

# Updating the Overall Housing Need

## Based on 2014-based projections for West Essex & East Herts

1. ORS was originally commissioned to review the ONS 2014-based Sub-National Population Projections (SNPP) and the CLG 2014-based household projections in the context of the assessment of overall housing need in the West Essex and East Hertfordshire SHMA (September 2015) and the subsequent review of migration trends that was undertaken in March 2016 following the PINS Advisory Visit to East Hertfordshire.
2. Following this review, the SHMA demographic projections were fully updated to take account of the latest information and provide an updated assessment of overall housing need for the housing market area and the four individual local planning authorities.

### Review of the ONS sub-national population projections

3. The 2014-based SNPP provide population projections for the 25-year period 2014-2039 and supersede the previous 2012-based SNPP. The official population estimate for 2011 (the start of the period that the SHMA used to assess Objectively Assessed Need, OAN) has not changed and is still the ONS Mid-Year Estimate (MYE) for Mid-2011; however, the 2014-based SNPP now provides the latest population projection for 2033 (the end of the OAN period).
4. Figure 1 compares the outputs from the 2014-based SNPP with the previous 2012-based outputs, and identifies that the 2014-based SNPP shows a higher level of projected population growth. Overall population growth over the 22-year period 2011-33 is now 7,599 persons higher (an increase from 97,504 to 105,103), which comprises increases across all four local authority areas. On this basis, the growth projected by the 2014-based SNPP is 7.8% higher than the 2012-based projection across the combined area.

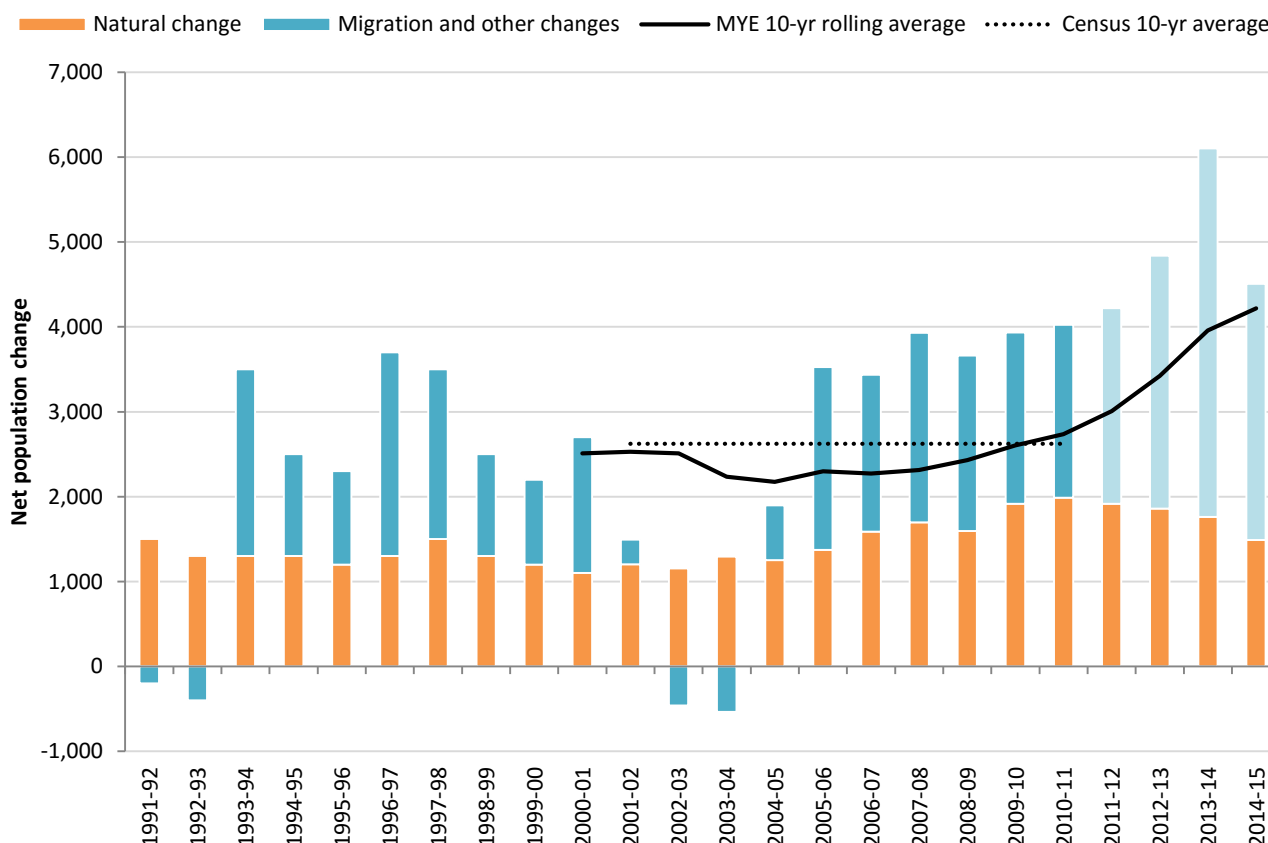
Figure 1: Comparison of ONS 2012-based and 2014-based Sub-National Population Projections

	ONS MYE	ONS 2012-based SNPP		ONS 2014-based SNPP		Difference in projected net change
	Total persons 2011	Total persons 2033	Net change 2011-33	Total persons 2033	Net change 2011-33	
East Hertfordshire	138,155	168,431	+30,276	170,526	+32,371	+6.9%
Epping Forest	124,880	153,177	+28,297	155,027	+30,147	+6.5%
Harlow	82,177	96,988	+14,811	98,779	+16,602	+12.1%
Uttlesford	80,032	104,152	+24,120	106,015	+25,983	+7.7%
<b>TOTAL</b>	<b>425,244</b>	<b>522,748</b>	<b>+97,504</b>	<b>530,347</b>	<b>+105,103</b>	<b>+7.8%</b>

5. This difference between the 2012-based and 2014-based SNPP is due to a combination of changes in the underlying population components of change. Considering the period 2014-33 where the two projections and the OAN period all overlap, we can establish for the housing market area as a whole:
  - » The number of births projected has increased by 2.0%, from an average of 5,629 to 5,743 per year; this accounts for an extra 114 persons annually on average;
  - » The number of deaths projected has also increased 2.0%, from an average of 3,831 to 3,909 per year; this accounts for 78 fewer persons annually on average in the projections;

- » Together, these yield an additional increase of 36 persons each year due to natural change;
  - » Net migration to the rest of the UK has reduced by 187 persons annually on average, from an average gain of 2,275 persons to a gain of 2,087 per year (a reduction of 8.2%);
  - » Net international migration has increased by 399 persons annually on average, from an average gain of 397 persons to a gain of 796 persons per year (an increase of 100.5%).
6. There is therefore an additional 36 persons on average each year attributable to natural change and an additional 212 persons on average each year attributable to overall net migration. Together, these account for an extra 248 persons on average annually for the 19-year period 2014-33; a total of 4,709 persons. As previously noted, the difference for the 22-year period 2011-33 is 7,599 persons, so the remaining difference of 2,890 persons is associated with the period up to 2014.
7. For the period 2011-12 the ONS Mid-Year Population Estimate provides a consistent basis for both projections. For the period 2012-14, the 2012-based SNPP projected future population change whereas the ONS Mid-Year Population Estimates have now published data based on actual population change recorded and estimated during this period, as shown in Figure 2.

