A Review of the West Surrey SHMA as it relates to the Objectively Assessed Housing Needs of Guildford

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NMSS

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This report has been prepared for Guildford Residents Association.

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A Review of the West Surrey SHMA as it relates to the Objectively Assessed Housing Needs of Guildford

Executive Summary

Aim

i. This report reviews the GL Hearn West Surrey Strategic Housing Market Assessment, Final Report, September 2015 (the 'SHMA') as it relates to the full objectively assessed housing needs (the 'full OAN') of Guildford District.

Approach

ii. The SHMA concludes that the full OAN of Guildford District is 693 homes a year for the plan period – 2013-33. This is made up as follows:

	Homes a year
Demographic projection	517
Improving affordability	31
Student growth impact	25
Supporting economic growth	120
Total	**693**

iii. This note considers each of these elements in turn

Demographic projection

iv. The SHMA makes no adjustments to the DCLG 2012-based household projections in estimating the demographic projection apart from updating the population projections to reflect the 2013 Mid-Year Population Estimates. (Without this update the SHMA would have concluded that the demographic OAN was 532 homes a year.)

v. Having conducted an independent review of the DCLG 2012-based projections, NMSS believe that there are three areas in which adjustments to the DCLG projections should be made.

- **Base projections for flows to and from the rest of the UK on a longer (10-year) trend period.** The DCLG 2012-based household projections are based on the 2012 Sub-National Population Projections (2012 SNPP). These use flow rates from the period 2007-12 to project future flows to and from the rest of the UK. In common with many other authorities, flows into and out of Guildford during this period were affected by the recent economic downturn and were not typical of the longer term trend. A better reflection of the likely longer term trend can be obtained by using a 10-year trend period – 2004-14 being the latest for which the data are currently available.

Adjusting the DCLG 2012-based projection on this basis **increases** the demographic OAN by 62 homes a year.

- **Adjust international migration projections to reflect actual flows to and from Guildford.** The 2012 SNPP are based on national international migration projections which assume that long term net migration to the UK is approximately half the level seen in the last year for which statistics are available. They may therefore underestimate likely future levels of migration, at least at the national level if not for every individual authority. NMSS believe that the best way to correct for this at the local authority level is to adjust the migration projections for an authority to reflect recent international flows to and from that authority. Such an adjustment would be preferable to applying an adjustment based on the national figures which may not reflect what has happened locally. Making such an adjustment for Guildford based on international flows in the period 2004-14 **increases** the number of homes needed by only 3 homes a year. This indicates that, in the case of Guildford, the projected international migration projections are not out of line with what has recently been observed.
- **Correct for errors in the historical data for international migration flows.** Taken together the ONS's estimates of births, deaths and migration flows in the years between 2001 and 2011 overestimate by over 90% the increase in the population of Guildford measured by two censuses. This error is known as the 'Unattributable Population Change' (UPC). An examination of the detailed datasets with the aid of a tool produced by the ONS suggests that the cause is most likely to be errors in the international flow estimates. Correcting for these **reduces** the estimate of the demographic OAN by 80 homes a year.

vi. Adjusting the DCLG 2012-based households projections to reflect these factors produces the following revised estimate of the demographic OAN:

	Homes a year
Starting point: DCLG 2012 (based on 2012 SNPP)	526
Adjustment for 10-year internal migration 2004-14	62
Adjustment for 10-year international migration 2004-14	3
Adjustment for UPC – 100%	-80
Revised estimate of the demographic OAN	**510**

vii. **The latest ONS projections make little difference to the OAN if an appropriate correction for UPC is made.** The ONS have very recently (25 May 2016) produced an updated set of local authority population projections: the 2014 Sub-national Population Projections. These suggest that over the plan period (2013-33) the population of Guildford will grow 17% faster than suggested by the 2012-based population projections. Applying DCLG's 2012-based household formation rates to the new ONS projections suggests a need for 603 homes a year. However, in common with the 2012 SNPP, the new projections make no allowance for UPC. This will be similar to that calculated for

the 2012 SNPP (-80 homes a year). Making that adjustment reduces the number of homes needed to 523. That is only 13 homes a year more than the 510 homes suggested by the adjusted NMSS calculation and as such is well within the error margins for this type of projections. The new ONS projections do not therefore provide grounds for increasing the demographic OAN.

Improving affordability

viii. **The proposed 'affordability uplift' of 31 homes a year is not justified and would not improve affordability.** The SHMA notes that housing in Guildford is significantly less affordable than in England as a whole and proposes an adjustment of 31 extra homes a year to reflect this. However, in discussing the case for such adjustments the Government's Planning Practice Guidance (PPG) notes that, "Prices or rents rising faster than the national/local average may well indicate particular market undersupply relative to demand." The issue is not whether prices are high but whether that they are rising faster than elsewhere. The data for the affordability of homes in Guildford relative to earnings suggests that it is no worse than other Surrey districts and has not seen a faster deterioration than they have. Indeed, some have seen a worse deterioration. Moreover, increasing housing supply beyond the level suggested by the demographic OAN would not result in a noticeable improvement in affordability but simply in more people who can afford high prices moving to the area. On this basis an affordability uplift for Guildford would not be justified.

Students

ix. **Extra student homes are already included in the official projections – possibly more than will be needed.** A detailed analysis of the DCLG household projections shows that they envisage an increase in the number of households of the type formed by students that is similar to and in fact slightly larger than the number of extra student homes which the SHMA suggests will be needed to cater for the expansion of the University of Surrey. Given that there are reasons to believe that the SHMA's calculation may overestimate the homes needed for students, there is not a case for adding additional student housing to the housing implied by the DCLG projections. Indeed, there is a possibility that the adjustment for students should be negative, not positive i.e. that too many student households have been included in the projections.

x. The analysis of the impact which potential increases in student numbers may have on the overall housing needs of any university town is complex and best carried out separately from a general demographic analysis. Given that students are a significant part of Guildford's population and there are substantial uncertainties in the calculations, there is a strong case for carrying out such a separate analysis and, possibly, setting a separate requirement for student housing.

Homes to support economic growth

xi. **<u>The SHMA method for estimating the number of homes needed to support job growth is flawed and exaggerates the number of homes needed</u>.** The SHMA aggregates three different employment forecasts to produce an estimate of the number of additional jobs which will be created in Guildford between 2013 and 2033. It then applies an independently derived set of employment rate assumptions (together with other assumptions) to turn that aggregated employment forecast into a population growth and housing need projection. This inevitably means that the employment rate assumptions used in the SHMA are different from those in the economic models used by the forecasters. This is a fundamental flaw because the relationship between the size of the population and the number of people in work (i.e. the employment rate) is a key factor in the models used by the economic forecasters. Had the economic forecasters made different assumptions about this relationship, they would have produced different estimates for the change in the number of jobs.

xii. When employment or economic activity rate assumptions consistent with forecasts are used to estimate the number of homes needed, it can be shown that neither the Cambridge Econometrics nor the Oxford Economics projection suggests that more homes will be needed than indicated by the revised estimate of the demographic OAN. In fact, both projections suggest that fewer homes are needed but the Planning Practice Guidance does not allow the OAN to be reduced in such circumstances. (The necessary data to conduct a similar analysis of the Experian forecast has not been made available to NMSS.)

xiii. The evidence from the two economic projections for which the necessary data is available to conduct a consistent analysis is that there is no need for the 120 extra homes a year to support economic growth suggested by the SHMA.

xiv. It should be noted that the analysis was based on economic projections produced before the Brexit vote. Updated projections would now be likely to suggest slower economic growth and the creation of fewer additional jobs. This reinforces the conclusion that the 120 extras homes are not needed.

Conclusions

xv. The analysis presented in this report updates the latest DCLG household projections using data and projections which have become available subsequent to the publication of those projections. Adjustments have also been made to reflect 10-year trends in internal and international migration and to correct for what appear to be errors in the historical data for international migration. **This leads to the conclusion that demographic considerations suggest that Guildford needs 510 homes a year over the period 2013-33. That figure compares with the SHMA's demographic projection of 517 homes a year** (although the SHMA's method is significantly different).

xvi. The SHMA adds extra homes to its demographic projection to allow for improving affordability; increased student numbers; and, supporting economic growth. This report has shown that none of these is justified on the basis of the evidence presented as:

a. The deterioration in the affordability of housing in Guildford is no worse than in other Surrey districts and boosting supply beyond the demographic OAN would not result in a noticeable improvement in affordability but simply in more people moving to the area.

b. An analysis of the DCLG household projections shows that they envisage an increase in the number of households of the type formed by students that is similar to and slightly larger than the number of extra student homes which the SHMA suggests will be needed to cater for the expansion of the University of Surrey. There are also reasons for believing that the SHMA's estimate of the number of homes needed for students may be too high. This suggests that an adequate provision for students is already included in the demographic OAN.

c. The SHMA seeks to estimate the number of homes needed to support employment growth using employment rate assumptions that are inconsistent with the employment forecasts. This produces misleading results. An analysis of the Cambridge Econometrics and Oxford Economics forecasts using employment or economic activity rate assumptions consistent with the forecasts suggests that in neither case is there a need to provide more housing than suggested by the demographic analysis. (The necessary data to carry out a similar analysis of the Experian forecast has not been made available.)

xvii. As no case has been made for adding to the demographic OAN, the full Objectively Assessed Need for housing in Guildford District should be taken to be 510 homes a year over the period 2013-33, not the 693 homes a year suggested by the SHMA.

A Review of the West Surrey SHMA as it relates to the Objectively Assessed Housing Needs of Guildford

1. Introduction

1.1. This report reviews the GL Hearn West Surrey Strategic Housing Market Assessment, Final Report, September 2015 ('the SHMA') as it relates to full Objectively Assessed housing Needs ('the full OAN') of Guildford District. The intention is to provide an evidence base for use by the Guildford Residents Association in making representations on the Guildford Local Plan.

2. Approach

2.1. The SHMA concludes that the full OAN of Guildford District is 693 homes a year for the period 2013-33[1]. This is made up as follows:

	Homes a year
Demographic projection	517
Improving affordability	31
Student growth impact	25
Supporting economic growth	120
Total	**693**

2.2. This note considers each of these elements in turn, comparing the figures suggested by GL Hearn with analysis using the NMSS model and Office for National Statistics (ONS) and Department for Communities and Local Government (DCLG) statistics and projections.

3. The demographic OAN

3.1. The demographic OAN of a local authority area is an estimate of its need for housing based solely on demographic considerations without any allowance for factors such as market signals, affordable housing or the homes which might be needed to support economic growth.

[1] See SHMA Figure 63 on page 170

3.2. The Government's Planning Practice Guidance[2] (PPG) stipulates that the starting point for estimating an OAN should be the DCLG's latest household projections. It acknowledges, however, that it may be necessary to adjust those projections to take account of factors that are not reflected in the trends on which they are based.

3.3. In arriving at the SHMA estimate of the demographic OAN, GL Hearn discuss the component parts of the latest DCLG projections[3] but conclude that it is not necessary to make any adjustments to them apart from updating them to reflect the 2013 Mid-year Population Estimates[4]. This gives an estimate of 517 homes a year for the period 2013-33 using an assumption that 4.0% of homes are either empty or used as second homes. Had GL Hearn used the latest DCLG projections without adjustment and applied the same empty and second homes rate they would have concluded that the demographic OAN was 532 homes a year 2013-33, not 517.

3.4. Having carried out an independent review of the official projections, NMSS have identified three areas in which there is a case for adjustments.

Internal migration: flows to and from the rest of the UK

3.5. The projected future population is the current population plus births, less deaths plus net migration into the area. Net migration can be divided into internal migration – migration to and from the rest of the UK – and international migration – flows to and from other countries. The statistics on births and deaths are of high quality and there is relatively little uncertainty about future births and deaths. There is far great uncertainty about past migration flows (both internal and international) and far greater doubt about future migration flows. Consideration of the reliability of ONS population projections therefore inevitably focuses on the migration flows.

[2] The *Planning Practice Guidance* was launched by the Department for Communities and Local Government (DCLG) on 6 March 2014 as a web-based resource and has been periodically updated since then. It is available at http://planningguidance.planningportal.gov.uk/

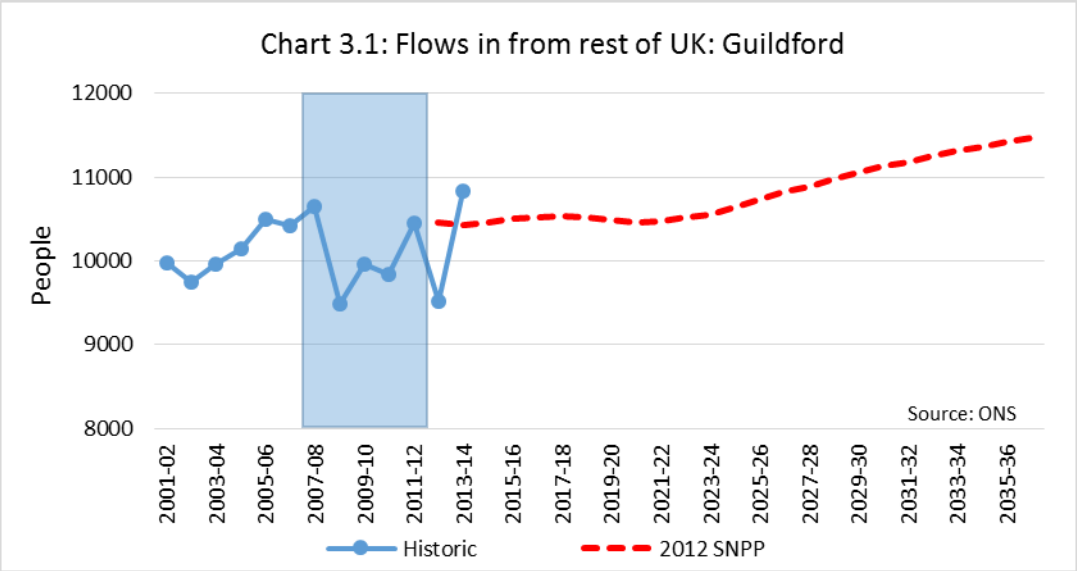
[3] The latest official household projection are the *2012-based household projections in England, 2012 to 2037* were published on 27 February 2015 and are available at https://www.gov.uk/government/statistics/2012-based-household-projections-in-england-2012-to-2037. As the name suggests, these are based on data up to mid-year 2012.

