Appeal by Gladman Developments Ltd

Land off Chilton Road, Long Crendon

PROOF OF EVIDENCE OF
JONATHAN LEE

ON BEHALF OF
AYLESBURY VALE DISTRICT COUNCIL

PINs Ref: APP/J0405/W/16/3142524
1. Introduction and Summary

11 My name is Jonathan Lee and I am Managing Director of Opinion Research Services (ORS), an independent social research practice that was founded at the University of Wales Swansea and has specialised in social and housing research for more than 20 years. I have a BSc degree in Computer Science (with Honours) awarded by the University of Wales (Swansea) in 1996.

12 I first joined ORS in 1994 and have been responsible for Strategic Housing Market Assessments undertaken for more than 100 local authorities across England and Wales, all of which require advanced knowledge of statistics and demographic modelling. I have also worked on numerous Housing Needs Assessments, Housing Requirement Studies, Stock Condition Surveys and Health Impact Assessments.

13 I am instructed by Aylesbury Vale District Council to give evidence in relation to this Appeal. My evidence in this case deals specifically with “Buckinghamshire Housing and Economic Development Needs Assessment Update 2016” (CD 14.4; “the HEDNA Update”) prepared by ORS and Atkins, and also considers the differences between the HEDNA and the analysis prepared by Regeneris on behalf of the Appellant in the proof of evidence from Dr Ricardo Gomez and the report “Buckinghamshire OAN (February 2017)” (“the Regeneris study”).

14 The evidence which I have prepared and provide for this appeal reference APP/J0405/W/16/3142524 (in this proof of evidence) is true and I confirm that the opinions expressed are my true and professional opinions. A list of acronyms is included for reference at Appendix 1. Planning and site assessment details relating to the Appeal are considered by other witnesses.

Summary of Evidence

15 ORS and Atkins were jointly commissioned by Aylesbury Vale District Council (with Chiltern District Council and Wycombe District Council) to prepare a Housing and Development Needs Assessment (HEDNA) which was published as a Consultation Draft in October 2015 (CD 8.4; “the Original HEDNA”) to support the Council in objectively assessing and evidencing development needs for housing (both market and affordable) and provide evidence to inform local policies, plans and decision making. The Original HEDNA was based on a Housing Market Area (HMA) for Buckinghamshire that ORS identified as part of a study
jointly commissioned by the four Buckinghamshire local planning authorities to identify Housing Market Areas in Buckinghamshire and surrounding areas (CD 14.6; “the HMA study”).

The HEDNA Update was subsequently prepared to take account of the consultation feedback received, to extend the geographic coverage of the study to include the South Bucks District Council area (in order to provide a consistent evidence base for the Chiltern and South Bucks joint Local Plan) and to take account of the most up-to-date information available. The HEDNA Update entirely supersedes the Original HEDNA.

I was the Project Director for the Original HEDNA, the HMA study and the HEDNA Update; I took responsibility for the analysis and modelling on all three studies and was the lead author of their reports. All three studies fully comply with the National Planning Policy Framework (NPPF, March 2012) and the approach used is well-established and consistent with Planning Practice Guidance on the Assessment of housing and economic development needs (PPG) and the good practice advice published by the Planning Advisory Service (PAS) “Objectively Assessed Need and Housing Targets: Technical Advice Note, second edition” (July 2015; CD 14.3).

Establishing the Objectively Assessed Need

The HEDNA sets out the Council’s full assessment of housing needs, based on the Buckinghamshire housing market area. The Appellant’s analysis (prepared by Regeneris) is presented in their report “Buckinghamshire OAN (February 2017)” (“the Regeneris study”).

The Council has established a schedule which identifies the assumptions relevant for establishing overall housing need which is included at Appendix 2.

The studies agree that:

» Buckinghamshire housing market area provides the most appropriate area for establishing the Objectively Assessed Need (OAN), and for the purposes of 5-year housing land supply the OAN should be assessed for Aylesbury Vale district;

» The period for assessing OAN is 2013-2033;

» The starting point estimate should be based on the 2014-based CLG household projections;

» Fertility rates and mortality rates should be based on the ONS 2014-based sub-national population projections;

» An allowance of 3.7% should be included for vacancies and second homes; and
» There is no justification for any increase to the OAN to help deliver the required number of affordable homes.¹

However, the Regeneris study disagrees with the HEDNA Update on a few important points which are critical to the assessment.

Firstly, the Regeneris study fails to take proper account of data quality issues that affect local demography for Aylesbury Vale. In particular, the study fails to acknowledge the systematic problems with ONS Mid-Year Population Estimates in the area. Consequently, the Regeneris study overestimates future population growth. This is for three reasons:

» They adopt population estimates for mid-2013, mid-2014 and mid-2015 uncritically despite the administrative data showing these to be inaccurate: this exaggerates population growth over the period 2013-15;

» They include erroneous migration estimates that do not take account inconsistencies with administrative data when establishing future migration assumptions: this exaggerates migration projected for the period 2015-33; and

» They do not take account of the impact of unattributable population change; despite this accounting for over 5,800 persons in Aylesbury Vale.

The Council has taken proper account of these data quality issues which affect the local demography for Aylesbury Vale; whereas the Appellant has accepted the population estimates uncritically (despite the ONS identifying problems with the local data). As a consequence of ignoring the data quality issues, the Appellant’s OAN is 217 dpa higher than the Council’s OAN.

Secondly, the Regeneris study relies exclusively on short-term migration trends based on 5-year averages, which are unlikely to continue over the 20-year Plan period. The 5-year period used to establish migration trends (2009-14) is a period during which a number of large housing developments have influenced migration levels, but Regeneris have ignored the PPG advice² on the need to take account of this when considering issues affecting local demography.

The Council has recognised that it is important to ensure that the projections are based on “normal” rates of migration, otherwise non-cyclic events such as large housing developments could artificially inflate (or

¹ The studies differ in their reasons for this. The Council note that PPG ID 2a-029 is clear that any such increase relates to “the total housing figures included in the local plan” and therefore this does not affect the OAN. The Appellant has concluded that their OAN is likely to deliver the affordable housing need that the Council has identified.

² PPG ID 2a-017
deflate) the future population and household projections. Whilst the basis for migration trends is a matter of judgement, the HEDNA Update is reasonable in adopting long-term trends based on 10-year averages. As a consequence of relying exclusively on short-term migration trends, the Appellant’s OAN is a further **28 dpa higher** than the Council’s OAN.

1.16 **The following chart considers the population projections for Aylesbury Vale in context.**

![Population Projections](image)

1.17 The HEDNA Update (which takes account of local data quality issues and is based on long-term trends) projects that population growth will be 19.4% over the 20-year period 2013-33. This projection remains within the upper quartile, so is higher than more than three quarters of all local authority areas in England; but it identifies a level of growth that is realistic when compared to the exceptionally high 5-year trend.

1.18 **The Regeneris study essentially relies on the ONS 2014-based starting point; and although the study recognises that the projected growth is double the national average, it does nothing to respond to this exceptional position. It is unrealistic to assume that the short-term migration trends on which this projection is based could be sustained for the full 20-year Plan period, and it is unreasonable to not take account of this.**

1.19 It is notable that most other LAs with comparable levels of proportionate growth are London boroughs (see Appendix 3). The Greater London Authority (GLA) has rightly argued that this does not provide a robust basis for planning for the long-term needs of London, and this was endorsed by the Inspector examining
the Further Alterations to the London Plan in Autumn 2014. For exactly the same reasons, the ONS starting point does not provide a robust basis for planning for the long-term needs of Aylesbury Vale.

1.20 The Regeneris study identifies extreme population growth based on unreliable data and unrealistic short-term migration rates being sustained over a 20-year period. The HEDNA Update, based on reliable long-term trends, provides the only robust demographic projection on which to base the OAN.

1.21 The final point of difference between the Regeneris study and the HEDNA Update relates to the final uplift applied to the housing need based on the demographic projection. The Regeneris study proposes an uplift of 106 dpa in response to suppressed household formation, and concludes that this would also provide a 15% response to market indicators and ensure alignment between future jobs and workers. The Council has proposed an overall uplift of 90 dpa in addition to the housing need based on household projections. As a consequence, the Appellant’s OAN is 16 dpa higher than the Council’s OAN.

1.22 Nevertheless, it is important to note that:

» The Appellant’s adjustment for suppressed household formation is artificially inflated by the unreasonably high demographic projection. As the demographic projection is 28% higher than can be justified, it is likely that this response to suppressed household formation is also too high be a comparable amount. Only an uplift of 80-90 dpa is reasonably needed, which is consistent with the uplift that the Council has applied;

» The Appellant’s proposed 15% uplift in response to market signals is unreasonably high in the context of the indicators for Aylesbury Vale and an uplift of more than 10% cannot be justified. The Council has applied an uplift of 10%; and

» The Appellant’s analysis of the alignment between jobs and workers is based on inconsistent economic activity rates, does not take proper account of changes to unemployment and assumes an unduly high rate of employment growth. The Council’s proposed OAN ensures alignment between a realistic assessment of future jobs and workers.

1.23 The HEDNA Update provides the only robust and reliable assessment of Objectively Assessed Housing Need for Aylesbury Vale: 19,385 dwellings over the 20-year period 2013-33, equivalent to an annual average of 969 dwellings.

1.24 The Council’s OAN of 969 dpa represents an overall increase in dwellings of 26% over the 20-year Plan period, an average of 1.3% per year. The Appellant’s OAN of 1,230 dpa represents an overall increase in dwellings of 33% over the 20-year Plan period, an average of 1.7% per year.
In addition to its own housing need, Aylesbury Vale is planning to provide 7,500 dwellings to address unmet need from elsewhere in the housing market area (375 dpa, equivalent to a further 0.5% per year). On this basis, their housing target based on the Council’s OAN represents an annual growth of 1.8%. This would be the second highest target of any Local Plan that has been adopted since the NPPF (the highest being Chiltern at 1.9%; see Appendix 4), compared to the average rate of annual growth of 1.0% across all adopted Plans.

Achieving a growth of 1.0% nationally would require a 71% increase in current housebuilding rates\(^1\) and would meet Government objectives to delivery one million new homes. The Council’s OAN identifies that the need for housing in Aylesbury Vale is 30% higher than the national average, and their contribution to meeting unmet needs from elsewhere in the housing market area is likely to need a housing target that will require housebuilding rates in the area to be almost double the national average.

The Appellant’s OAN would imply that the housing target would need a 2.2% annual rate of growth. This would significantly exceed the housing target in every other adopted Local Plan in the country; but it is the consequence of an unrealistic assessment based on erroneous population data and unrealistic migration levels. The Appellant’s OAN cannot be justified and it is unsound.

It is evidently clear that the HEDNA Update provides the only robust and reliable assessment of Objectively Assessed Housing Need for Aylesbury Vale at 969 dpa.

\(^1\) HEDNA Update, paras 7.15-17
2. The Council’s Approach

21 The Council accepts that Aylesbury Vale does not have a housing requirement figure in an up-to-date adopted Local Plan; however, the “Buckinghamshire Housing and Economic Development Needs Assessment Update 2016” (CD 14.4; “the HEDNA Update”) prepared by ORS sets out the latest full assessment of housing needs, based on the Buckinghamshire housing market area.

22 PPG clearly states that “the latest full assessment of housing needs” (ID 3-030) should be considered by the Inspector as the basis for 5-year housing land supply.

23 The HEDNA Update adopts the CLG 2014-based household projections as the starting point for establishing OAN, an average of 1,051 households per year over the 20-year period 2013-33. However, PPG recognises that “the household projections published by the Department for Communities and Local Government ... have not been tested” (ID 3-030); and that this starting point estimate of overall housing need may require adjustment to reflect factors affecting local demography (ID 2a-015, emphasis added).

Household projections published by the Department for Communities and Local Government should provide the starting point estimate of overall housing need. The household projections are produced by applying projected household representative rates to the population projections published by the Office for National Statistics ... The household projection-based estimate of housing need may require adjustment to reflect factors affecting local demography

24 Chapter 3 of the HEDNA Update reviews the official population estimates in detail, and taking full account of all of this information, the HEDNA Update establishes alternative household projections for Aylesbury Vale in the context of local demography.

Population Trends

25 The CLG household projections which provide the starting point estimate of overall housing need are based on the Office for National Statistics (ONS) Sub-National Population Projections (SNPP). This data in turn is based on data from the ONS Mid-Year Estimates (MYE). However, in Aylesbury Vale the MYE component of population change data suggested a net gain of 14,815 people over the 10-year period 2001-11, but the
population of Aylesbury Vale did not actually increase by 14,815 people. In fact, Census data shows that the population increase was only 8,377 people over this period – a difference of 6,438 persons.

2.6 The ONS take account of this difference through an “accountancy” adjustment in the Mid-Year Estimate data; however, 6,438 “missing” persons cannot simply be ignored when projecting the future population – this is a critical factor affecting local demography. Given the fundamental importance of population trends, the HEDNA Update considered this issue in detail for Aylesbury Vale (pages 42-51).

2.7 Based on a balanced analysis of all of the evidence, the HEDNA Update concluded that the 2001 Census had probably overestimated the population at that time; and with the benefit of hindsight, more recent data suggests that the population was actually around 162,500 persons. On this basis, the HEDNA Update concludes that “the 2001 Census probably overstated the population for Aylesbury Vale by around 3,400 persons” (para 3.34); but this only explains around half of the 6,438 “missing” persons. Taking account of all of the evidence available, the HEDNA Update goes on to conclude that (para 3.35):

“we are more than 99% confident that the component of population change data from the revised ONS mid-year estimates overestimates population growth for Aylesbury Vale”

2.8 It is accepted that data recorded on births and deaths are broadly accurate, therefore either fewer people moved to Aylesbury Vale or more people moved away than the flow data suggests – so the remaining “missing” people must be associated with net migration (in its broadest sense).

2.9 In July 2013, the House of Commons Public Administration Select Committee (PASC) published a report on Migration Statistics (HC 523, July 2013) (Appendix 5). This report concludes that “Migration estimates based on the International Passenger Survey … do not provide accurate estimates of international migration to and from local areas” (page 4).

2.10 Furthermore, the report cites views from other experts about the quality of this data (page 10):

Despite these recent improvements migration statistics are still not fully adequate for the task of producing robust population estimates or understanding patterns of migration

(Royal Statistical Society)

The statistics on migration to and from the UK and its constituent parts are inadequate

(British Society of Population Studies)

The international migration data are not fit for purpose (Royal Geographical Society)
Chapter 3 of the PASC report (pages 16-18) deals with local area migration estimates – i.e. estimates of international migration to and from local authority areas. The report quotes the Royal Statistical Society:

There is a continued problem with the quality and quantity of migration data available at a local level. Improvements have been made through the Migration Statistics Improvement Programme by allocating international migrants to local authority areas using administrative data, but the local-level estimates of migration are not robust, particularly for areas with high population turnover. For some local authority areas the Census has shown that the ONS population estimates have misrepresented the level of population growth, a problem caused by inaccurate internal and international migration estimates.

Furthermore, the report notes that the UK Statistics Authority has concluded:

The IPS sample size is too small to enable the production of reliable international migration estimates at a local authority level.

The chapter concludes (emphasis added):

The International Passenger Survey does not provide accurate estimates of international migration in local areas. The Census provides the most accurate data on the number and characteristics of migrants at the local level, but it is too infrequent to act as a routine source of data. The future of the Census is also uncertain. As the only reliable source of data on migrant populations in local areas, the potential loss of the Census is a concern. Accurate estimates of migration in local authorities must be available independent of the Census. The ONS should develop new sources of data on international migration that are robust enough to provide accurate estimates of annual migration flows to and from local authority areas, even if the Census continues.

