supply Change above underlying assumptions Price Change	£19,950 £310,000 15.54 52,490 915 52,490	£20,388.90 £320,230 15.71 53,015 1.00% Agains 53,405 0.74% -1.49%	£20,837 £330,798 15.88 53,545 1.00% t 1% growth 54,320 0.71% -1.43%	£21,296 £341,714 16.05 54,080 1.00% 349 55,235 0.68% -1.37%	£21,764 £352,990 16.22 54,621 1.00% 56,150 0.66% -1.31%	2021 £22,243 £364,639 16.39 55,168 1.00% 57,065 0.63% -1.26%	2022 £22,733 £376,672 16.57 55,719 1.00% 57,980 0.60% -1.21%	2023 £23,233 £389,102 16.75 56,276 1.00% 58,895 0.58% -1.16%	2024 f23,744 f401,943 16.93 56,839 1.00% 59,810 0.55% -1.11%	2025 £24,266 £415,207 17.11 57,408 1.00% 60,725 0.53% -1.06%	2026 <u>£24,800</u> <u>£428,909</u> 17.29 57,982 1.00% 61,640 0.51% -1.01%	2027 £25,346 £443,063 17.48 58,561 1.00% 62,555 0.48% -0.97%	2028 £25,903 £457,684 17.67 59,147 1.00% 63,470 0.46% -0.93%	2029 £26,473 £472,787 17.86 59,739 1.00% 64,385 0.44% -0.88%	£27,055.49 £488,389 18.05 60,336 1.00% 65,300 0.42% -0.84%	£27,650.71 £504,506 18.25 60,939 1.00% 66,215 0.40% -0.80%	£28,259.03 £521,155 18.44 61,549 1.00% 67,130 0.38% -0.76%
LQ Earnings LQ House Price LQ Ratio Number of houses TOTAL annual dwelling increase No Houses Supply Change above underlying assumptions Price Change reduction)	£19,950 £310,000 15.54 52,490 915 52,490 £310,000	£20,388.90 £320,230 15.71 53,015 1.00% Agains: 53,405 0.74% -1.49% £315,622	£20,837 £330,798 15.88 53,545 1.00% t 1% growth 54,320 0.71% -1.43% £321,535	£21,296 £341,714 16.05 54,080 1.00% 349 55,235 0.68% -1.37% £327,744	£21,764 £352,990 16.22 54,621 1.00% 56,150 0.66% -1.31% £334,256	2021 £22,243 £364,639 16.39 55,168 1.00% 57,065 0.63% -1.26% £341,078	2022 £22,733 £376,672 16.57 55,719 1.00% 57,980 0.60% -1.21% £348,217	2023 £23,233 £389,102 16.75 56,276 1.00% 58,895 0.58% -1.16% £355,682	2024 £23,744 £401,943 16.93 56,839 1.00% 59,810 0.55% -1.11% £363,481	2025 £24,266 £415,207 17.11 57,408 1.00% 60,725 0.53% -1.06% £371,624	2026 f24,800 f428,909 17.29 57,982 1.00% 61,640 0.51% -1.01% f380,121	2027 £25,346 £443,063 17.48 58,561 1.00% 62,555 0.48% -0.97% £388,982	2028 £25,903 £457,684 17.67 59,147 1.00% 63,470 0.46% -0.93% £398,219	2029 £26,473 £472,787 17.86 59,739 1.00% 64,385 0.44% -0.88% £407,843	£27,055.49 £488,389 18.05 60,336 1.00% 65,300 0.42% -0.84% £417,866	£27,650.71 £504,506 18.25 60,939 1.00% 66,215 0.40% -0.80% £428,303	£28,259.03 £521,155 18.44 61,549 1.00% 67,130 0.38% -0.76% £439,166
