



Briefing Note

Our ref 41022/06/MW/BOC
Date 8 April 2015
To Lichfield District Council
From NLP

Subject Implications of the 2012 SNHP with regards to the housing OAN for Lichfield District

1.0 Introduction

1.1 This note reviews the 2012-based Sub National Household Projections (SNHP) in the context of Lichfield's annual housing requirement as set out in the adopted Local Plan (2015). It follows on from NLP's South Staffordshire Districts Housing Needs Study and SHMA Update (2013) which informed the Council's housing requirement in the Lichfield Local Plan (LLP).

2.0 Lichfield District Local Plan 2015

2.1 The LLP covers the period between 2008 and 2029. Policy Core Policy 6 (Housing Delivery) indicates that the District Council will plan, monitor and manage the delivery of 10,030 homes in Lichfield District over the plan period. The housing requirement figure of 10,030 includes an allowance of 1,000 new homes to assist in meeting the needs of south east Staffordshire. This equates to annual delivery of around 478 new homes each year.

2.2 The housing requirement figure as set out in the LLP was informed by NLP's Housing Needs Study and SHMA Update 2012 amongst other considerations. NLP's report was prepared on behalf of the three Staffordshire authorities of Cannock Chase, Lichfield and Tamworth.

2.3 The initial PopGroup modelling used to inform the housing requirement range was based on the most up to date information available at the time of production. The modelling utilised the ONS 2008-based Sub-National Population Projections [SNPP] and equivalent 2008-based CLG household projections.

2.4 During the modelling exercise, NLP factored in economic and demographic needs amongst other considerations. NLP excluded outliers and unrealistic scenarios at the top and bottom end of the range and came to the conclusion that the most appropriate range should be 410-450 dpa.

- 2.5 Following on from the initial PopGroup modelling exercise, NLP prepared an update in May 2013. This Update was undertaken to take account of data which was released following the original study, specifically 2011 Census data; revised 2011/2011-based mid-year population estimates; 2010-based ONS SNPP; the 2011-based (Interim) SNPP; and 2011-based (Interim) SNHP. Other inputs were also updated to take account of more recent information for example: vacancy rates; economic activity rates; commuting rates and unemployment. The 2013 Update concluded that the original range of between 410-450 dpa for Lichfield was still appropriate as the range included the new baseline, the 2008-based household projections and the 2011-based household projections.
- 2.6 Following the publication of the 2012-based SNPP, NLP prepared the South-East Staffordshire Housing Needs Study in October 2014 to update the housing requirement for Lichfield. The Study used the 2012 baseline population from the 2012 Mid-year population estimates for Lichfield and also used the births, deaths and migration data from the ONS 2012-based SNPP. It applied a similar approach to headship rates as those used in the earlier studies.
- 2.7 The report concluded that the latest 2012-based SNPP for Lichfield District would result in significantly lower levels of population growth than the previous 2010-based SNPP. This had the effect of generally suppressing the resultant dwelling requirements for the District compared to previous model runs. The revised baseline scenario resulted in a requirement of 335 dpa. As such, it was concluded that the advent of the 2012-based SNPP did not significantly undermine the demographic modelling undertaken for the previous reports and would not result in a significant change to the OAN.
- 2.8 It was therefore considered that an OAN of between 410 and 450 dpa represented a sensible range for the District, providing a realistic level of housing to meet economic needs.

3.0 **Overview of the Methodology behind the 2012 Sub-National Household Projections**

- 3.1 The latest 2012 based SNHP were released on 27th February 2015 and supersede the 2011-based (Interim) SNHP. The 2012-based SNHP incorporate the ONS 2012-based SNPP published on 28th May 2014 and further information from the Census 2011 where available. At the time of writing, NLP was unable to fully update its PopGroup modelling as the Stage Two dataset for the 2012 SNHP had not been released.
- 3.2 The methodology for the 2012-based SNHP follows that used for the 2011-based and 2008-based projections. The 2011-based SNHP included some changes that were required to incorporate valuable information from the 2011 Census. Since then further information from the 2011 Census has become

available and has been incorporated into the 2012-based SNHP where possible, building on the approach used for the 2011-based SNHP¹.

