

Implications of 2016-based SNPP for Guildford

1.1 On the 24th May 2018, ONS published a new set of subnational population projections (SNPP). In the accompanying statistical bulletin it is noted that these will *'be used in the production of the 2016-based household projections for local authorities, to be published in September 2018'*. The population projections provide information on how the size and structure of the population is expected to change, which is a major input to projecting household growth. It is therefore possible to use this new information to form a view about likely household growth ahead of publication of the 2016-based household projections.

1.2 Household growth can be projected by applying household formation rates (by age and sex) from the 2014-based household projections. The key information in these projections is based on Census data (and will therefore not have changed) whilst ONS (as part of their consultation on the 2016-based household projections) stated in June 2017 that they intend to *'use the current methods as a starting point for the next release of the projections'*.

Key methodological differences from between the 2014- and 2016-based SNPP

1.3 In reality there are no methodological differences between the 2014- and 2016-based SNPP, with both using past trend data about births, death and migration, which is then projected forwards. The differences which arise in the results reflect the inclusion of more recent data.

1.4 The 2016-based SNPP draw on ONS' 2016-based national population projections (NPP) which were published in October 2017. The NPP project notably lower population growth than in the previous (2014-based) set, with the UK population projected to be 2 million fewer in mid-2041. This is driven by lower assumptions about future birth rates and international migration, and an assumption of a slower rate of increase in life expectancy. The key differences are:

- ONS' long-term international migration assumptions have been revised downwards to 165,000 pa (beyond mid 2022) compared to 185,000 in the 2014-based Projections. This is based on a 25 year average;
- The latest projections assume that women will have fewer children, with the average number of children per woman expected to be 1.84 compared to 1.89 in the 2014-based Projections; and
- ONS is no longer assuming a faster rate of increase in life expectancy of those borne between 1923 – 1938, based essentially on more recent evidence. Life expectancy still increases, just not as fast as previously projected.

1.5 For local authorities, the 2016-based SNPP use a different base period to study migration trends (the 5-years to 2016 for internal migration and the 6-years to 2016 for international migration). In projecting migration, it takes account of the updated mid-year population estimates (MYE) which ONS published in March 2018. As set out in the Council's Matters Statement, the revised MYE indicate that past levels of net migration may have been over-estimated.

1.6 Table 1 overleaf shows the migration trends for Guildford that would have fed into each of the 2014- and 2016-based SNPP. Migration in the 2014-based SNPP base period averaged 1,488 people per

annum, with a lower figure of 1,317 in the 2016-based period. This data, along with a lower projected level of international migration (at a national level and filtered down to local authorities) would lead to an expectation that net migration in the 2016-based SNPP would be lower.

- 1.7 Reductions in fertility projections and in the rate of improvement in life expectancy would also be expected to have a downward impact on levels of population growth.

Table 1: Comparing migration assumptions in the original and revised MYE for Guildford and SNPP averages

	Original MYE		Revised MYE	
	Net internal migration	Net international migration	Net internal migration	Net international migration
2008/9	-	1,173	-	-
2009/10	-150	2,097	-	-
2010/11	22	1,934	-	1,934
2011/12	40	1,615	40	1,239
2012/13	-727	1,396	-727	1,414
2013/14	123	1,540	123	1,487
2014/15	-	-	-71	1,470
2015/16	-	-	-573	1,809
2014-based	-138	1,626	-	-
2016-based	-	-	-242	1,559

Source: ONS

Comparing 2014- and 2016-based SNPP

- 1.8 Table 2 below shows that projected population growth in the 2016-based projections is some 6,700 people lower than in the 2014-based version.

Table 2: Projected population growth in 2014- and 2016-based SNPP

Guildford	Population 2015	Population 2034	Change in population	% change
2014-based	145,473	167,126	21,652	14.9%
2016-based	145,056	159,983	14,927	10.3%

Source: ONS

- 1.9 Table 3 shows the components of population change for the 2014- and 2016-based SNPP in Guildford. The average number of births projected to be some 158 lower each year, along with an increase of 45 deaths. The net impact of this is for natural change to be around 200 people lower per annum on average for the 2015-34 period. These reflect ONS' revised assumptions on fertility and mortality.
- 1.10 Internal migration is actually projected to be higher than in the 2014-based SNPP, however international migration is substantially lower. The lower international migration projected reflects the revisions ONS has made to the Mid-Year Estimates, and its lower projection at a national level of international migration. There is minimal difference between the different base periods. The overall net effect is that migration is projected to be on average around 160 people per annum lower.