LQ Earnings LQ House Price LQ Ratio Number of houses TOTAL annual dwelling increase No Houses Supply Change above underlying assumptions Price Change reduction)	£19,950 £310,000 15.54 52,490 915 52,490 £310,000 15.54	£20,388.90 £320,230 15.71 53,015 1.00% Agains: 53,405 0.74% -1.49% £315,622	£20,837 £330,798 15.88 53,545 1.00% t 1% growth 54,320 0.71% -1.43% £321,535	£21,296 £341,714 16.05 54,080 1.00% 349 55,235 0.68% -1.37% £327,744	£21,764 £352,990 16.22 54,621 1.00% 56,150 0.66% -1.31% £334,256	2021 £22,243 £364,639 16.39 55,168 1.00% 57,065 0.63% -1.26% £341,078	2022 £22,733 £376,672 16.57 55,719 1.00% 57,980 0.60% -1.21% £348,217	2023 £23,233 £389,102 16.75 56,276 1.00% 58,895 0.58% -1.16% £355,682	2024 £23,744 £401,943 16.93 56,839 1.00% 59,810 0.55% -1.11% £363,481	2025 £24,266 £415,207 17.11 57,408 1.00% 60,725 0.53% -1.06% £371,624	2026 f24,800 f428,909 17.29 57,982 1.00% 61,640 0.51% -1.01% f380,121	2027 £25,346 £443,063 17.48 58,561 1.00% 62,555 0.48% -0.97% £388,982	2028 £25,903 £457,684 17.67 59,147 1.00% 63,470 0.46% -0.93% £398,219	2029 £26,473 £472,787 17.86 59,739 1.00% 64,385 0.44% -0.88% £407,843	£27,055.49 £488,389 18.05 60,336 1.00% 65,300 0.42% -0.84% £417,866	£27,650.71 £504,506 18.25 60,939 1.00% 66,215 0.40% -0.80% £428,303	£28,259.03 £521,155 18.44 61,549 1.00% 67,130 0.38% -0.76% £439,166
LQ Earnings LQ House Price LQ Ratio Number of houses TOTAL annual dwelling increase No Houses Supply Change above underlying assumptions Price Change reduction) New Ratio	£19,950 £310,000 15.54 52,490 915 52,490 £310,000 £310,000 15.54 : 14,640	£20,388.90 £320,230 15.71 53,015 1.00% Agains: 53,405 0.74% -1.49% £315,622	£20,837 £330,798 15.88 53,545 1.00% t 1% growth 54,320 0.71% -1.43% £321,535	£21,296 £341,714 16.05 54,080 1.00% 349 55,235 0.68% -1.37% £327,744	£21,764 £352,990 16.22 54,621 1.00% 56,150 0.66% -1.31% £334,256	2021 £22,243 £364,639 16.39 55,168 1.00% 57,065 0.63% -1.26% £341,078	2022 £22,733 £376,672 16.57 55,719 1.00% 57,980 0.60% -1.21% £348,217	2023 £23,233 £389,102 16.75 56,276 1.00% 58,895 0.58% -1.16% £355,682	2024 £23,744 £401,943 16.93 56,839 1.00% 59,810 0.55% -1.11% £363,481	2025 £24,266 £415,207 17.11 57,408 1.00% 60,725 0.53% -1.06% £371,624	2026 f24,800 f428,909 17.29 57,982 1.00% 61,640 0.51% -1.01% f380,121	2027 £25,346 £443,063 17.48 58,561 1.00% 62,555 0.48% -0.97% £388,982	2028 £25,903 £457,684 17.67 59,147 1.00% 63,470 0.46% -0.93% £398,219	2029 £26,473 £472,787 17.86 59,739 1.00% 64,385 0.44% -0.88% £407,843	£27,055.49 £488,389 18.05 60,336 1.00% 65,300 0.42% -0.84% £417,866	£27,650.71 £504,506 18.25 60,939 1.00% 66,215 0.40% -0.80% £428,303	£28,259.03 £521,155 18.44 61,549 1.00% 67,130 0.38% -0.76% £439,166