- 3.3 The household projections are compiled using a two stage process. Stage One produces the national and local projections for the total number of households by age group and marital status group over the projection period. The total number of households in each local area forms the basis of the control totals for Stage Two of the projection methodology which gives the detail household type breakdown by age.
- 3.4 Stage One applies projected household membership rates to a projection of the private household population disaggregated by age, sex and marital status and summing the resulting projections of household representatives. The method uses a simplified three way relationship categorisation to represent marital/cohabitational status. The categories are in couples (including married couples who are living together and cohabiting couples); separated marrieds, divorced and widowed not in couples; and people not in couples (not cohabiting, never married). This is an aggregation of the detailed categories in the previous CLG (Household Projection System, known as HOPS) model which captures the key household formation characteristics of the relationship status groups while retaining relative simplicity.
- 3.5 As in the 2011-based projections, the projection methodology for Stage One from the 2008-household projection has been maintained but adapted. The 2012-based projections includes information from the 2011 Census which together with data from the Labour Force Survey (LFS) has been used to update the estimates for the 2011 point that are then used in the household projections methodology at national level.
- 3.6 The updated national projections are then used to control a set of projections for regions and local authorities that have been derived by applying projections of the household representative rates by sex, age and status to the 2012-based household population by sex, age and status. The regional and local authority projection is then controlled to the 2011 Census aggregate household representative rate.
- 3.7 The projections methodology uses time-series modelling which weights together simple and dampened logistic trends. Cohort modelling is not used. The simplified time-series based projections are referred to as the Stage One projections to distinguish them from the detailed projections by household type described in Stage Two.

¹ CLG, Household Projections 2012-based: Methodological Report (February 2015)

- 3.8 There are six key components to the household projections produced in Stage One each of which is given in detail below:
- 1 Population projections
 - 2 Marital status composition
 - 3 Institutional population
 - 4 Household representative rates
 - 5 LFS adjustments
 - 6 Regional and local household projections²
- 3.9 The importance of the household projections to planning is emphasised in the Planning Practice Guidance which states that “*household projections produced by the Department for Communities and local Government should provide the starting point estimate of overall housing need*”³. Therefore, the new household projections represent an important milestone in providing evidence to inform objective assessments of housing need.
- 3.10 However, they do not represent the whole picture, because:
- a They are based upon applying headship rates (rates of household formation) to the already released ONS 2012-based SNPP. These underlying population projections are trend based, reflecting migration patterns seen over the recession and may not be reliable in all areas. Significantly, they are already becoming outdated, with the 2012-based SNPP at the national level underestimating net in-migration to the UK by 170,000 persons over the past two years (2012/13 and 2013/14) compared with what ONS now know actually occurred.
 - b They reflect a long term and structural under-supply of housing over the long term, during periods of both recession and growth. Since 2001 an average of 135,000 dwellings in England have been completed each year, far short of what is needed, and there has been a 16% decline in the number of completions since the start of the millennium. Lack of dwellings constrains household formation and this historic and long term under-supply will have influenced what are firmly trend-based projections.
 - c They are influenced by recessionary trends since 2007, including mortgage rationing, financial instability and acute affordability constraints. Although the methodology for the household projections draw upon household formation trends over a 40 year period since 1971, they still contain a ‘recency bias’ reflecting trends over the last 10 years much more than trends over the longer term. The projected average

² Ibid

³ Practice Guidance, 2a-015-201040306

household size shows that household formation rates are increasing at a rate somewhere between the pre-recession 2008-based projections at the 2011-based interim projections.

- 3.11 These factors impact both the underlying population base as well as the household formation rates, combining to present a level of household growth at a national level substantially below a level that would truly reflect need and demand.

What do the projections mean for planning?

- 3.12 The Government's population and household projections will continue to act as the starting point for considering evidence of housing need, and for all their problems, they are as good a starting point as any. However, caution should be exercised when applying them in evidence. They can and should be subject to adjustment where specific evidence justifies it. The advice contained in the Practice Guidance that the projections may require adjustment to reflect household formation having been suppressed historically by housing undersupply and worsening affordability has been widely considered.
- 3.13 Many Planning Inspectors have taken the view that the 2011-based projections represented a suppression of household formation, particularly amongst younger age groups. This has been supported by analysis into the underlying projections such as the 'Holman Paper'⁴, and whilst the 2012-based are more optimistic in household formation rates than their 2011-based predecessors, they remain lower than long term trends would indicate. Some commentators have suggested that the new projections represent a 'new normal', with reduced household formation, compared to longer term trends, likely to continue irrespective of recessionary impacts. NLP considers that applying this approach to planning would be wrong.
- 3.14 It is imperative to view the new projections through the prism of the Framework: this seeks to 'boost significantly' the supply of housing to meet housing demand (including demand arising from household formation) and address affordability. Were the planning system to treat the lower levels of household formation as a 'new normal' it would 'lock in' the implications of housing under-supply impacting most of all on younger age groups, particularly those starting families. With the English Housing Survey having recently shown home ownership for younger age groups falling markedly, there are profoundly negative implications for economic and social well-being. Such an approach would run counter to the stated housing priorities of all the main political parties in the run-up to the election.