**Figure 2: Population growth based on ONS Mid-Year Estimates for the HMA (Note: Solid line shows MYE 10-yr rolling average, dotted line shows change between 2001 and 2011 Census. Note: Migration and other changes for data from 2011-12 onwards has not been reconciled to Census data; ONS will reissue this data following the next Census)**



8. It is evident that ONS population estimates for mid-2013, mid-2014 and mid-2015 (which are based on changes for the 3-year period 2012-15) show much higher rates of population growth than experienced in any other year during the last two decades.
9. Overall population growth in 2012-13 was estimated to be 4,837 persons with a gain of 6,103 persons in 2013-14; a total gain of 10,940 persons estimated over the 2-year period. This compares to the projected

gain of 8,047 persons from the 2012-based SNPP for the same period; so the 2012-based SNPP suggested 2,893 fewer persons than the actual changes recorded and estimated by ONS for the period:

- » The 2012-based SNPP projected a 2-year increase of 3,479 persons due to natural change (10,689 births offset against 7,210 deaths) whereas the MYE showed an actual increase of 3,619 persons (10,613 births and 6,994 deaths) over the period 2012-14; a difference of 140 persons; and
  - » The 2012-based SNPP projected a 2-year increase of 4,568 persons due to net migration (a gain of 3,778 persons from the UK and 790 persons from overseas) whereas the MYE estimated a gain of 7,321 persons due to migration and other changes: 4,731 persons from elsewhere in the UK (953 more than projected), 2,482 persons from overseas (1,692 more than projected) and 108 persons due to “other changes” (not included within the projection) over the period 2012-14. Together, these differences in migration rates account for 2,753 persons over the 2-year period.
10. Considering the combined impact of the natural change and net migration components yields an overall difference of 2,893 persons; consistent with the 2,890 persons previously identified (the minor difference due to arithmetic rounding at various stages of the process).
11. Therefore, over the 22-year period 2011-33, the 2014-based projection for 2033 includes an extra 830 persons following revisions to natural change (10.9% of the overall difference) and an extra 6,770 persons associated with changes to net migration (89.1% of the difference).

## Review of the CLG household projections

12. Figure 3 compares the outputs from the CLG 2014-based household projections with the 2012-based outputs, and identifies that the 2014-based projection shows a higher level of projected household growth across all four local authority areas. The overall increase over the 22-year period 2011-33 is now projected to be 50,697 households, compared to the growth of 49,638 households projected by the 2012-based data – an overall increase of 2.1%.

**Figure 3: Comparison of CLG 2012-based and 2014-based household projections**

	CLG 2012-based projection			CLG 2014-based projection			Difference in projected net change
	Total households		Net change 2011-33	Total households		Net change 2011-33	
	2011	2033		2011	2033		
East Hertfordshire	56,817	73,956	+17,139	56,810	74,053	+17,243	+0.6%
Epping Forest	52,094	66,465	+14,371	52,083	66,457	+14,374	+0.0%
Harlow	34,698	41,861	+7,163	34,695	42,348	+7,653	+6.8%
Uttlesford	31,580	42,545	+10,965	31,569	42,996	+11,427	+4.2%
<b>TOTAL</b>	<b>175,189</b>	<b>224,827</b>	<b>+49,638</b>	<b>175,157</b>	<b>225,854</b>	<b>+50,697</b>	<b>+2.1%</b>

13. As the primary determinant of household growth is normally the underlying population growth, it is perhaps surprising that the CLG 2014-based household projections are only 2.1% higher than the 2012-based household projections when the ONS 2014-based population projections (which inform the CLG projections) are 7.8% higher than the 2012-based population projections. The implication of this is that whilst the population trends now suggest there will be more people living in the HMA by 2033, household trends suggest that average household sizes will be fractionally larger thereby offsetting some of the additional population growth.

14. The average number of persons in each household was estimated to be 2.402 across the HMA in 2011, and the 2012-based household projection suggested that this would fall to 2.296 on average by 2033 (a reduction of 4.4%) whereas the 2014-based projections suggested a fall to 2.320 on average.

Figure 4: Comparison of average household size in 2033 based on CLG 2012-based and 2014-based household projections

	CLG 2012-based projection for 2033			CLG 2014-based projection for 2033			Difference in average persons
	Household population	Total households	Average persons	Household population	Total households	Average persons	
East Hertfordshire	165,928	73,956	2.244	168,042	74,053	2.269	+1.1%
Epping Forest	151,523	66,465	2.280	153,406	66,457	2.308	+1.3%
Harlow	96,408	41,861	2.303	98,226	42,348	2.319	+0.7%
Uttlesford	102,433	42,545	2.408	104,319	42,996	2.426	+0.8%
<b>TOTAL</b>	<b>516,292</b>	<b>224,827</b>	<b>2.296</b>	<b>523,993</b>	<b>225,854</b>	<b>2.320</b>	<b>+1.0%</b>

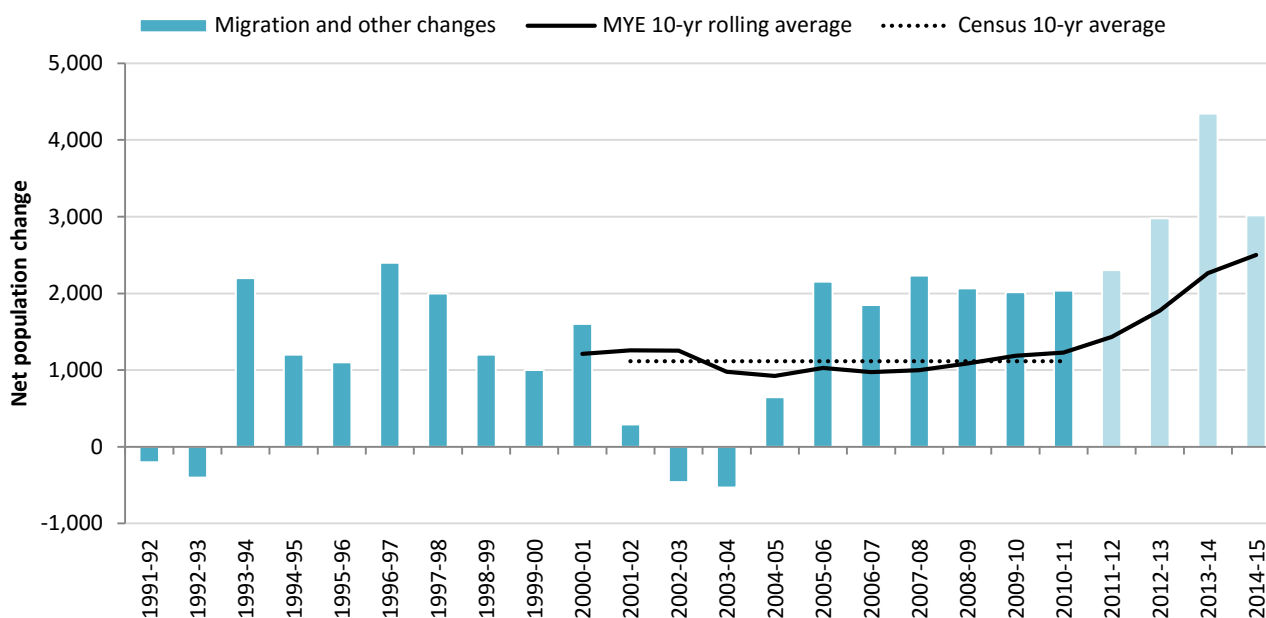
## Implications for Overall Housing Need

