

# Vale of Aylesbury Local Plan EiP

## Matter 2C: Demographics (OAN)

### Rebuttal Response to ED134.A

#### Introduction

1. During the Examination hearing session on Matter 2C, Mr. N. Tiley on behalf of CALA Homes Ltd circulated a document (ED134.A) which responded to the Council's response to the Inspector's questions on OAN (ED108.B).
2. ED108.B contained thirteen separate points which collectively sought to demonstrate that the adjustments made to Aylesbury Vale's population projections in the HEDNA Update (Dec 2016) were robust and justified in light of data quality concerns over the official statistics. Mr Tiley's ED134.A responded to each of those points in turn. The right to respond in writing to ED134.A was reserved by the council during the session. This document serves as that response, and hopefully should assist the Inspector.
3. In summary, Mr Tiley's main theme is the observation that the Unattributable Population Change (UPC) adjustment, when summed across all of the LPAs in the HMA, is significantly smaller than that applied by the ONS to Aylesbury Vale in isolation, and he feels this indicates that large adjustments to the figures for Aylesbury Vale such as are made by the HEDNA are thus unnecessary. Given the PPG's exhortation to establish OAN for the HMA as a whole, he also feels that any adjustment to Aylesbury Vale necessitates a corresponding adjustment to the other LPAs (Chiltern, South Bucks and Wycombe).
4. By contrast, it is the view of Opinion Research Services (ORS) that the issues that lead to the need for a UPC adjustment in Aylesbury Vale are materially different to those in the other LPAs, specifically that the issue in Aylesbury Vale has persisted in the years beyond the census-based UPC adjustment. This is not the case in the other LPAs, whose figures were successfully improved by the Migration Statistics Improvement Program (MSIP) and subsequent recalibration to the Census by the UPC. Since the issue leading to data inaccuracy in Aylesbury Vale is ongoing, ORS consider it appropriate to adjust the population projection for Aylesbury Vale accordingly, in contrast to the other LPAs in which the post census MYEs seem reasonable.

## i) Population projections

5. Under the first bullet point, Mr Tiley highlights that the Aylesbury Vale is projected to experience the 26th<sup>1</sup> greatest level of population growth of the 326 LPAs in England – within the top 10% - (to expand on this: it is in fact projected to experience the 8th highest growth of all non-London Boroughs in England), and then goes onto suggest that since Buckinghamshire as a whole is in the top 31% of counties, then there is less justification for adjustment.
6. However, it is precisely the fact that Aylesbury Vale is so anomalous in the Buckinghamshire context that makes it particularly deserving of further investigation. South Bucks is set to (by Mr Tiley's methodology) experience the 81st highest growth, Wycombe the 180th and Chiltern the 235th. Therefore, the reason for Buckinghamshire as a whole occupying the position it does is as a result of Aylesbury Vale skewing the average upwards. Nonetheless, as little can be concluded from a comparison at county level, it is far more appropriate to compare HMAs or planning authorities. In the LPA context, Aylesbury Vale ranks above LPAs such as Bedford, Luton, Reading, Milton Keynes and South Cambridgeshire, along with London boroughs such as Hounslow, Bromley, Bexley, Croydon and Waltham Forest.
7. Mr Tiley goes onto suggest that proximity to London would be indicative of greater proportionate levels of growth. Whilst this is broadly the case nationally, in this context Aylesbury Vale is again an anomaly. As previously mentioned, outside of London boroughs it is projected to have the 8th highest level of proportionate population growth, but is itself only the 59th nearest LPA, with projected growth exceeding that of closer LPAs such as Reading, North and East Hertfordshire, Stevenage, Guildford and Slough.
8. In light of these comparisons, it is clear that population growth in Aylesbury Vale requires careful examination.

## ii) UPC allowance

9. In his response to the second point, Mr Tiley claims that because the UPC adjustments net to +383 across the HMA, then any downward adjustment indicated by the UPC of -5,855 in Aylesbury Vale should be reflected in the other districts.
10. However, Mr Tiley misses an important point in this superficial analysis. The other UPC adjustments (primarily Wycombe), were taken into account in the HEDNA (specifically the UPC adjusted 2011 MYE was

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<sup>1</sup> Note that this is based on the 2014 SNPP, i.e. data from 2014 – 2033 taken from the 2014 SNPP. Using the 2013 population taken from the superseded MYE as a starting point to cover the 2013-33 plan period it is 23rd; or 25th using the recently revised MYE for 2013 as a starting point.