Migration is critically important to future population projections, and although the MYE component of population change data recorded overall net migration to be a gain of 7,170 persons over the 10-year period 2001-11, the HEDNA Update concluded that this overall gain associated with net migration was around 2,400 persons too high (para 3.36).

Taking account of the evidence from all of the official statistics, the HEDNA Update concluded that net migration over the 10-year period 2001-11 actually averaged around 480 persons annually.
Impact of the ONS Migration Statistics Improvement Programme

2.16 The individual components of population change are estimated by the ONS each year when deriving the MYE, however the original estimates for 2001-02 to 2009-10 were revised in the light of the ONS Migration Statistics Improvement Programme (MSIP).

2.17 The chart below shows the estimates for Aylesbury Vale. The dashed lines show the original ONS estimates and the solid lines show the MSIP revised estimates. It is evident that the estimates for natural change and UK migration did not change substantively, however international migration estimates changed marginally for the period 2001-04 and were fundamentally revised from 2005-06 onwards.

2.18 The original estimates for international migration identified a net loss of around 1,400 persons over the period 2001-10 whereas the revised figures identified a gain of around 2,100 persons over the same period. This change led to an additional 3,500 persons being incorporated in the population estimate for mid-2010, which increased from 174,400 to 178,200 persons as illustrated in the chart below.

2.19 It is evident that the original estimate (represented by the MYE (superseded) series on the chart) was much closer to the population estimate based on Census data. The MSIP revised estimate (represented by the MYE (exc. UPC) series on the chart) was actually less accurate as it suggested a far higher rate of population growth than was actually experienced. In other words, whilst the ONS Migration Statistics Improvement Programme improved the population estimates in most local authority areas, the estimates got far worse in Aylesbury Vale.
The ONS has not changed its method for the population estimates since the 2011 Census, so any systematic problem with the method would continue to affect more recent estimates. On this basis, the HEDNA Update considered the net population change in the component of change data for 2011-12, 2012-13, 2013-14 and 2014-15 in the context of a range of administrative data (HEDNA, figure 23). All identified that the MYE was continuing to overstate population growth. This is in accordance with PPG ID 2a-017 which states:

**Can adjustments be made to household projection-based estimates of housing need?**

*The household projections produced by the Department for Communities and Local Government are statistically robust and are based on nationally consistent assumptions. However, plan makers may consider sensitivity testing, specific to their local circumstances, based on alternative assumptions in relation to the underlying demographic projections and household formation rates. Account should also be taken of the most recent demographic evidence including the latest Office for National Statistics population estimates.*

*Any local changes would need to be clearly explained and justified on the basis of established sources of robust evidence.*
2.21 Alternative population data for Aylesbury Vale is carefully considered in the HEDNA and in summary, over the 4-year period 2011-15:

» The mid-year estimates suggest a population increase of 13,850 persons, which is **4,170 higher** than the 9,680 increase recorded on the NHS patient register – a difference of 1,043 persons on average each year;

» The mid-year estimates suggest an increase of 1,260 children aged 5-14, which is **520 higher** than the 740 increase on the school census; and

» The mid-year estimates suggest an increase of 4,610 people aged 65 or over, which is **340 higher** than the 4,270 increase in people aged 65+ receiving state pension.

2.22 Alternative administrative data for population is useful because the figures for the patient register and school places are based on real data returns each year while the MYE is based upon a combination of data returns and a model which also incorporates trend patterns. If trend patterns for an area have been wrong in the past then there is a high probability that they will continue to be wrong in the future. All of the administrative data sources that ONS identified for validating the population estimates suggest that the population is increasing slower than suggested by the estimates for the period mid-2011 to mid-2015, especially for those younger age groups that are particularly impacted by migration. On this basis, the HEDNA Update concluded that (para 3.41):

“the methodological improvement to estimating migration that the ONS introduced from 2004-05 onwards has created a systematic problem in Aylesbury Vale which has persisted beyond 2011, and it therefore isn’t appropriate to adopt this data uncritically”
The following chart clearly shows that Aylesbury Vale is an outlier when compared to other areas when comparing Patient Register change and the change in Mid-Year Estimates for the period 2011-15.

The chart also identifies that Central Bedfordshire is an outlier too; and ORS have had to address similar problems when establishing the OAN for the Luton and Central Bedfordshire SHMA. The approach taken for the demographics underlying the OAN for that study has been considered by a number of Inspectors, and was recently endorsed at appeal (see Appendix 6, paras 26-29, emphasis added):

26. The SHMA is a technical document intended to inform the formulation of the local plan strategy. Whilst it has not been through the process of examination, it was undertaken to establish the OAN for housing across the Luton and Central Bedfordshire Housing Market Area (HMA). I agree with my colleague in the earlier decision that this HMA is the most useful and appropriate option, particularly as neighbouring authorities were involved in a Steering Group that informed the SHMA process.

27. This appeal is not the forum to carry out a forensic analysis of the SHMA. I have noted the concerns of the appellant company that the reliance upon Census data for migration projections and a failure to properly account for market signals, in their view, would increase the dwellings per annum figure. It was accepted that the Office of National Statistics do not consider Census data to be completely accurate. However, there are risk factors attributable to all data sources. The
Census, whilst infrequent, provides estimates of long-term migration patterns. As a document which informs local plan making, the SHMA must look to the long-term without the danger of being influenced by short-term trends. Sensitivity testing may be an approach which should be considered but for the purposes of this appeal I am satisfied that the use of the Census data permeating through the substance and conclusions of the SHMA is appropriate. In reaching this view I am mindful that the difference between the mid-year estimates as the starting point and the Census data on the unadjusted housing need figures would likely be academic.

28. In considering market signals these should be assessed with reference to HMA. The SHMA approach is to draw comparisons with HMAs which exhibit similar demographic and economic characteristics. This does not necessarily mean neighbouring local authority areas. These may not be comparable with the extent and characteristics of the HMA. This is a judgement to be made and I am not convinced that the approach taken in the SHMA in this regard is unjustified.

29. Therefore, whilst I accept that some adjustments may be required to the OAN, as a result of the matters raised by the Examining Inspector, and in the formulation of a new local plan, this is a matter which requires further work, consideration, consultation and examination. I do not consider it is my role to set an OAN for the District. In my view, to the extent that it has been considered at the Inquiry, the SHMA represents a robust source of base data to establish the housing requirement. As a result the Council’s OAN in all probability would not be less than 29,500 dwellings over the plan period. I have considered the five year housing land supply (5YHLS) on this basis.

2.25 With regard to Aylesbury Vale, the administrative data clearly justifies the continued need for an adjustment to the MYE (as it did in Central Bedfordshire). Whilst the MYE data identifies a growth of 13,850 persons, the HEDNA Update concluded that adjustments to migration estimates consistent with those needed to reconcile the data for the period 2001-11 would reduce this to an increase of 9,646 persons (paras 3.43-44). This is comparable with the growth recorded on the patient register (9,680 persons) which is typically higher than the overall population growth.4

2.26 It is important to recognise that there has been no change in the ONS methodology for establishing the MYE since the mid-2011 estimates were produced – so any systematic error that existed at that time will continue to impact on more recent estimates, and therefore cannot be ignored. Whilst the ONS will not have a robust basis for correcting this data until the results of the 2021 Census are available (and therefore

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4 Over the period 2011-15 the patient register increased by 1.90 million persons nationally whereas the ONS population estimates identified an increase of 1.68 million persons over the same period
no official correction can yet be made), it is apparent that corrections made to the mid-2011 estimates need to be applied to the data for more recent years unless the underlying issues can be addressed through changes to the methodology.

2.27 This approach used in the HEDNA Update is consistent with the PPG, which states that alternative assumptions may be adopted provided that they are clearly explained, justified and based on robust evidence (ID 2a-017, emphasis added).

Plan makers may consider sensitivity testing, specific to their local circumstances, based on alternative assumptions in relation to the underlying demographic projections and household formation rates. Account should also be taken of the most recent demographic evidence including the latest Office of National Statistics population estimates. Any local changes would need to be clearly explained and justified on the basis of established sources of robust evidence.

2.28 Whilst the HEDNA Update did not separate out the impact of correcting for the underlying data quality issues from the reliance on long-term migration trends based on 10-year averages, I can confirm that adopting the adjusted population estimates from the HEDNA Update would yield an increase of 36,235 persons over the 20-year period 2013-33 based on 5-year migration trends for the period 2009-14 (the same period as used for the ONS 2014-based SNPP); compared to the increase of 45,272 persons projected by the 2014-based SNPP. On this basis, simply taking account of the identified data quality issues reduces the housing need from the CLG starting point of 21,028 households (21,836 dwellings; 1,092 dpa) to an overall increase of 17,466 households (18,137 dwellings; 907 dpa).

Migration Rates

2.29 The HEDNA Update report considered the basis for establishing migration trends in detail (pages 64-67) and concluded that:

» 5-year trend migration scenarios are less reliable: they have the potential to roll-forward short-term trends that are unduly high or low and therefore are unlikely to provide a robust basis for long-term planning.

» 10-year trend migration scenarios are more likely to capture both highs and lows and are not as dependent on trends that may be unlikely to be repeated. Therefore, we favour using 10-year migration trends as the basis for our analysis.
2.30 The HEDNA Update therefore favours 10-year migration trends as the basis for establishing housing need, rather than the 5-year trends used for the CLG projections. This is consistent with PAS advice (CD 14.3; paras 6.22 and 6.24, PAS July 2015) and expert views (for example “Making Sense of the New English Household Projections”, Professor Ludi Simpson and Dr Neil McDonald, see Appendix 7, page 178). Adopting long-term migration trends also avoids the suppressing of migration from London. This approach was discussed with officers from the GLA at a meeting in January 2015 and was agreed to be appropriate.

ORS has systematically adopted long-term migration trends based on a 10-year average across all OAN assessments that we have undertaken since the publication of the NPPF (any assessments that previously used different assumptions have been updated to ensure consistency). In some assessments this has increased the starting point, in others it has reduced it. The use of long-term trends is appropriate in both instances. The approach is consistent with that used by ORS for the Bath and North East Somerset (BANES) SHMA, where the Inspector Mr Simon Emerson concluded the following in his Report of the Examination into the Council’s Core Strategy (June 2014; Appendix 8) (paras 41-43, emphasis added):

41. There are two main criticisms of the use of this figure. Firstly, ONS states that the other, unattributable, changes introduced each year (generally a reduction of about 450 and reflected in Fig 1 of Addendum 1a) should not be directly taken off estimates of net migration because, as its name indicates, the ONS are not sure of the reasons why the adjustments have to be made. However, if this other changes adjustment is not made, the Census figures between 2001-2011 would not correlate and any annual average for past migration and other changes would not reflect what the Censuses show actually occurred.

42. Secondly, the most recent five years leading up to 2010-11 (in Fig 1 of Addendum 1a) has a higher annual average for migration and other changes at 681 than the 10 year average and this figure would be higher still if the ONS data for 2011/12 (published at the end of June 2013) was included in a rolled-forward five year average. However, given the uncertainties inherent in some of the data, particularly for flows of migrants internationally, a 10 year period is a reasonable approach and the latest MYE was published just as the ORS were completing their Addendums 1a and b so, understandably, had not been included.

43. The 10 year period selected by ORS also enables a simple cross-check drawn directly from the increase in the population of the district between 2001 and 2011 shown by the MYE for those years which are most closely related to the Censuses. In this period, the population increased by 6,338. (The rolled forward MYE from 2001 had indicated much higher growth at 12,308 – BNES/43 – and thus was clearly an overestimate.) Natural change (births and deaths) are a relatively reliable
component of change and account for an increase of about 1,000 over the inter-censal period. The residual increase as a result of all types of out-migration and in-migration is about 5,500 or 550 per year. The inter-censal period provides a readily understandable and robust check on the reasonableness of the average of about 550 per year for migration and other change used in the ORS model. Thus I consider that the ORS mid-trend population projection is a reasonable demographic projection. The population increase between 2011-2031 is projected to be about 16,600.

The approach is also consistent with that used by ORS for the Cheshire East Housing Development Study, where the Inspector concluded the following in his Further Interim Views of the Examination into the Council’s Local Plan Strategy (December 2015; Appendix 9) (paras 23-24, emphasis added):

23. Turning firstly to demographic housing need, the base figure using the latest DCLG 2012-based household projections equates to just under 22,000 new dwellings (2010-2030). Making adjustments to reflect a longer 10-year period on which to base future migration rates, along with vacant/second homes (4%), that figure is increased to almost 27,000 new dwellings. CEC has not included any adjustment to reflect local household formation rates (HFRs), particularly for the younger age groups (which may have been depressed in previous years), or for previous lower rates of housing delivery, which may have been affected by previous policy constraints and influenced past migration. However, the latest 2012-based household projections incorporate some uplift in HFRs compared with the lower rates in the superseded 2011-based projections, and so there is no specific need for any further adjustment, especially since PAS guidance advises that this is the best information available at present.

24. CEC’s consultants considered a range of HFRs and migration assumptions, giving reasons for selecting the preferred option. Previous policy restrictions on housing provision only lasted for a limited time and did not cover the whole Plan area; and there is no shortfall in housing provision in the period before the current Plan, based on contemporary housing targets. More recent migration and population figures may not provide a reliable guide for longer-term trends and do not necessarily undermine CEC’s estimates and assumptions. In any event, the uplift proposed between the base demographic need and the proposed OAN/housing requirement figure would more than account for any adjustment needed to reflect these demographic factors.

Consistent with the conclusions in the BANES SHMA and the Cheshire East HDS (as approved by both Inspectors), HEDNA Update recommended that population projections based on long-term migration trends were the most appropriate for establishing overall housing need. Not only did this allow calibration...
against detailed Census data (instead of relying exclusively on inadequate migration estimates from the International Passenger Survey), it also avoided the assessment of overall housing need being informed by short-term trends that are either too low or too high.

As previously noted, taking account of the identified data quality issues reduces the housing need from the CLG starting point of 21,028 households (21,836 dwellings; 1,092 dpa) to an increase of 17,466 households (18,137 dwellings; 907 dpa). Based on long-term migration trends using a 10-year average, the housing need further reduces to an increase of 16,933 households (17,584 dwellings; 879 dpa).

Balancing Jobs and Workers

Jobs Growth

The Original HEDNA considered two economic forecasts in relation to future employment, one based on data from Oxford Economics and the other based on data from Experian. These were reviewed against past trends and discussed with a wide range of stakeholders.

The 2015-based Oxford Economics data identified an increase of around 42,300 jobs across the Buckinghamshire Functional Economic Market Area (FEMA) whilst the Experian data identified a notably higher increase of around 51,300 extra jobs. These represented annual compound growth rates of 0.76% and 0.94% respectively; whereas the historic rate of growth for the period was 0.33% (based on Experian data for the period 1997-2013). On this basis, the Oxford Economics forecast was chosen as the preferred scenario; for whilst it was lower than the Experian forecast, it still represented an ambitious rate of growth in the context of historic trends whereas the Experian forecast was considered unrealistic.