⁴ A. Holman, New Estimates of Housing Demand and Need in England 2011 to 2031, Town and Country Planning

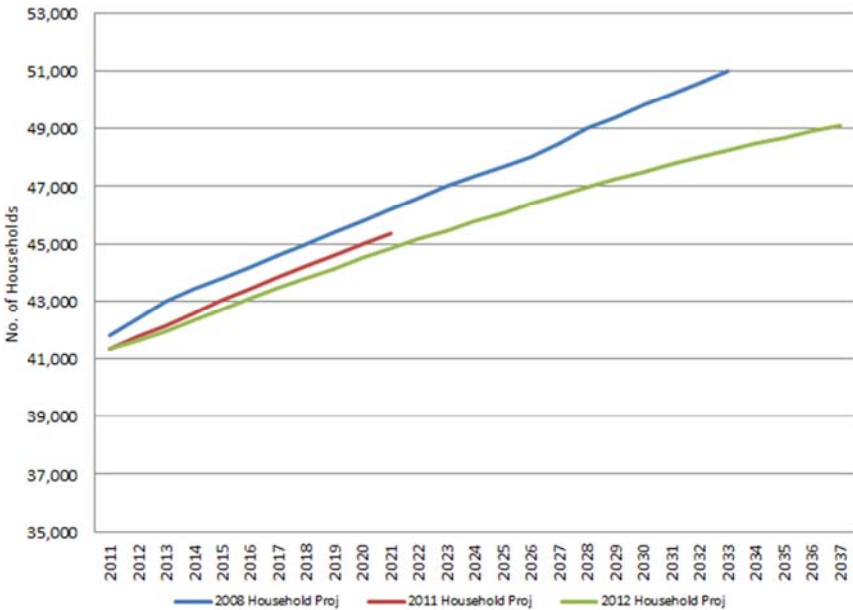
4.0 **2012 Sub-National Household Projections for Lichfield**

4.1 The 2012 SNHP indicate annual average household growth in Lichfield over the period to 2037 of 299 households per annum [hpa]. At face value, this is below the annual rate of growth in the previous projections.

4.2 Figure 1 illustrates the projected household growth in each of the past three SNHPs. As might be expected, the 2008-based projections project the highest rate of growth. The 2012-based projections are below the 2011 (Interim) projections in terms of overall household growth.

4.3 Whilst all three household projections in 2011 start at a relatively similar base, the 2008-based SNHP grow at the fastest rate and diverge from the other projections as the time progresses. By the end of the 2008 and 2012 projection periods, a significant divergence is evident. The 2008-based SNHP indicates that the number of households in Lichfield will surpass 50,000 by 2033. However, the 2012-based SNHP does not come near to crossing this threshold until the end of the forecasting period (2037).

Figure 1 Comparison of Household Projection Change over Time



Source: NLP Analysis / CLG Household Projections

4.4 A comparison of the latest projections against the previous 2008-based household and the 2011-based (Interim) projections for Lichfield is set out in Table 1.

Table 1 Household Projections Comparison

	2012-based Household Projections				2013-2033 annual H'Hold Growth		2012-2021 annual H'Hold Growth	
	2012	2037	2012-2037	Annual H'holds	2012-SNHP	2008-SNHP	2012-SNHP	2011-SNHP
Lichfield*	41,621	49,103	7,482	299	315	400	357	404

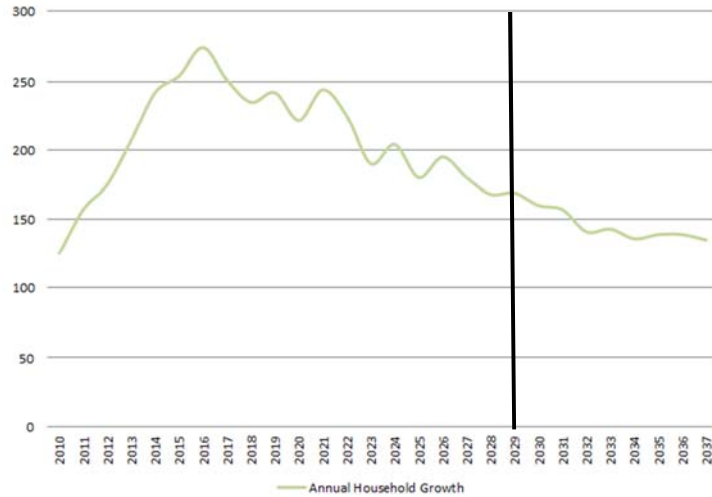
Source: CLG 2012 SNHP / CLG 2011 (Interim) SNHP / CLG 2008 SNHP

Note – the time periods have been changed to align across the various SNHPs

4.5 Comparing the various projections is a useful starting point. This indicates that the annual household change in the latest 2012 SNHP is significantly below the previous two projections. The latest household projections for Lichfield indicate that household growth is expected to increase by 299 annually between 2012 & 2037. Over comparable time periods, the 2012 SNHP is c.12% lower than the 2011-based SNHP (2012-21) and 21% lower than the 2008-based SNHP (2013-33).