[4] Each year the ONS produces Mid-year Population Estimates. These give the ONS's estimate of the population of local authorities at 30 June in the year in question. By updating the projection to reflect the 2013 Mid-year Estimates GL Hearn have sought to give a more up to date picture. However, it is not possible for a consultant to replicate exactly the method used by the ONS and it is possible that inaccuracies may have been introduced in the updating process. NMSS have not investigated whether this is the case. The latest mid-year estimates are the *Annual Mid-year Population Estimates, 2014* which were published on 25 June 2015 and are available at http://www.ons.gov.uk/ons/dcp171778_406922.pdf. The 2015 Mid-year Population Estimates are due to be published in June (2016).

3.6. The latest ONS population projections available at the time the SHMA was produced were the 2012-based Sub-National Population Projections for England[5] (2012 SNPP). The SHMA notes that the level of net internal migration projected in the 2012 SNPP is "expected to fall well below levels seen in the past"[6] but sees no need to correct for this. This merits further investigation.

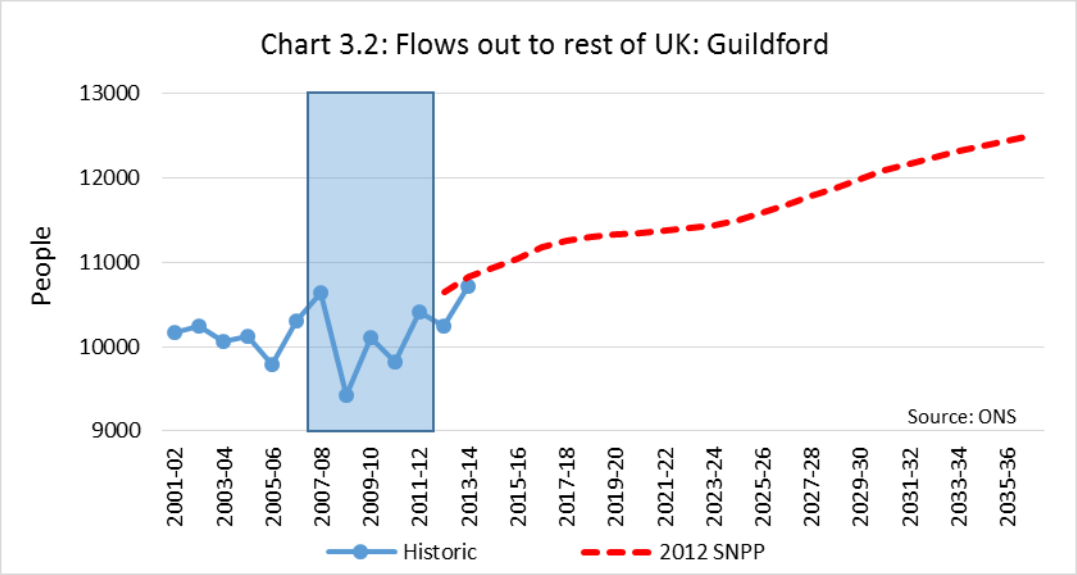
3.7. The ONS project flows to and from local authorities in England by calculating flow rates in a trend period of 5 years up to the base date of their projections. For the 2012 SNPP (on which the DCLG 2012-based projections are based) the trend period was 2007-8 to 2011-12 inclusive. That period included the recent recession during which flows to and from many parts of the country were below longer term trends. As a consequence, basing population projections on this trend period risks either under or overestimating future flows.

3.8. Charts 3.1 and 3.2 show the historical data for flows to and from Guildford from and to the rest of the UK together with the 2012 SNPP projections for those flows. The trend periods used by the ONS are shaded.



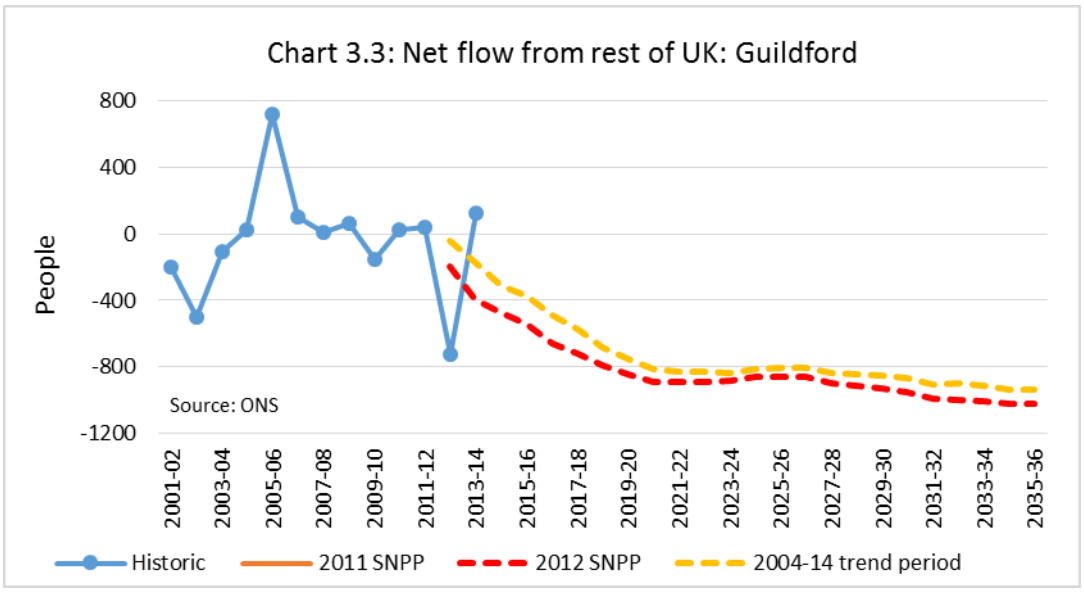
[5] The *2012-based Subnational Population Projections for England* were published on 29 May 2014 and are available at http://www.ons.gov.uk/ons/rel/snpp/sub-national-population-projections/2012-based-projections/stb-2012-based-snpp.html

[6] SHMA paragraph 4.23, page 50.



3.9. Note that both in- and outflows fell markedly after 2007-08 as the economic downturn took hold although there has since been a recovery to approximately the flows seen prior to the recession. Note also that there are now two further data points after the trend periods use in the 2012 SNPP – those for 2012-13 and 2013-14. These are available from the 2014 Mid-year Population Estimates and have been used by the ONS in preparing the 2014 Sub-National Population Projections (2014 SNPP) which were released on 25 May 2016.

3.10. To minimise the risk of distortion caused by the atypical flows during the economic downturn and to take advantage of the latest two data points, there is a strong case for updating the projections using the 10-year period 2004-14 as the trend period for internal migration. Chart 3.3 shows the impact this has on the net flow from the rest of the UK.

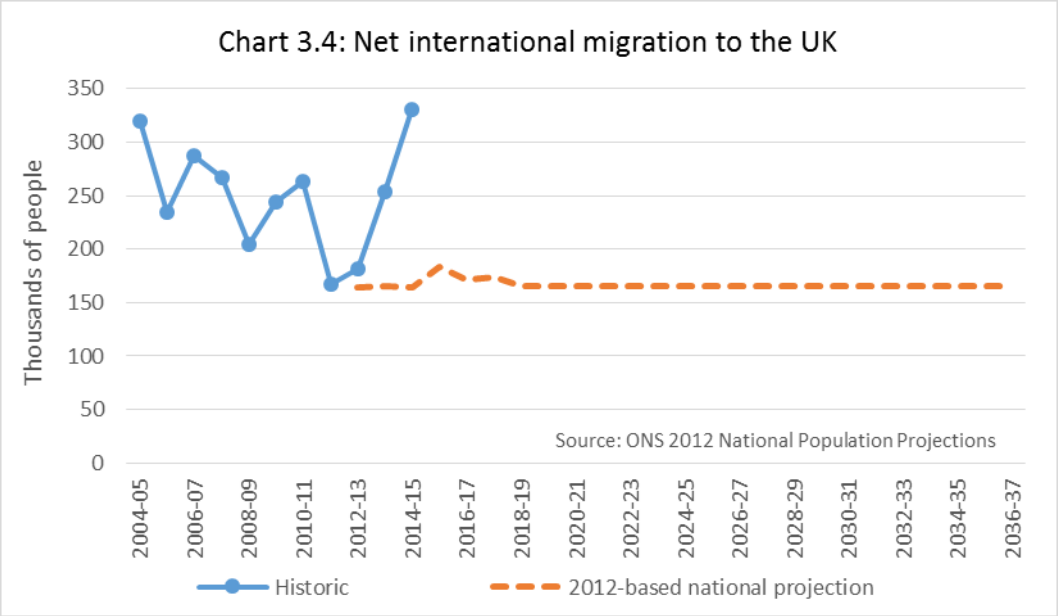


3.11. As can be seen, **the impact of using 2004-14 as the internal migration trend period is to reduce the net outflow by a relatively small number: an average of 98 people a year over the plan period 2013-33. The reduced**

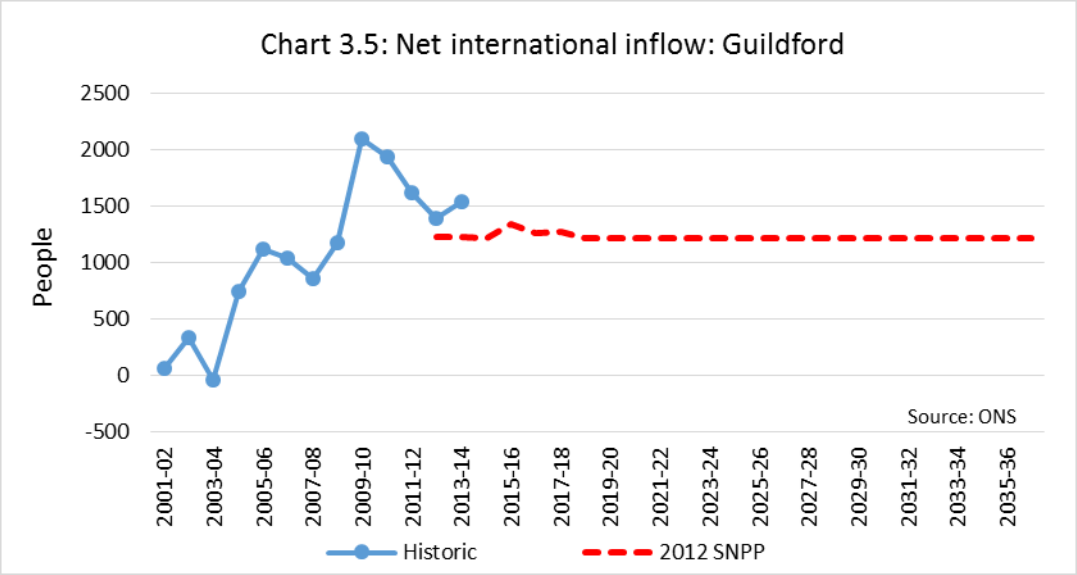
outflow produces a higher population projection and increases the number of homes needed by 62 homes a year.

International migration

3.12. The ONS project international migration to and from local authorities by disaggregating their national projection for international flows. Chart 3.4 shows the 2012-based National Population Projection (2012 NPP) which underpins the 2012 SNPP. As can be seen, the national projection is below the net flow seen in the previous 10 years and about half of the net flow suggested by the most recent data.



3.13. The discrepancy between the national projection which underpins the 2012 SNPP and the recent flow levels has led some to suggest that there should be a substantial uplift to the projection to reflect a more realistic view of future international migration. Whilst there may be a case for some uplift, it would be wrong to uplift the projected international flows for an individual local authority to reflect the national position as the discrepancy between what has happened recently and what is projected varies considerably from one authority to another. Chart 3.5 shows how Guildford's past and projected international flows compare.



3.14. As can be seen from the chart, the discrepancy between the projected net inflow and the recorded past flows over the last 10-years is not large. Indeed, **adjusting the projected net international flow to reflect the average flow over the period 2004-14 only increases the number of homes needed a year by 3.** This is not a significant adjustment.