For the HEDNA Update, 2016-based economic forecasts were obtained from both Oxford Economics and Experian. The Experian forecast had reduced substantially, and the new figures suggested a growth of 43,700 jobs over the same period (a compound rate of 0.81%). Therefore, with the benefit of hindsight, the Original HEDNA was right to not rely on the 2015-based forecast. The Oxford Economics forecast had also reduced, but the change was far more marginal with an extra 40,700 jobs forecast for the FEMA (a compound rate of 0.78%). Given the consistency in the Oxford Economics forecasts, the HEDNA Update continued to adopt these as the preferred scenario. Therefore, the alignment of jobs and workers was based on an increase of 40,716 jobs across the FEMA/HMA over the 20-year period 2013-33; which included 16,904 in Aylesbury Vale.

5 HEDNA Update, figure 53 and figure 54
Labour Force

2.38 Considering the future workers for Aylesbury Vale, the HEDNA Update identified that the economically active population would increase by 13,906 persons over the period 2013-33 (figure 113). This was based on the population projections using long-term migration trends, and took full account of changing economic activity rates associated with older people (as a consequence to changes to the pension age), female participation (as a consequence of a cohort change) and young people (as a consequence of staying longer in education) (paras 6.2-19).

2.39 Economic activity rates were based on Census data and the Office for Budget Responsibility (OBR) labour market participation projections (para 6.20). The HEDNA Update also took account of the recorded change in unemployment claimants over the period 2013-15, which reduced by 1,278 in Aylesbury Vale (figure 113); however, no further reduction was assumed over the remaining period to 2015-33.

2.40 Taken together, the increase in economically active population and the reduction in unemployment suggest that the total number of workers will increase by around 15,184 over the full 20-year period 2013-33; but after taking account of commuting patterns based on Census data, the HEDNA Update took the assumption that this proportion would not change and on the basis the number of residents out-commuting from Aylesbury Vale was assumed to increase by 4,565 workers (4,864 more commuting out of the Buckinghamshire HMA, including many likely to work in Milton Keynes and other surrounding HMAs, offset against 299 fewer commuting from Aylesbury Vale to the south of the HMA). This implied that 10,021 of the extra workers would be available to work in the local area (figure 113).

2.41 Considering the future jobs, the HEDNA Update was informed by evidence from Oxford Economics, which identified an extra 16,904 jobs over the 20-year period 2013-33. In considering the future number of jobs the HEDNA Update again considered the impact of commuting. Based on Census data, the analysis assumed that the proportion of jobs filled by commuters to the area would not change and on the basis the number of workers commuting to Aylesbury Vale was assumed to increase by 3,737; so the overall net impact was an increase in out-commuting. This implied that 13,167 of the extra jobs would depend on workers resident in the local area; but some of these jobs would be fulfilled as second jobs – so the total number of people needed would be fewer than the overall number of jobs, and providing for 13,167 extra jobs would only need 12,433 extra workers (figure 113).

2.42 Taking account of all of the evidence, the HEDNA Update concluded that there was likely to be a shortfall in workers; with only 10,021 extra workers available when 12,433 would be needed. There was a need to provide 2,412 additional workers to ensure alignment with future employment growth (figure 113).
To provide the additional workers needed, the HEDNA assumed the need for a higher rate of net migration than identified by past trends. Extra migrants would lead to a larger population overall with more economically active people resident in the housing market area. The HEDNA identified that 1,666 additional dwellings would be needed in Aylesbury Vale to provide the 2,412 extra workers needed to ensure alignment with future employment growth. On the basis of the proposed uplift to the housing need, the HEDNA Update identified an overall increase of 17,596 workers resident in Aylesbury Vale; which ensured that the overall number of future jobs and workers aligned.

The approach is consistent with that used by ORS for the Cheshire East Housing Development Study, although in that assessment the implications for migration were so significant that (unlike in Aylesbury Vale) some of the additional growth was assumed to be addressed through changes to commuting patterns. The Inspector endorsed the approach in his Further Interim Views of the Examination into the Council’s Local Plan Strategy (December 2015; Appendix 9) (paras 30-32, emphasis added):

30. Turning to economic factors, the HDS takes on board the conclusions of the revised economic assessment based on a 0.7%/year growth in jobs, equating to a need for 31,400 extra jobs. Taking account of commuting and economic activity rates, and given the ageing population in Cheshire East, this points to a shortfall of almost 11,800 workers compared with demographic projections. Addressing this shortfall through immigration alone would increase the housing need to 37,880 dwellings (1,894 dw/year), in order to provide the houses for the extra workers to take up the balance of the new jobs. However, this would lead to unprecedented additional levels of migration and commuting into Cheshire East, which CEC considers would be unsustainable, unrealistic and undeliverable.

31. CEC has examined a range of assumptions about migration and commuting into the borough, and has selected an option which makes modest adjustments to current trends, resulting in a need for almost 36,000 new dwellings, which is seen to be more realistic and sustainable. Even these assumptions would see an average increase of commuting into Cheshire East of some 400 persons/year and increased levels of migration of 2,600 persons/year, the highest level ever achieved; but in the context of overall migration and commuting within the wider area, these would represent relatively modest changes to current migration and commuting levels, involving less than 5% of the total projected number of jobs. Less out-migration may also occur with more jobs being provided in Cheshire East.

32. Much depends on the actual patterns of migration and commuting in the future, and in particular, where migrants and commuters come from; not all would necessarily come from the
surrounding areas, some could come from much further afield. The crossboundary migration assumptions have been addressed, and neighbouring authorities have commented on the detailed models and projections; the implications seem to be relatively modest in terms of the strategic patterns of migration and commuting and the inter-relationships between the housing and jobs markets and the economic strategies of the adjoining areas. Having considered all the evidence, discussions and statements at the hearing sessions, CEC seems to have reached a reasonably balanced judgement about the relationship between new jobs and houses, which is supported by the evidence and would result in sustainable levels of migration and commuting and patterns of development, in line with the guidance in the NPPF and PPG [ID-2a-018].

Criticism of the HEDNA’s Labour Force Assumptions

2.45 The Regeneris study claims that a number of assumptions taken by the HEDNA Update in relation to the future labour force projection are either inaccurate or inappropriate.

Economic Activity Rates

2.46 The HEDNA Update clearly identifies that there were 271,673 economically active residents in 2013 and that this would increase to 301,915 by 2033 based on the demographic-led projection (figure 127). These figures imply that the 66.3% of the overall population aged 16 or over was economically active in 2013 and this is likely to reduce to 63.7% of those aged 16 or over by 2033. The HEDNA Update also identifies a likely shortfall of 6,308 workers (figure 113) and proposes an increase to the overall housing need to draw in the additional population needed to address this shortfall. Following this uplift, the economically active population represents 63.9% of those aged 16+; so based on the HEDNA Update assumptions, the proportion of economically active residents is likely to reduce by 2.4% points over the 20-year period 2013-2033.

2.47 Oxford Economics 2016-based forecast identifies that 66.1% of the resident population aged 16 or over was economically active in 2013 (compared to 66.3% identified by the HEDNA Update, the difference being due to assumptions about the total population resident in Aylesbury Vale) and that this is likely to reduce to 63.7% by 2033 (compared to the 63.9% identified by the HEDNA Update). The forecast’s show that the proportion of economically active residents is likely to reduce by 2.4% points over the 20-year period 2013-2033, the same as assumed by the HEDNA Update. The assumptions taken by the HEDNA Update relating to economic activity rates are fundamentally consistent with those underlying the Oxford Economics forecast.
Unemployment

With regard to unemployment, the Regeneris study notes that (para 4.118):

“The HEDNA makes allowance for a fall in the number of unemployed residents in Buckinghamshire to occur between 2013 and 2033. It describes its approach at para. 7.40 and its use of government data which shows that between 2013 and 2015, unemployment fell by 3,800 across the area. It then adds these residents to its assumed increase in the resident labour force. There are two observations to make about this assumption:

It adds these unemployed residents to its estimates of the increase in the economically active population. The economically active population already includes residents who are unemployed but seeking work. By adding 3,800 to its assumed change (Buckinghamshire HEDNA Figure 113) in the resident labour force, it appears to be double counting this cohort of the population. The HEDNA should first establish what proportion of its extra resident labour force would be in employment and unemployment, then apply it adjustment to these figures.”

The HEDNA Update is not double counting unemployed workers returning to work.

It is correct to say that the economically active population already includes residents who are unemployed; but these form part of economically active population at the start of the projection period. Of the 271,700 economically active population that the HEDNA Update identified for 2013 (figure 92), the Oxford Economics data identifies that 259,500 were in employment; so there were around 12,200 unemployed at that time (though the number claiming unemployment benefits was lower than this). The HEDNA Update assumes that of these 12,200 people (who were already part of the economically active population) there would be 3,800 returning to work; reducing the number unemployed to around 8,400.

The HEDNA Update then identified the increase in the economically active population based on the demographic projections. This projected an increase from 271,700 economically active persons in 2013 to 301,900 by 2033; an overall increase of 30,200 economically active residents. The HEDNA Update does assume that all of the additional economically active residents will be employed; but this is a reasonable assumption given the level of jobs growth that is forecast. Whilst no increase in unemployment has been assumed, there would continue to be around 8,400 persons unemployed which represents a rate of 2.8% by 2033. This is consistent with rates for previous years identified by the Oxford Economics data for Buckinghamshire at times of near full employment.
It is reasonable to add the unemployed workers returning to work to the increase in the economically active population, as these are different people. The 3,800 unemployed workers returning to work were within the 271,700 starting population; the 30,200 increase in economically active residents are all additional to the 271,700 starting population. Since these are different people, there is evidently no double counting.

The Regeneris study goes on to say (para 4.118):

“By way of simple illustration, ONS data suggests that the number of economically active residents in Aylesbury Vale averaged at around 3,000 more than the number of employed residents in mid-late 2013, the start year for the HEDNA projections. If the HEDNA’s adjustment of 1,278 unemployed residents (Figure 113) were added to employed residents, it would still leave the district requiring more workers than the figure of 10,021 suggested by the HEDNA, and therefore an additional adjustment to the OAN figure.”

This statement misunderstands or misrepresents the analysis. If the ONS data suggests that the number of economically active residents in Aylesbury Vale averaged at around 3,000 more than the number of employed residents in mid-late 2013, the HEDNA Update simply assumes that 1,278 of these had returned to work between 2013 and 2015; thereby leaving around 2,000 people unemployed. This is broadly consistent with the Oxford Economics forecast, which identified that there were 3,700 unemployed residents in 2013 which reduced to 2,300 by 2015; a fall of 1,400 persons which is comparable with (albeit marginally higher than) the figure assumed by the HEDNA Update.

It is unclear why the Regeneris study says that this “would still leave the district requiring more workers than the figure of 10,021 suggested by the HEDNA, and therefore an additional adjustment to the OAN figure”, for this shortfall of workers is explicitly identified in the final row of the table at figure 113. This shows that Aylesbury Vale is likely to have a shortfall of 2,412 workers by 2033; and figure 114 confirms that an additional 1,666 dwellings will need to be provided to address this shortfall.

The HEDNA Update assumptions relating to unemployment are also consistent with the Oxford Economics forecast. The HEDNA Update assumes that unemployment will reduce by around 3,800 workers (para 7.40) which equates to 1.3% of the economically active population. The Oxford Economics data forecasts that unemployment will reduce from 4.6% to 3.3% over the 20-year period 2013-33; a reduction of 1.3%. The assumptions taken by the HEDNA Update relating to unemployment are fundamentally consistent with those underlying the Oxford Economics forecast.
Commuting

2.57 With regard to commuting, the Regeneris study notes that (para 4.125):

“There are two issues with the way that the HEDNA applies its assumptions about commuting:

*It assumes that the pattern of in and out-commuting will match that indicated by the 2011 Census. Some new residents to the area who might have labour market connections with the area that move from London, for example, must be assumed to change their behaviour so that it matches the flows given by the Census. This issue needs further explanation in the HEDNA, which lacks any detailed justification for these assumptions.*

*There appears to be an assumed change in the ratio of working residents to jobs, although this is not discussed in the HEDNA. The table below shows the implied change in the ratio based on data from the HEDNA.*

<table>
<thead>
<tr>
<th>Table 4.13 HEDNA Labour Force and Jobs Growth Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Employment*</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Economically Active Population</td>
</tr>
<tr>
<td>Ratio of Resident Labour: Jobs</td>
</tr>
</tbody>
</table>

Source: Buckinghamshire HEDNA Figures 92 and 97

2.58 It is entirely reasonable for the HEDNA Update to assume “that the pattern of in and out-commuting will match that indicated by the 2011 Census”. Any other assumption would be a policy-based decision that would need to be agreed under the Duty to Cooperate, and would therefore be considered when establishing the housing requirement and housing target for the Local Plans. It is well-established that OAN should be based on policy-off assumptions.

2.59 It is misleading to suggest that the HEDNA Update assumes a change in the ratio of working residents to jobs. The table shows the growth in economically active population based on the demographic projections in isolation. The HEDNA Update identified that these projections would lead to a shortfall of 6,308 workers by 2033 (figure 113) and therefore proposed that 4,329 additional dwellings should be provided to provide for these extra workers and ensure a balance. The table also fails to factor in any allowance for the assumed change to unemployment, despite acknowledging that this would have an impact in the following paragraph (para 4.126).
The following table shows the correct calculation. The ratio of resident employees to workforce jobs implied by the HEDNA Update is 0.99 at both the start and at the end of the 20-year period 2013-2033. There is no change in the ratio.

<table>
<thead>
<tr>
<th>Factor</th>
<th>2013</th>
<th>2033</th>
<th>Change 2013-2033</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Employment (Workplace Jobs)</td>
<td>261.1</td>
<td>301.9</td>
<td>+40.8</td>
</tr>
<tr>
<td>Resident Employees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demographic projection of Economically Active Population</td>
<td>271.7</td>
<td>301.9</td>
<td>+30.2</td>
</tr>
<tr>
<td>Unemployed workers</td>
<td>12.2</td>
<td>8.4</td>
<td>-3.8</td>
</tr>
<tr>
<td>Total employees based on demographic trends</td>
<td>259.5</td>
<td>293.5</td>
<td>+34.0</td>
</tr>
<tr>
<td>Impact of uplift to align jobs and workers</td>
<td>-</td>
<td>6.3</td>
<td>+6.3</td>
</tr>
<tr>
<td>Total Resident Employees (based on proposed OAN)</td>
<td>259.5</td>
<td>299.8</td>
<td>+40.3</td>
</tr>
<tr>
<td>Ratio of Resident Employees to Workplace Jobs</td>
<td>0.99</td>
<td>0.99</td>
<td>0.00</td>
</tr>
</tbody>
</table>

The HEDNA Update assumptions relating to commuting are also consistent with the Oxford Economics forecast. The HEDNA Update assumes that in-commuting will increase by 10,200 workers, but that this will be offset against a 11,500 increase in out-commuting. On this basis, net out-commuting increases by around 1,300 workers (para 7.41). The Oxford Economics data forecasts that net out-commuting will increase from 28,100 workers in 2013 to 28,900 workers in 2033; an overall increase in net out-commuting of 800 workers. Whilst this change is marginally lower than assumed by the HEDNA Update, the figures are comparable given the scale of the gross commuting flows to and from the FEMA. Furthermore, both the HEDNA Update and the Oxford Economics forecast show that the commuting ratio (the number of resident workers divided by total workforce jobs) will remain constant at 0.99 over the 20-year period 2013-2033.

The assumptions taken by the HEDNA Update relating to commuting are fundamentally consistent with those underlying the Oxford Economics forecast.

