

# ***Supplementary Committee Agenda***



**Epping Forest  
District Council**

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## ***Cabinet Monday, 2nd December, 2013***

**Place:** Council Chamber  
Civic Offices, High Street, Epping

**Time:** 7.00 pm

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**13. LOCAL PLAN EVIDENCE BASE - UPDATED POPULATION FORECASTING  
WORK AND STRATEGIC HOUSING MARKET ASSESSMENT (Pages 3 - 102)**

(Planning Portfolio Holder) The attached documents are background papers for this report (C-060-2013/14).

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# Population and household forecasts

2013

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## Acknowledgements

Demographic statistics used in this report have been derived from data from the Office for National Statistics licensed under the Open Government Licence v.1.0.

*The authors of this report do not accept liability for any costs or consequential loss involved following the use of the data and analysis referred to here, which are entirely the responsibility of the users of the information presented in this report.*

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# Executive Summary

## Requirements

- E1. As it formulates its Local Plan, Epping Forest District Council has sought to update the supporting demographic evidence, with the development of a suite of population, household and housing forecasts which incorporate the latest demographic data from:
- 2011 Census statistics on population and households
  - Revised mid-year population estimates for the period 2002–2010 (ONS)
  - 2011-based household projections for 2011–2021 (CLG)
- E2. This report has presented the suite of alternative growth scenarios using POPGROUP technology. They evaluate trend, policy and economic considerations; they are accompanied by a transparent definition of key assumptions; and they are presented in a consistent format that contrasts the impact of scenario assumptions upon changes to population, households, dwellings, labour force and jobs. All scenarios have been run from a 2011 base year, with a 2026 and 2033 horizon. Historical data has been included for 2001–2010.

## Outcomes

- E3. The latest demographic evidence has provided a timely update to Epping Forest District's population profile, aligning the new 2011 Census total with an historical time series back to 2001. The new demographic evidence has enabled the development of alternative 2011-based trend projections that consider the potential future impact of migration. These provide an important update to ONS' 2010-based and 2011-based projections.
- E4. Five-year and ten-year historical perspectives have been used to set migration assumptions in the trend scenarios. The 5-year alternative suggests a higher growth forecast than the 10-year, reflecting the increase in net in-migration to Epping Forest District since 2007.
- E5. Dwelling-led and jobs-led growth alternatives have been developed to contrast directly to official forecasts and the updated trend forecasts.

- E6. The analysis of scenario outcomes is complicated by the 'choice' of appropriate headship rates with which household (and dwelling) growth is estimated. The latest 2011-based rates have been calibrated after a period of unprecedented economic change and stagnation in the housing market and thus suggest a slower rate of household formation than the previous 2008-based rates, calibrated from data collected in a time period with very different market characteristics. Outcomes from each are presented here for comparison.

*Epping Forest District: scenario summary*

Scenario	Dwellings per year 2011-2033		
	Option A CLG 2011-trend	Option B CLG 2008	Average
SNPP-2010	698	741	719
Employment_Historical Trend Plus 10%	575	628	602
Employment_Historical Trend	556	609	582
Approved RSS Pure - R	455	455	455
Approved RSS Realistic - R	454	454	454
Mig-led 10yrs Zero Int Migration	360	401	381
Mig-led 5yrs	358	400	379
Draft Review RSS Realistic - R	365	365	365
Draft Review RSS Pure - R	360	360	360
Mig-led 10yrs	311	353	332
Mig-led 10yrs-5yrs	302	344	323
NetNil	240	273	257

Option A: CLG 2011-based headship rates

Option B: CLG 2008-based headship rates

## Recommendations

- E7. The scenario evidence presented here has provided an important update to Epping Forest District's demographic intelligence. The District Council should give particular consideration to the longer-term impacts of migration, both internal and international and its influence upon future housing growth.
- E8. It is recommended that Epping Forest District Council evaluates the robustness of its underlying economic forecast, which suggests consistent employment growth in conjunction with an ageing population and a shrinking labour force. Higher net in-migration and a higher housing requirement is the consequence of this scenario.

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- E9. In relation to future household formation, due consideration should be given to both Option A (2011-based household model) and Option B (2008-based household model) scenarios. The Option A scenarios may be driven by assumptions calibrated from a period of slower rates of household formation, but these conditions are likely to continue, certainly in the short term.
- E10. As it formulates its Local Plan using the evidence presented here, Epping Forest District Council should continue to cooperate with its neighbouring authorities, to consider the important migration and economic exchanges between these areas and the likely impact upon housing growth in the district.