15. As the CLG household projections provide the “starting point estimate of overall housing need” (PPG ID 2a-015), this starting point is now 50,697 households over the 22-year period 2011-2033, which represents 52,729 dwellings after taking account of transactional vacancies and second home ownership. Nevertheless, as the difference is almost exclusively due to changes in migration, without any changes to the SHMA migration assumptions this increase to the starting point estimate would be mostly offset against a larger reduction in the “Adjustment for long-term migration trends” set out in Figure 75 of the SHMA.
16. Following the PINS Advisory Visit to East Hertfordshire, ORS prepared a review of migration trends which considered the likely impact of increases in net migration recorded by the ONS mid-year estimates since the 2011 Census. The visiting Inspector agreed that a 10-year trend period was more appropriate than the 5-year period used for the ONS sub-national population projection and CLG household projection, but suggested that migration rates from the inter-censal period 2001-11 used by the SHMA should be sensitivity tested based on data for the more recent 10-year period 2004-14<sup>1</sup>.
17. Nevertheless, it is important to recognise that long-term trends in population growth due to migration to the West Essex and East Hertfordshire HMA have been relatively consistent, with annual growth averaging around 1,100 persons over each of the 10-year periods from 1991-2001 to 2001-2011. Despite this, annual rates from 2005-06 onwards have shown a higher rate of growth, with an average of around 2,100 persons per year being sustained over the period to 2011-12 – so it is likely that the long-term trend will also increase over time and stabilise at an annual increase of around 2,100 persons as a consequence.
18. The further analysis undertaken following the PINS advice identified that for the 3-year period 2001-04, migration and other changes yielded an overall loss of around 700 persons (-230 per year); whereas for the period 2011-14, there was an overall gain of around 9,600 persons (+3,200 per year). Replacing a 3-year period where a loss of 700 persons was recorded with a 3-year period with a recorded gain of 9,600 persons increased the overall level of migration during the 10-year period by around 10,300 persons – increasing the average by over 1,000 persons, up to a rate of around 2,260 persons per year (marginally higher than the expected long-term trend).

<sup>1</sup> Mid-2015 population estimates were published in May 2016, so were not available when the initial review of migration trends was undertaken

19. Figure 5 shows the trends in annual migration each year from 1991-92 to 2014-15, together with the associated 10-year rolling average.

**Figure 5: Migration and other changes based on ONS Mid-Year Estimates for the HMA (Note: Solid line shows MYE 10-yr rolling average, dotted line shows change between 2001 and 2011 Census. Note: Migration and other changes for data from 2011-12 onwards has not been reconciled to Census data; ONS will reissue this data following the next Census)**



20. It is important to recognise that the data for mid-2012 onwards is based exclusively on the estimated components of population change, whereas data for previous years is also informed by Census data. As the SHMA noted, the component of change data for the period 2008-11 was the least reliable of the intercensal period, and these years accounted for half of the ONS correction for the decade. Given that there have been no changes to the way in which the ONS estimates migration since 2011, any systematic problems in the methodology for capturing recent migration trends are likely to persist and such problems would also affect the accuracy of the population estimates for the period 2011-15.
21. On balance, it seems unlikely that the population actually increased by over 10,300 persons due to migration over the 3-year period 2012-14, as this exceeds growth previously recorded for many 10-year periods – there are likely to be data quality issues. We continue to believe that data for the most recent intercensal period provides the most reliable basis for future population projections, in particular given the consistency in population growth recorded between 1991-2001 and 2001-2011 (both periods based on estimates which take full account of Census data): the evidence suggests that these rates represent long-term norms.
22. Nevertheless, it is still important to recognise that the mid-year estimates suggest that annual migration rates may have increased from 2005-06 onwards and that an annual gain of around 2,100 persons may represent a new long-term norm. It is therefore sensible for the Councils to consider the potential impact of higher migration rates being sustained over the 22-year period 2011-33.
23. The ONS mid-year estimates suggest that the population across the HMA increased from 402,700 persons in 2005 to 444,900 persons in 2015, and overall increase of 42,200 persons over the 10-year period. During the period, there were 52,400 births and 35,200 deaths recorded; therefore, natural change accounted for 17,200 persons and the remaining 25,000 increase must be associated with net migration. This represents an annual average of 2,500 persons, which is higher than the 2,100 identified as a possible new long-term norm; so projections based on these rates will need to be considered in this context.

24. Future migration trends may also be affected by the UK leaving the EU; and whilst it is currently unclear what arrangements might be put in place to restrict immigration, the likely implications for the OAN of any future decisions will need to be kept under review. Nevertheless, it is important to recognise that the ONS 2014-based SNPP already project that net international migration to England will reduce from 304,700 persons in 2014-15 to 169,500 per year from 2020-21 onwards; so rates would need to be lower than this for the population and associated household projections to reduce.

## Updating the SHMA household projections

25. The projected increase in households across the West Essex and East Hertfordshire HMA is summarised in Figure 6:
- » The upper section of the table summarises the original SHMA analysis, with migration trends established using Census data and household projections based on rates from the CLG 2012-based data;
  - » The lower section of the table presents the outcome from the latest analysis, with migration trends established using Mid-Year Estimate data for the period 2005-15 and household projections based on rates from the CLG 2014-based data.
26. Figure 6 also provides an estimate of dwelling numbers, which takes account of vacancies and second homes based on the proportion of dwellings without a usually resident household identified by the 2011 Census. This identified a rate of 3.0% for East Hertfordshire, 4.5% for Epping Forest, 3.2% for Harlow and 4.7% for Uttlesford. The rate was 3.8% across the West Essex and East Hertfordshire HMA as a whole.
27. It is evident that the latest assumptions increase the projected household growth from 36,899 households (as identified by the SHMA) to 43,759 households over the 22-year period 2011-33; an increase of 6,860 households (equivalent to an uplift of 18.6%).