1.11 It should be noted that the figures in the table below do not exactly sum to the overall population change, this is due to the inclusion in the SNPP of a consolidation factor, this is included by ONS as an adjustment to ensure that all subnational projections sum exactly to national projections.

Table 3: Components of population change in the 2014- and 2016-based SNPP

	2014-based	2016-based	Difference
Births	1,765	1,607	-158
Deaths	1,090	1,135	45
Natural change	675	472	-203
Internal net	-969	-763	206
International net	1,443	1,078	-365
Total net migration	474	315	-159

Source: ONS

- 1.12 Given the differences in the overall population growth, there will also be differences in the age profile of the population. Table 4 shows projected population change in five-year age bands in each of the two releases. Both projections see notable increases in the older person population, and also of people in their 20s. The 2016-based projections see a much lower change in the number of children (this will be linked to lower fertility) and also a lower change in older age groups, particularly those aged 85 and over (linked to mortality assumptions). There are also lower levels of growth of people in their late 30s and 40s – this may well be linked to lower levels of international migration.

Table 4: Population change by age in the 2014- and 2016-based SNPP

	2014-based	2016-based	Difference
0-4	644	-43	-687
5-9	957	-6	-963
10-14	1,958	1,042	-916
15-19	1,767	1,408	-359
20-24	2,064	2,587	522
25-29	1,341	1,809	467
30-34	427	141	-285
35-39	632	-85	-717
40-44	320	-658	-978
45-49	-105	-945	-840
50-54	-276	-838	-562
55-59	679	395	-283
60-64	1,787	1,613	-174
65-69	1,027	960	-68
70-74	2,186	2,125	-61
75-79	1,589	1,534	-54
80-84	1,341	1,218	-122
85 & over	3,313	2,669	-644
Total	21,652	14,927	-6,725

Source: ONS

Household Growth and Housing Need

- 1.13 By applying the household representative rates (HRRs) from the 2014-based household projections, which are the latest available, it is possible to calculate household growth and housing need associated with the new SNPP. A 2.3% vacancy allowance is then applied in calculating housing need.
- 1.14 Table 5 shows that the starting point for assessing housing need will have fallen from 557 dwellings per annum (using the 2014-based demographic projections) to 422 dpa (using the 2016-based

SNPP). The latest projections indicate population growth which is 6,700 lower; and 2,500 lower household growth.

Table 5: Estimated housing need associated with the 2014- and 2016-based SNPP – Guildford

	Households 2015	Households 2034	Change in households	Per annum	Dwellings per annum
2014-based	56,846	67,196	10,350	545	557
2016-based	56,768	64,595	7,827	412	422

Source: Demographic projections

Sensitivity Analysis – Adjusting Household Formation Rates

- 1.15 In the SHMA Addendum adjustments were also made to household formation rates in drawing conclusions. The modelling undertaken saw HRRs for the population 25-34 return to the levels seen in 2001.
- 1.16 Table 6 below shows the impact of applying this adjustment to the 2016-based SNPP projection. This shows a need for some 475 dwellings per annum, some 13% above the starting point of 422 dpa.

Table 6: Estimated housing need associated with the 2014- and 2016-based SNPP – Guildford (with uplift to HRRs for 25-34 age group)

	Households 2015	Households 2034	Change in households	Per annum	Dwellings per annum
2014-based	56,846	68,164	11,318	596	610
2016-based	56,768	65,591	8,823	464	475