LQ Earnings LQ House Price LQ Ratio Number of houses TOTAL annual dwelling increase No Houses Supply Change above underlying assumptions Price Change reduction) New Ratio Plan Period Requirement: Requirement from model 2016-2032	£19,950 £310,000 15.54 52,490 915 52,490 £310,000 15.54 £310,000 15.54 14,640 727	£20,388.90 £320,230 15.71 53,015 1.00% Agains: 53,405 0.74% -1.49% £315,622	£20,837 £330,798 15.88 53,545 1.00% t 1% growth 54,320 0.71% -1.43% £321,535	£21,296 £341,714 16.05 54,080 1.00% 349 55,235 0.68% -1.37% £327,744	£21,764 £352,990 16.22 54,621 1.00% 56,150 0.66% -1.31% £334,256	2021 £22,243 £364,639 16.39 55,168 1.00% 57,065 0.63% -1.26% £341,078	2022 £22,733 £376,672 16.57 55,719 1.00% 57,980 0.60% -1.21% £348,217	2023 £23,233 £389,102 16.75 56,276 1.00% 58,895 0.58% -1.16% £355,682	2024 £23,744 £401,943 16.93 56,839 1.00% 59,810 0.55% -1.11% £363,481	2025 £24,266 £415,207 17.11 57,408 1.00% 60,725 0.53% -1.06% £371,624	2026 f24,800 f428,909 17.29 57,982 1.00% 61,640 0.51% -1.01% f380,121	2027 £25,346 £443,063 17.48 58,561 1.00% 62,555 0.48% -0.97% £388,982	2028 £25,903 £457,684 17.67 59,147 1.00% 63,470 0.46% -0.93% £398,219	2029 £26,473 £472,787 17.86 59,739 1.00% 64,385 0.44% -0.88% £407,843	£27,055.49 £488,389 18.05 60,336 1.00% 65,300 0.42% -0.84% £417,866	£27,650.71 £504,506 18.25 60,939 1.00% 66,215 0.40% -0.80% £428,303	£28,259.03 £521,155 18.44 61,549 1.00% 67,130 0.38% -0.76% £439,166

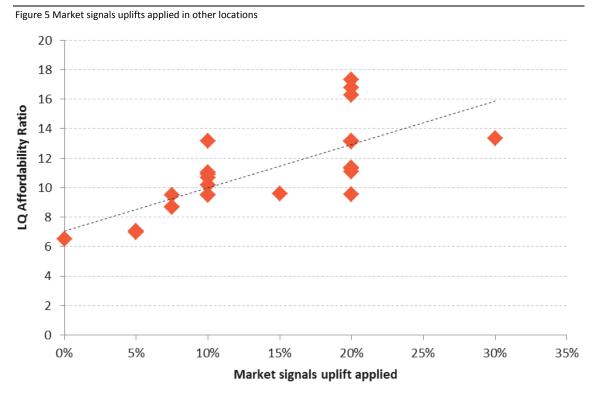
OBR March 2017 Economic Outlook forecast assumptions (OBR forecast is to 2022, but proportional change held constant thereafter)

Affordability Calculator																	
Local Authority	Waverley																
Inflation (1.00 if none)	1		Implicit grow	th in OBR Mo	del	566											
Earnings Rate of increase (proportional) (Source: OBR)	1.0434		The OBR mod	el is based o	n an embedd	ed assumpti	ion that hous	ehold growt	h of 1.0% pe	r annum will	occur (and th	at this housi	ng will be de	livered to me	et that need).	Therefore, any	'increase' in