Double Jobbing

With regard to “double jobbing”, the Regeneris study notes that (para 4.117):

“the HEDNA’s double jobbing figure of 5.9% ... is a significantly higher figure than the ONS Annual Population Survey data suggests is the proportion of people with more than one job in the South East (4.2%) on average over the past four years”

There is no reason to assume that the level of “double jobbing” in Buckinghamshire would be the same as that across the whole of the South East region; and the adjustments for “double jobbing” are consistent with the Oxford Economics forecast.
The HEDNA Update assumes that “providing sufficient workers for 30,500 additional jobs would need an extra 28,800 workers living in the area” (para 7.42), thereby assuming that 1,700 jobs would be filled as second jobs. Whilst the Oxford Economics data forecasts an increase of around 40,700 extra jobs, the forecast identified that this would need an extra 38,900 people in employment. On this basis, the forecast assumes that around 1,800 of the extra jobs would be second jobs. The assumptions taken by the HEDNA Update relating to “double jobbing” are fundamentally consistent with those underlying the Oxford Economics forecast.

Summary of Labour Force Assumptions

The following table summarises the consistency between the HEDNA Update and the Oxford Economics 2016-based forecast. None of the criticisms put forward by the Appellant are valid. Any differences are minor, and all would yield a lower uplift when aligning jobs and workers which would have the consequence of reducing the overall housing need.

<table>
<thead>
<tr>
<th>Factor</th>
<th>HEDNA Update</th>
<th>Oxford Economics 2016-based forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Activity Rates (percentage of population aged 16 or over)</td>
<td>2.4% point reduction</td>
<td>2.4% point reduction</td>
</tr>
<tr>
<td>Unemployment Rates (percentage of economically active population)</td>
<td>1.3% point reduction</td>
<td>1.3% point reduction</td>
</tr>
<tr>
<td>Net Commuting (number of workers)</td>
<td>1,300 increase in net out-commuting</td>
<td>800 increase in net out-commuting</td>
</tr>
<tr>
<td>Commuting Ratio (number of resident workers divided by total workforce jobs)</td>
<td>Constant at 0.99</td>
<td>Constant at 0.99</td>
</tr>
<tr>
<td>Double Jobbing (number of jobs)</td>
<td>1,700 increase in second jobs</td>
<td>1,800 increase in second jobs</td>
</tr>
</tbody>
</table>

Household Formation Trends

PPG identifies that the household projections may require adjustment to reflect the consequences of past under-delivery of housing (ID 2a-015):

The household projection-based estimate of housing need may require adjustment to reflect household formation rates which are not captured in past trends.

Given this context, the HEDNA Update considers the additional needs from homeless households and concealed families which are not captured in past trends and that otherwise would not be counted. The needs based on household projections are therefore increased to take account of 130 concealed families
and homeless households that are additional to the household projections. This response to the past under-delivery of housing increases the overall housing need by an average of 7 households per year over the 20-year period.

Housing Market Signals

The housing market signals indicators indicate that there are considerable housing market pressures in Buckinghamshire HMA; and given that many of these indicators show greater pressures than the national average (in particular the market signals relating to price), the HEDNA Update concluded that the Objectively Assessed Need should be higher than suggested by household projections in isolation and proposed a 15% uplift overall.

However, the HEDNA Update recognised the distinct characteristics of the two local housing market areas within the wider Buckinghamshire HMA and the differentials between their respective housing market indicators. The market signals for Aylesbury Vale in 2013 (the base date for the OAN) were substantially “better” than the indicators for the rest of Buckinghamshire. Indeed, the indicators for Aylesbury Vale were very similar to the indicators for in Eastleigh, where the Local Plan Inspector considered a 10% uplift to be appropriate. On this basis, the Original HEDNA and the HEDNA Update proposed an uplift of 10% uplift for Aylesbury Vale in the north and an uplift of 20% for southern Buckinghamshire (the combined area of Chiltern, South Bucks and Wycombe).

The market signal indicators identified by PPG specifically include the unmet need for housing from concealed families and homeless households (ID 2a-019):

“Overcrowding

Indicators on overcrowding, concealed and sharing households, homelessness and the numbers in temporary accommodation demonstrate un-met need for housing.”

Given this context, the adjustment for suppressed household formation already represents a specific uplift responding to market signals based on unmet need for housing, and should be considered as part of the market signals uplift.

Similarly, the need to provide additional housing to balance future jobs and workers will already “increase planned supply by an amount that ... could be expected to improve affordability” (PPG ID 2a-020); so this uplift should also be considered as a cumulative part of the response to market signals.
Establishing OAN

2.73 The HEDNA Update calculates the overall housing need for Aylesbury Vale as follows:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Households</th>
<th>Dwellings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic starting point CLG household projections 2013-33</td>
<td>21,028</td>
<td>21,836</td>
</tr>
<tr>
<td>Adjustments for local demography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data quality issues Systematic problems with the population estimates overstating historic population growth</td>
<td>-3,562</td>
<td>-3,699</td>
</tr>
<tr>
<td>Migration trends Long-term trends based on 10-year average</td>
<td>-533</td>
<td>-553</td>
</tr>
<tr>
<td>Baseline household projections taking account of local circumstances</td>
<td>16,933</td>
<td>17,584</td>
</tr>
<tr>
<td>Adjustment for suppressed household formation rates Concealed families and homeless households</td>
<td>+130</td>
<td>+135</td>
</tr>
<tr>
<td>Baseline housing need based on demographic projections</td>
<td>17,063</td>
<td>17,719</td>
</tr>
<tr>
<td>Further adjustments needed... In response to balancing jobs and workers Additional 1,666 dwellings proposed across the sub-FEMA to ensure alignment between future jobs and workers</td>
<td>-</td>
<td>+1,666</td>
</tr>
<tr>
<td>In response to market signals 1,623 dwellings needed (in addition to the 125 dwellings for concealed families and homeless households) to deliver the overall 10% uplift of 1,758 dwellings proposed</td>
<td>10% x 17,584 = 1,758</td>
<td>1,758 - 135 = +1,623</td>
</tr>
<tr>
<td>Combined impact of the identified adjustments</td>
<td>-</td>
<td>+1,666</td>
</tr>
<tr>
<td>Full Objectively Assessed Need for Housing 2011-33</td>
<td>-</td>
<td>19,385</td>
</tr>
</tbody>
</table>

2.74 The HEDNA concludes the Objectively Assessed Need for Housing in Aylesbury Vale to be 19,385 dwellings, equivalent to an average of 969 dwellings per year over the 20-year period 2013-33.

Affordable Housing Need

2.75 The HEDNA Update identifies the need for affordable housing in Chapter 4. The overall housing need identified includes the need for both market housing and affordable housing. Affordable housing need represents 4,200 dwellings in Aylesbury Vale over the Plan period 2013-33 (figure 78) with market housing representing the balance of 15,185 dwellings.

2.76 The HEDNA Update has properly captured the unmet needs of homeless and other households living in unacceptable accommodation (such as concealed families and sharing households) together with all needs arising over the 20-year period 2013-33; therefore, the needs of all households have been counted, regardless of whether or not they are able to afford their housing costs. Meeting the identified need for affordable housing will result in some housing currently occupied by established households being released.
back to the market. Therefore, meeting the affordable housing need in full would offset the need to provide some market housing – so the need for affordable housing does not increase the overall objectively assessed need.

2.77 It is important to note that the HEDNA Update does not rely upon the private rented sector as a means of reducing affordable housing need; instead, it recognises that households in receipt of housing benefit can afford to access suitable housing in the market as they receive a welfare payment specifically for this purpose, so it would be inconsistent with the PPG to count these households as needing affordable housing (ID 2a-024):

“care should be taken … to only include those households who cannot afford to access suitable housing in the market”

2.78 The HEDNA Update does caution that if this payment was withdrawn, this would have a substantial impact on the affordable housing need; but the Government has not suggested that there is any intention to universally withdraw housing benefit from those households in the private rented sector, and it is included in the Office for Budget Responsibility long-term economic forecasts.

2.79 When establishing the Housing Requirement for the Local Plan, PPG states that the Council will need to consider whether or not there is sufficient justification for any further increase in the total housing figures included in the Local Plan (beyond the identified OAN) (ID 2a-029):

The total affordable housing need should then be considered 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.

2.80 This would be part of the Council’s policy response to meeting the identified need for affordable housing. It would not change the overall OAN, which is based on the identified housing need and is a “policy off” figure. Any assumed change to housing benefit in the private rented sector would also be a policy-based decision and therefore should not be included in the assessment of affordable housing need.
3. The Appellant’s Approach

3.1 The Appellant has prepared a separate assessment of OAN. This is presented in analysis prepared by Regeneris in their report “Buckinghamshire OAN (February 2017)” (“the Regeneris study”), and all paragraph references relate to that report unless stated otherwise.

3.2 The Council has established a schedule which identifies the assumptions relevant for establishing overall housing need which is included at Appendix 2. The studies agree that:

- Buckinghamshire housing market area provides the most appropriate area for establishing the Objectively Assessed Need (OAN), and for the purposes of 5-year housing land supply the OAN should be assessed for Aylesbury Vale district;
- The period for assessing OAN is 2013-2033;
- The starting point estimate should be based on the 2014-based CLG household projections;
- Fertility rates and mortality rates should be based on the ONS 2014-based sub-national population projections;
- An allowance of 3.7% should be included for vacancies and second homes; and
- There is no justification for any increase to the OAN to help deliver the required number of affordable homes.6

3.3 However, the Regeneris study disagrees with the HEDNA Update on a few important points which are critical to the assessment.

3.4 There are only three substantive points of difference between the Council and the Appellant:

- Issues of local demography – the Regeneris study fails to acknowledge the systematic problems with ONS Mid-Year Population Estimates in the area, and consequently overestimates future population growth. As a consequence of ignoring the data quality issues, the Appellant’s OAN is 217 dpa higher than the Council’s OAN;

6 The studies differ in their reasons for this. The Council note that PPG ID 2a-029 is clear that any such increase relates to “the total housing figures included in the local plan” and therefore this does not affect the OAN. The Appellant has concluded that their OAN is likely to deliver the affordable housing need that the Council has identified.
Migration rates – the Council prefer long-term trends based on 10-year averages whereas the Appellant prefers short-term trends based on 5-year averages. As a consequence, the Appellant’s OAN is **28 dpa higher** than the Council’s OAN; and

Uplift to the housing need based on the demographic projection – the Regeneris study proposes an uplift of 106 dpa in response to suppressed household formation, and concludes that this would also provide a 15% response to market indicators and ensure alignment between future jobs and workers. The Council has proposed an overall uplift of 90 dpa in addition to the housing need based on household projections. As a consequence, the Appellant’s OAN is **16 dpa higher** than the Council’s OAN. Nevertheless, it is important to note that:

- The Appellant’s adjustment for suppressed household formation is artificially inflated by the unreasonably high demographic projection. As the demographic projection is 28% higher than can be justified, it is likely that this response to suppressed household formation is also too high by a comparable amount. Only an uplift of 80-90 dpa is reasonably needed given the market signals information in Aylesbury Vale, which is consistent with the uplift that the Council has applied;
- The Appellant’s proposed 15% uplift in response to market signals is unreasonably high in the context of the indicators for Aylesbury Vale and an uplift of more than 10% cannot be justified. The Council has applied an uplift of 10%; and
- The Appellant’s analysis of the alignment between jobs and workers is based on inconsistent economic activity rates, does not take proper account of changes to unemployment and assumes an unduly high rate of employment growth. The Council’s proposed OAN would ensure alignment between future jobs and workers.

These points of difference are considered further below, to demonstrate that the Appellant’s evidence in relation to each of the substantive points is fundamentally flawed. Only the Council’s OAN is robust.

### Population Trends

Whilst the ONS SNPP provides a reasonable starting point for understanding local population projections (as the PPG recognises), the PPG also clearly states that the starting point estimate of overall housing need may require adjustment to reflect factors affecting local demography (PPG ID 2a-015, emphasis added).

*Household projections published by the Department for Communities and Local Government should provide the **starting point** estimate of overall housing need. The household projections are*
produced by applying projected household representative rates to the population projections
published by the Office for National Statistics ... The household projection-based estimate of housing
need may require adjustment to reflect factors affecting local demography and household
formation rates which are not captured in past trends.

3.7 Given the fundamental importance of population trends, the HEDNA Update considered this issue in detail
for Aylesbury Vale (pages 42-51).

3.8 This analysis identified numerous problems with the data for Aylesbury Vale:

» The ONS mid-year estimate component of population change data suggested a net gain of
14,815 people over the 10-year period 2001-11, but Census data shows that the population
increase was only 8,377 people over this period – a difference of 6,438 persons;

» The ONS Migration Statistics Improvement Programme led to an additional 3,500 persons being
incorporated in the population estimate for mid-2010, which increased from 174,400 to
178,200 persons; but the ONS original estimate was much closer to the Census estimate. The
revised estimate was less accurate, as it suggested a far higher rate of population growth than
was actually experienced; so although the MSIP improved the population estimates in most
local authority areas, the estimates got far worse in Aylesbury Vale;

» All of the administrative data sources that ONS identified for validating the population estimates
suggest that the Aylesbury Vale population is increasing slower than suggested by the mid-year
estimates for the period 2011-15. Aylesbury Vale is an outlier;

3.9 On this basis, the HEDNA Update concluded that the methodological improvement to estimating migration
that the ONS introduced from 2004-05 onwards has created a systematic problem in Aylesbury Vale which
has persisted beyond 2011, and it therefore isn’t appropriate to adopt this data uncritically. Despite all of
the evidence, the Regeneris study relies on the ONS mid-year estimates without regard to any other data
sources.

3.10 The Regeneris study essentially relies on the ONS 2014-based starting point; and although the study
recognises that the projected growth is double the national average, it does nothing to respond to this
exceptional position. As a consequence, their population projections do not provide a robust basis on
which to base any reliable assessment of housing need.
Migration Rates: Long-term vs. Short-term Trends

3.11 Given that the demographic projections are trend-based, one of the most critical factors is the period over which those trends are based. The PAS OAN technical advice note considers this issue in relation to the ONS population projections (CD 14.3; paras 6.22 and 6.24, PAS July 2015; emphasis added):

6.22 A more general problem relates to the ONS forecasting model. To predict migration between local authorities within the UK that model uses a base period of five years (for international migration the period is six years and the figures are controlled to national totals). This can throw doubt on the projections, because for many areas migration varies widely over time. Over a number of years one would expect such fluctuations to cancel out, so that long-term trends become apparent. But a five-year base period does not seem enough for this, bearing in mind that the ONS projections look ahead 25 years and Local Plans 15 years or longer. This is a main reason why for many areas successive rounds of population projections show very different results.

6.24 For all these reasons, in assessing housing need it is generally advisable to test alternative scenarios based on a longer reference, period, probably starting with the 2001 Census (further back in history data may be unreliable). Other things being equal, a 10-to-15 year base period should provide more stable and more robust projections than the ONS’s five years.