Errors in the historical data: Unattributable Population Change (UPC)

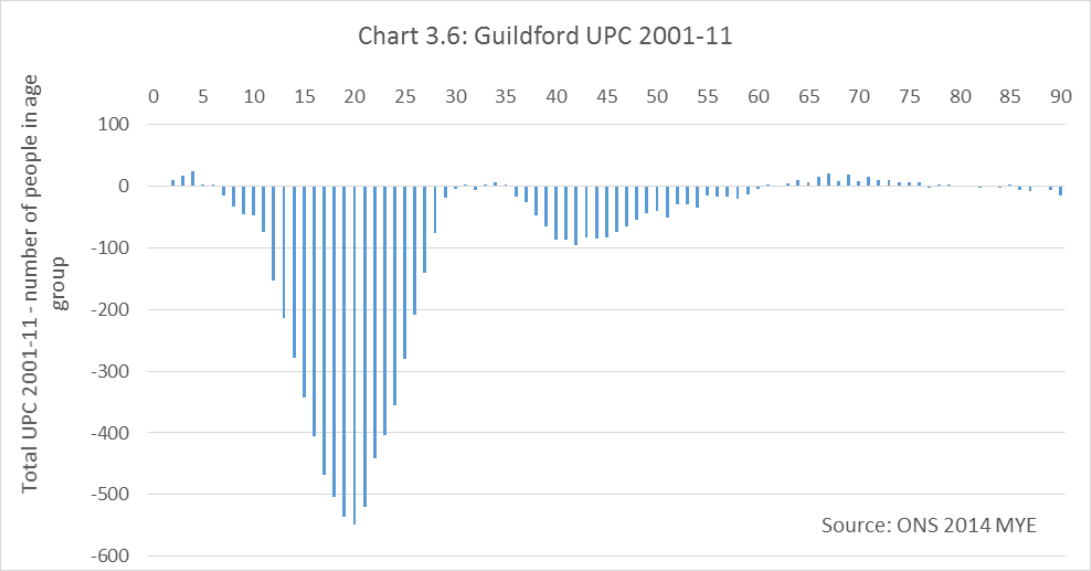
3.15. In theory, the population measured in the 2001 census plus births, less deaths, plus net migration flows in the interim, should equal the population measured in the 2011 census. This is, however, never the case: there is always a discrepancy known as 'Unattributable Population Change' (UPC). As we have high quality systems for registering births and deaths, the errors are likely to be in some or all of the census estimates for 2001 and 2011 and the migration flows, both internal and international. The key point to note is that if the errors are in the estimates of past migration flows then projections based on those estimates are also likely to be inaccurate.

3.16. The SHMA notes that Guildford has a negative UPC for the period 2001 to 2011, (which means that the estimated components of change exceed the observed change in population). It suggests that:

> *"....if this is due to misreporting of components of change it is considered most likely to be due to the poor recording of international out-migration. Whilst an adjustment to the projections could be made to consider a lower level of migration to reflect UPC this would need to be done in conjunction with an understanding of the impact on other aspects of the projection. Most notably we consider that increasing levels of international out-migration would have a knock on effect on the estimates of internal out-migration and the two would be likely to broadly balance out.*[7]

[7] SHMA paragraph 4.32, page 54

3.17. This is both highly questionable and fails to take account of the scale of UPC in Guildford's case. The SHMA notes that it averaged 717 people a year for the period 2001-11 but it does not point out that the average observed population change was only 781 people a year: i.e. UPC was 92% of the observed population change. It is therefore a very significant issue for Guildford.



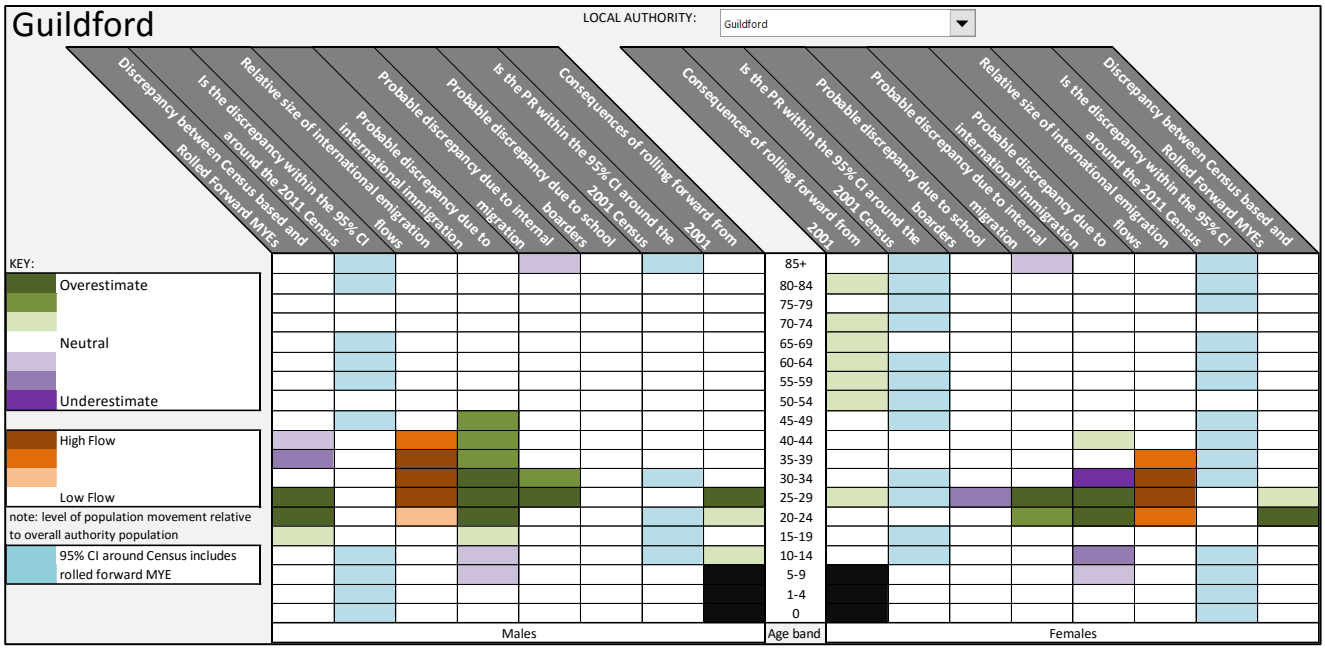
3.18. The ONS publish data with their Mid-Year Estimates which disaggregates UPC by age and gender. Chart 3.6 shows this data for Guildford. It indicates that UPC is concentrated in two age groups: 11-28 and 38-48 (both inclusive). This concentration of UPC in specific age groups suggests that there may have been particular problems with the estimation of either the census populations or the migration flows of certain groups. The 11-28 group includes the age groups in which most students fall and it is not surprising that Guildford, as a university town, has problems in these age groups as the arrivals and departures of students are notoriously difficult to measure accurately. However, students would not explain the discrepancies in the 11-17 or the 38-48 age groups. The problems in those age groups suggest that there may have been difficulties with the recording of families with teenage children as many aged 38-48 will have children aged 11-17.

3.19. The ONS initially took the view that it was unnecessary to make adjustments for UPC and no such adjustments are included in their sub-national population projections. However, they have since produced a very detailed report which discusses the reasons for the errors and seeks to given an indication of their likely scale[8]. This was accompanied by a data tool which gives an assessment of

[8] *Further understanding of the causes of discrepancies between rolled forward and census based local authority mid-year population estimates for 2011*, 17 September 2015, ONS, available at http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/guide-method/method-quality/specific/population-and-migration/population-statistics-research-unit--psru-/latest-publications-from-the-population-statistics-research-unit/further-understanding-causes-discrepancies.pdf

the possible contribution which the census data and migration flows may have made to the UPC for each authority[9].

Figure 3.1: ONS Data Tool summary chart for Guildford



3.20. Figure 3.1 reproduces the summary chart for Guildford from the ONS tool. As indicated by the shaded cells, the ONS analysis suggests that the main causes of Guildford's large UPC are international migration (males aged 15-49; females aged 20-34) and internal migration (males aged 25-34; females age 20-29).

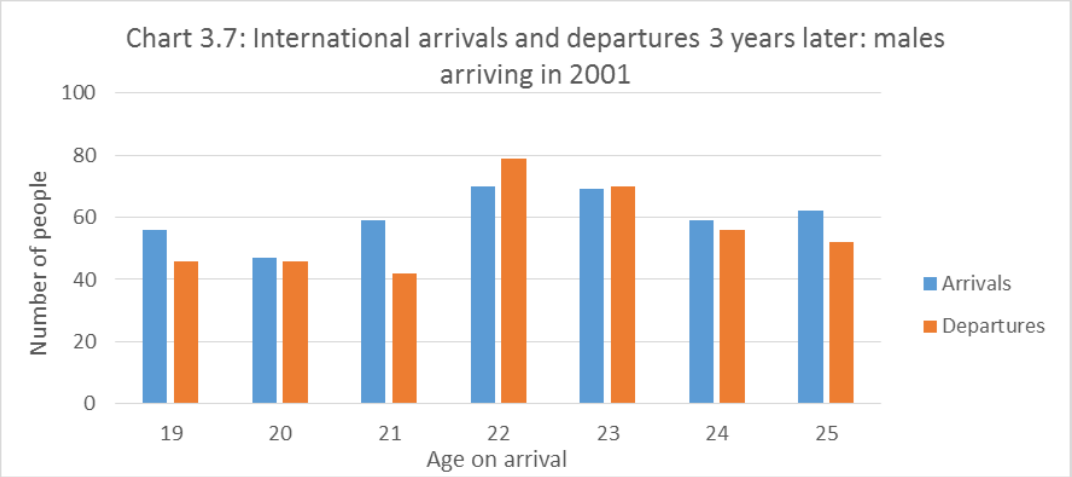
3.21. The 2014 Mid-Year Estimates provide the historical data for migration flows by single year of age and gender for the period 2001-14. It is possible to examine these and, with the aid of the ONS data tool, reach a view on which flows in which age groups in which years are likely to be responsible for UPC.

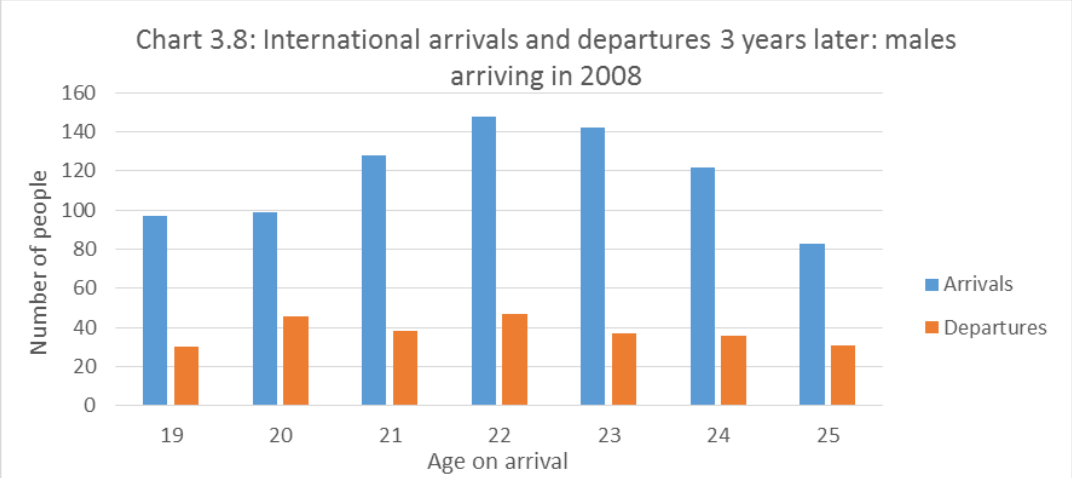
3.22. As already noted, given the age groups in which UPC occurs, it is highly likely that student flows are responsible for a significant part of the errors. The fact that most students will come to Guildford for a period of 3-4 years and then leave (although some will remain) can also be used to sense-check the estimated migration flows. This is particularly revealing for international arrivals and departures.

3.23. Chart 3.7 compares international arrivals of men aged 19 to 25 in 2001 with departures 3 year later. Thus, for example, the first pair of bars in the chart shows that there were 56 19 year old men who arrived in 2001 (blue bar) and 46 22-year old men who left in 2004, three years later (orange bar). Whilst it is not possible to say whether or not the 46 who left in 2004 were amongst the 56 who arrived in 2001 or that all of the 56 were students, there is a reasonable

[9] *Understanding the causes of discrepancies between the rolled forward mid-year estimates for 2011 and the mid-year estimates based on the 2011 census,* ONS, September 2015, available at http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/guide-method/method-quality/specific/population-and-migration/population-statistics-research-unit--psru-/latest-publications-from-the-population-statistics-research-unit/data-tool-17-sept.zip

correlation consistent with people arriving to study for 3 years and then leaving.





3.24. The broad picture shown in Chart 3.7 persists for the next three years, but in the second half of the decade a very different picture emerges. Chart 3.8 is the equivalent of Chart 3.7 but for arrivals in 2008 and departures three years later. As can be seen the correlation between arrivals and departures has largely disappeared. The possibility that the change might be due to more 4 year courses being taken has been explored by producing similar charts with 4 year time lags but this provides no explanation. It is also possible that during the decade an increasing proportion of foreign students stayed on in the UK after the completion of their courses. However, to explain the differences between the arrivals and the departures 3-4 years later, a substantial majority of foreign students would need to have chosen to stay on. A more likely explanation, particularly given the evidence from the ONS's data tool, is that there are significant errors in the flow data with either the inflows being over-estimated or the outflows being under-estimated – or both.

3.25. Whilst it is not possible to say that there are not similar discrepancies between the inflows and outflows of UK students, there does not appear to be an issue on a similar scale: the reported figures for arrivals and departures are consistent with students staying for 3 or 4 years if allowance is made for a reasonable proportion staying on in Guildford after their studies and a certain amount of late reporting of departures.