Source: Demographic projections

Economic Growth

- 1.17 Because the 2016-based SNPP has a slightly different age profile than the 2014-based projections, it is also possible to look at what housing need would be associated with forecast economic growth. This has been looked at using both the 2015 and 2017 Office for Budget Responsibility (OBR) participation rates (with an adjustment so that no values fall over the projection period).
- 1.18 The modelling looks at housing need associated with a labour-supply growth of 11,105 people (2015-34) calculated as:
- 12,893 jobs with 0.9 commuting ratio and 4.3% double jobbing = 11,105 labour-supply growth
- 1.19 These assumptions on commuting and double jobbing are consistent with those used in the SHMA Addendum.
- 1.20 The evidence indicates that support a consistent level of jobs growth, housing provision of 514 dpa would be required using the 2015 OBR rates. This compared to a figure of 579 dpa in the SHMA Addendum (Table 20). If the 2017 OBR rates are used, this falls slightly to 507 dpa (see Table 7).
- 1.21 This difference between the ‘economic-led need’ in the updated analysis and the SHMA Addendum is particularly driven by lower increases in the number of older persons (i.e. any uplift for economic

growth is more focussed on people of 'working-age' with lower 'associated' growth in the number of older people (who have the highest household representative rates) arising in the 2016-based SNPP).

- 1.22 The economic-led need is 85-92 dwellings pa higher than the demographic starting point derived from the 2016-based SNPP. The range reflects the two economic participation rate scenarios.

Table 7: Estimated housing need associated with job growth of 12,893 (2015-34) – linking to 2016-based SNPP – Guildford

	Households 2015	Households 2034	Change in households	Per annum	Dwellings per annum
2015 – OBR	56,768	66,319	9,551	503	514
2017 – OBR	56,768	66,186	9,418	496	507

Source: GL Hearn

- 1.23 This analysis can also be developed with the inclusion of the HRR uplift for the 25-34 population. Outputs with this scenario are shown in Table 8 below, pointing to need for between 563 and 571 dwellings per annum. The headship rate adjustment applied to the economic led need increases the figure by 11%.

Table 8: Estimated housing need associated with job growth of 12,893 (2015-34) – linking to 2016-based SNPP – Guildford (with uplift to HRRs for 25-34 age group)

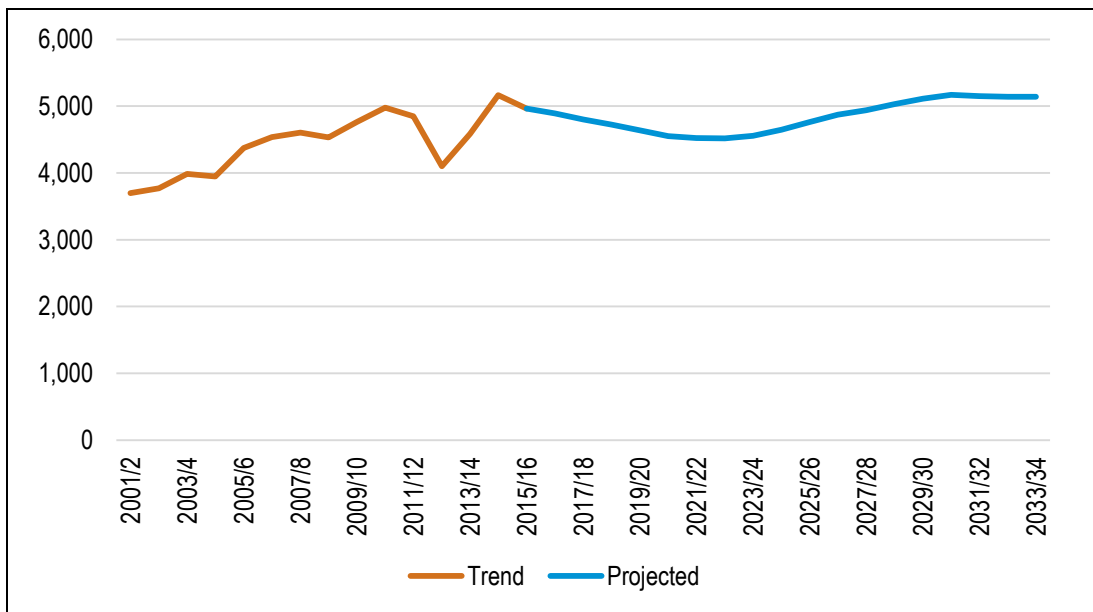
	Households 2015	Households 2034	Change in households	Per annum	Dwellings per annum
2015 – OBR	56,768	67,361	10,593	558	571
2017 – OBR	56,768	67,224	10,456	550	563

Source: GL Hearn

Students

- 1.24 The final element of the OAN for Guildford was to include an estimate of additional housing required for a growing student population. In the SHMA Addendum, it was noted that there is expected to be some growth in the number of students, but as the SNPP did not show any uplift to migration of key student age groups it was likely that this was not captured in the projections. An additional allowance of 23 dwellings per annum was included in the OAN.
- 1.25 The analysis below shows that the 2016-based SNPP also shows a limited level of increase in in-migration of student age groups (taken to be those aged 18-23) and as a result it is considered that the figure of 23 dpa remains valid (see Figure 1).