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## 2. Introduction

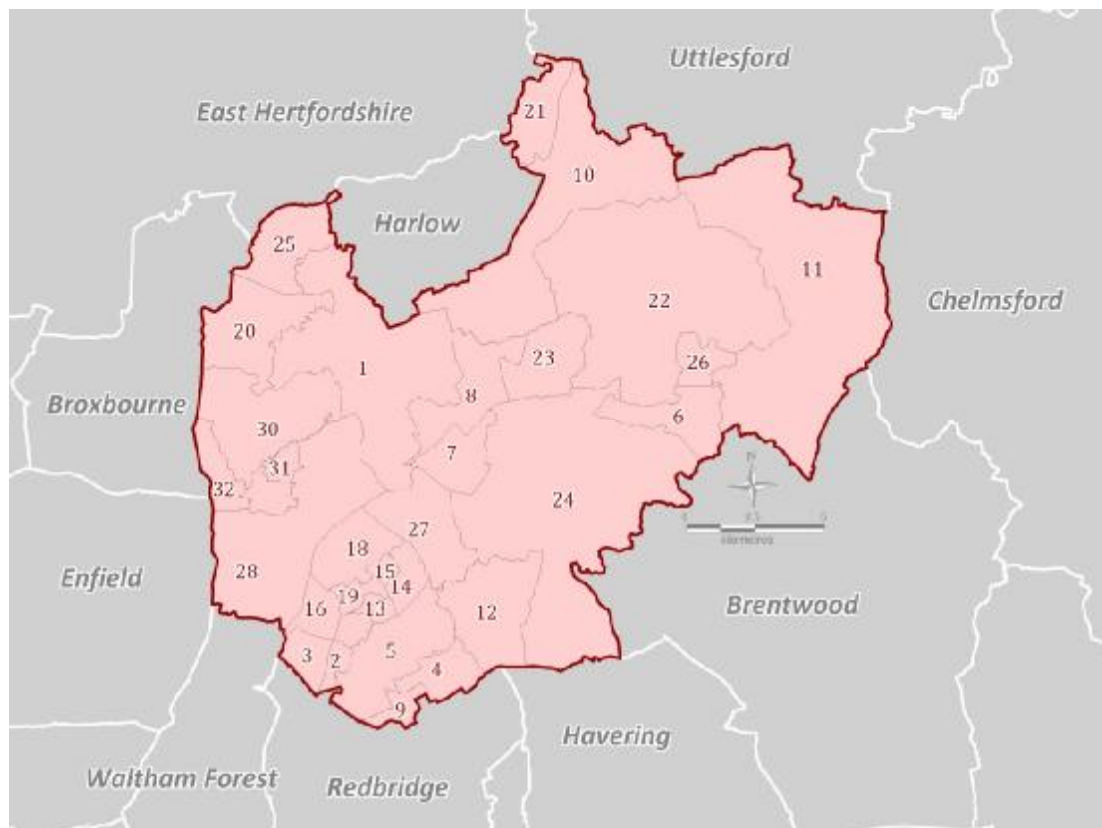
### Requirements

- 2.1 Forecasts of population and household growth provide a critical input to the development of housing growth targets within Local Plans. For Epping Forest District Council (EFDC), the importance and sensitivity of these data has been reflected in the Issues & Options Consultation on the Local Plan.
- 2.2 With a concern over the robustness of previous official population projections from the Office for National Statistics (ONS) and with the release of a range of new demographic evidence, EFDC is seeking to obtain an up-to-date assessment of likely population and household growth, with due consideration for a range of demographic, economic and policy factors.
- 2.3 This new evidence is required to support the development of EFDC's Local Plan; to establish a position on future population and housing growth that can be balanced against other issues such as planning constraints and land availability, and that meets the request of the National Planning Policy Framework (NPPF) for an objective assessment of housing need.

### This analysis

- 2.4 This report uses the latest demographic evidence to deliver a review of demographic change in Epping Forest District between 2001-2011 and to present a suite of alternative growth forecasts from which EFDC can consider its Local Plan housing options.
- 2.5 Historical context is provided at both district level and for smaller, ward geographies (Figure 1). Forecasts are presented for the district as a single geographical area, with the forecast horizon running to 2033.
- 2.6 The forecasting analysis incorporates the latest 2011 Census statistics on population and households, revised mid-year population estimates (MYE) for 2002-2010 and the latest household projection model from Communities and Local Government (CLG).
- 2.7 The suite of growth forecasts considers new trend projections in contrast to previous official projections and assesses the impact of a number of dwelling-led and employment-led growth

alternatives. All growth scenarios are assessed in terms of their impact upon population, households, dwellings, the labour force and likely job numbers.