used in every case), but in the case of the districts (other than Aylesbury Vale) the data quality issue observed in the MYEs that led to the UPC discrepancy appears to have been corrected (as was demonstrated in figures 30, 35 and 40 of the HEDNA) by the Migration Statistics Improvement Program (MSIP), whereas in the case of Aylesbury Vale, the discrepancy that led to the UPC appears to have compounded in the years following the Census. This indicates a uniquely systemic problem in the Aylesbury Vale data that has persisted beyond 2011. The issue that led to a need for UPC correction is no longer present in the other LPAs, and as such it is inappropriate to adjust the other LPAs post 2011 for an issue that does not exist. In this respect, Aylesbury Vale is materially different to the other LPAs and thus requires different treatment.

### iii) MSIP effects

11. In his third response Mr Tiley points out that the MSIP program was *“rigorously implemented by ONS implementing improvements to both data collection and to the methodology employed to estimate migration flows. The results are that the estimates of migration flows should have improved, rather than worsened...”*
12. It is the case that nationally, the MSIP program did improve the Mid-Year Estimates, reducing the need for the sort of UPC correction seen in Aylesbury Vale. However, it is also the case that it did not solve the problem it set out to address in every authority, and Aylesbury Vale is an excellent example of this (another good example is Central Bedfordshire). It is for this reason that the ONS have continued to refine and improve their statistical techniques, as evidenced by the recent (March 2018) revisions to the Mid-Year Estimates and the proposed Statistical Population Dataset (SPD) methodology.
13. With regard to these inaccuracies Mr Tiley goes onto suggest that *“One is simply asked to accept that these exist by the HEDNA”*, this is of course untrue, and the evidence supporting their existence is clearly laid out in pages 42-51 of the HEDNA Update and further in the Annexes to ED108.B.
14. Mr Tiley then goes on to present two graphs that supposedly demonstrate that adjustment beyond that of UPC is not necessary. His graph again makes the point that the UPC adjustment across the whole HMA was relatively small compared to the size of the adjustment in Aylesbury Vale (note the difference between blue and orange lines). This is not disputed. However, this says nothing about the causes of the UPC and whether the underlying issue persists in Aylesbury Vale beyond 2011, as is demonstrated in the HEDNA Update.
15. The first graph is of particular note, since it shows that the influence of the MSIP was to cause further inaccuracy in Aylesbury Vale. If it were to have improved accuracy, one would expect the orange line to be closer to the blue line than the grey. It is notable that in all other LPAs in the HMA this was the case. As such, it is the case that the MSIP improved accuracy in the other LPAs, whilst reducing it in Aylesbury Vale.

16. This is further evidence that the data quality issues in Aylesbury Vale are materially different to those corrected by UPC in the other LPAs and as such require different treatment, including an examination of whether it persists beyond 2011. Conflating all UPC adjustments together as Mr Tiley prefers neglects to take account of this important fact.

#### iv) Period of error

17. In his response to bullet point four, Mr Tiley suggests that there is no error across the HMA, and thus discussion of the period in which it occurred is moot. There clearly is an error as was identified by the ONS (indeed Mr Tiley enumerates the net error for the HMA in his para 2.1.7 and for Aylesbury Vale in his para 2.1.6.). In seeking the cause of this error it is important to attribute the error to a given period. Since the MSIP adjustment primarily impacted on MYEs in the years following 2004, if the period of error correlates with this it would constitute strong evidence that the MSIP is responsible for the inaccuracy. As can be seen from Mr Tiley's figure 2.1, this is clearly the case in Aylesbury Vale.

#### v) Net migration

18. In his response to the fifth point Mr Tiley levels three criticisms, that are themselves not internally consistent. In the first, he advocates the analysing total population figures across the HMA as a whole, figures which are of course the result of simply summing the figures for each of the four LPAs (since this is the geographic level at which they are published). Each therefore comprises one of four separate inputs into the overall figure. In his second criticism he suggests that in the case of data comprised of four separate inputs (using the example of migration), these should be considered individually, a clear contradiction.
19. The consideration of each individual element of population change is clearly present in the HEDNA (see for example figure 21 showing the components of change for Aylesbury Vale) and it is a necessary process to establish OAN for each LPA in the absence of a joint plan, since each LPA has different characteristics and a separate examination. The OAN for the HMA as a whole is a result of summing these elements. In deriving a robust overall OAN for the HMA it is of course appropriate to examine each of the data elements that comprise it individually to establish their robustness, and that is precisely what the HEDNA has done.
20. Mr Tiley's third criticism suggests that there has been "a slight, but not abnormal increase in the level of internal in-migration to the districts of the HMA". This does not adequately explain why average annual population change excluding natural change (according to the MYEs cited in the HEDNA Update, since revised) in Aylesbury Vale went from 483 persons per year in the four year period 2007-11, to 2,609 per year in the subsequent four years 2011-15, more than quintupling. This remains a clear anomaly.