3.12 The issue of migration trends has been considered by Inspectors Examining numerous Local Plans. As previously noted, the Inspectors for BANES and Cheshire East both endorsed ORS’s approach based on a 10-year period. A 10-year period was also recommended by the Inspector Examining the Cornwall Local Plan in his Preliminary Findings (June 2015; Appendix 10, emphasis added):

3.6 Migration. The demographic model used in the SHMNA and the more recent ONS projection uses migration flows from the previous 5 years only. Given the significance of migration as a component of change for Cornwall and to even-out the likely effect of the recent recession on migration between 2008-2012 a longer period than 5 years would give a more realistic basis for projecting this component. A period of 10-12 years was suggested at the hearing and I consider that this would be reasonable, rather than the 17 year period used in ID.01.CC.3.3. I also consider that the ONS’ Unattributable Population Change component should be assigned to international migration for the reasons given by Edge Analytics in ID.01.CC3.3. This approach was not disputed at the hearing.
3.13 The issue has also been considered at Section 78 Inquiries. A recent Appeal decision in Bedford (Appeal Ref: APP/K0235/W/15/3005128; April 2016; Appendix 11) where the Council’s OAN was based on an SHMA produced by ORS concluded:

20. As migration is dynamic and affected by factors which are unpredictable there can be considerable variations over short periods of time. There is logic therefore in the LPA’s argument for using long term migration trends when considering long term (2012-2032) housing provision. Reliance on short term trends, which may be influenced by non-cyclical factors, could result in a bias that may not be sustained over a 20 year period.

3.14 Migration trends were also considered in the article “Making sense of the new English household projections” by Ludi Simpson (Professor of Population Studies at the University of Manchester) and Neil MacDonald (previously Chief Executive of the National Housing and Planning Advice Unit) (page 178, Town & Country Planning April 2015; Appendix 7):

The argument for using a five-year period rather than a longer one is that the shorter the period, the more quickly changes in trends are picked up. The counter-argument is that a shorter period is more susceptible to cyclical trends, an argument that has particular force when the five-year period in question – 2007-12 – neatly brackets the deepest and longest economic downturn for more than a generation. … A large number of local authority areas are affected by this issue. For 60% of authorities the net flow of migrants within the UK in 2007-12 was different by more than 50% from the period 2002-07. While this is comparing a boom period with a recession, it serves to indicate the impact of the choice of reference period for trend projections.

3.15 Furthermore, when establishing likely future migration for their economic forecasts, Oxford Economics show that migration rates are likely to fall from current short-term trends over the period to 2033.
3.16 The use of long-term migration trends:

» Is an approach that is allowed by the PPG (so long as it is justified);

» Is an approach that is supported by PAS;

» Is an approach which has clear precedent from Inspectors examining Local Plans and hearing Appeals elsewhere;

» Is an approach that is commended by academic experts in demographic analysis; and

» Is an approach that is adopted by industry experts.

3.17 The Local Plans Expert Group (LPEG) also recognised the importance of considering 10-year migration trends as well as the 5-year trends used for the PPG “starting point” estimate; and identified the need for consistency in migration assumptions between neighbouring areas, proposing that the same trend period should be used for migration across all local authorities within each housing market areas. Nevertheless, this need for consistency extends to migration between housing market areas to avoid double counting (which is overlooked by the LPEG approach) and there have been numerous consultation responses about the technical problems with the approach for assessing need that the LPEG advisor has proposed.

3.18 The Government response to the CLG Select Committee inquiry into the report of the Local Plans Expert Group recognises that there are “questions on the technicalities of the methodology proposed by LPEG”, and the Housing White Paper has confirmed that the Government will be consulting on options for a “standardised approach to assessing housing requirements”. In my view, the recommendation to focus consistently on more stable long-term migration trends would be a sensible outcome.

3.19 In contrast, the Regeneris OAN report essentially relies upon the 2014-based SNPP which draws on trends over the 5-year period to 2014. The 2014-based SNPP provides the basis for the CLG household projection, which in turn provides “the starting point estimate of overall housing need” (PPG ID 2a-015); however, “the household projections published by the Department for Communities and Local Government ... have not been tested” (PPG ID 3-030) and that this starting point estimate of overall housing need “may require adjustment to reflect factors affecting local demography” (PPG ID 2a-015).

3.20 PPG sets out the type of factors likely to affect local demography at paragraph 17, which notes that (PPG ID 2a-017, emphasis added):

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7 “Government response to the Communities and Local Government Select Committee inquiry into the report of the Local Plans Expert Group” (CLG, February 2017) page 10
8 “Fixing our broken housing market” (CLG, February 2017) para 1.13
“Issues will vary across areas but might include: migration levels that may be affected by changes in employment growth or a one off event such as a large employer moving in or out of an area or a large housing development such as an urban extension in the last five years”

3.21 Almost half (45%) of Aylesbury Vale’s recent housing delivery was based on three urban extensions, and this has led to the housing stock increasing by around 4.8% over the 5-year period 2009-14; an average of around 1% each year. This compares to the housing stock increasing by 2.5% nationally over the same period; an average of around 0.5% each year.

3.22 It is evident that the rate of housing delivery in Aylesbury Vale has been double the national average, and as a consequence the migration assumptions within the 2014-based SNPP have led to the area having the seventh highest rate of growth of all areas outside London (see Appendix 3). Despite the extreme rate of growth identified by the projection, the Regeneris study ignores the specific PPG advice of the need to take account of issues affecting local demography (ID 2a-017) and continues to rely on this starting point which has not been tested.

Migration Rates: Reviewing the Outputs

3.23 The following chart considers the actual population projections for Aylesbury Vale in the context of all local authority areas.

3.24 The ONS 2014-based sub-national population projections suggested that the population was likely to increase by 25.0% over the period 2013-33 based on 5-year migration trends. This was in the context of
median growth across all local authority areas being 12.4% (half of local authorities had growth above this rate, half below this rate); the upper quartile being 18.3% (quarter of local authorities had growth above this rate) and the upper decile being 23.5% (only 10% of local authorities were projected to grow at or above this rate).

3.25 The HEDNA Update (based on 10-year migration trends which take account of data quality issues that affect local demography) projects that population growth will be 19.4% over the 20-year period 2013-33. This remains within the upper quartile, so is higher than more than three quarters of all local authority areas in England; but it identifies a level of growth that is realistic when compared to the exceptionally high 5-year trend.

3.26 The Regeneris study relies almost exclusively on the ONS 2014-based starting point and does not take account of the projected growth being almost double the national average. It is unrealistic to assume that the short-term migration trends on which this projection is based would be sustained for the full 20-year Plan period as housing development in Aylesbury Vale has been extremely high in recent years whilst it has not yet increased to the levels required in other parts of the country, and it is clearly unreasonable to not take account of this.

3.27 It is notable that most other LAs with comparable levels of proportionate growth are London boroughs, and the Greater London Authority (GLA) has rightly argued that this does not provide a robust basis for planning for the long-term needs of London. The 2014-based SNPP included 21 London boroughs in the 32 local authorities projected to have the fastest rate of growth; but the GLA 2013-round projections reduced the projected growth for these areas by 30% (see Appendix 3). This approach was endorsed by the Inspector examining the Further Alterations to the London Plan in Autumn 2014 (paras 24-30, Appendix 12):

> 30. The GLA acknowledge that the projections are uncertain, particularly with respect to migration, and this is the main reason why a review of the Plan is planned to start in 2016. However, it seems to me, having considered all the evidence and the submissions, that they are reasonable and probably the best available assessment of objectively assessed housing need for London at this time.

3.28 For exactly the same reasons, the ONS starting point does not provide a robust basis for planning for the long-term needs of Aylesbury Vale.

3.29 The Regeneris study identifies extreme population growth based on unrealistic short-term migration rates being sustained over a 20-year period. The ORS migration rates, based on reliable long-term trends, provide the most robust basis for projecting population on which to base the OAN.
Migration Rates: Other evidence presented by the Appellant

3.30 Aylesbury Vale District Council and Wycombe District Council consulted on the Original HEDNA in Autumn 2015. The Appellant at this Inquiry (Gladman Development Ltd) submitted separate responses to the two consultations. Both responses were prepared by Regeneris, who are representing the Appellant in relation to the OAN and 5-year housing requirement at this appeal.

3.31 The Appellant’s response to Wycombe concluded that “the Central Buckinghamshire HMA probably represents a reasonable and practical definition for the purposes of assessing Wycombe’s OAN” and that the HMA “is largely consistent with recently published travel to work area (TTWA) analysis published by the ONS from the 2011 Census” (“Central Buckinghamshire HEDNA - Comments on Draft Document, Wycombe: Regeneris Consulting”, Appendix 13, para 3.23, emphasis added).

3.32 Having agreed the basis for the housing market area, the response goes on to endorse the HEDNA’s approach to the demographic projections:

3.30. However, the HEDNA recognises that there are reasonable grounds for demographic projections of future housing need to reflect past 10 year migration trends up to 2014. For Wycombe, this points to a slightly higher growth figure than either the starting point SNPP 2012 projections or the 10 year migration scenario based on change between 2001 and 2011.

3.31. The main points that arise in considering this preferred scenario are:

Population growth of 20,800 in the preferred demographic scenario is higher than the 2012-based ONS sub-national population projection for Wycombe for the same period (+19,600).

For the HMA, projected growth of 64,250 is around 2,750 higher than SNPP2012 for the same period. This reflects figures for both Chiltern and Wycombe which are higher than SNPP2012, although the figure for Aylesbury Vale is slightly lower.

Annual population growth of 1,040 in the projection compares with annual growth of 990 a year in the period from 2001 to 2014 based on ONS estimates.

For the HMA as a whole, the preferred scenario suggests annual population change of 3,200 people a year which is around 400 higher than the average population change which occurred between 2001 and 2014.
3.32. Given the evidence of past population change in Wycombe, **the preferred scenario established by the HEDNA represents a reasonable and robust view of how the district’s future population might be expected to change.**

3.33 Whilst these comments relate to Wycombe district, PPG sets out that “any cross-boundary migration assumptions ... will need to be agreed with the other relevant local planning authority” (ID 2a-018), thereby implying the need for consistency. It is clearly important that migration assumptions for Aylesbury Vale are consistent with those for Wycombe, as the two districts form part of the same housing market area. On this basis, if Appellant and Regeneris consider that “the preferred scenario established by the HEDNA represents a reasonable and robust view” in relation to Wycombe, then it follows that they must also consider that this scenario provides “a reasonable and robust view” for Aylesbury Vale. It is unreasonable to suggest that a 10-year migration trend is right for Wycombe but that a 10-year trend is wrong for Aylesbury Vale.

3.34 The demographic context for Wycombe is the opposite to Aylesbury Vale, as the ONS has consistently under-estimated their population and household growth and the use of 10-year migration trends increases the rate of household growth in Wycombe (whereas it reduces the rate in Aylesbury Vale). It is necessary to adopt consistent trends across the HMA; otherwise households risk being missed (if two different trends are adopted that lead to a reduction in overall housing need) or alternatively households are double counted (where two different trends are adopted that lead to an increase in overall housing need). If 10-year migration trends are adopted for Wycombe but 5-year trends are adopted for Aylesbury Vale, this would lead to an increase in overall housing need as the needs of some households would be counted in both local authority areas. This is irrational and there is no justifiable reason why this form of double counting should be allowed.

3.35 Further to their submission to Wycombe, Regeneris has also recently presented a paper to North Norfolk District Council, once again in relation to a planning appeal for Gladman Development Ltd. In that paper, they state (“Note on the Objectively Assessed Need for the North Norfolk Area”, Regeneris Consulting 7th March 2017; Appendix 14, para 1.7, emphasis added):

> As per the previous point, Regeneris have taken the most recent official population and household projections as the starting point. We have then considered long term trends in net migration. We have adjusted the SNPP-2014 population forecasts to take account of the average of migration over the period **2005 to 2015** using recent data on migration, rather than the five-year 2009 to 2014 period that is used by ONS in their projections. **Such an adjustment is generally considered good practice and preferable to a reliance on a five year period alone.**
On this basis, not only does the Appellant consider 10-year migration trends represent a “reasonable and robust view” in terms of the HEDNA’s treatment of Wycombe, but they endorse such an approach as being “generally considered good practice and preferable to a reliance on a five year period alone”. Furthermore, the Appellant at this appeal has been supported by other experts elsewhere who have all endorsed 10-year migration trends. These include evidence presented to Examinations in Public of the Cheshire East Local Plan Strategy and Luton Local Plan, and a number of planning inquiries in Central Bedfordshire.

The Appellant’s reliance on 5-year migration trends in relation to this Inquiry is purely opportunistic, given that it yields a higher housing need.

Applying a “Reality Check” to the Household Projections

Given that the household projections are trend-based, it is appropriate to consider how they compare with actual increases in the number of households resident in Aylesbury Vale. The following chart shows the number of additional households resident in Aylesbury Vale – trends from Census data that cover the 20-year period 1991-2011 and projections for the 20-year period 2013-2033 from the HEDNA Update and the Regeneris study:

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Census data 14,595</td>
<td>HEDNA Update 17,063</td>
</tr>
<tr>
<td>Regeneris study (short-term migration) 16,933</td>
<td>Regeneris study (long-term migration) 21,680</td>
</tr>
<tr>
<td>Regeneris study (long-term migration) 14,550</td>
<td></td>
</tr>
</tbody>
</table>

It is apparent that the HEDNA Update projects that the increase in households over the next 20 years will be 16% higher than the previous 20-year period, but the increases seem to be a plausible measure of the area’s own future need. The HEDNA Update provides realistic household projections for the 20-year period 2013-2033 in the context of trends over the last 20 years; although the actual increase in households will depend primarily on the number of dwellings that are provided in the area during this period.
3.40 It is clear that the Regeneris study projections based on short-term migration trends fail to accurately reflect past trends in household growth. The projections suggest that the future increase in households will be 49% higher than over the previous 20-year period, without taking account of the proposed change to headship rates (21,680 cf. 14,595). It is important to recognise that, at this stage, the figures from the Regeneris study are intended to be trend-based population and household projections – so they should not include any element of additional housing to compensate for any potential constraints on the local housing market. They should simply reflect past trends, and clearly they do not.

3.41 The demographic projections from the Regeneris study are fundamentally inconsistent with trends from the last 20 years. This is for three reasons:

» They adopt population estimates for mid-2013, mid-2014 and mid-2015 uncritically despite the administrative data showing these to be inaccurate, which exaggerates population growth over the period 2013-15;

» They include erroneous migration estimates that do not take account inconsistencies with administrative data when establishing future migration assumptions: this exaggerates migration projected for the period 2015-33; and

» They do not take account of the impact of unattributable population change; despite this accounting for over 5,800 persons in Aylesbury Vale.

3.42 In contrast, the Regeneris study projections based on long-term migration trends (Gomez proof, table 5.3) provide a far more realistic assessment: an increase of 14,550 households (or 16,550 households following the proposed change to headship rates). Whilst this projection does not consider the impact of data quality issues and relies on the official data uncritically, given that the Appellant and Regeneris endorse the use of long-term migration trends elsewhere as being “generally considered good practice and preferable to a reliance on a five year period alone”, this scenario should provide the demographic basis for their OAN. Nevertheless, the scenario is ignored by the subsequent analysis.