Reference	Ward Name	Reference	Ward Name
1	Broadley Common, Epping Upland and Nazeing	17	Loughton Roding
2	Buckhurst Hill East	18	Loughton St John's
3	Buckhurst Hill West	19	Loughton St Mary's
4	Chigwell Row	20	Lower Nazeing
5	Chigwell Village	21	Lower Sheering
6	Chipping Ongar, Greensted and Marden Ash	22	Moreton and Fyfield
7	Epping Hemnall	23	North Weald Bassett
8	Epping Lindsey and Thornwood Common	24	Passingford
9	Grange Hill	25	Roydon
10	Hastingwood, Matching and Sheering Village	26	Shelley
11	High Ongar, Willingale and The Rodings	27	Theydon Bois
12	Lambourne	28	Waltham Abbey High Beach
13	Loughton Alderton	29	Waltham Abbey Honey Lane
14	Loughton Broadway	30	Waltham Abbey North East
15	Loughton Fairmead	31	Waltham Abbey Paternoster
16	Loughton Forest	32	Waltham Abbey South West

**Figure 1: Epping Forest District: Geographical context**  
*Contains Ordnance Survey data © Crown copyright and database right 2012*

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## Forecasting Methodology

- 2.8 Demographic forecasts have been developed using the POPGROUP suite of products. POPGROUP is a family of demographic models which enables forecasts to be derived for population, households and the labour force, for areas and social groups.
- 2.9 POPGROUP models are used extensively by local authorities across the UK, providing a desktop utility for the evaluation of alternative growth scenarios to support local planning. Under licence to the Local Government Association (LGA), Edge Analytics provides product development and technical support to the product suite and its user base.
- 2.10 Appendix A provides a summary overview of the POPGROUP model methodology. More detail can be found online at <http://www.popgroup.org.uk/>.

## Report Structure

- 2.11 Section 5 provides an update on the latest demographic evidence for Epping Forest District including 2011 Census statistics, mid-year population estimate revisions and the latest household model assumptions.
- 2.12 Section 4 extends this analysis with a summary examination of the historical trends in internal and international migration that have affected population change in Epping Forest District and that influence its growth projections.
- 2.13 Section 5 provides a profile of historical (2001 - 2011) demographic change for Epping Forest District using ward geographies. The components of population change (births, deaths, and migration) are analysed alongside changes due to housing growth.
- 2.14 Section 6 defines the range of growth scenarios which are developed and tested for Epping Forest District. These scenarios include official forecasts, trend-based, dwelling-led and employment-led alternatives.
- 2.15 Section 7 provides illustration and commentary on the impacts of each scenario upon changes to population, households, dwellings, labour force and jobs growth.
- 2.16 Section 8 represents a concluding section which summarises the evidence and makes a number of recommendations for Epping Forest District Council to consider as it formulates its Local Plan.

### 3. Updating the Demographic Evidence

#### Headline Change 2001-2011

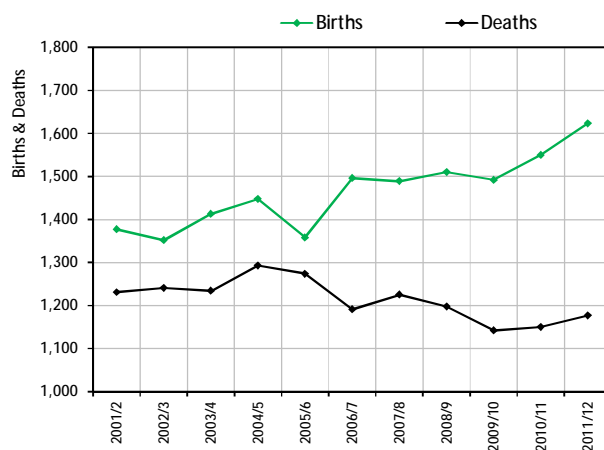
- 3.1 The 2011 Census has provided an updated and definitive view of the population of Epping Forest District. Since 2001, the population of Epping Forest District has increased by an estimated 3,728 people; a 3.1% increase from a population total of approximately 121,000 in 2001 to a total of 124,700 in 2011 (Table 1). Census evidence suggests that the rate of increase in dwelling numbers has exceeded population growth. A 4.7% growth in dwellings has resulted in an additional 2,400 properties over the decade.

Table 1: Epping Forest District: Census summary of demographic change, 2001 – 2011

	(000s)			%
	2001	2011	Change	Change
Population	121.0	124.7	3.7	3.1
Communal Establishment Population	0.7	1.0	0.3	
Dwellings	51.8	54.2	2.4	4.7

Source: 2001 and 2011 Census.

- 3.2 Since 2001, the annual number of births recorded in Epping Forest District has risen, reaching its highest level of 1,623 in the very latest year for which statistics are available, 2011/12. In contrast, the recorded number of deaths has declined, to 1,177 in 2011/12 (Figure 2). Natural change (the difference between births and deaths) has become an increasingly important component of population growth over the decade.