Housing Price Rate of increase (proportional) (Source: OBR)	1.048		supply in the					-					-				
						ĺ	Ū										
Change in ratio if 1.0% household growth needs met by 1% housing growth	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
LQ Earnings	£19,950	£20,815.83	£21,719	£22,662	£23,645	£24,672	£25,742	£26,860	£28,025	£29,242	£30,511	£31,835	£33,216	£34,658	£36,162.18	£37,731.61	£39,369.17
LQ House Price	£310,000	£324,880	£340,474	£356,817	£373,944	£391,894	£410,704	£430,418	£451,078	£472,730	£495,421	£519,201	£544,123	£570,241	£597,612	£626,298	£656,360
LQ Ratio	15.54	15.61	15.68	15.75	15.81	15.88	15.95	16.02	16.10	16.17	16.24	16.31	16.38	16.45	16.53	16.60	16.67
Number of houses	52,490	53,015	53,545	54,080	54,621	55,168	55,719	56,276	56,839	57,408	57,982	58,561	59,147	59,739	60,336	60,939	61,549
		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
TOTAL annual dwelling increase	571	Againg	t 1% growth	5													
No Houses	52,490	53,061	53,632	54,203	54,774	55,345	55,916	56,487	57,058	57.629	58.200	58,771	59.342	59,913	60,484	61,055	61,626
Supply Change above underlying assumptions	52,490	0.09%	0.08%	0.06%	0.05%	0.04%	0.03%	0.02%	0.01%	0.00%	-0.01%	-0.02%	-0.03%	-0.04%	-0.05%	-0.06%	-0.06%
Price Change		-0.18%	-0.15%	-0.13%	-0.11%	-0.08%	-0.06%	-0.02%	-0.01%	0.00%	0.01%	-0.02%	0.06%	-0.04%	0.03%	-0.00%	-0.00%
reduction)	£310,000	£324,335	£339,410	£355,263	£371,935	£389,472	£407,920	£427,327	£447,746	£469,232	£491,841	£515,635	£540,679	£567,040	£594,790	£624,006	£654,767
New Ratio	15.54	15.58	15.63	15.68	15.73	15.79	15.85	15.91	15.98	16.05	16.12	16.20	16.28	16.36	16.45	16.54	16.63
	13.34	13.30	15.05	13.00	13.75	13.75	13.85	13.91	13.56	10.05	10.12	10.20	10.20	10.30	10.45	10.54	10.05
Plan Period Requirement: Requirement from model 2016-2032	9,136																
Already delivered 2013-2015																	
Total 2013-2013																	
Delivery over plan period p.a																	
	. 315																
Affordability Calculator																	
Local Authority	Waverley																
Inflation (1.00 if none)	1		Implicit grow			566											
Earnings Rate of increase (proportional) (Source: OBR)	1.0434														et that need).	Therefore, any	'increase' in
Housing Price Rate of increase (proportional) (Source: OBR)	1.048		supply in the	model, for c	onsidering th	e University	of Readings	price elastici	ty (-2.0), is n	neaured agai	nst this impli	cit growth in	the OBR mod	del.			