4.6 When the annual change associated with the latest projections are analysed on a year by year basis some interesting conclusions can be drawn. Figure 2 illustrates the 2012-based SNHP projected annual household change to 2037. This indicates that the highest growth is projected to occur in the earlier years, peaking in 2015 before tailing off afterwards. This is predominantly due to negative natural change rather than increased levels of net out migration. In the latest SNPP, the number of deaths continues to outweigh the number of births with this increasing over the period.

Figure 2 Annual Household Growth in Lichfield District (2012-2037)



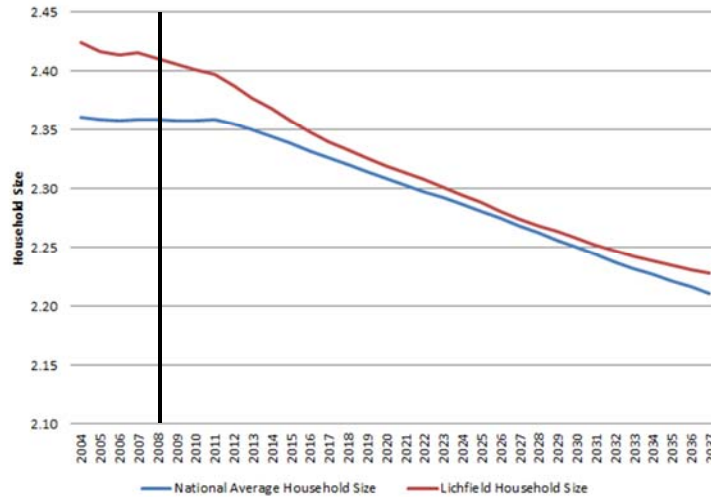
Source: NLP Analysis / 2012-based SNHP

Average Household Size & Headship Rates

4.7

In terms of average household size, Figure 3 compares Lichfield District’s rate of change against the national average over time based on the 2012 SNHP data. Both exhibit a clear downward trend, although Lichfield’s average household size declines markedly at the beginning to close the gap to the national average. In 2008 (the base year of the plan), the average national household size was 2.35 persons compared to 2.41 in Lichfield. By 2029 (the end of the current plan period), Lichfield’s average household size is almost aligned with the national average, 2.263 and 2.257 respectively. Towards the end of the 2012 SNHP time period, Lichfield’s projections begin to diverge slightly from the continually declining national average.

Figure 3 Average Household Size - National Average and Lichfield Average

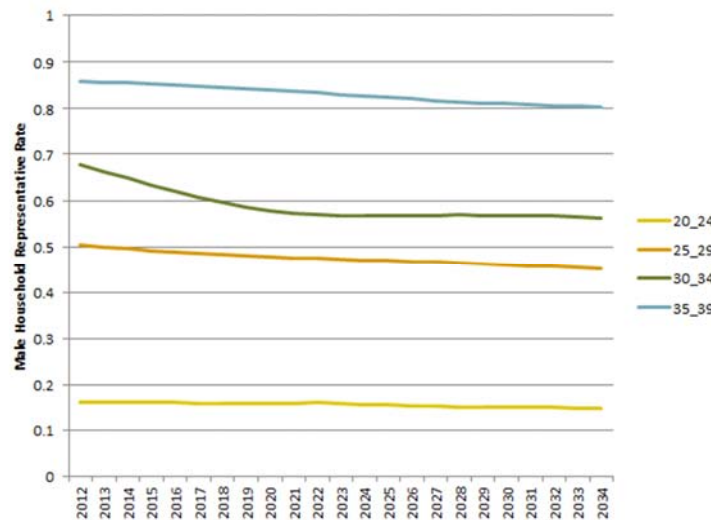


Source: NLP Analysis / CLG Household Projections

4.8

Figure 4 analyses the household representative rates of males between the ages of 20 and 40. These are the age cohorts that have been faced with the most significant challenges in obtaining mortgage finance and accessing the property market since 2007/08. It would appear that all four age cohorts are declining. However, the age cohort 30-34 experiences the steepest decline, predominantly from 2012-2019. The rate of decline slows down after that point, but continues to decline nonetheless.