Source: ONS

Figure 2: Epping Forest District: Births and deaths 2001/2002 – 2010/2011

- 3.3 A population pyramid by age and sex illustrates the extent to which population growth has been distributed across the age-groups and the degree to which the movement of large birth cohorts have affected the changing age profile (Figure 3).

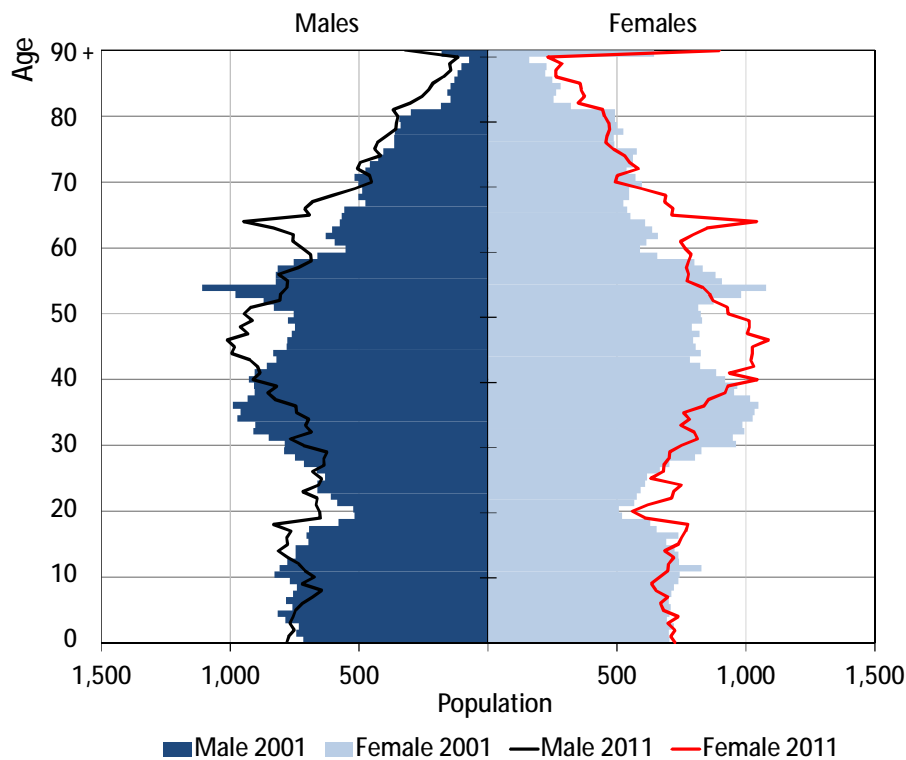
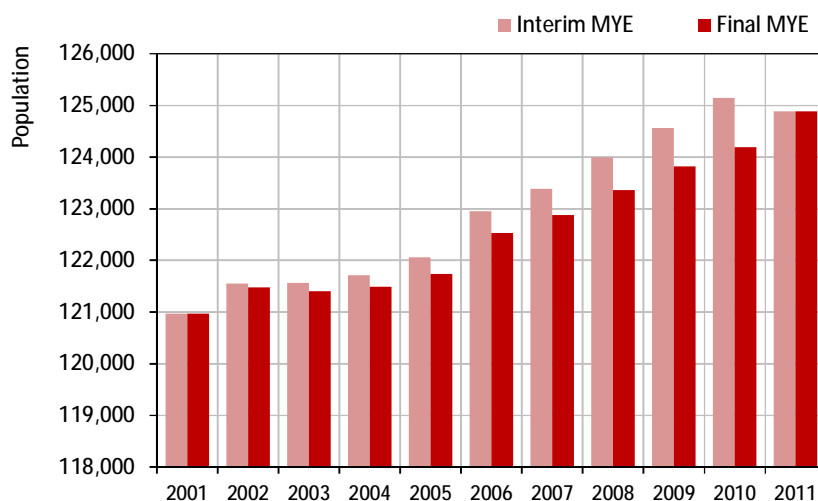


Figure 3: Epping Forest District: Changing age profile of the population, 2001 - 2011

- 3.4 The colour coding of the age pyramid illustrates where population has increased since 2001 (blue bars) and where population numbers have declined (red bars). The majority of the changes reflect the 'ageing' of the resident population over the decade, with those aged 30-40 in 2001 becoming the 40-50 age-group in 2011. The movement of the post -World War Two baby boom cohort is most evident, with a spike in the 55 year-old age group in 2001 becoming a 65 year-old spike in 2011.
- 3.5 Population ageing is a particularly important consideration for Epping Forest District as the next 20 years will see a reduction in the size of the resident labour force as the large birth cohorts of the 1950s and 1960s move beyond retirement. Retaining its young adult population or replenishing it through net inward migration is a key consideration for the district in meeting future economic and demographic growth aspirations.