3.26. Given that the discrepancies suggested by the analysis of flows in student age groups are large enough of themselves to account for UPC, a revised projection has been produced by adjusting the historical estimates of international flows in the appropriate age groups and then using the average flows over the period 2004-14 as the basis for projected future flows. (See Appendix A for full details of the analysis.) **This analysis suggests a full allowance for UPC should be made by adjusting international flows. This would reduce the number of homes needed by 80 homes a year.**

Household formation rates

3.27. To turn an estimate for the population of an area into an estimate of the number of households in that area, a view needs to be taken of how that population will group itself into households.

3.28. A simple example may help to illustrate the issue here. Consider a town with a population of 10,000 people. If they were all to live on their own, 10,000 homes would be needed. Alternatively, if they were all to live in families of four only 2,500 homes would be needed. In the real world, average households sizes tend to be somewhere in between one and four: the average for England in 2014 was 2.38[10].

3.29. Household formation rates measure the tendency or a group of people to form separate households (or more exactly, the probability that a person in a group would be a 'household representative person' – what in less politically correct days was called a 'head of household'). A household formation rate of 1 means that everyone in a group is a household representative person and that there are as many households as people in the group. A household formation rate of 0.5 means that half of the people in the groups are household representative persons and that there are half as many households as people.

3.30. DCLG household projections are based on applying their projections for how household formation rates will change in the future to the sub-national population projections produced by ONS.

3.31. In the SHMA, GL Hearn use the DCLG's 2012-based household formation rates without adjustment in estimating the demographic OAN. They note that the 25-34 age group is projected to have significantly lower household formation rates than projected in the 2008-based projections but make no adjustment for this at this stage in their analysis (although they return to the topic in their discussion of market signals). This is consistent with the NMSS view that the 2012-based household formation rates should be used 'as published'. That view has been set out in a number of papers and reports[11] and is not elaborated on here as it is not

[10] Source ONS, Families and Households 2014

[11] See:

- Making sense of the New English Household Projections, Ludi Simpson and Neil McDonald, Town and Country Planning, April 2015. Available from the TCPA at http://www.tcpa.org.uk/pages/our-journal.html Ludi Simpson is Professor of Demographics and the University of Manchester.

a point of difference.

Empty and second homes

3.32. In order to ensure that there are sufficient homes to accommodate the likely increase in households, allowance needs to be made for homes that will at any one time be empty or used as second homes, and so not be used as a household's main home. There is a range of reasons why homes may be empty: they may be rental properties during void periods between tenancies; be pending sale after a death; undergoing refurbishment or otherwise not in a habitable condition; or be in unpopular locations.

3.33. In the SHMA, GL Hearn use data from the 2011 census for "household spaces with no usual residents" which they say can be used as a proxy for empty vacant and second homes[12]. However, a home with no usual resident is not necessarily a home which would ordinarily be thought of as being an empty or second home. The category includes homes that are occupied by people who do not qualify as 'usual residents of the UK'[13] and properties that are used as commercial holiday lets and as such are not part of the ordinary housing stock which is available to meet housing need. In some cases, the census figures will also reflect judgements made by census enumerators when census forms are not returned.

3.34. The alternative source of data for empty and second homes is the council tax database. As revenue depends on the database being accurate, councils go to considerable lengths to ensure that it is fully up to date and accurate. It has the added advantage of being refreshed annually unlike the census data which cannot be updated between censuses. NMSS therefore believe that it is the better source for estimates of empty and second homes.

3.35. For Guildford the difference between the 2011census figure for household spaces with no usual residents (4.0%) and the council tax base figure (2.91% using the 2015 Council Tax database) is not large. The NMSS analysis in this report uses the council tax database figure. As a result, the results produced will be some 1% lower than those that would have been obtained using the census figure.

A revised assessment of the demographic OAN

3.36. Using the 2015 council tax database estimate of empty and second homes, and making the adjustments to the DCLG 2012-based household projections discussed above, produces the following result:

- New Estimates of Housing Requirements in England, 2012 to 2037, Neil McDonald and Christine Whitehead, TCPA, November 2015. See: http://www.tcpa.org.uk/pages/new-estimates-of-housing-requirements-in-england-2012-2037.html

[12] SHMA paragraph 3.17, page 37

[13] For 2011 census purposes, a usual resident of the UK is anyone who, on census day, was in the UK and had stayed or intended to stay in the UK for a period of 12 months or more, or had a permanent UK address and was outside the UK and intended to be outside the UK for less than 12 months.

	Homes a year
Starting point: DCLG 2012 (based on 2012 SNPP)	526
Adjustment for 10-year internal migration 2004-14	62
Adjustment for 10-year international migration 2004-14	3
Adjustment for UPC – 100%	-80
Revised estimate of the demographic OAN	**510**

(Note: figures may not add exactly due to rounding.)

3.37. This is close to the figure of 517 homes a year arrived at by GL Hearn in the SHMA. However, the differences in the methods used are significant, particularly when the latest projections produced by the ONS – the 2014-based Sub-National Population Projections (2014 SNPP) are considered.

Implications of the 2014 Sub-National Population Projections (2014 SNPP)

3.38. The 2014 Sub-National Population Projections were published on 25 May 2016. They are a straightforward update of the 2012 SNPP with each of the trend periods used moved forwards two years so that they end in 2014. The change to the projected population increase varies significantly from authority to authority.

3.39. In the case of Guildford the projected population increase for 2013-33 in 2014 SNPP is 17% larger than in the 2012 SNPP: in the 2012 SNPP the population increase 2013-33 was 21,252; in 2014 SNPP it is 24,971. The latter figure is reasonably close to the figures suggested by the NMSS model when updating the 2012 SNPP for 10-year migration periods to 2014 (before any UPC correction) i.e. 24,433.

3.40. If the DCLG 2012-based household formation rates are applied to the 2014 SNPP population figures, this produces a household increase that equates to a need for 603 homes a year (compared with 526 homes a year in the DCLG 2012-based population projection). This is an increase of 15%.

3.41. However, for the reasons discussed above, **it is appropriate to adjust the 2014 SNPP to allow for Guildford's large, negative UPC. This would reduce the number of homes needed by about 80, producing a housing figure of 523 homes a year.** This compares with the figure of 510 homes a year produced by the NMSS model by adjusting the 2012 SNPP for 10-year migration trends and UPC. The difference (13 homes a year) is well within the error margins for projections of this type. **The new ONS population projections do not therefore provide grounds for increasing the demographic OAN.**

4. Market signals: improving affordability

4.1. The Government's Planning Practice Guidance (PPG) makes it clear that those planning for housing are expected to take account of 'market signals':

"The housing need number suggested by household projections (the starting point) should be adjusted to reflect appropriate market signals, as well as other market indicators of the balance between the demand for and supply of dwellings. Prices or rents rising faster than the national/local average may well indicate particular market undersupply relative to demand."[14]

4.2. The SHMA conclusion on market signals is as follows:

The SHMA evidence indicates that affordability pressures in the West Surrey HMA are notable. House prices are above the South East average. Entry level house prices are 11 or more times the typical earnings of younger households compared to a ratio of 6.4 nationally although this is largely unchanged for some years. Over the 2001-11 decade, housing costs increased relative to earnings; whilst household formation and home ownership both fell.[15]

4.3. GL Hearn note there is no guidance on how an adjustment for market signals should be calculated if they are found to be justified. They propose that the adjustment should be based on returning the household formation rates of 25-34 year olds back to the levels they were at in 2001. This produces an additional 31 homes a year[16].

4.4. The key issue here is whether GL Hearn have correctly reflected the PPG's approach to market signals. The above extract from the PPG above refers to 'prices or rents rising faster than the national/local average'. This is important. Higher prices than in other areas may not necessarily indicate a particular problem but may simply reflect the mix of housing in an area or particular features which are thought desirable such as proximity to transport links, city centres, attractive countryside etc. For example, prices in central London are always going to be higher than elsewhere given the value those renting or buying homes attach to a central location – advantages that are inevitably limited to a finite number of properties no matter how adequate the supply of homes is in London as a whole. On the other hand, prices rising faster than other areas may indicate a supply problem.

4.5. This is reinforced by the Planning Advisory Service's (PAS) technical advice note on Objectively Assessed Needs and Housing Targets[17] which advises that:

"Proportional price change is generally a better indicator than absolute price, because a comparatively high price may indicate either comparatively high demand (an attractive area, better housing stock) or low supply (possibly due to planning). But if prices in an area are rising faster than elsewhere, this suggests that supply is tightening compared to

[14] Planning Practice Guidance, Paragraph: 019 Reference ID: 2a-019-20140306
[15] SHMA paragraph 10.29, page 168
[16] SHMA Figure 63
[17] See paragraph 7.13 of *Objectively Assessed Need and Housing Targets: Technical advice note, Second edition*, July 2015, Planning Advisory Service
http://www.pas.gov.uk/documents/332612/6549918/OANupdatedadvicenote/f1bfb748-11fc-4d93-834c-a32c0d2c984d

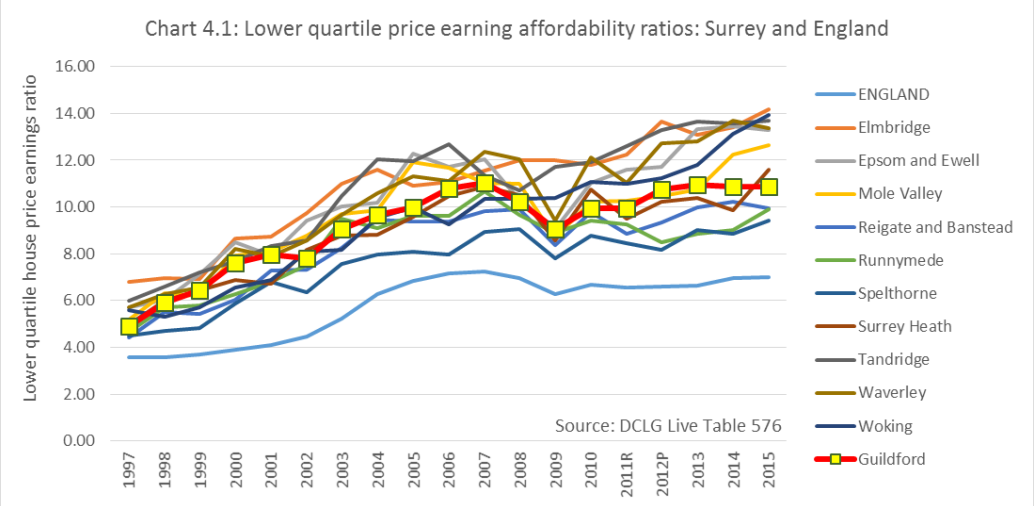
other places – unless for some reason the area is becoming more desirable over time."

4.6. Further weight has been given to this interpretation of the PPG by the decision made by a planning inspector on an appeal in Cotswold District[18] – an area which also has a high affordability ratio. He said:

> *"A house in the Cotswolds costs more than other places at least partly because it offers attractions that do not exist elsewhere. The same applies to the Chilterns (also offering swathes of AONB landscape and where similar differentials exist) and to Kensington and Chelsea (currently the place where the ratio of lower quartile prices to incomes is the highest in the land). Because location is an integral characteristic of any dwelling, there are numerous geographical discontinuities in housing markets…….It follows that a significant increase in the stock of houses in Cotswold would be likely to result, not in a noticeable decrease in house prices or improvement in affordability, but in new residents with the wherewithal to pay the prices sought……In my view the evidence adduced does not demonstrate that market signals warrant an increase in the objectively assessed need for housing in the District of Cotswold."*

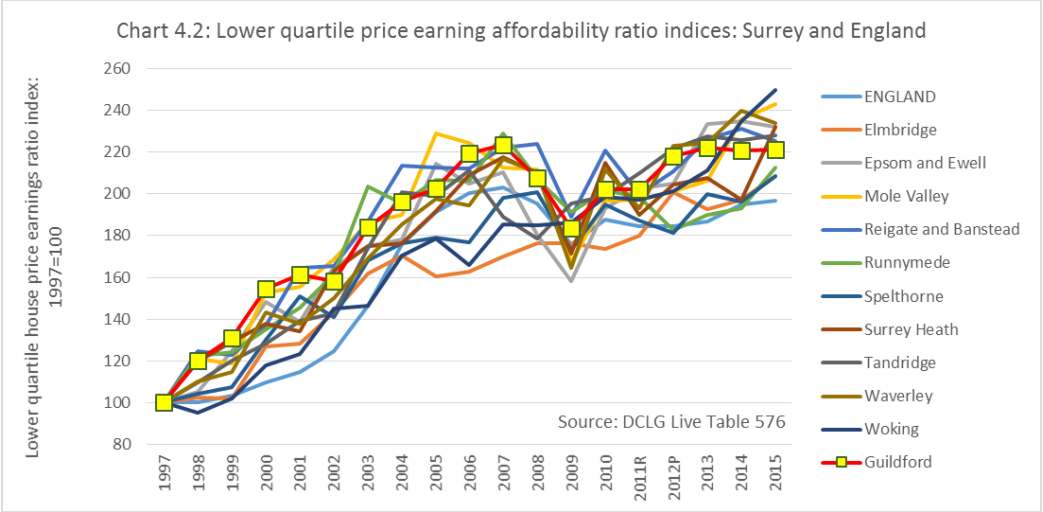
4.7. Those conclusions would be equally true if "Guildford" were substituted for "Cotswold".