Figure 4 2012 SNHP Male Household Representative Rates



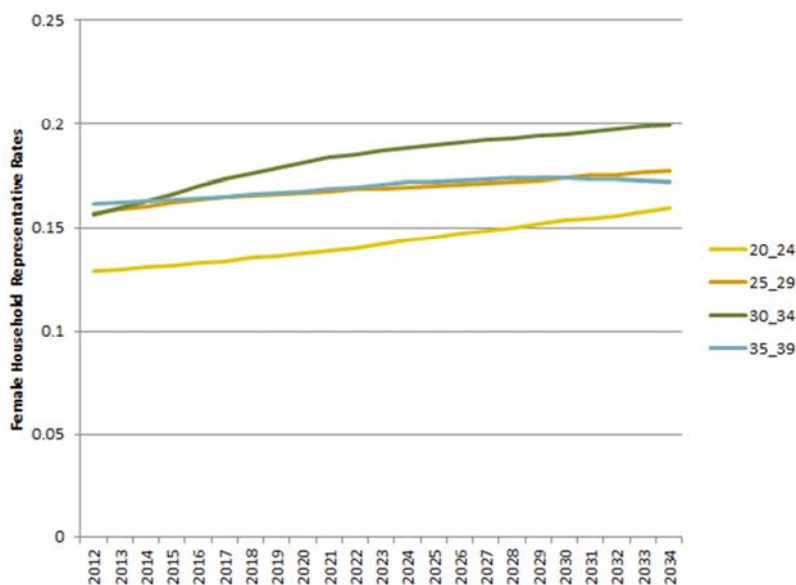
Source: NLP Analysis / CLG 2012-based SNHP

4.9

In contrast, Figure 5 illustrates that the household representative rates for females is increasing steadily in Lichfield District over the period to 2037. The

strongest area of growth is in the age cohort 30-34, which increases significantly (from 12.8% to 15.9%) whilst the 20-24 age cohort increases from 15.55% to 19.9%.

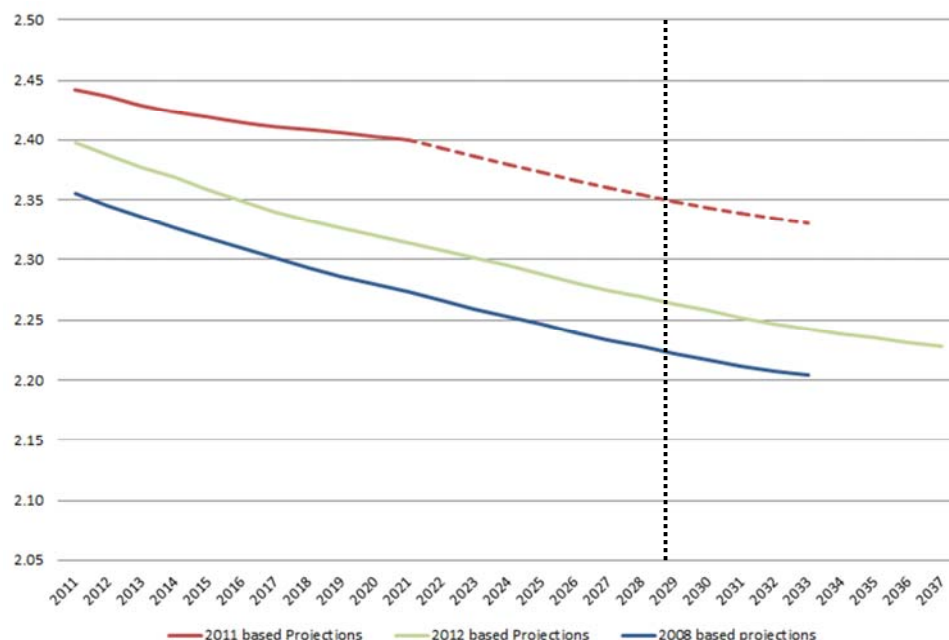
Figure 5 2012 SNHP Female Household Representative Rates



Source: NLP Analysis / CLG 2012-based SNHP

- 4.10 Figure 6 compares the change in average household size across the three most recent SNHPs. The Council's housing requirement figure was informed by the Southern Staffordshire Districts Housing Needs Study and the SHMA Update (2012), the Implications of the 2011-based CLG Household Projections (2013) and the South East Staffordshire Housing Needs Study Update (2014). The 2012 report incorporated modelling data based on the 2008-based SNHP whilst the latter studies were founded on the 2011-based (Interim) SNHP.
- 4.11 The latter studies assumed that household representative rates follow the 'Indexed' approach to household formations (i.e. they would follow the 2011 SNHP rates to 2021, whereupon they assume the long term trends identified within the 2008-based household projections to 2033). This is represented as an indicative dashed line on Figure 6.
- 4.12 This indicates that the most optimistic average household size was the 2008-based projections, whilst the 2011-based projections are considerably more pessimistic. The latest 2012 SNHP fall between the previous two projections albeit, they are closer to the 2008-based projections. Indeed, they appear to follow an almost identical downwards trajectory, starting from a higher average household size of 2.4 in 2011.