## Mid-Year Estimate revisions

- 3.6 In May 2013, ONS published its revised mid-year population estimates, which align the 2002-10 populations with the latest 2011 data. These new data have recalibrated the 'components of change' to ensure the correct transition of the age profile of the population over the 2001–2011 decade, taking into account births, deaths, internal migration and international migration.
- 3.7 The 2011 Census count suggested that the previous mid-year population estimates for Epping Forest District (2002-2010) had resulted in a slight over-estimation of the ten-year growth trajectory (Figure 4). This has important implications when considering the 'components of change' that have driven historical growth, particularly migration and its impact upon the calculation of 'trend' projections for the District.



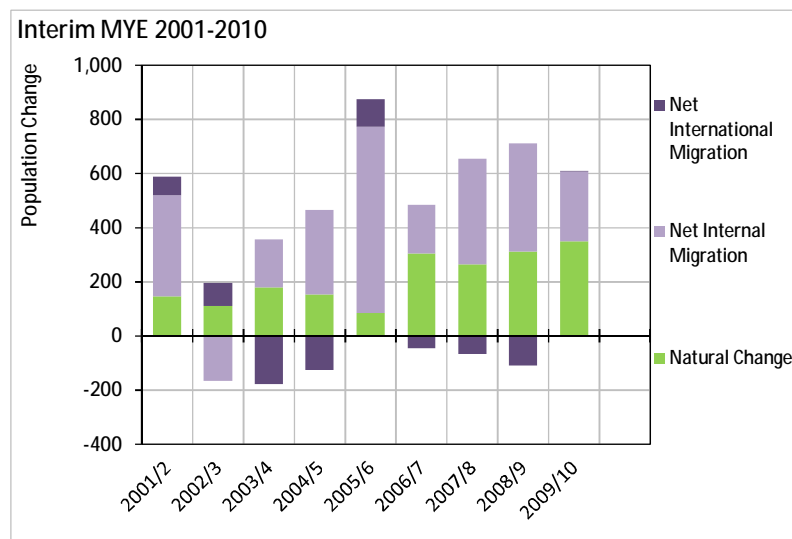
Source: ONS

Figure 4: Epping Forest District: Mid-year population change 2001 – 2011

- 3.8 Between successive censuses, births and deaths are accurately recorded in vital statistics registers and provide the most robust measure of 'natural change' (the difference between births and deaths) in a geographical area. Internal migration data are derived from GP registers, providing an accurate representation of inter-area flows, albeit with some issues with regard to potential under-registration in certain age-groups (young males, in particular). International migration is the most difficult component of population change to estimate with confidence.
- 3.9 On the assumption that births, deaths and internal migration have been robustly measured (and that the 2001 Census provided a robust population count for Epping Forest District), the 'adjustment' that resulted from the 2011 population is most likely to be associated with the mis-

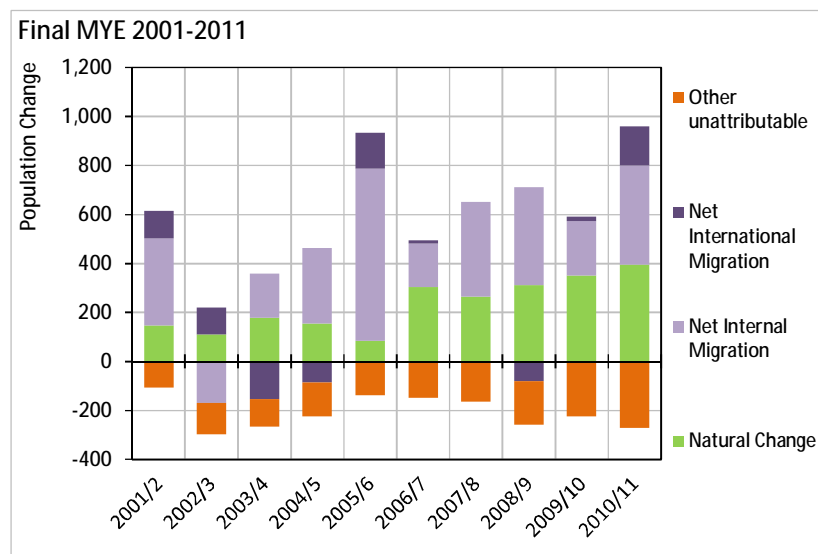
estimation of international migration; the balance between immigration and emigration flows to and from Epping Forest District.