4.8. Following this approach, the chart below compares Guildford's lower quartile ratio with other Surrey districts and England, showing Guildford to have been consistently in the middle of the pack but much higher than the England average:

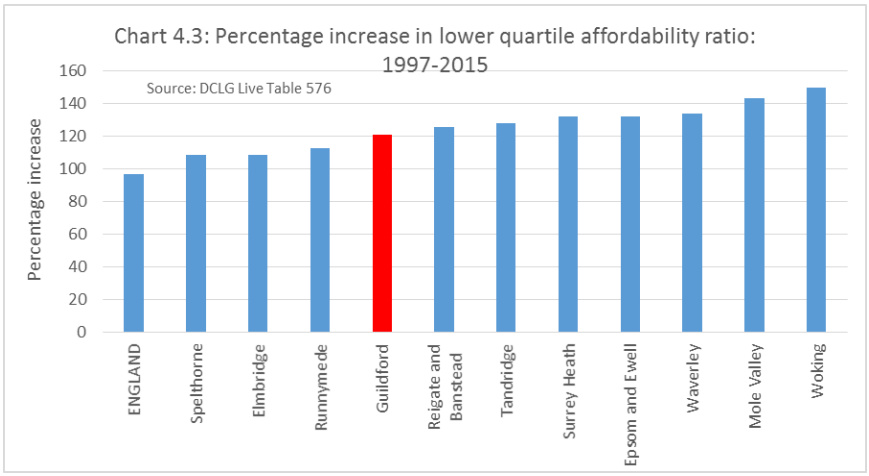


4.9. It is easier to see the relative rates at which affordability ratios have changed if they are presented as indices as in Chart 4.2 (which sets the index for each authority at 100 in 1997):

[18] The appeal related to a site in Mickleton: ref – APP/R3650/A/14/2223115



4.10. As can be seen from the above chart, Guildford's rate of increase has at times been towards the top of this set of comparator authorities but over the period 1997 to 2015 six Surrey districts had a bigger relative deterioration in affordability – as the following chart shows:



4.11. **The above analysis suggests that there is no reason to single Guildford out for a market signals/affordability uplift. To do so would have no noticeable impact on the affordability of properties in the area: it would simply result in more people moving to the area to occupy any additional homes built**.

5. Student housing

5.1. GL Hearn compare the expected growth in the student population (330-350 a year) with the fall in the University of Surrey student numbers in the trend periods used for the 2012 SNPP (163 a year) and conclude that student growth is likely to be up to 500 persons a year faster than assumed in the 2012 SNPP[19]. They then appear to set this finding aside and estimate the number of extra homes that would be needed to house the expected number of additional

[19] SHMA Appendix C Last but two paragraphs on page 197

students on a standalone basis. They conclude that an additional 25 extra homes a year would be needed. In these calculations they assume that:

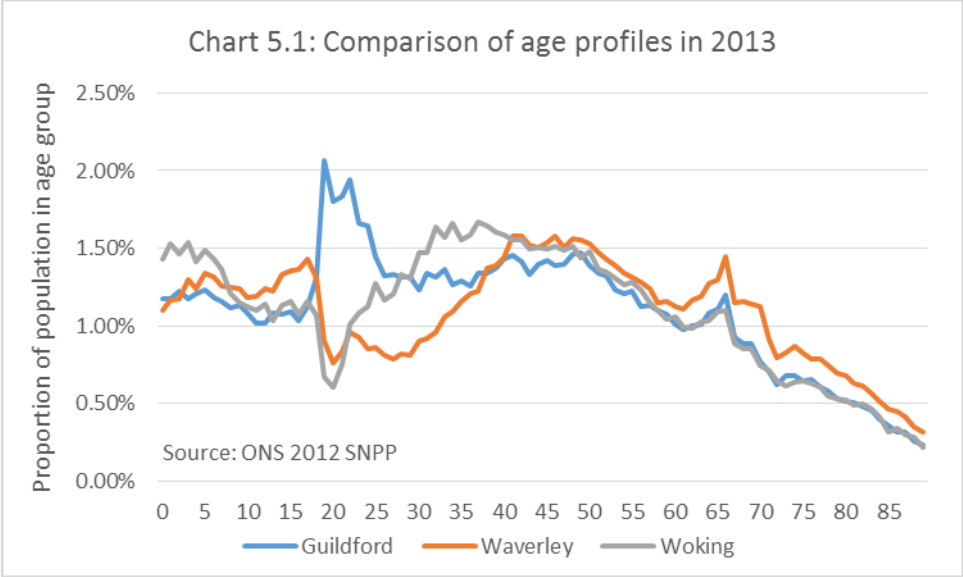
- The expected growth in student numbers over the next ten years continues until the end of the plan period.
- The 25 homes a year needed for students are over and above the demographic projection i.e. it is assumed that no extra student households have been included in the DCLG household projections.
- The average student household size is 4.

5.2. All of these assumptions are highly questionable. They could all lead to a substantial overestimation of the number of additional homes needed over the plan period. For example:

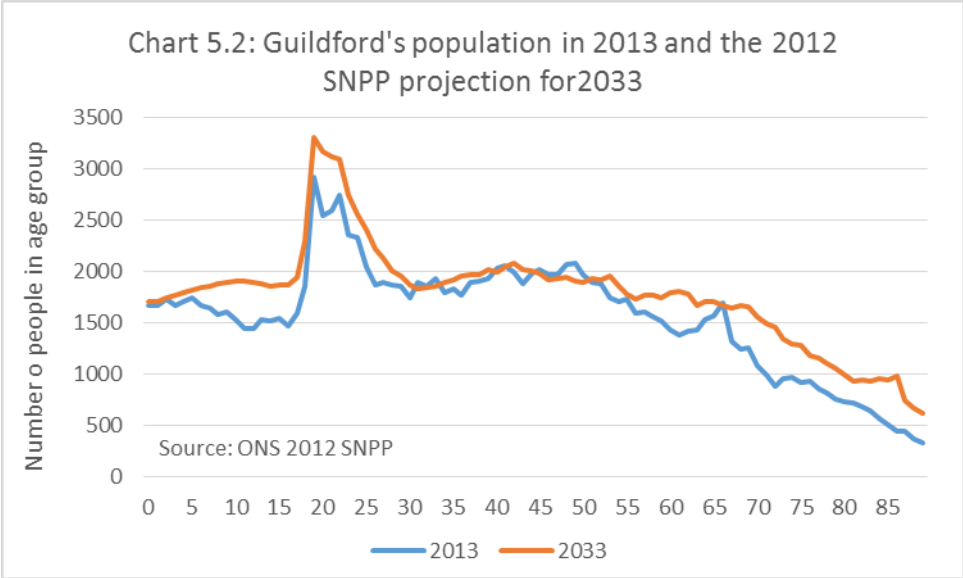
- If the growth in student numbers stops after 10 years only half the suggested number of extra homes would be needed.
- If the average student household size is 5, not 4 only 20 homes a year would be needed, not 25.

5.3. The assumptions made about what has or has not been included in the DCLG projections are particularly suspect. Owing to the way in which the DCLG projections are constructed, it is not safe to assume that the projections will accurately reflect the rate of growth in student numbers which occurred in the trend periods used to construct the projections. Moreover, there is no need to make any such assumption as an examination of the detailed datasets, published by the ONS and DCLG with their projections, gives a reasonably clear indication of what has in fact been included in the projections.

5.4. The presence of a substantial number of students in Guildford is evident from its age profile. Chart 5.1 compares the age profile of Guildford with that of the two other districts covered by the West Surrey SHMA – Waverley and Woking. The presence of students in Guildford is clear from the sizeable peak in the age profile between the ages of 19 and 24. In contrast, the age profiles of Waverley and Woking dip after age 18 reflecting the departure to university of young people brought up in those districts.



5.5. The age profile is similar through the plan period, albeit with an increasing weighting towards older age groups as the period progresses. Chart 5.2 compares Guilford's population in 2013 with the 2012 SNPP projection for 2033.



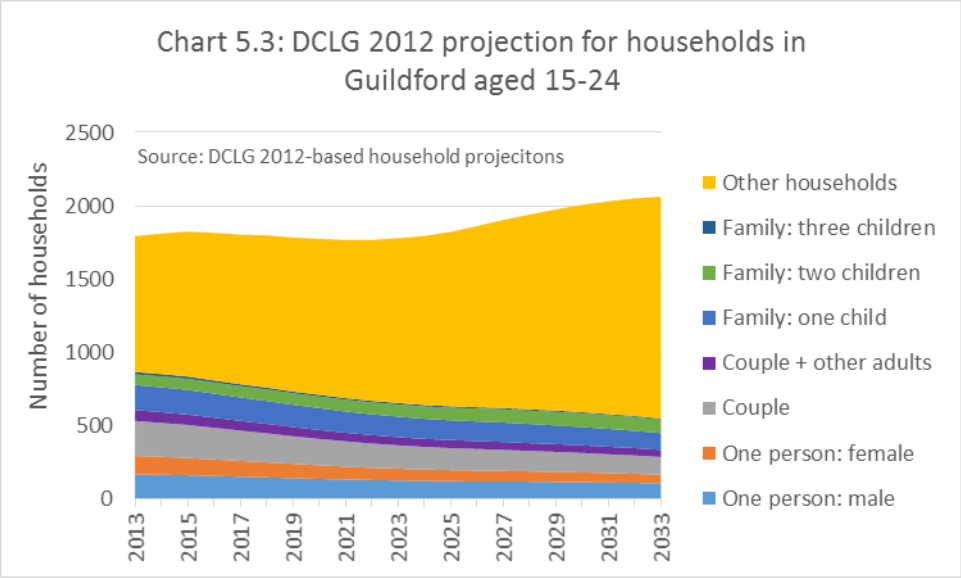
5.6. As can be seen, the population in student age groups is projected to grow significantly. In particular, the number aged 20-24 is projected to grow by 16%.

5.7. As far as the impact of students on the objectively assessed need for housing is concerned, the key issue is not the projected increase in the total population of student age but the increase in the population that is assumed to live in residential accommodation rather than communal establishments such as halls of residence. Here the way in which the DCLG projections are put together is particularly unhelpful from the point of view of estimating student housing requirements. For each age group under 75, the projections assume that the number of people living in communal establishments remains constant at the number in the base year. This means that no allowance is made for any increase in the number of places available in halls of residence. The effect of this is to exaggerate the likely increase in the number of students who will be looking to

live in ordinary rented accommodation. The DCLG 2012-based household projections for Guildford suggests that the number of 20-24 year olds living in residential accommodation will increase by 20% between 2013 and 2033 (whilst the total population in this age group is expected to increase by 16%).

5.8. DCLG apply its projections for household formation rates to the residential population to produce a projection for the number of households in a local authority area. That projection is split into eight household types. Most student households will fall into the "other households" category i.e. households that are not single people; couples (with or without other adults) or households with children.

5.9. Chart 5.3 shows the DCLG 2012-based household projection for Guildford for households headed by someone age 15-24, split by household type.



5.10. As the chart shows, "other households" are the main household type for this age group in Guildford. This is because:

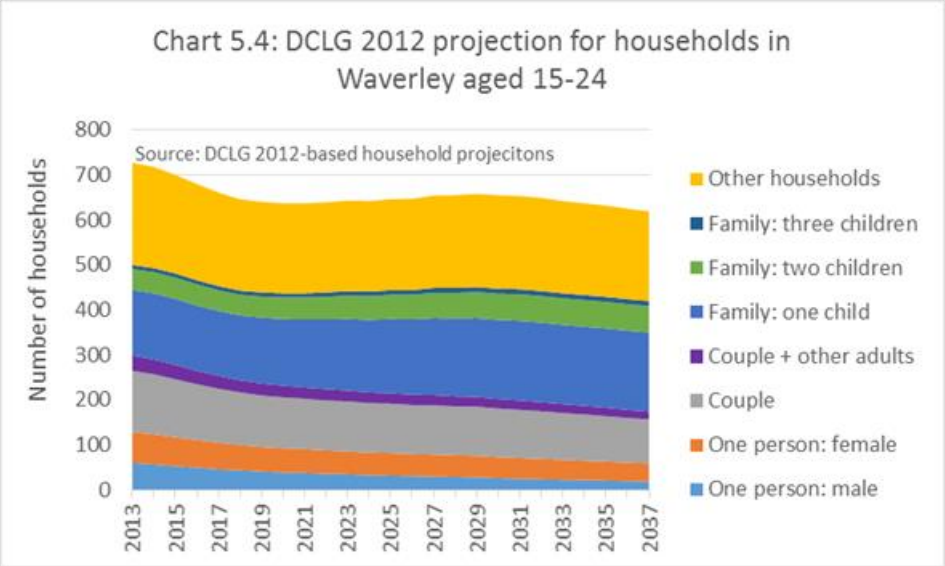
- Relatively few in the age group can afford to live alone as a single person household.
- Whilst there are some couples, they are not that numerous in this age group. Couples living together are just beginning to form and the cost of living alone as a couple will be a significant factor in Guildford.
- There will be some families with children but again they will not be that numerous in an expensive area such as Guildford.