Figure 6 Comparison of Average Household Size Projections in Lichfield District



Source: NLP Analysis / CLG Household Projections

Comparison of Population Projections

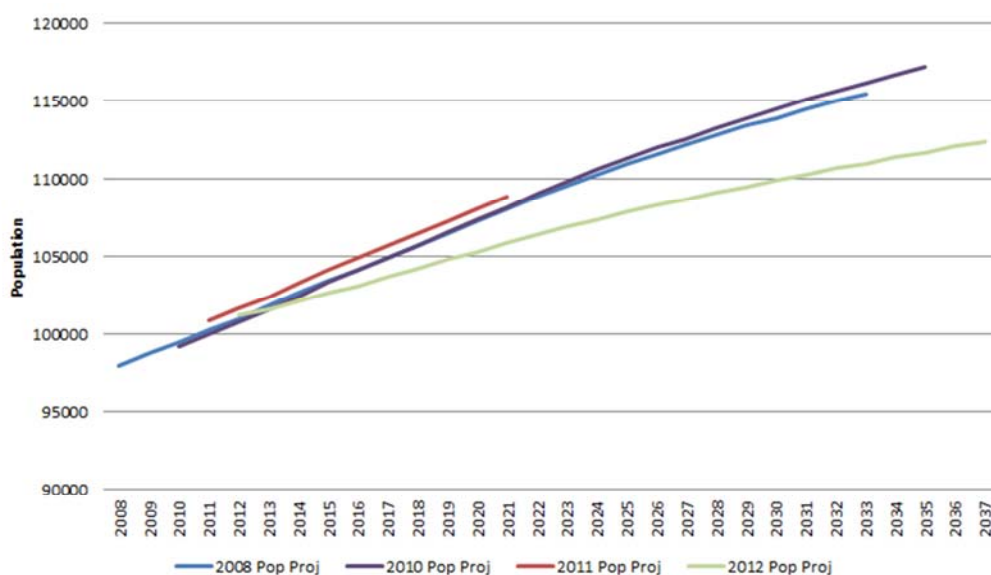
- 4.13 The household projections are underpinned by the equivalent population projections. As such, in understanding the changes to the household projections, it is vital to analyse the trends in population growth over time.
- 4.14 The 2008-based population projections indicates population growth of 13,700 between 2013-33 compared to population growth of 9,400 in the latest 2012-based SNPP over a comparable time period. This represents a 31% difference between the two projections. The difference between the 2011-based SNPP indicates total population growth of 7,200 from 2012 to 2021, whilst the 2012-based SNPP are approximately 35% lower over the same time period. As such, it is reasonable to suggest that the latest SNHP for Lichfield is lower than the 2011 equivalent primarily due to the substantial difference in the underlying population projections, rather than the household representative rate used.
- 4.15 The 2012-based SNHP also remain below the previous full set of projections (2008-based) which assumed higher population growth as well as slightly higher rates of household formation, having been less influenced by recessionary trends.
- 4.16 Figure 7 plots the four most recent population projections for Lichfield District. As can be seen, the population projections for the 2008, 2010 and 2011 SNPPs are broadly aligned and project growth along a similar trajectory. The

2011 projections commence at a slightly higher starting point and trend forwards at a similar rate, slightly above the 2008 and 2010 projections.

4.17

In contrast, the latest SNPP projects population growth at a much slower rate over the period to 2037. This suggests that population growth is a key reason why the latest SNHP is lower than the 2011-based household figure. Household representative rates have an important role to play but in this instance the change in population growth may be considered a particularly important contributing factor.