21. In the context of housebuilding that follows, he observes that average rates of housebuilding since 2011 have shown a 65% increase over the 20-year average for 1991-2011. Leaving aside for a moment the fact that rates of housebuilding going back as far as 1991 are of questionable relevance in this context, the equivalent calculation for population change shows an increase of 407%, in tandem with a significant reduction in average household size (see HEDNA Update figure 17). Thus a 65% increase in housebuilding cannot not be said to explain away the discrepancy. There is further discussion concerning rates of housebuilding under point 11.

## vi) Population growth

22. Under his response to the sixth point Mr Tiley compares population growth in Aylesbury Vale to that of Wycombe, but unfortunately does not compare like-with-like. In the first paragraph he cites ED108.B which states that, according to the MYEs in the HEDNA, the population of Aylesbury Vale increased by 28% more in the four years post census (total change 2011-15 from the MYEs = 13,827 persons, average of 3,457 per year) than it did in the all of the ten years of the previous decade combined (total of 12,390 people, average of 1,239 per year). This corresponds to the average annual population change almost tripling in the four years post Census according to the MYEs. We consider that this is strong evidence of there being serious reason to doubt the robustness of the post 2011 MYEs for Aylesbury Vale, and supports the case for their adjustment.
23. As a comparison, the equivalent calculation for Wycombe gives an average of 991 persons per annum 2001-2011 (taking account of UPC), and 1,018 persons per annum 2011-15 (without any UPC adjustment). This corresponds to a consistent rate of population change, rather than the step change of the Aylesbury Vale figures. As such, this is supportive of the idea that post 2011, the MYEs for Wycombe are reasonable estimates of population change. Therefore, it was not considered appropriate to adjust them in the HEDNA.
24. Mr Tiley then goes on to note that the 2017 MYEs show a larger population growth than the 2014 SNPP projection (itself based on previous MYEs) anticipated; and suggests that this may be justification for an upward adjustment. The reality is that it is simply further evidence of a persistent, compounding error in each subsequent iteration of the MYEs for Aylesbury Vale.

## vii) Systematic errors

25. The response given to the seventh bullet suggests that there is no systematic error present at the HMA level since the MYEs broadly match the Census. ORS agree that there is not a HMA wide systematic error; rather there is a systematic error only in the case of Aylesbury Vale. As previously explained, a systematic error necessarily will persist beyond 2011. In the case of South Bucks, Chiltern and Wycombe, there is no evidence of a persistent error, the MSIP adjustment (making the MYEs more effective estimates in most places) in tandem with the UPC adjustment (recalibrating the MYEs so that the component changes of the MYE build on an accurate base figure moving forward) appear to have corrected the issue moving beyond 2011 (see discussion around fig 40 of the HEDNA Update as an example of evidence to this effect).
26. In the case of Aylesbury Vale, the MSIP adjustment rendered the MYEs less effective (as evidenced by the MSIP deviating the MYEs further from census measured reality, rather than improving them). Since at the time of the HEDNA Update this methodology remained unchanged, the error persisted beyond 2011. Since Aylesbury Vale is the only LPA where there is evidence of a systematic, persistent error beyond 2011, then it is the only one that requires adjustment. Mr Tiley's contention that all LPAs should be adjusted similarly simply ignores the evidence that the discrepancy in Aylesbury Vale is of a materially different nature than those corrected by UPC in the other LPAs, i.e. it persists beyond 2011.

## viii) ONS uncertainty

27. Regarding Mr Tiley's comments on the eighth bullet point concerning ONS measured levels of uncertainty, he states correctly that all MYEs have a measure of uncertainty, and that the degree of uncertainty increases as time passes from the last Census. What he does not address is the relative size of this uncertainty range. The ONS consider there to be significantly more uncertainty over the Aylesbury Vale MYEs than any of the other local authorities comprising the HMA, particularly with regard to international migration (see Annex 3 to ED108.B, para 16-18). This demonstrates that the ONS have a lower level of confidence in the accuracy of their MYE for Aylesbury Vale than elsewhere.