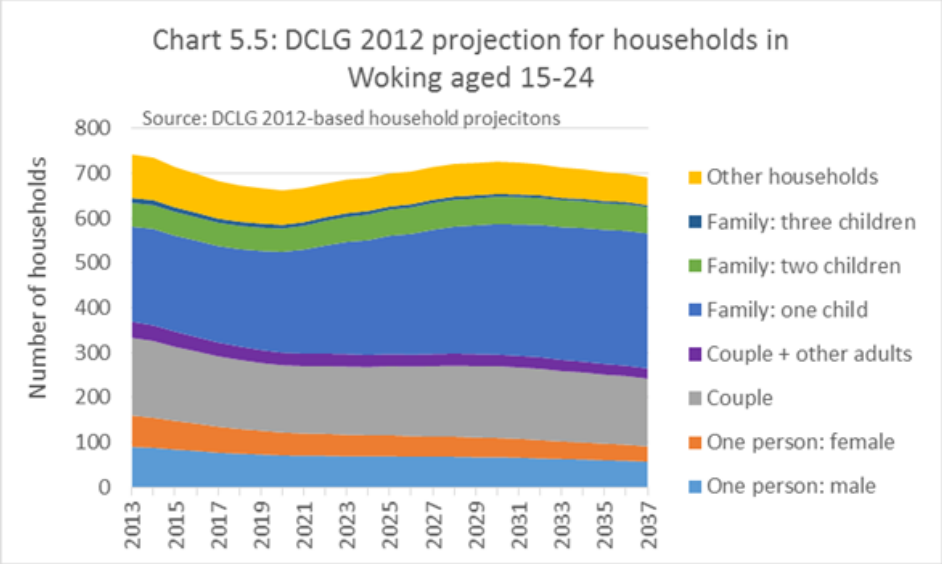
5.11. The consequence is that most people in this age group, who are not living with parents, will be living in shared houses and flats with people they are unrelated to i.e. as "other households". In Guildford a substantial proportion of these other households will be student households.

5.12. The key point to note from the graph is that the number of "other households" is projected to increase relatively rapidly during this period: by 585 households or an average of 29 households a year over the period 2013-33. It is not possible to

say what proportion of the increase will be student households but, given the preponderance of student households in this age group, it is highly likely that a substantial part of the increase will be student households.

5.13. This point is reinforced if the projected growth in 15-24 year-old "other households" in Guildford (Chart 5.3 above) is compared with the equivalent projections for Waverley and Woking – see Charts 5.4 and 5.5 below.





5.14. A comparison of the Charts 5.3, 5.4 and 5.5 shows that:

- Guildford has far more "other households" in 2013 than either Woking or Waverley, which tends to confirm the suggestion that students are a large factor in the number of "other households".
- The number of "other households" rises significantly for Guildford whilst it falls for both Waverley and Woking, which suggests that the increase in "other households" in Guildford is not due to some general increase in "other households" in this age group in the area but to an increase in the number of student households.

5.15. The 29 additional "other households" a year in the projection can be compared with the 25 extra student households estimated in the SHMA. Bearing in mind that:

- the increase in the number of "other households" is greater than the SHMA estimate for the growth in student households;
- the SHMA estimate for extra student households could be too large if the growth in student numbers does not increase at the rate envisaged for all 20 years of the plan period or if students live in households with an average size of more than four,

there is no case for adding additional student housing to the housing implied by the DCLG projections. Indeed, it may be that the household projections envisage more student households than there are likely to be. This would mean that overall need for housing is lower than the revised demographic OAN suggests.

5.16. The above discussion illustrates that the analysis of the housing needs of students in any university town is a complex matter. Attempting to carry out such an analysis as part of a demographic analysis using the DCLG projections is fraught with pitfalls. A better approach is to separate student housing needs from more general housing needs. Given that students are a significant part of Guildford's population there is a strong case for carrying out such a separate analysis. This may well confirm that, not only is there no case for adding to the demographic OAN to allow for additional student households, but that, on the contrary, the household projections envisage too many extra student households.

5.17. There may also be a case for setting two separate targets: one for student housing and one for general housing. The target for student housing could reflect the scope for, and desirability of, increasing the supply of student-specific housing taking into account policy considerations such as the impact which significant numbers of students living in rented accommodation can have on individual neighbourhoods.

6. Homes to support economic growth

6.1. Section 5 of the SHMA considers whether additional homes are needed to support economic growth above and beyond those required to meet the demographically-based estimate of demand. It concludes that such an increase is necessary. The suggested increase is 120 homes a year on top of the demographically-based estimate of 517 homes a year (plus 31 homes a year to improve affordability and 25 for students).

6.2. The analysis is based on employment forecasts produced by Cambridge Econometrics, Experian and Oxford Economics. These indicate that employment will grow by between 0.6% and 1.1% a year between 2013 and 2033[20].

6.3. The following approach is used in the SHMA to estimate the housing implications

[20] SHMA Paragraph 5.7, page 75

of these forecasts:

- An estimate of the workplace employment is made using data from the Business Register Employment Survey (BRES), adjusted to be consistent with the regional workforce jobs data series.
- The average compound annual growth rate of the three projections is then used to project employment growth from this base figure. This produces a projected growth of 17,700 jobs in Guildford over the period 2013-33.
- This jobs increase is then turned into a population and housing increase by making the following assumptions:
  - The commuting ratio is held constant at 0.90[21].
  - The number of working people in Guildford who have more than one job ('double jobbers') is held constant at 4.1%.
  - Employment rates[22] change as specified in Table 29 of the SHMA (page 79).
- By applying the above assumptions to the projected jobs increase it is possible to estimate the population increase that is needed. Household formation rates can then be used to convert the projected population first into a number of households and then (using empty and second home rates) into a number of homes.

6.4. In summary, the approach aggregates three different employment forecasts and then applies an independently derived set of employment rate assumptions (together with other assumptions) to turn that aggregated employment forecast into a population growth and housing need projection. This inevitably means that the employment rate assumptions used are different from those in the economic models used by the forecasters. This is a fundamental flaw which risks producing misleading results. This is because the relationship between the number of people in a population and the number of people who will be in employment (i.e. the employment rate assumptions) is a fundamental part of the models used to produce employment forecasts. Had the forecasters made different assumptions about this relationship, they would have come to different conclusions about the number of jobs that are likely to be created.

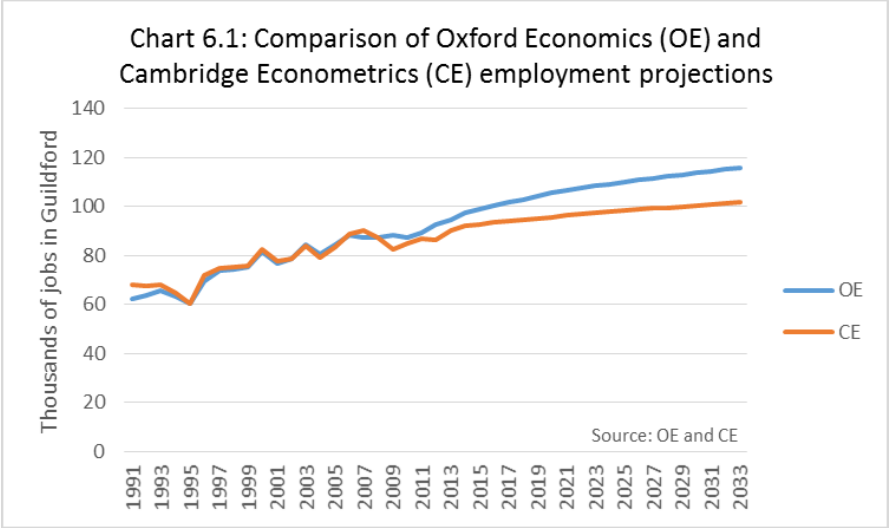
6.5. The issues here and the scale of the impact they have can be illustrated using the forecasts produced by Cambridge Econometrics (CE) and Oxford Economics (OE)[23].

6.6. Chart 6.1 compares the CE and OE employment forecasts for Guildford.

[21] The commuting ratio is number of Guildford residents who are in employment divided by the number of people working in Guildford. The fact that the commuting ratio is less than 1 means that there are more people working in Guildford than there are people in work living in the district i.e. there are more who commute into Guildford to work than who commute out.

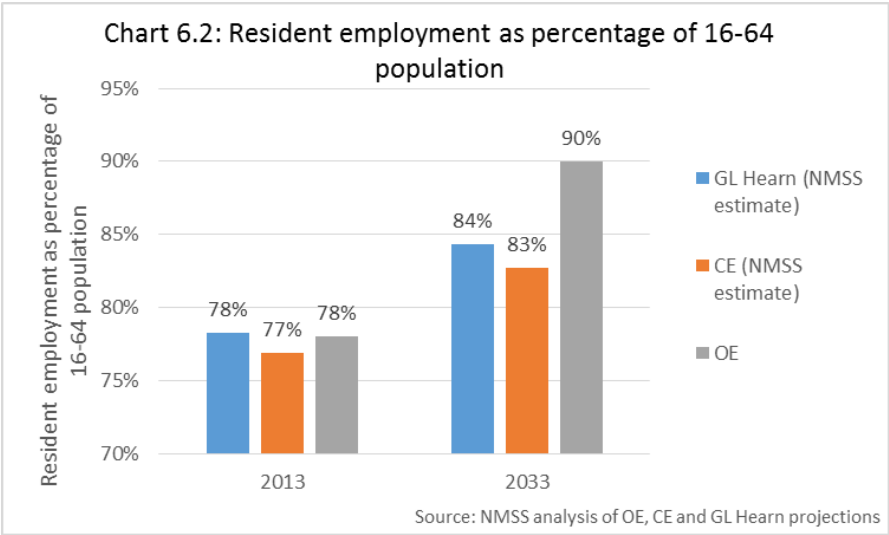
[22] The employment rate for a group of people is the proportion of that group that is in employment. Table 29 gives employment rates by age and sex.

[23] At the time of writing the necessary data from the Experian projection has not been made available to NMSS to enable that projection to be included in this analysis.



6.7. As can be seen, the two forecasts are significantly different: OE envisages 21,200 extra jobs between 2013 and 2033 compared with CE's 11,600, i.e. the OE forecast is for employment growth that is 80% faster than suggested by CE. This does not, however, mean that the OE forecast implies a need for a population or housing growth is 80% faster than that suggested by CE because the two forecasts take different views on employment rates.

6.8. Chart 6.2 compares the employment rates envisaged by CE and OE in 2013 and 2033. The measure used is the number of Guildford residents in employment ('resident employment') as a percentage of the total population aged 16-64[24]. The equivalent figures implied by the GL Hearn employment rate assumptions are also shown. Note that, whilst the OE figures can be calculated directly from the OE output sheet, those for GL Hearn and CE have been estimated by NMSS by applying their employment rate or economic activity rate assumptions to the population projection used to estimate the OAN.



6.9. Note that, whilst all three employment rate figures for 2013 are similar, there is a

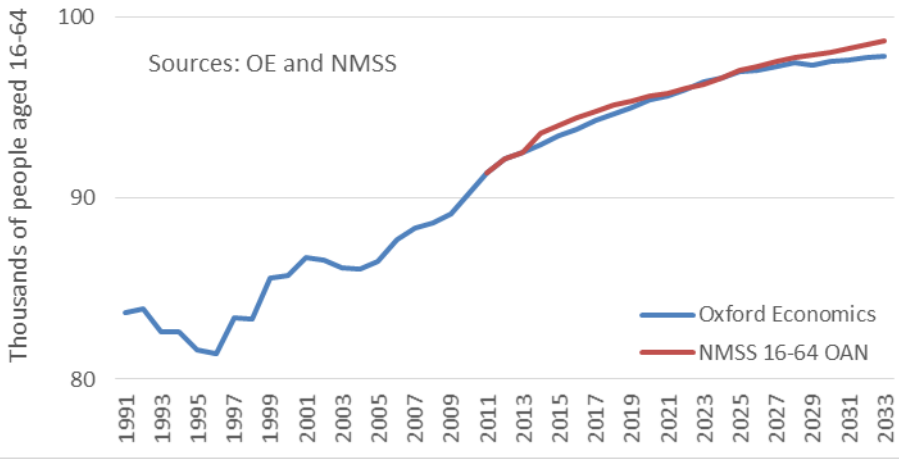
[24] This is not an ideal measure to use as there will be many residents aged over 65 who are in employment and that number is likely to rise. However, it has been chosen as the best available basis for comparison given the differences between the formats in which forecasters produce their outputs.

marked difference between the OE assumption for 2033 and the OE and GL Hearn figures for that date. The difference means, for example, that, for a given size Guildford population in 2033, OE are assuming that there will be 7% more people in work than implied by the GL Hearn employment rate assumptions. A consequence of this is that, if the GL Hearn employment rate assumptions are used to estimate the number of people needed in 2033 to support the OE jobs projection, then the result will overestimate the number needed by a similar percentage. (It is of course the case that if the population in 2033 is overestimated by 7% then the change in population between 2013 and 2033, and hence the number of extra homes needed, will be overestimated by a much larger proportion.)

6.10. It follows from this example that the only reliable way to estimate the population and housing implications of an employment forecast is to use employment rate or economic activity rate assumptions that are consistent with the employment forecast being evaluated.

6.11. For the OE forecast this is straightforward as they include their forecast of the 16-64 population in their output. Chart 6.3 compares the OE projection with the NMSS population projection used to estimate the revised demographic OAN.