Figure 1: Past and Projected In-Migrants aged 18-23 to Guildford Borough in 2016-based SNPP

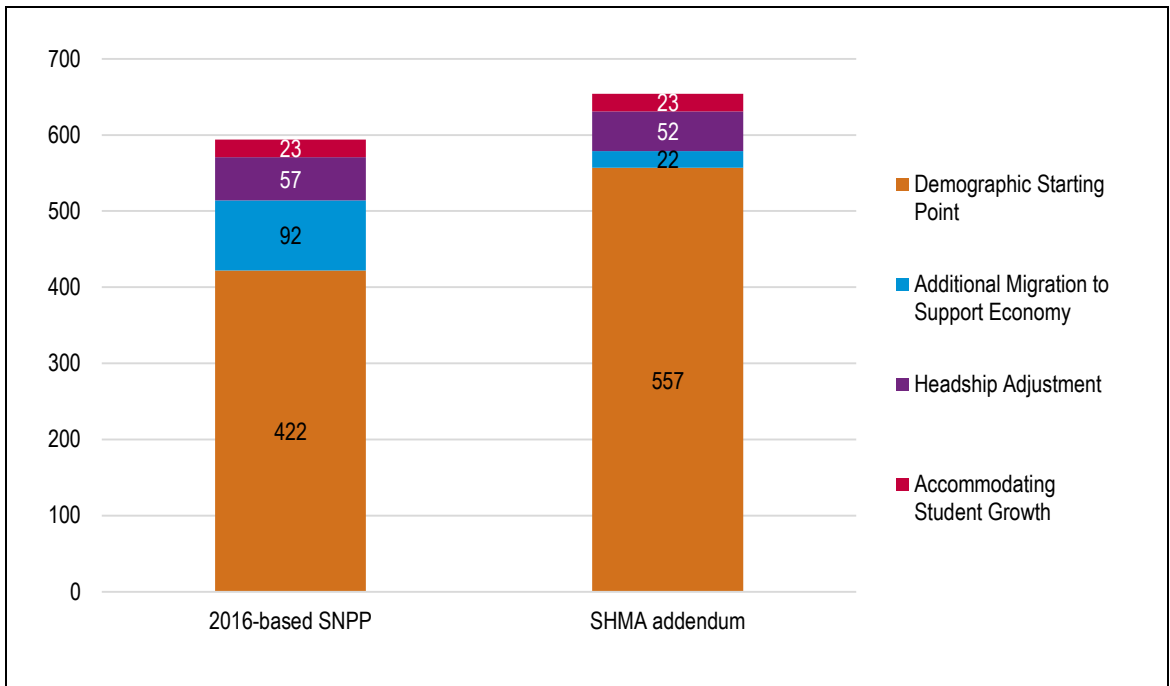


Source: ONS

Overall Housing Need

- 1.26 Drawing the above together, this short report identifies a need based on the latest evidence for 11,286 homes in Guildford Borough between 2015-34, equivalent to 594 dwellings per annum. The figure below shows how this figure has been derived, and is set out in the same format as Figure 24 of the SHMA Addendum.
- 1.27 The analysis set out in Figure 2 shows that the 2016-based SNPP would require a higher level of uplift for economic growth (from a lower start point) but that overall, the need is around 60 dwellings lower. This is driven by the 2016-based SNPP projecting for lower levels of growth in the population of older persons.
- 1.28 Using the 2014-based headship rates, an economic-led need of 507-514 dpa is shown – an increase of 85-92 dpa on the demographic starting point resulting from higher in-migration. Adjusting the headship rates in these projections raises the need by 56-57 dpa. A student adjustment of 23 dpa is then added. The combined adjustments result in an OAN which is 41% above the starting point demographic projections (422 dpa).

Figure 2: Composition of Guildford's Objectively Assessed Housing Need (2016-based SNPP and SHMA addendum) – dwellings per annum



Source: GL Hearn