Figure 7 Comparison of recent SNPPs for Lichfield District



Source: NLP Analysis / ONS SNPPs

4.18

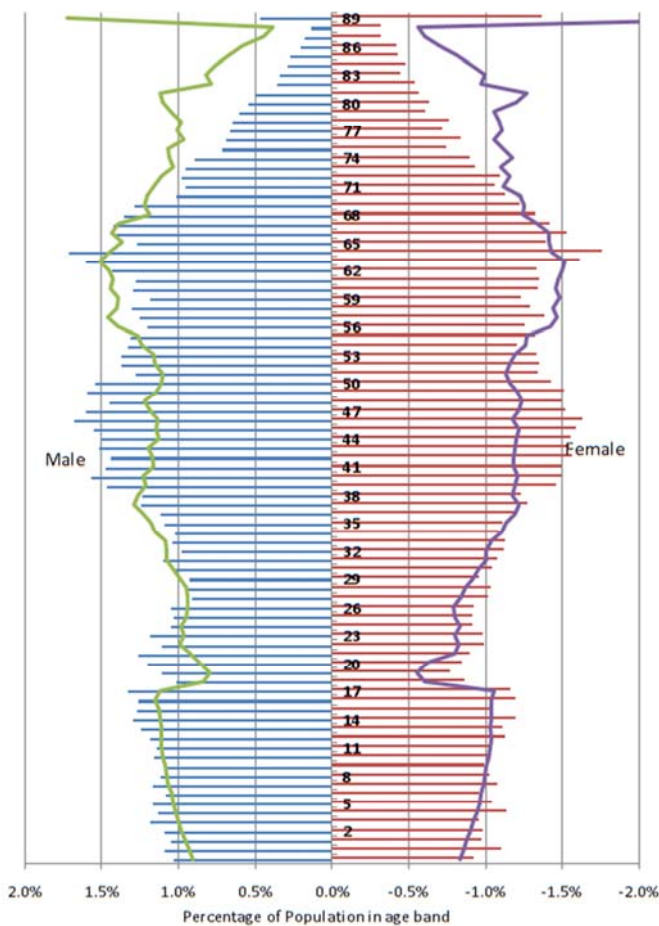
Figure 8 illustrates the percentage change in each age cohort between 2012 and 2029 (the end of the current plan period) for the 2012-based SNPP. This demonstrates that the greatest change is in the proportion of Lichfield's residents aged over 70 (both male and female) over the 16 year period. In particular, the percentage of local residents over the age of 90 is expected to grow exponentially. The percentage of males aged over 90 quadruples between 2012 and 2029 whilst the percentage of females aged over 90 doubles.

4.19

In direct contrast, the percentage of males and females under the age of 18 in Lichfield in 2029 declines for all age cohorts. Most strikingly, the percentage of the population between 40 and 55 declines in both males and females. The proportion of males aged 40-55 drops from 23.7% in 2012 to 18.7% in 2029. Similarly, the proportion of females ages 40-55 drops from 23.5% in 2012 to 19.1% in 2029. It is therefore unsurprising that with a considerable growth in the number of older people and the significant reduction in the numbers aged

40-55 results in average household size reducing significantly, as this translates into smaller family units and more people living alone, or in couples.

Figure 8 Lichfield District - Change in Percentage of Population for each Age Band (2012/2029)



Source: CLG 2012-based SNPP
 Note: Outline shows year 2029

4.20

When comparing the 2012 SNPP with the 2008-based SNPP, it appears that the growth in the percentage of residents over 90 is greater than the previous projections to 2029. In the earlier years (2012-2016) the projections are broadly aligned but thereafter the growth of 90+ in the latest projections is higher. In contrast to this, the percentage of those aged under 10 in the latest projections declines sharply and at a faster rate than the 2008-based projections.

Figure 9 Comparison of Age Cohorts within 2008 and 2012 Sub-National Population Projections



Source: NLP Analysis / ONS SNPP

5.0 Implications of the 2012-based SNHP

5.1 The projections are an important ingredient when planning for housing growth but are not the whole picture. Any SHMA applying the new projections must factor in the following:

- 1 Scrutiny of the underlying SNPP – Recent international migrations statistics demonstrate that the 2012-based SNPP are increasingly divergent from what is actually happening. This calls into question the reliability of the SNPP’s international migration assumptions, which are likely to be too low, and are partly responsible for the reduced levels of overall household growth in these 2012-based SNHP. This factor is likely to have the greatest impact on major cities and their hinterlands. Internal UK migration assumptions in the SNPP are also open to question in some locations, particularly cities and University Towns;
- 2 Making adjustments to headship rates to reflect for specific household formation factors for specific age group and household types;
- 3 Employment growth – past trends, forecasts and economic strategies, notably of LEPs (where these are realistic);
- 4 Market Signals – there is nothing in the Practice Guidance that indicates that housing supply nationally or locally should be constrained to the household projections. The Guidance specifically seeks to include upward adjustment to improve housing affordability; and,

5 Affordable housing needs – these should be met in full, and is a separate part of the assessment of housing requirement that may also necessitate an increase in the overall housing requirement figure in the Local Plan.

5.2 That said, the Practice Guidance states that wherever possible, local needs assessments should be informed by the latest available information. However *‘this does not automatically mean that housing assessments are rendered outdated every time new projections are issued’* (Para. 16 Ref ID: 2a-016-20150227)

5.3 The 2012-based SNHP provides household representative rates that lie between the 2011 and 2008-based SNHP. However, they are closer to the household representative rates used in the 2008-based projections. At the time of writing, CLG has yet to provide the detailed Stage Two data on household types necessary to undertake a full PopGroup run of the scenario modelling so that the implications of the latest data on Lichfield District Council’s OAN range can be fully understood.