**Figure 6: Projected households and dwellings over the 22-year period 2011-33 for West Essex and East Hertfordshire**  
(Note: Dwelling numbers derived based on proportion of dwellings without a usually resident household in the 2011 Census. Data may not sum due to rounding)

Scenario	Households				Dwellings			
	2011	2033	Net change 2011-33	Average annual change	2011	2033	Net change 2011-33	Average annual change
<b>MIGRATION BASED ON CENSUS 2001-2011 with CLG 2012-BASED HOUSEHOLD RATES</b>								
East Hertfordshire	56,813	70,086	<b>13,272</b>	603	58,600	72,290	<b>13,690</b>	622
Epping Forest	52,093	61,089	<b>8,996</b>	409	54,540	63,958	<b>9,418</b>	428
Harlow	34,701	39,455	<b>4,754</b>	216	35,835	40,745	<b>4,910</b>	223
Uttlesford	31,579	41,456	<b>9,877</b>	449	33,138	43,503	<b>10,365</b>	471
<b>TOTAL</b>	<b>175,186</b>	<b>212,086</b>	<b>36,899</b>	<b>1,677</b>	<b>182,113</b>	<b>220,495</b>	<b>38,382</b>	<b>1,745</b>
<b>MIGRATION BASED ON MYE 2005-2015 with CLG 2014-BASED HOUSEHOLD RATES</b>								
East Hertfordshire	56,813	72,506	<b>15,696</b>	713	58,600	74,789	<b>16,189</b>	736
Epping Forest	52,093	62,651	<b>10,568</b>	480	54,540	65,605	<b>11,065</b>	503
Harlow	34,701	41,008	<b>6,313</b>	287	35,835	42,355	<b>6,520</b>	296
Uttlesford	31,579	42,749	<b>11,181</b>	508	33,138	44,871	<b>11,733</b>	533
<b>TOTAL</b>	<b>175,186</b>	<b>218,915</b>	<b>43,759</b>	<b>1,989</b>	<b>182,113</b>	<b>227,620</b>	<b>45,507</b>	<b>2,068</b>

## Considering the Impact on Objectively Assessed Need

28. The “*starting point*” estimate for OAN is the CLG household projections, and the latest published data is the 2014-based projections for period 2014-39. These projections suggest that household numbers across the study area will increase by 50,697 over the 22-year period 2011-33, which represents 52,729 dwellings after taking account of transactional vacancies and second home ownership.
29. It is important to recognise that the CLG 2014-based household projections are based on the ONS 2014-based sub-national population projections (SNPP), which are informed by migration trends from the 5-year period 2009-14. In the context of the official data on migration trends for West Essex and East Hertfordshire being higher in more recent years, the projected population growth reflects this.
30. Nevertheless, the future projections are particularly sensitive to the period on which migration trends are based, and PAS advice to Local Authorities suggests that the official projections are “*very unstable*” and it is more appropriate to adopt a longer base period to establish robust migration trends. This view is echoed by academics and has been promoted by Planning Inspectors at numerous Local Plan Examinations. Furthermore, the Public Administration Select Committee has identified the Census as “*the only reliable source of data on migrant populations in local areas*”.
31. Given this context, the SHMA has developed independent household projections using a 10-year migration trend based on Census data. The specific method used has been supported previously at Examination, where it was noted that “*a 10 year period is a reasonable approach*” and “*the inter-censal period provides a readily understandable and robust check on the reasonableness of the average*”. On the basis of 10-year migration trends, the SHMA projected an increase of 36,899 households across the study area over the 22-year period 2011-33, an average of 1,677 per year. Nevertheless, it is reasonable to consider the potential impact of higher migration rates observed over the 10-year period 2005-15 being sustained over the 22-year period 2011-33. **This implies a higher rate of household growth: an overall increase of 43,759 households, equivalent to 1,989 households per year.**
32. The original SHMA analysis identified that the baseline household projections should be increased by 641 households to take account of **concealed families** and **homeless households** that would otherwise not be captured due to suppressed household formation rates. On this basis, the demographic projections identify a total increase of 44,400 households (based on migration trends from MYE data for the period 2005-15 and household rates from the CLG 2014-based data). This adjustment responds to identified un-met need for affordable housing and also addresses suppressed household formation rates. **Providing for an increase of 45,289 households would yield a baseline housing need of 46,174 dwellings over the 22-year period 2011-33, equivalent to an average of 2,099 dwellings per year.**
33. While demographic projections form the starting point for Objectively Assessed Need calculations, it is necessary to consider whether a higher rate of housing delivery may be needed to help address housing market problems. Further adjustments may be needed in response to balancing jobs and workers, market signals or any backlog of housing provision. However, it is important to recognise that these adjustments are not necessarily cumulative: it is necessary to consider them collectively.
34. Whilst the original SHMA concluded a need to increase housing delivery by 5,600 dwellings to provide enough workers for the likely increase in jobs in the area (taking account of the likely expansion of Stansted Airport), the higher migration rates now assumed already yield an increase of 39,100 economically active persons resident in the HMA, which aligns with the number of workers needed for the jobs growth previously identified – so an uplift for jobs would now only be required if the forecast jobs growth was also higher.

35. The original SHMA also proposed an uplift of 20% was proposed as an appropriate response to the market signal indicators, in particular house prices and affordability which were both considerably higher than national figures and had also been increasing at a faster rate. Inspectors elsewhere have considered 10% to be an appropriate response to “moderate” pressures in areas where the indicators were notably lower than those in the West Essex and East Hertfordshire HMA. This uplift included the increase of 667 dwellings to take account of concealed families and homeless households not captured by the household projections. An uplift of 20% would yield an extra 9,101 dwellings, which would include 667 dwellings previously mentioned – **so a further 8,434 dwellings would need to be included.**
36. As the SHMA fully considered the unmet needs of homeless and other households living in unacceptable accommodation that will exist at 2011 and identified all needs arising over the 22-year period 2011-33, **there will be no ‘backlog’ of additional unmet need for housing to be counted at the start of new Plan periods that start in 2011.**
37. On this basis, the baseline housing need of 46,174 dwellings could be increased by up to 8,434 dwellings based on the additional uplift needed in response to market signals. **This would yield an overall total of 54,608 dwellings over the 22-year period 2011-33.** This would represent an uplift of 20% on the baseline household projections using migration rates from the MYE for the period 2005-15.
38. Figure 7 summarises each of the stages for establishing the Full Objectively Assessed Need for Housing across the West Essex and East Hertfordshire HMA over the 22-year period 2011-33.