Balancing Jobs and Workers

Jobs Growth

3.43 The HEDNA considered the alignment of jobs and workers across the housing market area, and then subsequently reviewed the balance for Aylesbury Vale. Nevertheless, PPG is clear that this issue must fundamentally be considered across the HMA as a whole.
“Needs should be assessed in relation to the relevant functional area, ie housing market area” (ID 2a-008)

“A housing market area is a geographical area defined by household demand and preferences for all types of housing, reflecting the key functional linkages between places where people live and work” (ID 2a-010, emphasis added)

“Plan makers should make an assessment of the likely change in job numbers based on past trends and/or economic forecasts as appropriate and also having regard to the growth of the working age population in the housing market area” (ID 2a-018, emphasis added)

As previously noted, the Original HEDNA considered two economic forecasts, one based on data from Oxford Economics (which identified an increase of around 42,300 jobs, equivalent to an annual compound growth rate of 0.76%) and the other based on data from Experian (which identified an increase of around 51,300 jobs, equivalent to an annual compound growth rate of 0.94%). In contrast, the historic rate of long-term growth over the period was 0.33% (based on Experian data for the period 1997-2013); and following discussion with a wide range of stakeholders, the Oxford Economics forecast was chosen as the preferred scenario. Whilst this scenario was lower than the Experian forecast, it still represented an ambitious rate of growth in the context of historic trends.

The Experian forecast was considered unrealistic, in particular for Wycombe where the Experian forecast annual growth at a rate of 0.94% in stark contrast to the historic negative growth (a rate of -0.28% based on Experian data for the period 1997-2013, when the number of jobs in Wycombe reduced from 96,500 to 91,900).

For the HEDNA Update, 2016-based economic forecasts were obtained from both Oxford Economics and Experian. The Experian forecast had reduced substantially, and the new figures suggested a growth of 43,700 jobs over the same period (a compound rate of 0.81%). Therefore, with the benefit of hindsight, the Original HEDNA was right to not rely on the 2015-based forecast. The jobs growth in Wycombe was notably reduced (reducing from 18,900 extra jobs in the 2015-based Experian forecast to a growth of 15,700 jobs in the 2016-based forecast), but remained notably higher than forecast by Oxford Economics (10,600 jobs in the 2015-based data and 11,300 jobs in the 2016-based data); all in the context of a historic loss of jobs.

The 2016-based Oxford Economics forecast was also lower than the 2015-based figures across the FEMA, but the change was far more marginal: an extra 40,700 jobs (a compound rate of 0.78%). Given the consistency in the Oxford Economics forecasts and the greater confidence in the underlying figures for
Wycombe, the HEDNA Update continued to adopt these as the preferred scenario. It is worth noting that the 2016-based forecast from Oxford Economics was higher than the Experian forecast in Aylesbury Vale and South Bucks, but lower than the Experian forecast in Chiltern and Wycombe.

3.48 The alignment of jobs and workers for the HEDNA Update was therefore based on an increase of around 40,700 jobs across the FEMA/HMA over the 20-year period 2013-33. In contrast, the Appellant has proposed a growth of 54,050 jobs across Buckinghamshire for the same period (Regeneris study, page 56, table 5.6). This is based on data from an Oxford Economics forecast obtained in October 2016 (whereas the HEDNA Update relied on a forecast from April 2016); and is “driven by forecast employment growth in Wycombe” (Regeneris study, para 5.54). The Regeneris study only provides summary outputs from this forecast, but the scale of the growth clearly raises similar concerns to the original Experian figures (especially given the apparent dependency on future jobs growth in Wycombe).

3.49 The Regeneris study argues that the forecast across Buckinghamshire “is broadly in line with the longer term average” (para 5.54). However, the forecast of 54,050 jobs represents an annual growth of 1.0% over the period 2013-33; whereas trends for the period 1995-2015 represent annual growth of 0.8%. The difference may only be 0.2% points, but the forecast represents a substantial 25% increase on past trends.

3.50 Furthermore, the data that the Regeneris study presents about past trends (table 5.6) is markedly different to the trend data included in the April 2016 forecast that Oxford Economics provided for the HEDNA Update. The Regeneris data identifies an average of 1,950 extra jobs each year equivalent to a compound growth of 1.0%; however, the Oxford Economics data provided for the HEDNA Update shows that the total number of jobs across Buckinghamshire increased from 238,600 in 1995 to a total of 273,600 in 2015: an extra 35,000 jobs, equivalent to an average of 1,750 per year and an annual compound growth rate of 0.69%. Whilst the reason for the difference is unclear, the key point is that a future growth of 1.0% is substantially higher than past growth.

3.51 When considering past trends, it is also important to recognise that the period chosen can also have a substantial impact. For this reason, we have considered the Oxford Economics data for all periods. The annual rates of growth are summarised in the following table. Where the growth is lower than assumed by the HEDNA Update, cells are highlighted green; where growth is the same as assumed, cells are highlighted yellow; and where growth is higher, cells are highlighted red.
The HEDNA Update assumes growth that is higher than experienced across more than half of all of the trend periods. When periods of 10-years or more are considered, only 40% of historic periods have experienced sustained growth that is higher than the jobs growth assumed by the HEDNA Update – but even this has to be considered in context, as it is important to recognise that the Oxford Economics data can vary quite significantly from year-to-year. This is typically not because the number of jobs is fluctuating by such a large amount, but it is simply a change in the estimate which is based on survey data that is subject to a relatively wide error margin.

Trends from the Experian data tend to be more stable (as illustrated below) as it seems that fluctuations are addressed through some form of smoothing process, whereas the Oxford Economics trends appear to be based directly on the raw data and are therefore far more volatile.
3.54 Because the Oxford Economics trend data is more volatile, rates of growth can be less reliable where these compare high points and low points. Whilst the Appellant relies on trends based on the Oxford Economics data, the HEDNA Update considered trends based on the Experian data.

3.55 Considering the Experian data, the HEDNA Update assumes growth that is higher than experienced across more than three quarters of all of the trend periods. When periods of 10-years or more are considered, there are no historic periods since 1997 where Buckinghamshire has experienced sustained growth that is higher than the jobs growth assumed by the HEDNA Update.

3.56 On this basis, the jobs forecast adopted by the HEDNA Update is reasonable. In contrast, the increase proposed by the Regeneris report is exceptional and much higher than any historic trend period.

Labour Force

3.57 The Regeneris study provides very limited details about the labour force projections on which their assessment is based. Whilst information about the overall number of additional jobs is presented alongside the overall increase in population, households and dwellings (tables 5.10 and 5.11); no detail is provided about the overall size of the economically active population, the level of unemployment, the number of commuters or the extent of double jobbing. Furthermore, there is no information provided about any population structures in terms of the age and gender breakdown. It is therefore difficult to draw evidence-based conclusions about their assessment. However, the following paragraphs consider the available evidence.
Economic Activity Rates

Whilst the Regeneris study sets out the assumed economic activity rates for different age groups in 2013 and 2033 (table 5.8, page 59), it fails to set out the combined impact of these changes. The Regeneris report does not provide any information about the structure of their projected population; but simply notes that based on employment change, an increase of 54,050 jobs is likely to need an overall increase of around 102,830 persons (across all age groups) over the period 2013-33 (table 5.11, page 61). However, it is possible to consider the combined impact of these rates when applied to the ONS mid-year population estimates for mid-2013 and the ONS 2014-based sub-national population projections for 2033, which provide the starting point for their demographic projections. The following table sets out the relevant data and calculations for Buckinghamshire.

<table>
<thead>
<tr>
<th></th>
<th>Total Population</th>
<th>Assumed Economic Activity Rates</th>
<th>Economically Active Population</th>
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<tr>
<td></td>
<td>2013</td>
<td>2033</td>
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</tr>
<tr>
<td>Male</td>
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<tr>
<td>Aged 16-24</td>
<td>26,030</td>
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<td>7.1%</td>
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<tr>
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</tr>
<tr>
<td>Aged 55-64</td>
<td>30,596</td>
<td>36,915</td>
<td>62.8%</td>
</tr>
<tr>
<td>Aged 65-74</td>
<td>25,785</td>
<td>35,403</td>
<td>17.3%</td>
</tr>
<tr>
<td>Aged 75+</td>
<td>24,728</td>
<td>42,307</td>
<td>3.2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>411,593</td>
<td>483,519</td>
<td>67.0%</td>
</tr>
</tbody>
</table>

On this basis, we can conclude that the Regeneris study assumptions on economic activity rates yield an economically active population of 275,800 persons for 2013, equivalent to an overall rate of 67.0% of residents aged 16 or over; and based on the 2014-based SNPP, their forecast rates would yield 308,400 workers by 2033, equivalent to 63.8% of the overall population aged 16 or over.

On this basis, there is general agreement on the economic activity rates for 2033 between the Appellant (63.8%), the HEDNA Update (63.9%) and the Oxford Economics forecast (63.7%). Nevertheless, when estimating the rates for 2013, there was agreement between the HEDNA Update (66.1%) and the Oxford Economics forecast (66.3%), but the Appellant’s estimate was notably higher (67.0%). Whilst the HEDNA Update estimated there to be 271,700 economically active residents and Oxford Economics estimated
there to be 271,900; the Appellant’s estimate was around 4,000 higher at 275,800 economically active persons.

3.61 The following chart shows the ONS Annual Population Survey (APS) estimates for Buckinghamshire’s resident economically active population for the 12-month periods April 2012-March 2013 through to October 2013-September 2014. It is evident that the Oxford Economics and HEDNA Update already provide relatively high estimates when compared to the APS figures, so this does not provide any evidence to support an extra 4,000 persons being included in the economically active population for 2013 as the Regeneris study rates would imply.

3.62 Despite the happy agreement on overall economic activity rates for 2033, the growth that the Appellant assumes for the period 2013-2033 will be 4,000 persons lower as a consequence because their estimate of the economically active population is 4,000 persons too high at the start of the period. As it is the change that is important when aligning jobs and workers, the inaccurate starting estimate undermines their analysis.

3.63 The Oxford Economics forecast show that the proportion of economically active residents is likely to reduce by 2.4% points over the 20-year period 2013-2033, exactly the same as assumed by the HEDNA Update. In contrast, the Regeneris study suggests that rates will reduce by 3.2% points. Whilst the difference of 0.8% points appears small, it represents a one third increase on the 2.4% point change that was identified by Oxford Economics and the HEDNA Update. The assumptions taken by the Appellant relating to economic activity rates lack consistency with those underlying the Oxford Economics forecast.
Unemployment

With regard to unemployment, the Regeneris study notes that (para 5.63-5.64):

“Evidence on unemployment is drawn here from the Annual Population Survey. This relies on small sample sizes and some caution should be exercised when interpreting the results. Nonetheless we are able to see how unemployment in Aylesbury Vale and nationally rose following the 2007/8 recession but appears to have fallen back to its pre-recession rate and some way below the national and regional averages. In the year to June 2016 unemployment in the district averaged 2.7%, below the level indicated by the 2011 census.

We therefore allow in our modelling for unemployment in Buckinghamshire to fall from its 2013 level to the average level indicated by the APS for the period between 2004 and 2007 (3.0%), when the UK economy was in a position of near full employment. This has the effect of releasing extra residents into the labour force in a similar way to the approach adopted in the HEDNA.”

Whilst the Regeneris study rightly cautions about small sample sizes, it fails to draw attention to how small these sample sizes actually are. Indeed, for the result quoted for Aylesbury Vale (“in the year to June 2016 unemployment in the district averaged 2.7%”) the sample size is so small that a confidence interval cannot be provided – in other words, the ONS has no statistical confidence in the result. Instead, the ONS tables caution that “Estimate and confidence interval unreliable since the group sample size is small (3-9); so the evidence on which Regeneris relies is based on fewer than 10 survey responses.

The APS estimate for unemployment in Buckinghamshire in 2013 was 4.5% and this was subject to a confidence interval of ±1.4% points at the 95% level of confidence. In other words, the ONS estimates the rate of unemployment for 2013 as being somewhere between 3.1% and 5.9% of the economically active population. Applying this to the economically active population (based on the ONS mid-2013 population estimate and the economic activity rates assumed by the Regeneris study, which identified 275,800 economically active persons) would suggest that the estimate for Buckinghamshire’s unemployment in 2013 was somewhere between 8,500 and 16,300 persons, with a mid-point estimate of 12,400 persons.

The Regeneris study notes that their analysis makes an allowance “for unemployment in Buckinghamshire to fall from its 2013 level to the average level indicated by the APS for the period between 2004 and 2007 (3.0%), when the UK economy was in a position of near full employment” (para 5.64). Whilst the Regeneris study does not provide any detail about the economically active population resulting from their different scenarios, applying their economic activity rates to the ONS 2014-based sub-national population projections yielded around 308,400 economically active persons in 2033. Assuming a 3.0% unemployment
rate would suggest around 9,250 unemployed persons in this scenario; a reduction of 3,150 from the 2013 mid-point estimate (though the range for the 2013 estimate suggests that this could be a reduction of over 7,000 unemployed persons at one extreme, or alternatively an increase of up to 750 unemployed persons at the other extreme).

3.68 Both the HEDNA Update and Oxford Economics forecast assumed that unemployment would reduce by around 1.3% of the economically active population (though this was based on a smaller population than assumed by the Appellant in 2013). The Regeneris study suggests that rates will reduce by 1.5% points, based on a mid-point estimate and assuming a larger population in 2013. The assumptions taken by the Appellant relating to unemployment rates suggest a larger change than assumed by the HEDNA Update.

Commuting

3.69 In terms of commuting, “the Regeneris modelling holds constant the ratio of people working in each district to employed residents, using data from the 2011 Census and Oxford Economics respectively” (para 5.9). The figures for each area are presented in table 5.9:

<table>
<thead>
<tr>
<th>Table 5.9 Workplace and Resident Employment, 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace population (16-74)</td>
</tr>
<tr>
<td>Aylesbury Vale</td>
</tr>
<tr>
<td>Chiltern</td>
</tr>
<tr>
<td>South Bucks</td>
</tr>
<tr>
<td>Wycombe</td>
</tr>
</tbody>
</table>


3.70 The use of a commuting ratio provides a reasonable basis for understanding current commuting patterns, but it does not provide a rational basis for future projections.

3.71 The Regeneris report identifies a commuting ratio of 1.17 for Aylesbury Vale as at 2011, calculated based on 87,980 resident workers and 75,310 workplace workers (both based on the populations aged 16 to 74). On the basis of the proposed method, an increase of 100 jobs would need an additional 117 resident workers; 100 to work in the area, and 17 to commute to jobs elsewhere. However, an increase of 1,000 jobs would lead to 170 extra workers assumed to commute out of the area; and an increase of 10,000 jobs would lead to 1,700 extra out-commuters. In other words, the more jobs created locally, the more workers are assumed to commute to work elsewhere. This is an irrational conclusion. It would be far more logical to assume that a higher number of jobs created locally would lead to a lower number of workers
commuting to work elsewhere. There is no justification for a higher number of jobs being created locally needing a higher level of out-commuting to align jobs and workers.

3.72 The Regeneris approach also fails to appreciate the importance of balancing jobs and workers across the housing market area as a whole, instead their analysis considers each LPA in isolation. This is a fundamental problem that affects the basis on which overall housing need is assessed, and is contrary to Planning Practice Guidance, which states that jobs and workers should be considered across the functional area:

“Needs should be assessed in relation to the relevant functional area, ie housing market area”
(ID 2a-008)

“A housing market area is a geographical area defined by household demand and preferences for all types of housing, reflecting the key functional linkages between places where people live and work” (ID 2a-010, emphasis added)

“Plan makers should make an assessment of the likely change in job numbers based on past trends and/or economic forecasts as appropriate and also having regard to the growth of the working age population in the housing market area” (ID 2a-018, emphasis added)

3.73 The PAS OAN Technical Advice Note specifically cautions against the approach adopted by the Appellant (CD 14.3; para 8.13, emphasis added):

“In aligning jobs and housing it is advisable to focus on HMAs and functional economic areas – which as discussed earlier should ideally be co-terminous – rather than individual districts. Many people travel to work across administrative boundaries, so planning for each district in isolation will not produce the most efficient and sustainable relationships between the location of houses and jobs”

3.74 The methodology used by the Appellants for establishing future commuting patterns is fundamentally flawed, as it has no regard to alignment across the housing market area as a whole, instead focussing on individual LPAs in isolation.