- 3.10 ONS has recalibrated the components of change for Epping Forest District to ensure the correct age-profile of the population over the decade, taking account of natural change, internal migration and international migration. The 'before-and-after' profile of the components is presented, including the additional 2010/11 statistics that accompany the 2011 mid-year estimates (Figure 5; Figure 6).



Source: ONS

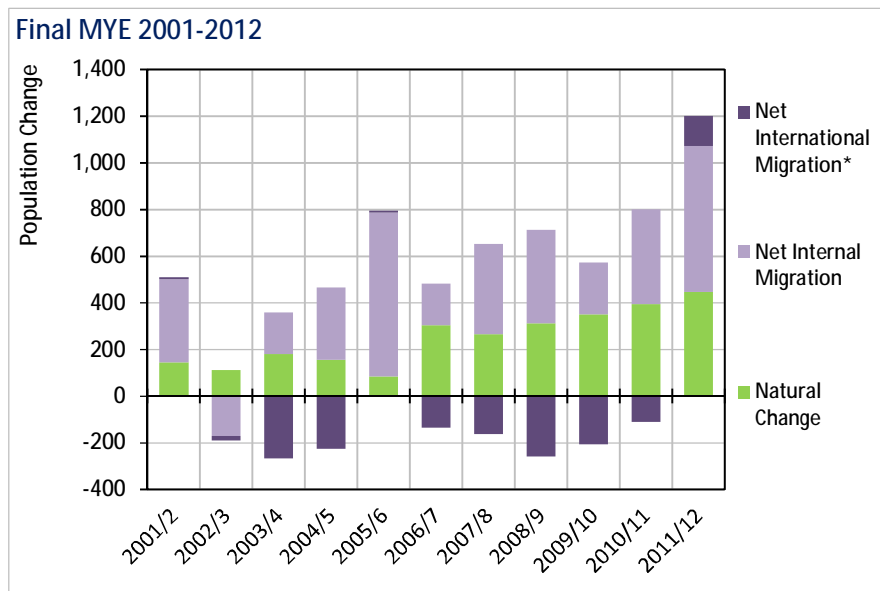
Figure 5: Epping Forest District: Components of population change, old mid-year estimates



Source: ONS

Figure 6: Epping Forest District: Components of population change, new mid-year estimates

- 3.11 The result of this recalibration is that birth and death totals (and therefore natural change) remain largely unchanged. Small changes to internal migration impacts are evident but not significant.
- 3.12 With regard to international migration, ONS has not explicitly assigned the MYE adjustment to international migration. Instead it has identified an additional 'other unattributable' component, suggesting it has not been able to accurately identify the source of the 2001-2011 overcount.
- 3.13 The forecasting analysis presented in this report assumes that the 'other unattributable' component of change is most likely associated with international migration. An alternative argument might be that the 2001 Census may have 'over-counted' Epping Forest District's 2001 population but this is unlikely and difficult to verify. Similarly, the 2011 Census may have 'under-counted' Epping Forest District's population but the 96% household response rate for the District suggests a robust enumeration process.
- 3.14 Assuming that mis-estimation of international migration is the main reason for the 2011 Census adjustment, the components of change which have determined Epping Forest District's population growth since 2001 are presented (Figure 7). This illustration includes the very latest evidence from the 2012 mid-year population and its estimated components of change for the year 2011/12.



Source: ONS

Figure 7: Epping Forest District: Components of population change, 2002 – 2011



- 3.15 These data suggest that natural change has become an increasingly important factor, supported by net growth through internal migration. These net increases have been balanced by a small net outflow due to international migration.
- 3.16 The re-calibration of the mid-year estimates presents international migration as having a negative impact upon Epping Forest District's population change, a net loss in each year 2003/4 to 2010/11. The latest 2012 mid-year estimate suggests a higher internal migration and natural change component and a small net growth due to international migration
- 3.17 There is clearly considerable uncertainty associated with the recalibration of population statistics, especially international migration as a component of change. Further evidence on both internal and international migration is presented in section 3, providing additional context for the scenario development in subsequent sections of this report.

## Household projections

- 3.18 In April 2013, CLG released its latest household projections for local authority districts in England, incorporating household data from the 2011 Census and underpinned by the 2011-based interim sub-national population projection from ONS.
- 3.19 Household projections are derived through the application of household headship rates (also referred to as 'household representative rates' in the CLG documentation). The projected household headship rates used in the 2011 household model have been derived using 2011 Census data in combination with statistics from the Labour Force Survey (LFS).
- 3.20 The new household projections replace the previous, 2008-based household projections. They provide an update on likely household growth trajectories, taking account of the unprecedented economic conditions that have affected local communities since 2008.
- 3.21 The new CLG household model provides an important update to the evidence base, with the general trend in the 2011-based projections suggesting a reduction in the rate of household growth from 2011-21, compared to previous projections.
- 3.22 Rates of household growth are determined by two factors: first, the profile and change in household headship rates by household type, age and sex; and second, the underlying rate of population growth.