Figure 7: Full Objectively Assessed Need for Housing across West Essex and East Hertfordshire HMA 2011-33

Stage		Original SHMA Assessment	OAN Update
<b>HOUSEHOLDS</b>			
Demographic starting point: CLG 2014-based household projections 2011-33		49,638	50,697
Adjustment for local demographic factors and migration trends 10-year migration trend		-12,739	-6,938
Baseline household projections taking account of local circumstances		36,899	43,759
<b>DWELLINGS</b>			
Housing need based on household projections taking account of local circumstances		38,382	45,507
Adjustment for suppressed household formation rates Concealed families and homeless households with allowance for vacancies		641 + 26 = 667	641 + 26 = 667
Baseline housing need based on demographic projections		39,049	46,174
Further adjustments needed...	In response to balancing jobs and workers Projected growth in workers exceeds forecast jobs growth and planned jobs growth therefore no further adjustment needed	5,600	-
	In response to market signals Dwellings needed (in addition to the adjustment for concealed families and homeless households) to deliver the overall percentage uplift proposed	20% x 38,382 = 7,676 7,676 - 667 = 7,009	20% x 45,507 = 9,101 9,101 - 667 = 8,434
Combined impact of the identified adjustments		+7,009	+8,434
Full Objectively Assessed Need for Housing 2011-33		46,058	54,608

39. Whilst the OAN identified by the SHMA will be a key part of the evidence base, the Local Plans will be the mechanism through which the SHMA evidence will be assessed against environmental and policy constraints, such as Green Belt, to identify a sustainable and deliverable plan requirement. The Local Plans will also consider the most appropriate spatial distribution for the OAN across the functional housing market area for West Essex and East Hertfordshire.



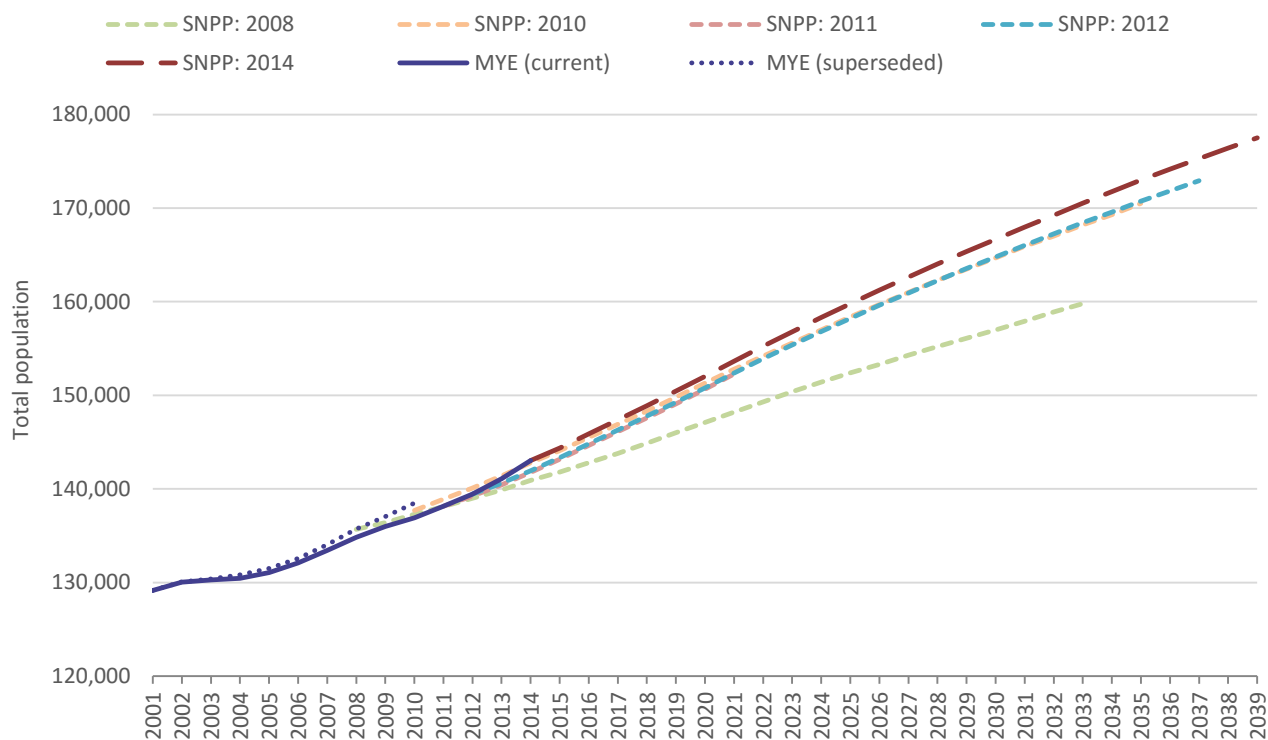
40. Nevertheless, it is possible to establish the OAN for each individual local authority area in the same way as it has been established for the housing market area as a whole. Whilst this may not represent the most appropriate spatial distribution for meeting the OAN, it provides a reasonable starting point for the process:
- » The demographic starting point for each local authority area is published by CLG;
  - » The adjustment for migration trends is based on ONS data published for each local authority area that identifies the difference in net migration between the 5-year period 2009-14 used for the CLG starting point and the 10-year period 2005-15 used for the updated SHMA household projections;
  - » The conversion from households to dwellings is based on Census data on the number of household spaces without any usual residents published for each local authority area;
  - » The adjustment for suppressed household formation rates is based on Census data on concealed families and CLG data on homelessness that is published for each local authority area;
  - » The further adjustment in response to market signals is based on an uplift of 20% across the housing market area, applied to the relevant local data.
41. Figure 8 summarises each of the stages for establishing the Full Objectively Assessed Need for Housing in each local authority in the West Essex and East Hertfordshire HMA over the 22-year period 2011-33.