3.75 When considering the commuting ratio for Buckinghamshire based on the HEDNA Update, the ratio of resident employees to workplace jobs was identified to be 0.99 in 2013 based on all workers aged 16 or over. Whilst the Regeneris study is based on data from 2011 and considers only those aged 16 to 74, the conclusion that Aylesbury Vale and Chiltern are large net exporters or labour (with ratios of 1.17 and 1.22 respectively) and that South Bucks and Wycombe are broadly in balance (with ratios of 0.97 and 1.02) is
clearly markedly different to the HEDNA conclusion that there is a balance of workers and jobs across the housing market area as a whole. This is due to the data on which the Appellant relies.

3.76 Considering resident employment of those aged 16-74, the data in table 5.9 identifies a total of 246,400 workers across the housing market area in 2011. As previously noted, the Appellant’s assumptions about economic activity rates identified a total of 275,800 economically active persons in 2013, of which 273,800 were aged 16 to 74; and the Appellant’s assumptions about unemployment identified a mid-point estimate of 12,400 persons. On this basis, other parts of the Appellant’s evidence suggest that resident employment (16-74) was 261,400 persons in 2013 (15,000 higher than the estimate for 2011 presented in table 5.9) and the total number of resident workers (aged 16 or over) was 263,400 at that time.

3.77 Considering the workforce population, the data in table 5.9 identifies a total of 225,000 persons working in the housing market area in 2011. This is considerably lower than the estimate of 261,100 jobs for the housing market area in 2013. Oxford Economics data suggests that there was a lower number of jobs in 2011 – a total of around 253,600 – but this was still markedly higher than the total of 225,000 in table 5.9, with an overall difference of 28,600. The reason for this difference is that the data presented by the Appellant relates only to main jobs, and does not count second jobs. On this basis, it is important that the future number of workers is aligned with the future number of main jobs (i.e. the jobs number was reduced to take account of “double jobbing”).

3.78 Considering the housing market area as a whole, the commuting ratio in 2011 would have been 246,400 resident workers divided by 225,000 main jobs based on the data in table 5.9, which yields a ratio of 1.10; however, this fails to maintain consistency with other assumptions that have been taken and therefore undermines the robustness of the analysis.

3.79 In summary, the Appellant (i) has used an irrational method for projecting future commuting patterns, (ii) has failed to consider alignment between jobs and workers across the housing market area as a whole, and (iii) compounded this flawed approach with data that introduces inconsistencies with other assumptions taken in relation to the labour force projection. The assumptions taken by the Appellant relating to commuting are fundamentally flawed.

**Double Jobbing**

3.80 Introducing its analysis of the future workforce, the Regeneris study states (para 5.58):

“To translate potential employment growth in the area to housing need, the Regeneris modelling makes a series of assumptions about how the labour force will change. Our approach is broadly
consistent with that of the HEDNA in that it considers change in the resident labour force, the relationship between jobs and workforce growth in the area and double jobbing.”

3.81 However, whilst the report goes on to provide further detail about the assumptions relating to economic activity rates (paras 5.59-5.62), unemployment (paras 5.63-5.64) and resident labour force to jobs ratio (paras 5.65-5.67), no information is presented about the approach to double jobbing and it is unclear how this has been addressed (if it has been addressed at all).

3.82 The Oxford Economics data identifies that Buckinghamshire was estimated to have 261,100 jobs in 2013, but these were fulfilled by 231,400 workers – so around 29,700 jobs were second jobs. On this basis, the treatment of second jobs and double jobbing is evidently important.

3.83 In presenting the economic growth scenarios, the Regeneris study simply sets out that they are seeking to align to an overall employment growth of 54,050 jobs across Buckinghamshire; and that this will need 102,830 extra people, 49,850 extra households and 51,700 extra dwellings (table 5.11). There is no reference to the downward adjustment that must be applied to the total jobs figure to ensure that the alignment is based only on the increase in main jobs. The assumptions taken by the Appellant relating to double jobbing are not set out and it is unclear if any adjustment has been made.

Labour Force Assumptions – the need for consistency

3.84 The PAS OAN Technical Advice Note dedicates an entire chapter to the need for consistency between the assumptions that inform economic forecasts and those used to establish the labour force when establishing housing need (CD 14.3; chapter 8, pages 32-36). Between paragraphs 8.4 and 8.13 the advice note sets out that:

“To predict future job change, many housing needs studies rely on econometric forecasts commissioned from specialist forecasters ... The housing needs study translates these numbers into future resident population (people living in the area), based on assumptions about the factors that link workspace jobs to resident population – comprising commuting, double-jobbing, economic activity rates and unemployment. Finally this population is translated into households and dwellings, using HRRs and the usual vacant dwelling adjustment. The result is a job-led housing need figure ... This approach will often produce invalid results, because most economic forecasts already include a view of future population ... Whether the calculation is merely circular, or logically inconsistent as shown in the graphic, it cannot produce a valid result, because its logic is faulty ...

For an approach that makes sense, it is necessary to integrate demographic projections and
economic forecasting. For this the housing assessment study should ideally work with the economic forecasters, using mutually consistent assumptions about the factors that link jobs to population and housing.”

3.85 The following table summarises the consistency between the HEDNA Update and the Oxford Economics 2016-based forecast. Any differences are minor, and all would yield a lower uplift when aligning jobs and workers which would have the consequence of reducing the overall housing need.

3.86 This need for consistency in these assumptions has also been considered by a number of Inspectors at recent planning appeals, and each Inspector has been presented with different evidence; however, one of the most recent Inspector’s Decision (December 2016) involved work prepared by Maldon District Council which shares many similarities with the analysis undertaken for Buckinghamshire HEDNA (paras 28-32, Appendix 15, emphasis added):

28. The biggest difference between the parties in relation to OAN relates to whether there should be an uplift for future job growth. The Council are of the view that its suggested OAN at 310 dpa is sufficient to support the anticipated future growth in the area of some 2,200 jobs, based on the East of England Forecasting Model (EEFM). In contrast, the appellant is of the view that there should be an uplift of some 70 dwellings per annum.

29. The appellant has come to this view by taking the average of three projections made by Cambridge Econometrics, Oxford Econometrics and Experian Econometrics. These three projections differ significantly in their forecasts from 3153 jobs to 934 jobs. To a large degree, this is likely to be because they apply different economic activity rates. The appellant has averaged these three forecasts and then applied a nationally derived Office of Budget Responsibility Rate (OBR) of economic activity. I agree with the Council that this approach appears to ignore the fact that the three forecasts above already contain views of the relationship between the number of people in an area and the number of jobs. The appellant’s approach attempts to estimate the number of people needed to support a forecasted increase in jobs by applying assumptions about the relationship between jobs and population that are different to those used in the original forecasts. This does not seem a robust approach in my view, as it has the potential to over-inflate the projection of homes to meet future job growth.

30. This view is supported by Section 8 of the Planning Advisory Service (PAS) Technical Advice Note: Objectively Assessed Need and Housing Targets (July 2015).1 Whilst I accept that this document has no formal status, Mr Donagh did accept that it has been accepted and relied upon by a wide number
of Inspectors, I therefore give it some weight. In addition, the Council has made me aware of a relatively recent appeal decision for a development in the neighbouring local authority Chelmsford City Council. Whilst that appeal clearly had some different circumstances, the Inspector nonetheless considered very similar arguments on this particular matter, indeed from Mr Donagh himself. The Inspector in that case, endorsed the approach of the Council, who as in this case, relied on the EEFM rather than the use of the OBR activity rate and three separate job forecasting models. These matters add further weight to my concerns. The appellant has set out that their approach has been supported elsewhere, but I have not been provided with any appeal decisions or specific details that confirm such a view.

31. It is also clear that a significant amount of analysis has been undertaken on the EEFM by the Council, as is evident from Appendix 3 of the Hardisty Jones Associates Report: Employment Evidence and Policy Update (July 2015) (the Hardisty Jones report). The Council has set out that the Adopted East Cambridgeshire Local Plan uses the EEFM for its jobs output and that the EEFM is also being used for employment trends in the joint OAN assessments of its neighbouring authority areas of Braintree, Chelmsford, Colchester and Tendering. The Hardisty Jones report concludes that the EEFM is a consistent basis for forecasting economic growth for the entire East of England region and parts of the Southeast and East Midlands region. The appellant has produced little evidence to dispute the findings of the Hardisty Jones report or in relation to why the Council’s adoption of the EEFM is inappropriate in this case.

32. Given all of this, I am not persuaded by the appellant’s evidence that an uplift for jobs is necessary beyond the Council’s suggested OAN of 310 dpa or that the Council’s approach is flawed in this regard.

Summary of Labour Force Assumptions

3.87 The following table summarises the consistency between the HEDNA Update and the Oxford Economics 2016-based forecast. Any differences are minor, and all would yield a lower uplift when aligning jobs and workers which would have the consequence of reducing the overall housing need.

3.88 The table also identifies the lack of consistency between the Regeneris study and the Oxford Economics Forecast. It is evident that the Appellant’s approach does not adopt “mutually consistent assumptions about the factors that link jobs to population and housing” and as a consequence (as cautioned by the PAS OAN Technical Advice Note) their analysis will “produce invalid results”. Their labour force analysis cannot be relied upon.
### Household Formation Trends

The Regeneris study considers trends in household formation at paragraph 5.20 and rightly concludes that “the factors that have shaped household change over this period are complex and interwoven”. It is important to recognise that a number of the changes that have been observed relate to the underlying demographic structure of the population and have little or no relationship with the housing market. Indeed, many of the factors identified in the Regeneris report are independent of the housing market, including (extracts from bullets from bullets following para 5.20):

- “The number of people choosing to delay parenthood or not to have children which has contributed to increases in the number of single person households”;
- “Greater numbers of older people are also living longer in couple households”;
- “Tendency for international migrants from some backgrounds to live in larger households had influenced both household formation and average household size in England”; and
- “Cohort effects, whereby the trend for a particular age group in one period is carried through into later years”.

Of course, it is also widely accepted that housing supply and economic factors such as housing affordability have also contributed to recent trends; but it is important to recognise that these are not the only issues influencing household formation.

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9 Estimate based on 54,050 extra jobs and commuting ratio of 1.10 for Buckinghamshire as a whole.
3.91 Whilst that Regeneris study is right to identify that there are likely to be cohort effects that affect household formation, what it fails to mention is that the CLG methodology for the household projections fails to capture this. The “Household Projections 2014-based Methodological Report” published by CLG clearly states that “cohort modelling is not used” (Appendix 16, page 7). The report further considers the possible impacts of cohort modelling, noting (page 28, emphasis added):

“There could also be cohort effects that are ignored by the current methodology. Recent falls in household representative rates for younger age groups may carry forward through a cohort process into older age groups in future years. If there is evidence in the future from the Census and the LFS of cohort effects then it would be necessary to consider whether introducing cohort effects into the model would improve the household projections – especially given the additional complexity and data requirements that this approach would entail.”

3.92 The Regeneris study is also misleading in saying that (para 5.21):

“The CLG methodology for household projections gives additional weight to latter years of the past trends data. The implication is that trends in household formation during the 2000s have a greater bearing on the future projections than earlier trends.”

3.93 The CLG Household Projections 2014-based Methodology Report does confirm that additional weight is given to Labour Force Survey in latter years, but this only relates to estimates for the period that post-date the most recent Census and have no impact on the future projection (page 17, emphasis added):

The LFS is a sample survey and as such subject to a margin of error but the data are far more up-to-date than the Census and some allowance for recent movements in the LFS are considered necessary. The LFS data has been incorporated into the England level projections for the 2012 period. The LFS data is seasonally adjusted and smoother as presented in the previous section. The smoothed LFS household representative rates are spliced onto the 2011 census data points.

Adjustments are then made to all age and relationship status groups so that they move towards the smoothed LFS value with:

a. The maximum weight of 50% to reflect uncertainty over accuracy and

b. the LFS weight is linked to the time since the last census (the longer the time elapsed since the last census, the less time there is for household representative rates to get back on to trend).
For example **in the 2014-based projections, the LFS data receives a 15% weight** derived as the maximum weight (50%) multiplied by the time in years elapsed since the 2011 census divided by the maximum years between censuses (3/10). **After 2014, the projections revert to the pre-LFS adjustment trends, reflecting the importance of retaining a view of long term trends.** The post-2014 projections are not affected directly by the 2012 LFS adjustments.

The revisions, shown in Figure 5, are extremely small but the largest changes were to the household representative rates for males and females aged 75 to 79 and 85+. **The overall impact is small** and reduced the projected number of households in 2039 by 3,000 or **0.01 per cent** compared to what would have been produced using the unadjusted household representative rates.

3.94 It is simply wrong for the Appellant to say that “trends in household formation during the 2000s have a greater bearing on the future projections than earlier trends” (para 5.21). Estimates for the whole period up to and including 2011 are based exclusively on Census data which reflect long-term trends. For the 2014-based data, LFS only affects the estimates for the years 2012, 2013 and 2014, and the maximum weight attributed to this data is 15%. The estimate for 2012 is based 5% on LFS data, 95% on long-term trends; the estimate for 2013 is based 10% on LFS data, 90% on long-term trends; and the estimate for 2014 is based 15% on LFS data, 85% on long-term trends. The future projections are based exclusively on long-term trends and the LFS adjustment has an impact of less than 3,000 households across the whole of England over the 25-year period 2014-2039, equivalent to only 0.01%.

3.95 The Regeneris study is misleading in its presentation of the CLG methodology.

3.96 Furthermore, whilst the Regeneris study accepts that there are many factors that affect household formation trends that are entirely independent of the housing market, it proposes a simplistic adjustment where they “assume that headship rates for 25 to 34 year olds recover to their 2001 level by the end of the plan period” (para 5.28), thereby completely ignoring the wide range of “complex and interwoven” factors that are likely to have caused the underlying trends.

3.97 The following chart shows the number of Household Representative Persons (HRPs, essentially “head of household”) and non-HRPs in the 25-34 age group over the period 1991-2014. It also shows the number of persons in this age group in terms of their relationship status — single, living as a couple (either married or cohabiting) or previously married (divorced, separated or widowed). It is apparent that whilst there has been a notable reduction in the number of HRPs, this mirrors a similar pattern in the number of persons who are living as a couple (the numbers are higher, as each couple will include two persons).
3.98 This clearly suggests that “the number of people choosing to delay parenthood or not to have children which has contributed to increases in the number of single person households” is a significant driver to the underlying demographic characteristics of those aged 25-34 in Buckinghamshire.

3.99 Considering the relationship between these two factors, the chart below clearly shows that the number of single persons that are HRPs in Buckinghamshire has remained stable, and has increased marginally over the period 2010-2014. It is the number of couple HRPs that has fallen – but this is predominantly due to there being fewer couples rather than there being a substantially higher number who are failing to form. This is the fundamental driver to the reducing household representative rate for this group which the Regeneris study presents (figure 5.4), but without any explanation of the reasons for the likely change.
3.100 It is inappropriate to simply assume that the underlying rate should return to its level in 2001 when the cause of the change is fundamentally due to changes in the trends for when young people will choose to live as a couple.