Chart 6.3: Comparison of OE and NMSS estimates for the 16-64 population of Guildford



6.12. As can be seen from the chart, the NMSS OAN projection envisages a bigger increase in the 16-64 age group than the OE projection. **This means that the demographic projection will provide more than enough additional people in the 16-64 age group to provide the necessary labour force and that there is no need to add to the demographically-based OAN to support the OE view of potential job growth.**

6.13. For the CE forecasts a rather more complex analysis is necessary. CE do not publish economic activity rates for individual authorities but they have made available their rates for the South East region. (See Table 6.1 below. Note that the CE rates do not extend beyond 2030. A straight line extrapolation has been used to estimate the 2033 figures.)

Table 6.1: CE economic activity rates for South East (%)				
	2011	2013	2030	2033 (extrapolated)
Male 0-15	0.0	0.0	0.0	0.0
Male 16-24	66.9	64.4	54.3	53.2
Male 25-34	92.7	93.4	91.8	92.1
Male 35-44	93.4	93.5	91.0	90.5
Male 45-59	87.6	89.7	93.0	93.7
Male 60-64	63.1	65.5	73.2	75.2
Male 65+	14.5	15.2	19.1	19.9
Female 0-15	0.0	0.0	0.0	0.0
Female 16-24	65.4	64.1	57.0	57.3
Female 25-34	79.3	78.4	82.8	83.5
Female 35-44	78.1	80.0	79.4	77.7
Female 45-59	77.6	80.2	93.2	95.0
Female 60-64	41.3	43.0	63.1	66.7
Female 65+	7.1	9.8	12.7	12.4

6.14. Estimates of the CE economic activity rates for Guildford have been produced by assuming that those rates bear the same relationship to the CE South East rates as the 2011census economic activity rates for Guildford bear to the 2011 census activity rates for the South East[25]. The CE activity rates for Guildford so estimated have then been applied to the NMSS OAN population projection to produce estimates of the economically active population in 2013 and 2033 that are consistent with the CE forecasts. These suggest that the economically active population will rise from 75,000 in 2013 to 84,400 in 2033.

6.15. As with the SHMA analysis, assumptions need to be made about commuting patterns, double jobbing and unemployment rates to convert these estimates of the number of economically active people living in Guildford into estimates of the number of jobs which could be supported in the district. The assumptions made are as follows:

- Commuting ratios and double jobbing rates are held constant at the rates implied by CE figures for 2011.
- Unemployment rates for 2011 and 2013 are taken from the APS model-based estimates of unemployment (via Nomis). It is assumed that in 2033 the unemployment rate is equal to the average rate for the period 2004-08.

6.16. With these assumptions it can be shown that the population increase projected by NMSS in calculating the revised demographic OAN would support an increase of 13,200 jobs between 2013 and 2033 using economic activity rates consistent with the CE forecast. This compares with the jobs increase of 11,600 projected by CE for this period. **The conclusion therefore is that the demographically-based OAN will provide more than enough extra workers to support the CE jobs increase projection so no additional homes are needed to support the**

[25] 2011 census economic activity rates are from table DC6107EW via Nomis.

CE view of economic growth.

6.17. The above analysis suggests that both the OE and CE views of economic growth could be supported with a smaller population growth and hence fewer homes than indicated by the revised demographic OAN. However, the Planning Practice Guidance does not allow for downwards adjustments in these circumstances. The conclusion therefore has to be simply that no additional homes are needed to support economic growth.

6.18. It should be noted that the analysis was based on economic projections produced before the Brexit vote. Updated projections would now be likely to suggest slower economic growth and the creation of fewer additional jobs. This reinforces the conclusion that the 120 extra homes are not needed.

Conclusions on supporting economic growth

6.19. The key conclusions of the above analysis are:

- The SHMA analysis of the homes needed to support economic growth is flawed as it applies employment rate assumptions that are markedly different from those implicit in the employment forecasts. This results in an estimate for the number of extra homes needed that is inconsistent with the employment forecasts used.
- When consistent employment and economic activity rate assumptions are used, neither the OE nor the CE jobs forecasts suggest a need for additional homes above those indicated by the NMSS revised assessment of the demographic OAN.
- In the absence of equivalent detail on the Experian forecast, it is not possible to comment on any implications for housing numbers which it may have.
- On the basis of the available evidence, there is not a case for the 120 homes a year addition to support economic growth suggested by the SHMA.

6.20. On a more detailed but still highly significant point, it is of concern that the difference between the Oxford Economics and Cambridge Econometrics forecasts is as large as it is (with the former suggesting a jobs growth rate that is 80% faster than the latter). This must cast doubt on the reliability of the forecasts. A detailed examination of the reasons for the differences between all three forecasts should be carried out, possibly resulting in adjustments to one or more of the forecasts to produce a closer and more plausible set of projections.

7. Conclusions

7.1. The analysis presented in this report updates the latest DCLG household projections using data and projections which have become available subsequent to the publication of those projections. Adjustments have also been made to

reflect 10-year trends in internal and international migration and to correct for what appear to be errors in the historical data for international migration. **This leads to the conclusion that demographic considerations suggest that Guildford needs 510 homes a year over the period 2013-33**:

	Homes a year
Starting point: DCLG 2012 (based on 2012 SNPP)	526
Adjustment for 10-year internal migration 2004-14	62
Adjustment for 10-year international migration 2004-14	3
Adjustment for UPC – 100%	-80
Revised estimate of the demographic OAN	**510**

(Note: figures may not add exactly due to rounding.)

7.2. The revised estimate of the demographic OAN figure compares with the SHMA's demographic projection of 517 homes a year (although the SHMA's method is significantly different).

7.3. The SHMA adds extra homes to its demographic projection to allow for improving affordability; increased student numbers; and, supporting economic growth. This report has shown that none of these is justified on the basis of the evidence presented as:

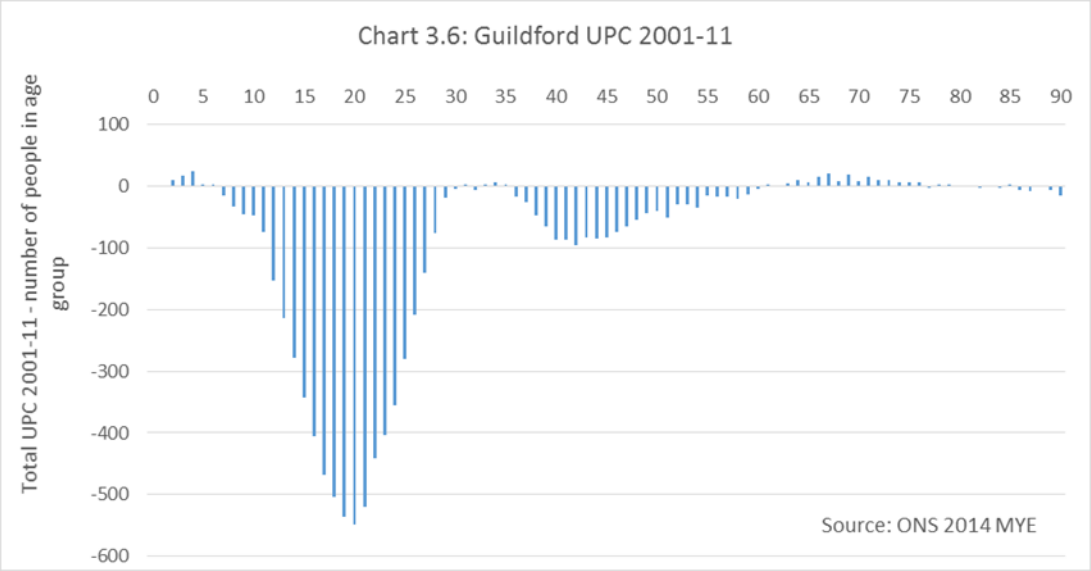
- The deterioration in the affordability of housing in Guildford is no worse than in other Surrey districts and boosting supply beyond the demographic OAN would not result in a noticeable improvement in affordability but simply in more people moving to the area.
- An analysis of the DCLG household projections shows that they envisage an increase in the number of households of the type formed by students that is similar to and in fact slightly larger than the number of extra student homes which the SHMA suggests will be needed to cater for the expansion of the University of Surrey. There are also reasons for believing that the SHMA's estimate of the number of homes needed for students may be too high. This suggests that an adequate provision for students is already included in the demographic OAN and that it is possible that the demographic OAN contains more student households than there are likely to be.
- The SHMA seeks to estimate the number of homes needed to support employment growth using employment rate assumptions that are inconsistent with the employment forecasts. This produces misleading results. An analysis of the Cambridge Econometrics and Oxford Economics forecasts using employment or economic activity rate assumptions consistent with the forecasts suggests that in neither case is there a need to provide more housing than suggested by the demographic analysis. Indeed, in both cases a smaller population growth (and hence fewer homes) could support the jobs growth that is forecast. (The necessary data to carry out a similar analysis of the Experian

forecast has not been made available.)

7.4. As no case has been made for adding to the demographic OAN, **the full Objectively Assessed Need for housing in Guildford District should be taken to be 510 homes a year over the period 2013-33, not the 693 homes a year suggested by the SHMA.**

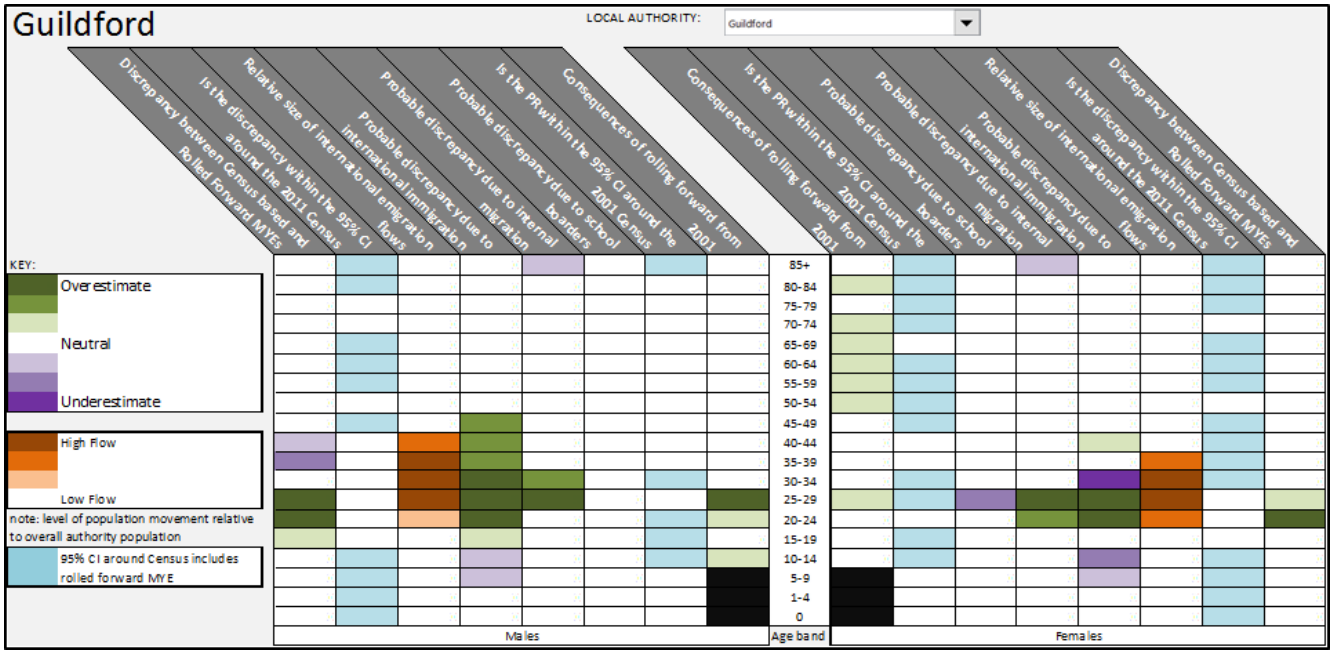
Appendix A: Estimation of the implications of UPC for the population projection

1. As noted in paragraph 3.18 of the main report, ONS publish data which disaggregates UPC by age and gender (see paragraph 3.18 and Chart 3.6 – reproduced below).



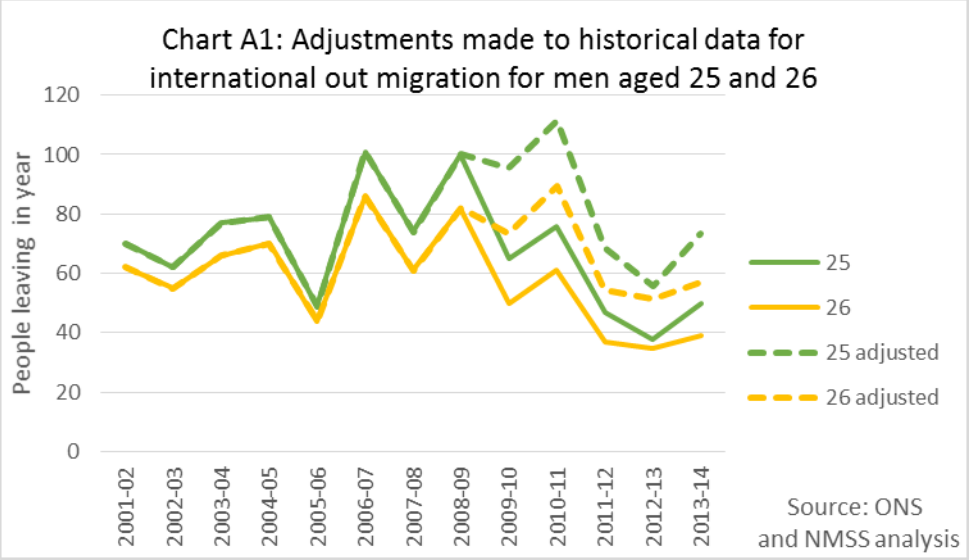
2. Their data tool (see Figure 3.1 – reproduced below) indicates where their analysis suggests that the errors may lie.