**Figure 8: Full Objectively Assessed Need for Housing by local authority 2011-33**

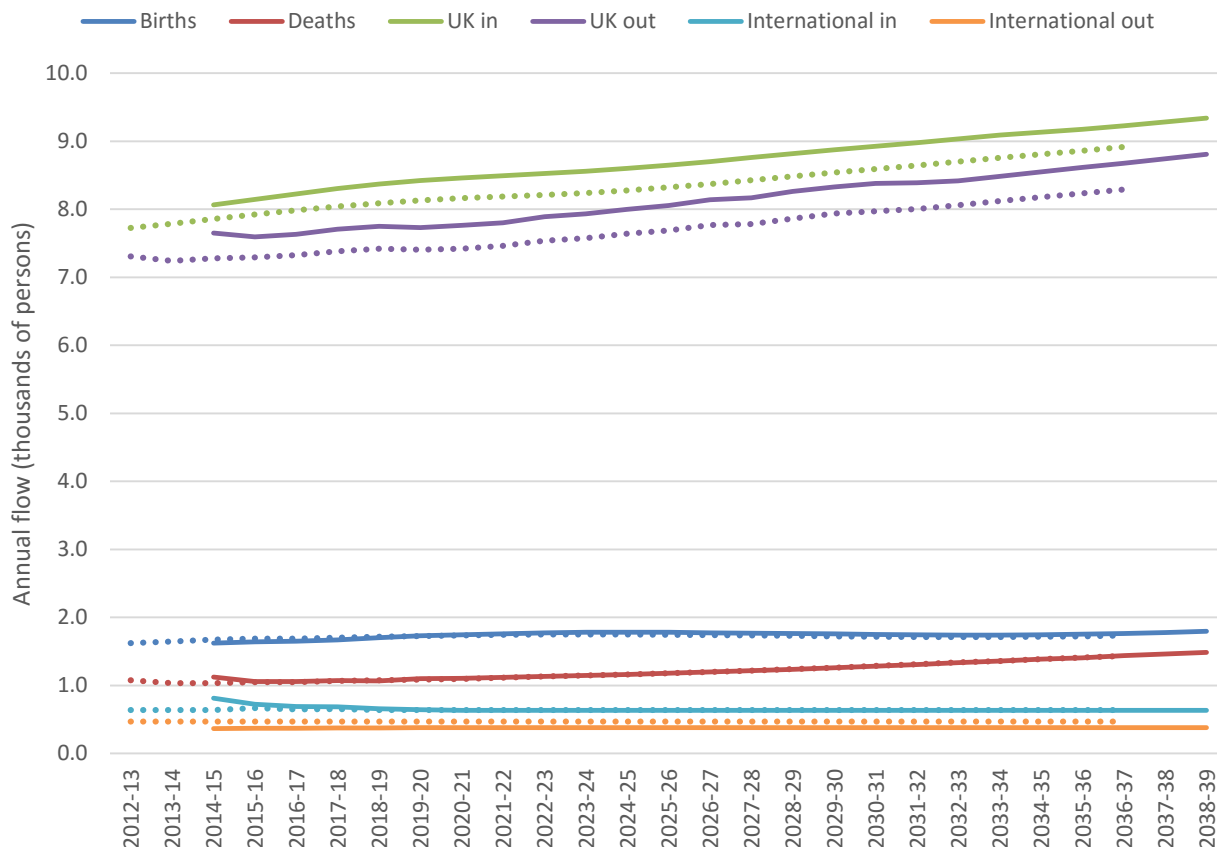
Stage		OAN Update			
		East Herts	Epping Forest	Harlow	Uttlesford
<b>HOUSEHOLDS</b>					
<b>Demographic starting point:</b> CLG 2014-based household projections 2011-33		<b>17,243</b>	<b>14,374</b>	<b>7,653</b>	<b>11,427</b>
<b>Adjustment for local demographic factors and migration trends</b> 10-year migration trend		-1,547	-3,806	-1,340	-246
<b>Baseline household projections taking account of local circumstances</b>		<b>15,696</b>	<b>10,568</b>	<b>6,313</b>	<b>11,181</b>
<b>DWELLINGS</b>					
<b>Housing need based on household projections taking account of local circumstances</b>		<b>16,189</b>	<b>11,065</b>	<b>6,520</b>	<b>11,733</b>
<b>Adjustment for suppressed household formation rates</b> Concealed families and homeless households with allowance for vacancies		169 + 5 = 174	173 + 8 = 181	167 + 6 = 173	132 + 7 = 139
<b>Baseline housing need based on demographic projections</b>		<b>16,363</b>	<b>11,246</b>	<b>6,693</b>	<b>11,872</b>
<b>Further adjustments needed...</b>	<b>In response to balancing jobs and workers</b> Projected growth in workers exceeds forecast jobs growth and planned jobs growth therefore no further adjustment needed	-	-	-	-
	<b>In response to market signals</b> Dwellings needed (in addition to the adjustment for concealed families and homeless households) to deliver the overall percentage uplift proposed	<b>20% x 16,189</b> = 3,238 3,238 - 174 = 3,064	<b>20% x 11,065</b> = 2,213 2,213 - 181 = 2,032	<b>20% x 6,520</b> = 1,304 1,304 - 173 = 1,131	<b>20% x 11,733</b> = 2,347 2,347 - 139 = 2,208
<b>Combined impact of the identified adjustments</b>		<b>+3,064</b>	<b>+2,032</b>	<b>+1,131</b>	<b>+2,208</b>
<b>Full Objectively Assessed Need for Housing 2011-33</b>		<b>19,427</b>	<b>13,278</b>	<b>7,824</b>	<b>14,080</b>

## Comparison of ONS 2014-based and 2012-based SNPP for East Hertfordshire

ONS mid-year population estimates and sub-national population projections (Source: ONS)

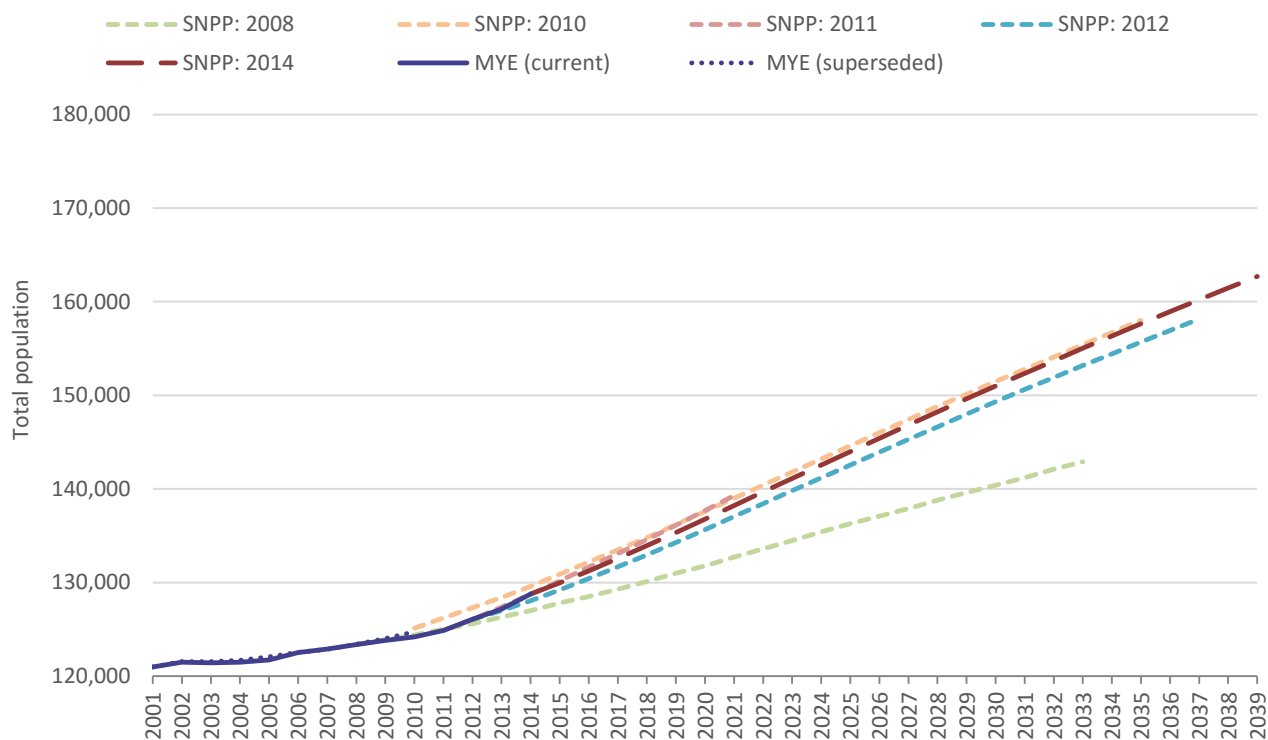


Components of population change (Source: ONS. Note: 2014-based SNPP: solid line; 2012-based SNPP: dotted line)