- 3.23 The new CLG household model projections are underpinned by the interim 2011-based population projection (ONS). This projection uses 2011 Census statistics for its base period population, but uses assumptions from the 2010-based population projection to define its fertility, mortality and migration components of change. For this reason, the 2011-based population projections do not provide a suitably robust 'trend' projection of population growth.
- 3.24 In order to present an appropriate test of the 'sensitivity' of the new household headship rates upon future household growth, the ONS 2010-based sub-national population projection has been used in conjunction with 2008-based and 2011-based household headship rates. The population projection is scaled to match 2011 Census totals, following the 2010-based growth trend thereafter.
- 3.25 The impact of the 2011 headship rates is to reduce the scale of household growth over the 2011-21 period. Using the 2010-based population projection, scaled to the 2011 Census total, household numbers are projected to increase by just 12.1% using the 2011-based headship rates, compared to 13.0% with the 2008-based headship rates (Table 2).

Please note, this is only an illustration of the difference that using different headship rates makes, using the official 2010 ONS projections as an example. The final figure would depend on which scenarios were used (see pages 34-39)

**Table 2: Epping Forest District: Changing household numbers 2011-2021**

	Households			Change 2011-2021	
	2011	2016	2021	Total	%
2008-based headship rates	51,847	55,006	58,579	6,733	13.0%
2011-based headship rates	51,828	54,733	58,117	6,288	12.1%

Source: CLG; Edge Analytics. Results derived using SNPP-2010 population projection.

- 3.26 With a reduction in the projected rate of household formation, a higher average household size is maintained when applying the 2011-based headship rates; by 2021, the occupancy ratio in Epping Forest District using the 2008-based headship rates is 2.33, compared to a ratio of 2.35 when using the 2011-based headship rates (Table 3).

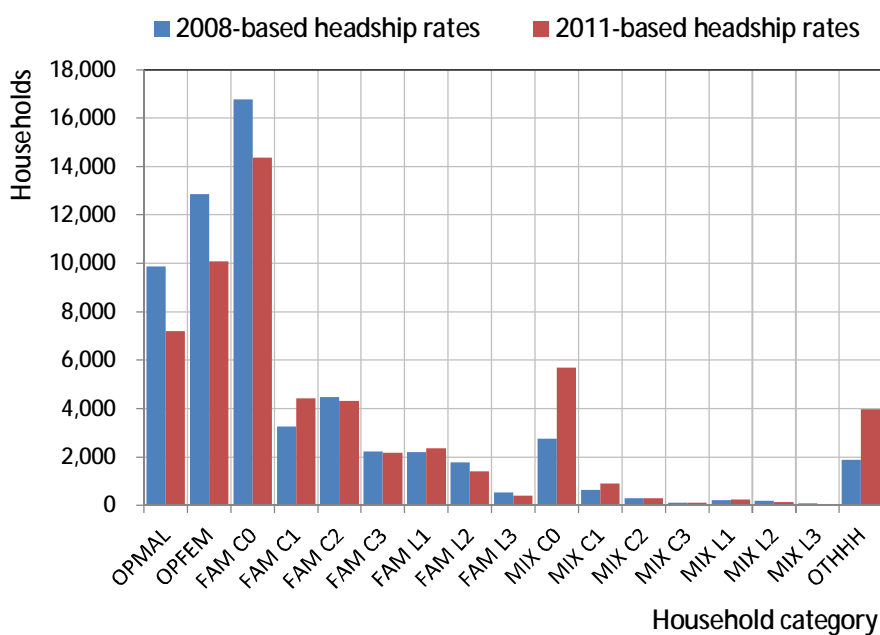
Please note, this is only an illustration of the difference that using different headship rates makes, using the official 2010 ONS projections as an example. The final figure would depend on which scenarios were used (see pages 34-39)

**Table 3: Epping Forest District: Changing household size 2011-2021**

	Population / Household		
	2011	2016	2021
2008-based headship rates	2.39	2.36	2.33
2011-based headship rates	2.39	2.37	2.35

Source: CLG; Edge Analytics. Results derived using SNPP-2010 population projection.

3.27 The revised 2011-based headship rates have had the most significant impact upon single-person households (OPMAL, OPFEM) and family households with no children (FAMC0). This has been slightly offset by increases in households comprising a couple and one or more other adults with no dependent children (MIXC0) and the miscellaneous 'Other' classification (Figure 8).