3.101 Nevertheless, the data does show that there has been an increase of couple non-HRPs (excluding the partners in each couple) over the period 2001-14, with the number increasing from 2,600 to 4,400 couples aged 25-34 who are living as concealed families (an increase of 1,800 households). Some of these will be living in multi-adult households, but others may be living with parents or other family as they have been unable to afford a home of their own; and there is a need to address such suppressed household formation.

3.102 The HEDNA Update proposes a specific increase of 659 dwellings to respond to observed increases in concealed families identified by Census data and homeless households that would not be included in the household projections. Furthermore, the further market signals uplift provides a further 1,256 dwellings in addition to the dwellings needed to align jobs and workers. These dwellings are not intended to draw in extra population, but instead to allow average household sizes to fall. Therefore, the HEDNA Update includes a total of 1,915 dwellings to respond to likely suppressed household formation. This is a proportionate response which recognises that there are a range of demographic factors which affect the household representative rate.

3.103 Whilst we do not agree with the arbitrary assumption taken by the Regeneris study to return rates to those observed in 2001, it is notable that the impact of this is an increase of around 2,120 dwellings on the SNPP 2014 scenario (table 5.2); which is an uplift that is comparable to that adopted by the HEDNA Update.

**Housing Market Signals**

3.104 The Regeneris study argues that there is no justification for a differential response to market signals in Aylesbury Vale and the rest of Buckinghamshire; proposing that a 15% response should be applied uniformly across the whole area. In arguing this position, the Regeneris study draws comparisons between Aylesbury Vale LPA and Wycombe LPA and suggests that both show similar market signals in terms of affordability and other indicators. However, the Appellant fails to recognise the importance of considering housing market signals on the basis of housing market areas. It is not appropriate to consider LPAs in isolation when they form part of a wider housing market area.

3.105 The HEDNA Update identified that Buckinghamshire HMA comprises two local housing market areas: Aylesbury town local HMA and High Wycombe and Amersham local HMA; and identified notably different
market signals for the two local HMAs. More specifically, when considering affordability at the lowest quartile the rate for Aylesbury town local HMA is 10.4x whereas the rate for the High Wycombe and Amersham local HMA is notably higher at 13.9x lower quartile earnings, around double than the national rate.

3.106 The PPG advice is clear (ID 2a-020):

“In areas where an upward adjustment is required, plan makers should set this adjustment at a level that is reasonable. The more significant the affordability constraints (as reflected in rising prices and rents, and worsening affordability ratio) and the stronger other indicators of high demand (eg the differential between land prices), the larger the improvement in affordability needed and, therefore, the larger the additional supply response should be.”

3.107 On this basis, given the differential in affordability (and other market signals) between the two local HMAs, the HEDNA Update was fully justified in proposing a 10% uplift to respond to housing market signals in the Aylesbury town local HMA and a 20% uplift to respond to housing market signals in the High Wycombe and Amersham local HMA.

3.108 When responding to housing market signals, it is important to remember that the justification for any response must be predicated either on (i) a need to draw in additional population (above the levels observed through recent migration trends), normally as a consequence of needing to align jobs and workers; or (ii) a need to enable more households to form and allow average household sizes to reduce. On this basis, any response to housing market signals must be intrinsically related to the alignment (or lack of alignment) between jobs and workers, and the extent of any suppressed household formation that has been identified.

3.109 The Regeneris study recognises the inter-relationship between these different factors to an extent; proposing that “the market signals uplift should be applied to an employment growth-led scenario” and concluding that “applied to our economic growth adjusted figures, a 15% adjustment would result in an OAN of 1,230 dpa for Aylesbury Vale and 2,970 dpa for Buckinghamshire” (para 5.102).

3.110 Figures of 1,230 dpa for Aylesbury Vale and 2,970 dpa for Buckinghamshire which incorporate a 15% uplift imply baseline figures of 1,070 dpa and 2,585 dpa respectively prior to the uplift being applied. These correspond to the annual dwelling numbers identified in tables 5.10 and 5.11 based on the CLG Household Projections (without adjusting the rates for 25-34 year olds). In other words, the Regeneris study agrees that the response to suppressed household formation should form part of the market signals response.
and is not additional to it. This is consistent with the HEDNA Update, which makes a specific adjustment for suppressed household formation which forms part of the overall response to market signals.

3.111 Whilst the Regeneris study considers the response to suppressed household formation forms part of the overall response to market signals, in considering the balance between jobs and workers, the study argues (para 5.101.2):

“The uplift to meet a forecast imbalance between jobs and workers is to meet future demand linked to additional labour moving to the area to work, who require additional housing beyond that assumed by demographic projections alone. Delivering housing at this level would simply meet this projected increase in demand. It does not follow that any change in the demand-supply balance could be expected to occur and affordability problems would be expected to persist.”

3.112 Nevertheless, where there is “a forecast imbalance between jobs and workers” and there is a need for “additional labour to move to the area beyond that assumed by demographic projections alone”, then it is reasonable to conclude that this would lead to housing market pressures. Furthermore, the Regeneris study proposes to respond to this housing market pressure through replacing the demographic household projections with an alternative assessment based on the future labour force.

3.113 Where additional housing is provided to balance future jobs and workers, it is reasonable to conclude that this will “increase planned supply by an amount that ... could be expected to improve affordability” (PPG ID 2a-020) in the same way as providing additional housing for any other reason. There is no reason to conclude that providing extra housing given a need for additional workers would not have an impact that is any different to providing extra housing given a need for more households to form; so this uplift should also be considered as a cumulative part of the response to market signals.

Affordable Housing Need

3.114 At the Cheshire East Local Plan hearings in October 2015, ORS was invited by the Inspector to establish common ground with this Inquiry’s Appellant, Gladman Development Ltd. Following a sequence of discussion and correspondence, the Appellant submitted a letter which stated:

“The ORS appraisal assumes that all households who live in the Affordable Sector continue to need their affordable home but it recognises that those who live outside that sector in the Private Rented Sector and claim housing benefit would also have housing need if that support withdrawn. In November 2015, there were 5,300 such households in Cheshire East.
In considering how many affordable homes are required in order to meet the housing needs of the area, it is therefore relevant to consider what role will be played by Housing Benefit in the PRS in future. On one hand, if no additional affordable homes were provided then the number of Housing Benefit Claimants in the PRS might be expected to grow rapidly. On the other, moving all those who currently claim Housing Benefit and live in the PRS into an affordable home would require the provision of a great many new affordable homes.

This a fundamentally political question – it is concerned with how we consider people should be treated. Unfortunately, the Government does not give a clear direction on this. On the one hand, the definition of Affordable Housing does not include the PRS and one of the reasons the Government cited for the introduction of affordable rent was that, by boosting the supply of affordable homes, it would reduce the number of households needing Housing Benefit to sustain a tenancy in the PRS. On the other hand, where households are housed in the PRS and claiming Benefit, they are generally considered to be suitably housed even though they would not be able to afford to sustain the tenancy absent the benefit.

In the CEC Note, the Council points out that the Government has given no indication of its intention to cease providing Housing Benefit to PRS tenants. This is true. It also points out that seeking to provide affordable homes to the 5,300 Private Tenants in Cheshire East currently claiming Housing Benefit would be an enormous change in the structure of the housing market. It therefore considers that the most appropriate course would be to make plans on the basis that the prevalence of households with a housing need meeting those needs by means of a private tenancy supported by Housing Benefit will stay the same.

For the purposes of the SHMA, we don’t have an issue with this. We consider that it is a reasonable starting assumption. What we suggested in our Comments to ORS [RE D027.002] was that one way to look at the question would be to consider whether the output of affordable homes implied by the application of the Council’s policies would enable the Council to reduce the role of the PRS in meeting housing needs.”

3.115 Therefore, the Appellant accepted the “policy off” starting point assumption was correct, and that holding constant the number of households in receipt of housing benefit was a reasonable position to understand future affordable housing needs.
4. Conclusion on Establishing OAN

41. There are only three substantive points of difference between the Council and the Appellant where the Appellant’s OAN is higher than the Council’s OAN: (i) data quality issues that affect the local demography, (ii) migration trends and (iii) the final uplift applied to the housing need based on the demographic projection.

42. The HEDNA Update takes full account of all of the relevant evidence that affects local demography issues for Aylesbury Vale and provides realistic demographic projections for the 20-year period 2013-2033, based on the most reliable data and set in the context of long-term migration trends. The population projections identify that population growth will be 19.4% over the 20-year period 2013-33. This is more realistic than the projection based on short-term migration trends, and it remains within the top 25% of all local authority areas; so the population growth identified by the HEDNA Update is higher than the growth in more than three quarters of all local authority areas in England.

43. The Regeneris study essentially relies on the ONS 2014-based starting point and does not take account of the projected growth being double the national average. It is unrealistic to assume that the short-term migration trends on which this projection is based would be sustained for the full 20-year Plan period, so it is unreasonable to not take account of this. It is notable that most other LAs with comparable levels of proportionate growth are London boroughs, and the GLA has rightly argued that this does not provide a robust basis for planning for the long-term needs of London. For exactly the same reasons, the ONS starting point does not provide a robust basis for planning for the long-term needs of Aylesbury Vale.

44. The ORS migration rates, based on reliable long-term trends, provide the most robust basis for projecting population on which to base the OAN. This is an approach that both Regeneris and this Appellant have endorsed as being “considered good practice and preferable to a reliance on a five year period alone” in representations elsewhere (Appendix 15, para 1.7).

45. In aligning jobs and workers, the HEDNA Update has been based on employment forecasts prepared by Oxford Economics which identify a jobs-growth of 40,700 jobs for Buckinghamshire HMA over the 20-year period 2013-2033. This represents a compound growth rate of 0.78% per year, and since 1997 there have been no periods of 10-years or more where Buckinghamshire has sustained a higher rate of growth. The Appellant assumes an unrealistic jobs growth figure based on an annual rate of 1.0%.
In terms of assumptions taken relating to the future labour force, the HEDNA Update is fully consistent with the Oxford Economics forecast in terms of economic activity rates, unemployment rates, commuting rates and double jobbing. In contrast, the Regeneris study overestimates economic activity for 2013 (and on this basis assumes less growth from 2013-33), higher falls in unemployment, higher increases in commuting and provides no details on their analysis of double jobbing, despite this accounting for 29,700 of the total 261,100 jobs in the area in 2013. The Appellant’s approach does not adopt “mutually consistent assumptions about the factors that link jobs to population and housing” and as a consequence (as cautioned by the PAS OAN Technical Advice Note) their analysis will “produce invalid results”.

The Appellant’s alignment of jobs and workers cannot be relied upon. Their jobs forecast is unrealistically high and the labour force assumptions are fundamentally inconsistent with the Oxford Economics forecast on which they rely.

The Appellant argues that the same uplift should be applied across Buckinghamshire in response to market signals; but the HEDNA Update identified two local housing market areas, and affordability at the lowest quartile was notably higher in the High Wycombe and Amersham local HMA (13.9x) than in the Aylesbury town local HMA (10.4x). The PPG advice is clear that “the more significant the affordability constraints ... the larger the additional supply response should be” (ID 2a-020), so the HEDNA Update was fully justified in proposing a 10% uplift to respond to housing market signals in the Aylesbury town local HMA and a 20% uplift to respond to housing market signals in the High Wycombe and Amersham local HMA.

Although the Appellant accepts that suppressed household formation forms an important part of the market signals response, it is argued that an increase in housing to respond to jobs pressures should not be counted. Where additional housing is provided to balance future jobs and workers, it is reasonable to conclude that this will “increase planned supply by an amount that ... could be expected to improve affordability” (PPG ID 2a-020) in the same way as providing additional housing for any other reason. There is no reason to conclude that providing extra housing given a need for additional workers would have an impact that is any different to providing extra housing to enable more households to form; so this uplift should also be considered as a cumulative part of the response to market signals.

The Appellant’s OAN is not robust and cannot be relied upon. It is based on short-term migration trends which take no account of underlying data quality issues; considers future jobs growth based on an unrealistic forecast that suggests a growth rate that is considerably higher than historic trends, and takes assumptions about the labour force that are fundamentally inconsistent and produce invalid results; and propose a market signals uplift that fails to recognise the differences in affordability between the local HMAs and fails to acknowledge the need to avoid double counting increases to housing supply to align jobs.
The Council’s OAN of 969 dpa represents an overall increase in dwellings of 26% over the 20-year Plan period, an average of 1.3% per year. The Council’s evidence at this appeal is based on HEDNA that uses the same methodology for assessing overall housing need as has been endorsed by the Inspectors examining the Bath and North East Somerset Core Strategy (see Appendix 8), the Cheshire East Local Plan Strategy (see Appendix 9) and Inspectors at numerous appeal hearings, including at Central Bedfordshire (see Appendix 6), Bedford (see Appendix 11) and Uttlesford (see Appendix 17).

In addition to its own housing need, Aylesbury Vale is planning to provide 7,500 dwellings to address unmet need from elsewhere in the housing market area (375 dpa, equivalent to a further 0.5% per year). On this basis, their housing target based on the Council’s OAN represents an annual growth of 1.8%. This would be the second highest target of any Local Plan that has been adopted since the NPPF (the highest being Chiltern at 1.9%; see Appendix 4), compared to the average rate of annual growth of 1.0% across all adopted Plans.

Achieving a growth of 1.0% nationally would require a 71% increase in current housebuilding rates and would meet Government objectives to delivery one million new homes. The Council’s OAN identifies that the need for housing in Aylesbury Vale is 30% higher than the national average, and their contribution to meeting unmet needs from elsewhere in the housing market area is likely to need a housing target that will require housebuilding rates in the area to be almost double the national average.

The Appellant’s OAN of 1,230 dpa represents an overall increase in dwellings of 33% over the 20-year Plan period, an average of 1.7% per year. Taking account of Aylesbury Vale’s contribution to unmet need from elsewhere in the housing market area would imply that the housing target would need a 2.2% annual rate of growth. This would significantly exceed the housing target in every other adopted Local Plan in the country; but it is the consequence of an unrealistic assessment based on erroneous population data and unrealistic migration levels. The Appellant’s OAN cannot be justified and it is unsound.

It is evidently clear that the HEDNA Update provides the only robust and reliable assessment of Objectively Assessed Housing Need for Aylesbury Vale at 969 dpa.

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10 HEDNA Update, paras 7.15-17
List of Appendices

Appendix 1  List of Acronyms

Appendix 2  Comparison of Housing Need Assumptions between the Council/ORS and the Appellant/Regeneris (ORS, March 2017)


Appendix 4  Housing targets from Local Plans found sound under the NPPF (ORS, January 2017)

Appendix 5  House of Commons Public Administration Select Committee: “Migration Statistics” (July 2013)

Appendix 6  Langford Road, Henlow, Central Bedfordshire: Appeal Decision (February 2016)

Appendix 7  Town & Country Planning: “Making sense of the new English household projections” Simpson/MacDonald (April 2015)

Appendix 8  Bath and North East Somerset Core Strategy: Inspector’s Report (June 2014)

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Appendix 13  Central Buckinghamshire HEDNA - Comments on Draft Document, Wycombe (Regeneris Consulting, )

Appendix 14  Note on the Objectively Assessed Need for the North Norfolk Area (Regeneris Consulting, March 2017)

Appendix 15  Nipsells Farm Lodge, Nipsells Chase, Maldon: Appeal Decision (December 2016)


Appendix 17  Land North of Pelham Road, Clavering, Uttlesford: Appeal Decision (November 2015)