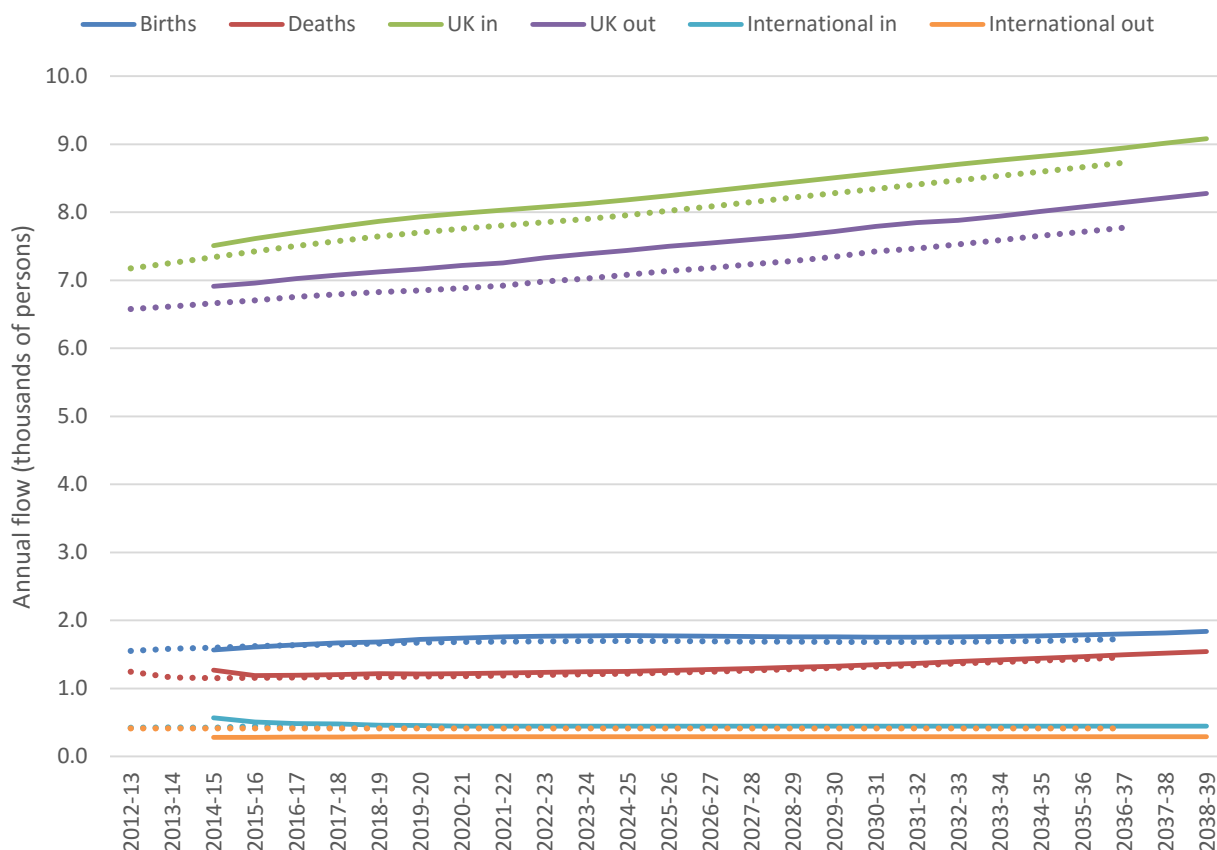


## Comparison of ONS 2014-based and 2012-based SNPP for Epping Forest

ONS mid-year population estimates and sub-national population projections (Source: ONS)

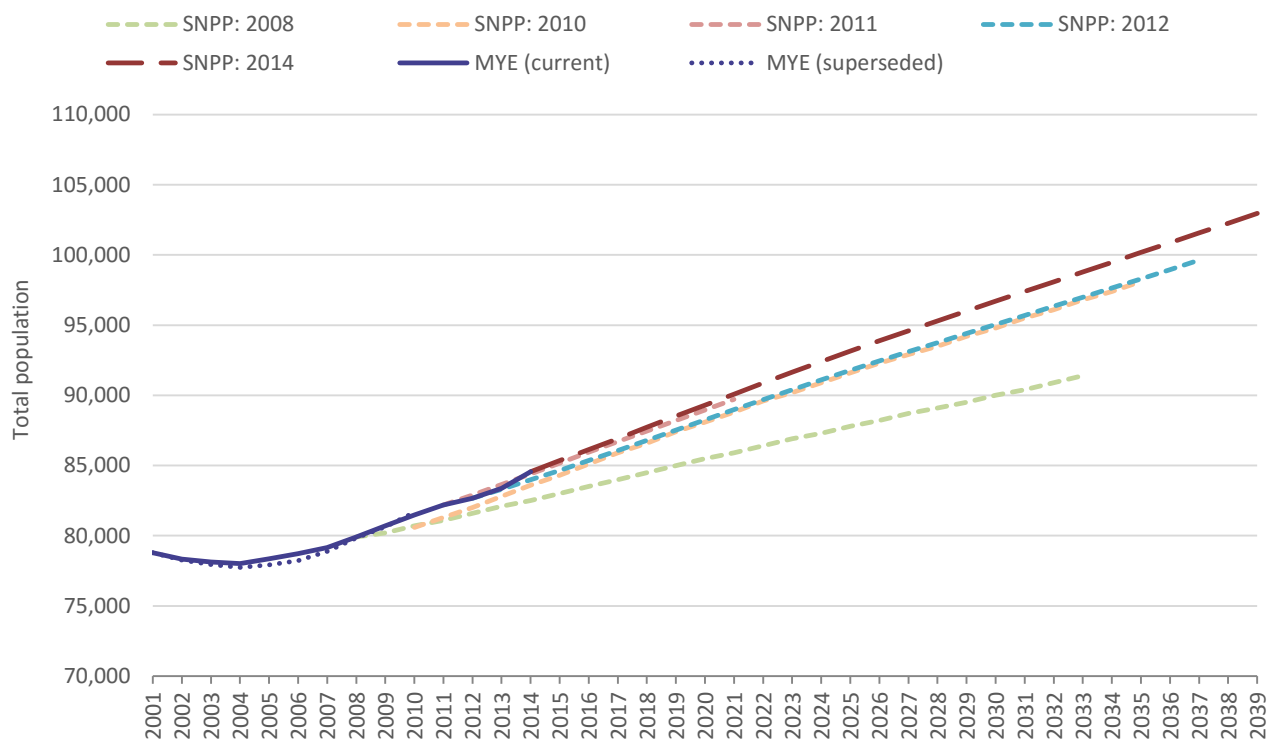


Components of population change (Source: ONS. Note: 2014-based SNPP: solid line; 2012-based SNPP: dotted line)