## ix) ONS empirical confidence

28. In his response to the ninth point, Mr Tiley observes that across the HMA, the MYEs are well within the empirical confidence interval, and this reduces the justification for an adjustment in Aylesbury Vale. However, the reason that the MYEs are well within the confidence interval across the HMA is because this interval is considerably wider than it might otherwise be because of the large uncertainty concerning Aylesbury Vale. Therefore, the reason that there is less of a justification for an adjustment across the HMA is simply that the other three of the four LPAs do not require one.

## x) Patient Register

29. In his response to the tenth point concerning the patient register, Mr Tiley suggests that an increase in internal in-migration as enumerated by the MYEs would not be reflected in the Patient Register, and thus in his opinion it would not necessarily “keep pace” with the resultant population increases. Mr Tiley fails to note that the Patient Register is the key input into establishing internal migration in the Mid-Year Estimates. Since levels of internal migration in the MYEs are essentially estimated through examination of changes in the patient register (in tandem with other inputs such as Higher Education Statistics Agency data), to suggest that it is not reliable in this regard as Mr Tiley does, is to, by extension, cast doubt on the Mid-Year Estimates themselves.
30. The MSIP adjustment was concerned with international migration (which the MYEs enumerate through other means than the Patient Register such as the International Passenger Survey), so this simply serves as further evidence that the discrepancies observed are connected with the MSIP adjustment.

## xi) Housebuilding

31. In his response to point eleven Mr Tiley concludes that the HEDNA estimate is incorrect through a piece of circular mathematics. Essentially he takes the numbers from the SNPP (in 2.1.43), and compares the result to the Mid Year Estimate (in 2.1.44). This is circular since the SNPP are projections based on the Mid-Year Estimates, and so would be expected to closely align.
32. Mr Tiley fails to note that the MHCLG produce estimates of households and the household population (i.e. those not in communal establishments) in the form of the DCLG household projections, themselves based on the SNPP population projections, which are themselves based on the preceding MYEs. The following data easily refutes Mr Tiley’s calculations:

33. In 2011 the census identified 69,406 households. The 2014 CLG household estimate for 2011 was 69,689 which is consistent with the Census (as one would expect after application of the UPC adjustment). The household estimate for 2015 in Aylesbury Vale was 74,597 – an increase of 4,908 extra households. Data from annual monitoring reports shows that during this period there were 4,446 completions. Clearly, no matter which vacancy rate one chooses to use, there are insufficient dwellings completions 2011-15 to support this increase in households. Therefore, this serves as solid evidence that there is an issue with the MHCLG household figures.
34. Given that the MHCLG household figures are based on the SNPP population projections, which are themselves based on the MYEs, we can conclude that dwelling completions are evidence of a problem with the Mid-Year Estimates: Effectively the reason the 2014-based CLG household estimate for 2015 is too high is because the 2014-based population SNPP population projection for 2015 is too high, and the reason the population projection is too high is because the post 2011 MYEs that inform it are themselves overestimates due to a persistent issue with estimates of migration.

## xii) Further improvements to the estimates

35. Mr Tiley points out in bullet point twelve that in the latest iteration of the MYEs (March 2018), the ONS have reduced the population estimates somewhat, but not to the degree that would align with the estimates in the HEDNA. This is because the changes to the MYE methodology that led to this reduction is only the first change in several improvements that the ONS intend to make. We would anticipate that these further improvements once implemented would serve to bring the estimates still closer to the HEDNA estimate, and this initial revision indicates the direction of travel.

Finally in this section, Mr Tiley notes that the MYE for 2016 is 2,800 persons higher than that identified in the 2014 SNPP. He states that this “suggests the need for an upward adjustment in Aylesbury Vale”. On the contrary; this serves as further evidence of a continued error of overestimation in the MYEs.

## xiii) Statistical Population Dataset

In his response to point thirteen, Mr Tiley points out that the SPD are not official statistics; and feels they can should therefore be afforded no weight. Whilst it is true that the SPD are not official statistics, it is also true that they represent a further indication of the ONS’ intent regarding the future of national statistics. Although still experimental in their current form, their close consistency with the figures in the HEDNA suggest that the further refinements to the MYEs that the ONS have stated their intention to implement will serve to bring the official statistics even more closely in line with the HEDNA.