5.4 NLP has advised Lichfield District on their appropriate housing requirement to carry forward in their Core Strategy and has updated the work on a number of occasions. The housing OAN range identified by NLP’s analysis that informed the Core Strategy was 410-450 dpa. Table 2 summarises the various stages of work which have been conducted to inform Lichfield’s OAN. The latest 2012 SNHP (with an allowance for vacancy) indicates that the demographic ‘starting point’ for assessing Lichfield’s OAN is 307 dpa (2012 – 2037). This is significantly lower than the housing requirement taken forward in Lichfield’s Core Strategy. This, however, remains only the starting point and does not factor in any allowance for market signals (e.g. affordability, economic needs or adjustments to the underlying population projections or household representative rates).

Table 2 Annual Housing Need - Updated Comparison

	OAN Evolution					2012 SNHP (+allowance for vacancy)
	Original 2012 SHMA Range (2008-based CLG)	November 2012 Update	May 2013 Update	2011-based CLG H’hold Projections	Housing Needs Study 2014	
Lichfield	410-450 dpa	410-450 dpa	410-450 dpa	416 dpa	335 dpa	307 dpa

Source: NLP Analysis

Note: A Vacancy Allowance of 2.58% has been applied

5.5 Nevertheless, on the basis of the data that has been released by CLG so far, NLP draw the following conclusions:

1 The baseline ‘starting point’ housing growth figures for Lichfield in the 2012-based SNHP project growth of 299 households annually over the period to 2037. This equates to 7,475 households over the 25 year period.

- 2 In the period from 2012 to 2029 (end of the current plan period), the projections indicate annual growth of 340 dwellings⁵. This is substantially below the 410-450 OAN range identified in earlier studies.
- 3 The latest projections suggest that the change in household size in Lichfield sites somewhere between the more optimistic long term trends exhibited in the 2008-based SNHP, and the shorter term, recessionary influenced 2011-based SNHP.
- 4 In terms of population projections, the latest 2012-based SNPP are by far the lowest of the past four iterations. The previous 3 SNPPs are broadly aligned and exhibit a similar growth trajectory but the latest projections deviate significantly away from this.
- 5 This is a crucial point, as it means that although the 2012-SNPP is below the other projections, the household representative rates are reasonably more optimistic than the 2011-based (Interim) projections and as such are closer aligned than would be expected.
- 6 The Practice Guidance states that the latest household projections (2012-based) should form the starting point for any assessment of OAN. Over the period 2012-2029, the 2012 SNHP indicate average annual growth of 340 dpa⁶.
- 7 This is the starting point for the assessment of OAN. It falls substantially below the 410-450 housing OAN identified in the 2012 SHMA, the 2012 SHMA Update, the May 2013 SHMA Update and the 2011-based (Interim) Household Projections.

5.6 The latest 2012-based SNHP are the new 'starting point' for assessing the housing OAN for Lichfield. Although the full PopGroup modelling has not been completed at this stage, even if a 20% uplift was applied to the demographic starting point to allow for worsening market signals, the new housing requirement would equate to roughly 410 dpa. A figure of 410 dpa is at the lower end of the range identified throughout NLP's PopGroup modelling exercises.

5.7 On the basis of the foregoing analysis, it is suggested that the latest SNHP are unlikely to have a significant impact on the OAN range for Lichfield District purely based on the foregoing population and household projections. However further PopGroup modelling is necessary to fully substantiate this hypothesis and we reserve the right to review this position as and when the full SNHP raw data sets are available. Furthermore, economic consideration will need to be incorporated in any modelling exercise to ensure alignment between housing and economic aspirations.

⁵ Incorporating an allowance for vacancy of 2.58%

⁶ Ibid

6.0

Conclusion

6.1

The latest SNHP represents the starting point in deriving an appropriate OAN for Lichfield but does not comprise the whole picture. At this stage, NLP has not been able to update its HEaDROOM modelling as the full dataset for the 2012 SNHP has not been released. It is expected to be released in the coming weeks but until this time, a full update to the modelling will not be possible. It is nevertheless important that the 2012 SNHP and its implications are considered.

6.2

Given that the latest 2012 SNHP projections have generated household representative rates that sit between the 2011 and 2008-based SNHPs, albeit closer to the 2008 based projections, the outcome of any future new modelling (incorporating the 2012 SNHP) is not anticipated to be substantially different to that outlined in previous studies for the District.

6.3

Taking the 2012 SNHP at face value, they do not appear to indicate that the suggested OAN range of 410dpa to 450 dpa would be substantially altered had the latest household projections been available to use in NLP's PopGroup model previously. Nevertheless, we reserve the right to review this initial hypothesis once the Stage Two 2012 SNHP datasets are released and we are able to undertake more detailed PopGroup modelling.