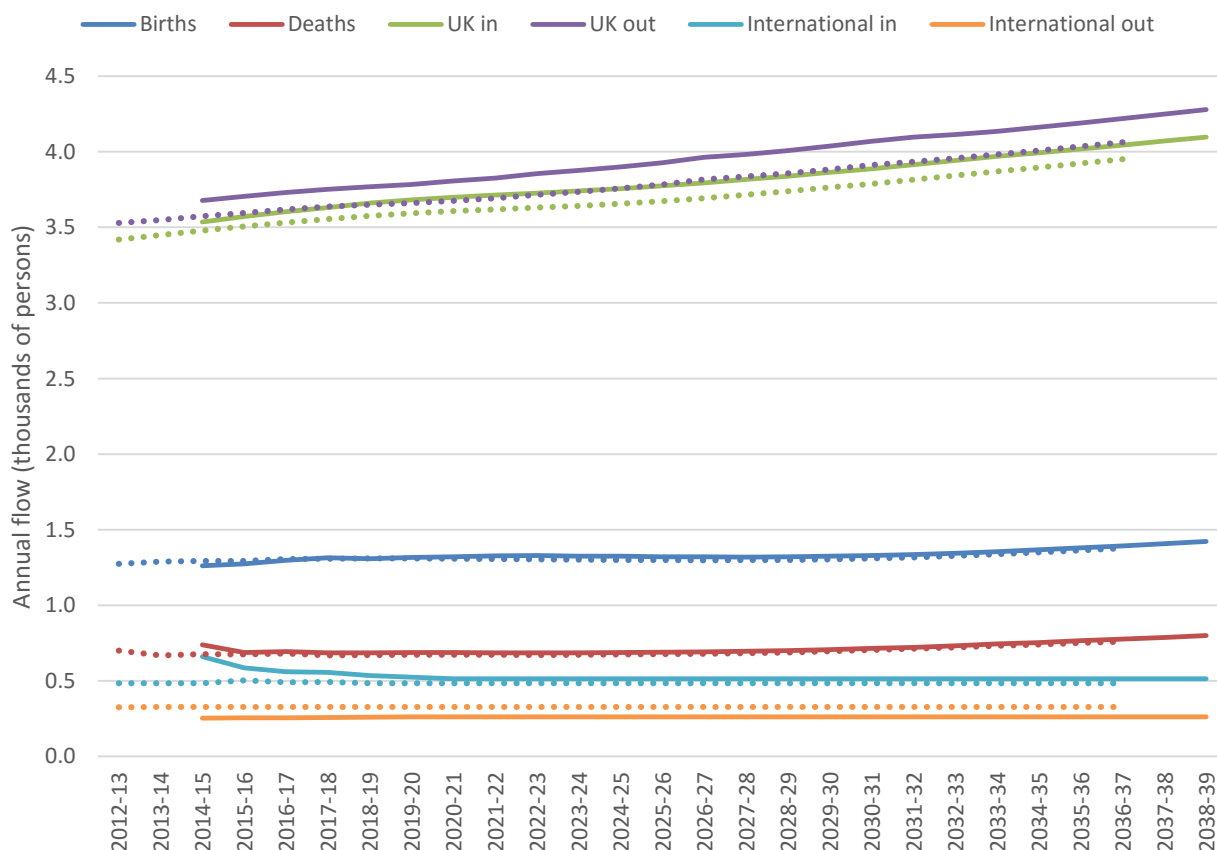


## Comparison of ONS 2014-based and 2012-based SNPP for Harlow

ONS mid-year population estimates and sub-national population projections (Source: ONS)

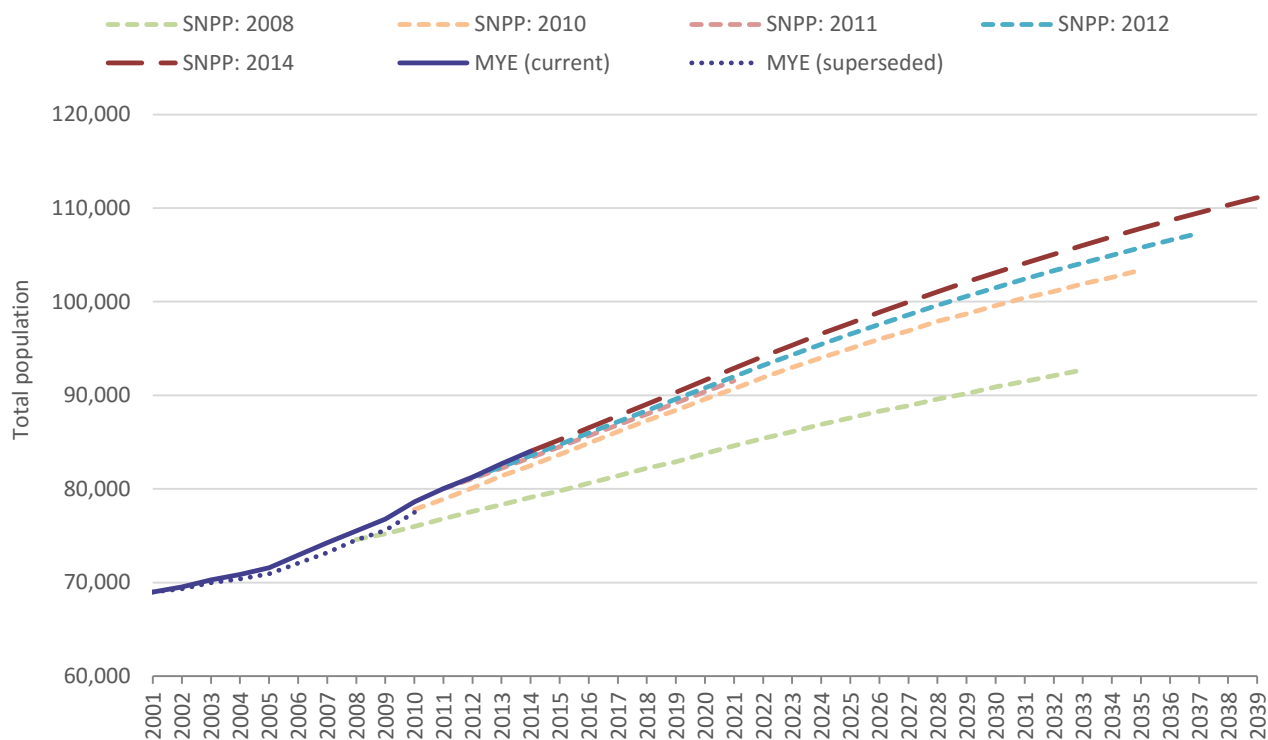


Components of population change (Source: ONS. Note: 2014-based SNPP: solid line; 2012-based SNPP: dotted line)



## Comparison of ONS 2014-based and 2012-based SNPP for Uttlesford

ONS mid-year population estimates and sub-national population projections (Source: ONS)



Components of population change (Source: ONS. Note: 2014-based SNPP: solid line; 2012-based SNPP: dotted line)