Change in ratio if 1.0% household growth needs met, i.e. 1.1% housing growt	h 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
LQ Earnings	£19,950	£20,815.83	£21,719	£22,662	£23,645	£24,672	£25,742	£26,860	£28,025	£29,242	£30,511	£31,835	£33,216	£34,658	£36,162.18	£37,731.61	£39,369.17
LQ House Price	£310.000	£324.880	£340,474	£356,817	£373,944	£391,894	£410,704	£430,418	£451,078	£472,730	£495,421	£519,201	£544,123	£570,241	£597,612	£626,298	£656,360
LQ Ratio	15.54	15.61	15.68	15.75	15.81	15.88	15.95	16.02	16.10	16.17	16.24	16.31	16.38	16.45	16.53	16.60	16.67
Number of houses	52,490	53,015	53,545	54,080	54,621	55,168	55,719	56,276	56,839	57,408	57,982	58,561	59,147	59,739	60,336	60,939	61,549
	32,430	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
		1.00%	1.00%	1.00%	1.00%	1.00%	1.0076	1.0076	1.0076	1.0076	1.00%	1.00%	1.0076	1.0076	1.00%	1.00%	1.00%
TOTAL annual dwelling increase	709	0	t 1% growth	143	FF 220	56.005	56 744	F7 450	50.462	F0.074	50 500	60.200	60.000	C4 707	CD CC	C2 425	(2 C2 C2 A
No Houses	52,490	53,199 0.35%	53,908 0.33%	54,617 0.32%	55,326 0.30%	56,035 0.28%	56,744 0.27%	57,453 0.25%	58,162 0.23%	58,871 0.22%	59,580 0.20%	60,289 0.19%	60,998 0.18%	61,707 0.16%	62,416 0.15%	63,125 0.14%	63,834 0.12%
Supply Change above underlying assumptions Price Change		-0.70%	-0.67%	-0.63%	-0.60%	-0.56%	-0.53%	-0.50%	-0.47%	-0.44%	-0.41%	-0.38%	-0.35%	-0.32%	-0.30%	-0.27%	-0.25%
	£310.000	-0.70% £322,705	-0.67% £336,048	-0.63% £350.060	-0.60% £364,775	-0.56% £380,231	-0.53% £396,465	-0.50% £413,517	-0.47% £431,430	-0.44% £450,249	-0.41% £470,021	-0.38% £490,796	-0.35% £512,626	-0.32% £535,568	-0.30% £559,679	-0.27% £585.023	-0.25% £611,662
reduction)	£310,000 15.54	£322,705 15.50	£336,048 15.47	£350,060 15.45	±364,775 15.43	£380,231 15.41	£396,465 15.40	±413,517 15.40	±431,430 15.39	£450,249 15.40	£470,021 15.41	£490,796 15.42	15.43	1535,568 15.45	£559,679 15.48	£585,023 15.50	15.54
New Ratio	15.54	15.50	15.47	15.45	15.43	15.41	15.40	15.40	15.39	15.40	15.41	15.42	15.43	15.45	15.48	15.50	15.54
Dian Daried Pequirement: Pequirement from model 2016 2022	: 11,344																
Plan Period Requirement: Requirement from model 2016-2032																	
Already delivered 2013-2015																	
Total 2013-203																	
Delivery over plan period p.a	. 635																

Appendix 4: Market signals uplifts applied in other locations

Table 5 Market signals uplifts applied in other locations LPA LQ Affordability SHMA/Inspector's Report **Market Signals** Uplift Ratio (2016) Eastleigh **Inspector's Report** 10% 10.18 Canterbury SHMA & Inspector's Report 20% 11.1 30% 13.32 Cambridge SHMA South Cambridgeshire SHMA 10% 11.03 High Peak SHMA & Inspector's Report 7.06 5% Braintree 15% 9.58 SHMA Chelmsford SHMA 20% 11.36 Sefton Inspector's Report 0% 6.5 Uttlesford 10% **Inspector's Report** 13.18 **Aylesbury Vale** SHMA 10% 10.92 Chiltern SHMA 20% 16.27 South Bucks SHMA 20% 17.31 SHMA 20% 11.29 Wycombe Uttlesford SHMA 20% 13.18 East Herts SHMA 20% 13.1 Harlow SHMA 20% 9.55 SHMA 16.77 **Epping Forest** 20% SHMA 10% 9.52 Stevenage North Hertfordshire SHMA 10% 10.69 **Bristol** 8.68 SHMA 7.50% North Somerset SHMA 7.50% 8.67 South Gloucestershire 9.51 SHMA 7.50% Tamworth Inspector's Report 5% 6.96 Mid Sussex **Inspector's Report** 20% 13.17 Crawley Inspector's Report 10% 9.52

Source: Lichfields (Note: only includes those where a flat rate uplift has been applied/concluded, rather than those where market signals uplift was not explicitly considered/applied or where an alternative approach – e.g. headship adjustments – were applied)



Source: Lichfields