Figure 3.1: ONS Data Tool summary chart for Guildford



3. This data together with other information (such are the data on the growing disparity between international arrivals and departures amongst student age groups) can be used to adjust the historical data in the relevant year and age and

gender groups so as to eliminate UPC. This has been done using scaling factors to adjust up or down as appropriate the recorded international migration flows in the appropriate years until the disparity between the 2011 census population estimate and the 2001 census estimate plus subsequent births, less deaths plus net migration disappears. For example, Chart A1 below shows the adjustments made to the international out migration data for men aged 25 and 26. In this case the estimates for 2009-10 and later years have been increased by 47%.



4. This process inevitably involves a degree of judgement and there are doubtless alternative adjustments that could be argued to be equally justified. However, the judgements made have been guided by the ONS Tool, the ONS's age and gender breakdowns of UPC and other data. They have also been constrained to eliminate UPC age group by age group. They are therefore by no means arbitrary.

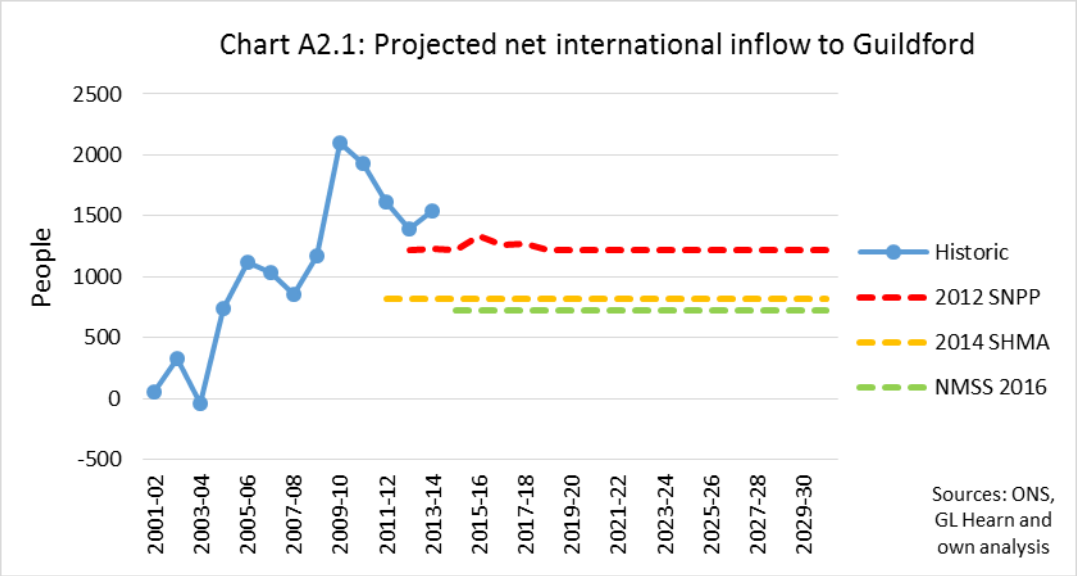
5. Having produced a revised historical data series for international migration revised average flows have been calculated for the period 2004-14. Those average flows have then been used in the NMSS model in the place of the flows in the 2012 SNPP to produce a revised population projection which eliminates the impact of UPC.

Appendix B: Why the estimate of the OAN has changed since the CCHPR Review of the Guildford and West Surrey Strategic Housing Market Assessment of July 2014

1. The Guildford and West Surrey Strategic Housing Market Assessment of July 2014 suggested a demographic housing requirement of 652 homes a year for the period 2011-31. That figure was broadly endorsed by a Cambridge Centre for Housing and Planning Research (CCHPR) review in July 2014 of which the author of this report was the main author. It is therefore pertinent to ask why both the latest SHMA and this report conclude that demographic OAN is of the order of 510 homes a year.

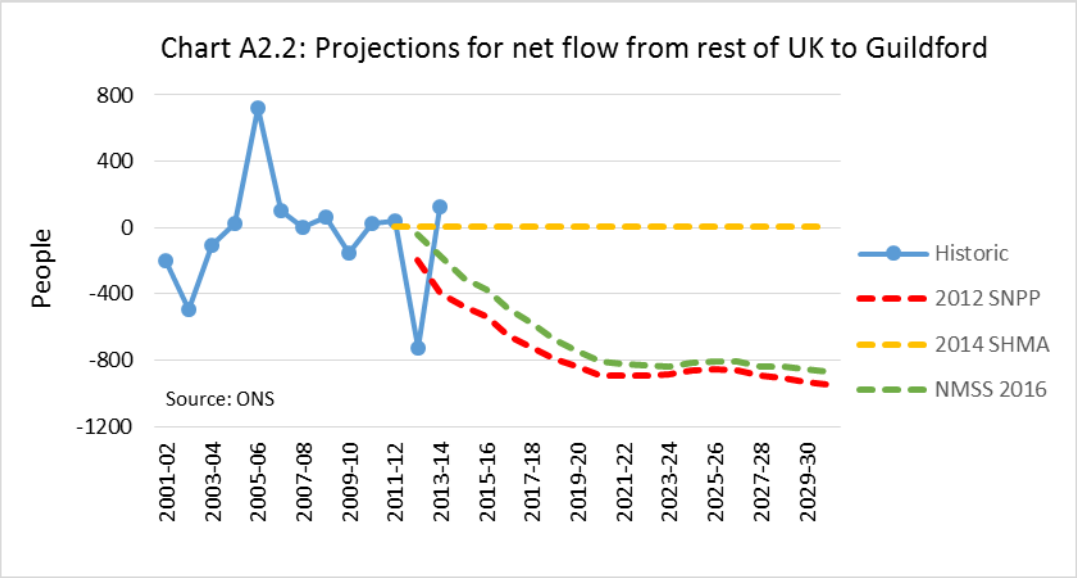
2. There are a large number of detailed differences between the 2014 analysis and the latest work with the most recent analysis benefitting from more up to date data sets and the DCLG 2012-based household projections which were not available to inform the 2014 work. However, the majority of the difference is attributable to the projections made for internal and international migration. Those differences largely explain why the 2014 SHMA envisaged a population increase of 28,500 between 2011 and 2031 whilst the NMSS projection for the revised OAN presented in this report envisages an increase of only 21,500 i.e. 7,000 or 25% less than the earlier figure.

3. Taking international migration first, the May 2014 SHMA based its projection of international migration flows on the historic average flows. It then assumed that all of the UPC was attributable to errors in the estimation of those international flows and reduced the historic estimates accordingly. This produced an average net international inflow of 821 people a year. This report also bases its projection of international flows on the average of historical flows. In addition it also adjusts those flows on the assumption that all of UPC is attributable to errors in those flows. This produces a net international inflow of 725 people a year, almost 100 less than the 2014 SHMA estimate. Chart A2.1 shows the two projections alongside that in the 2012 SNPP.

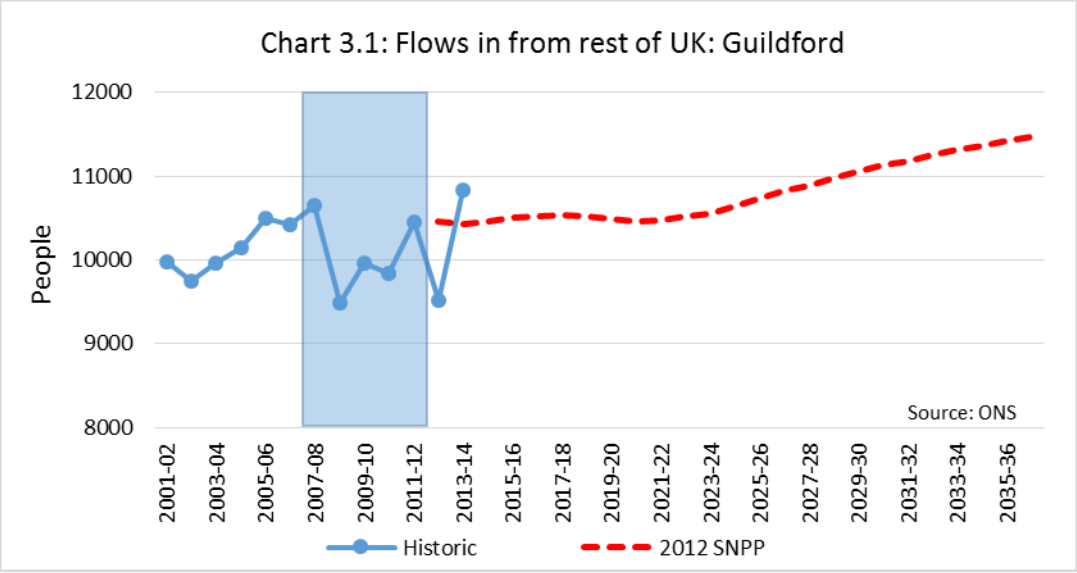


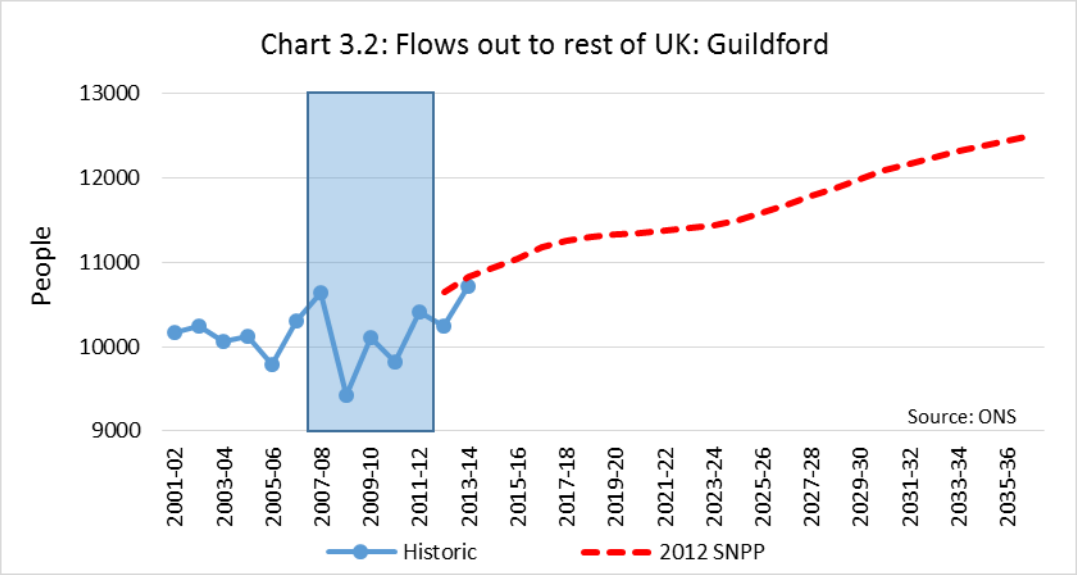
4. As can be seen, both the 2014 SHMA and the latest NMSS work suggest a net international flow that is significantly below the 2012 SNPP. Compared with the 2012 SNPP, the differences between the two projections is not that large. The latest NMSS projection is, however, based on both more recent data and much fuller information about the likely causes of UPC. It ought therefore to be more reliable.

5. Chart A2.2 compares the 2014 SHMA projection for the net flow from the rest of the UK with both the 2012 SNPP projection and the NMSS projection for the revised demographic OAN.



6. The 2014 SHMA rejected the 2012 SNPP projection as being implausible compared with the recent historical trend. This might not appear unreasonable from Chart A2.2. However, the net flows presented there are the difference between much larger 'in' and 'out' flows – see Charts 3.1 and 3.2 from the main report, reproduced below:





7. In neither of these does the 2012 SNPP projection appear significantly out of line with past trends (although both could benefit from small adjustments to reflect a 10-year trend period which has been less influenced by the economic downturn). The apparently anomalous downward trend in the net flow chart is due to the projection for the outflows rising faster than the projection for the inflows. The key question is then, "Is this plausible?"

8. The ONS projects internal migration flows by estimating flow rates for each age and gender group from historical data and then calculating the flows in future years by multiplying the population in each age and gender group by the historic flow rate (which is assumed to remain unchanged). This means that the projected outflows will rise if the population rises and, similarly, the projected inflows will rise if the populations in the areas from which people come also rise.

9. An important consideration here is that internal migration flows tend to be larger for younger people: the tendency for people over 40 to move across local authority boundaries is significantly less than for those in their 20s and 30s. With Guildford having a large net international inflow (which is heavily weighted to younger age groups) it is to be expected that its population in the younger age groups will grow faster than is typical for the rest of the country. It is therefore to be expected that the outflows from Guildford to the rest of the UK will also grow faster than the projected flows into Guildford from the rest of the country – leading to a declining net inflow or a rising net outflow.

10. The conclusion is therefore that the 2014 SHMA and CCHPR report were wrong to reject the 2012 SNPP internal migration projection as implausible: it is consistent with a growing younger population caused by a significant net international inflow.