Source: CLG; Edge Analytics. Results derived using SNPP-2010 population projection.  
See Appendix B for a definition of household types.

**Figure 8: Epping Forest District: Impact of the 2011 headship rates on household growth (2011-21)**

## 4. Internal and International Migration

### Inflow, outflow and netflow - UK migration

- 4.1 In the development of official population projections, the pattern and level of internal migration observed over an historical period will typically provide the migration rate assumptions which drive the trend projections for individual local authorities. A five-year historical perspective is a typical time-period, although the unprecedented economic conditions of the last five years suggest that a longer-term view may be more appropriate in establishing a new trend projection for Epping Forest District.
- 4.2 Internal migration statistics are provided by the Patient Register Database Service (PRDS), tracking the movement of the population upon re-registration with a GP. This data is used by the ONS in its mid-year population estimates as the basis for estimating migrant flows between local authority areas. Data presented here relate to moves between local authorities within England and Wales during the period 2001/2 to 2010/11, excluding flows to and from Scotland and Northern Ireland.

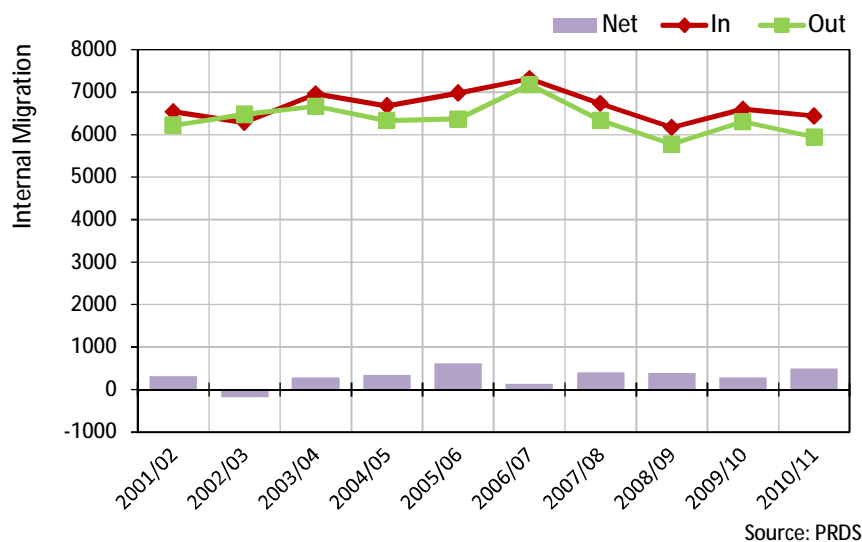


Figure 9: Epping Forest District: Internal migrant profile 2001/02 – 2010/11

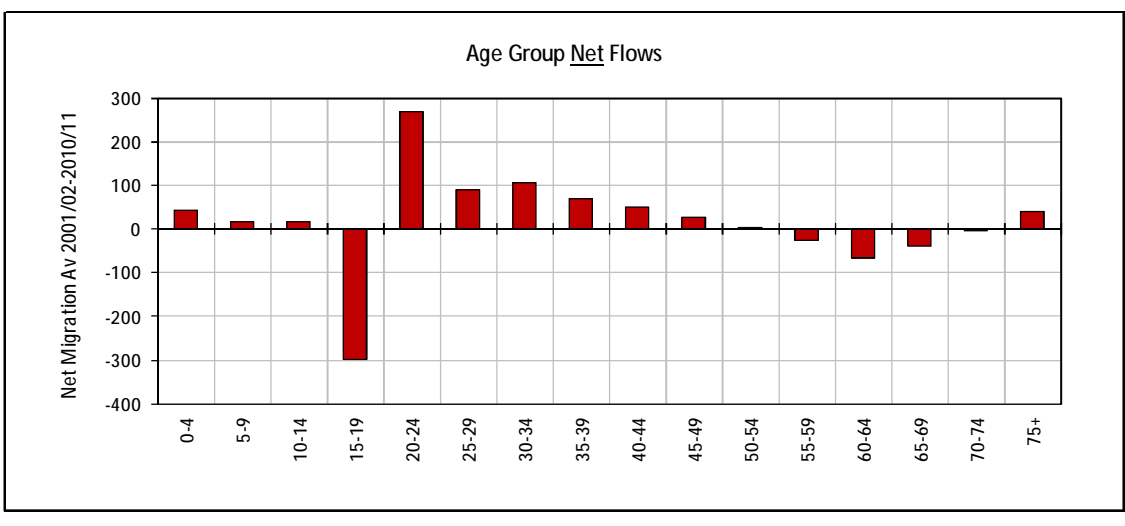
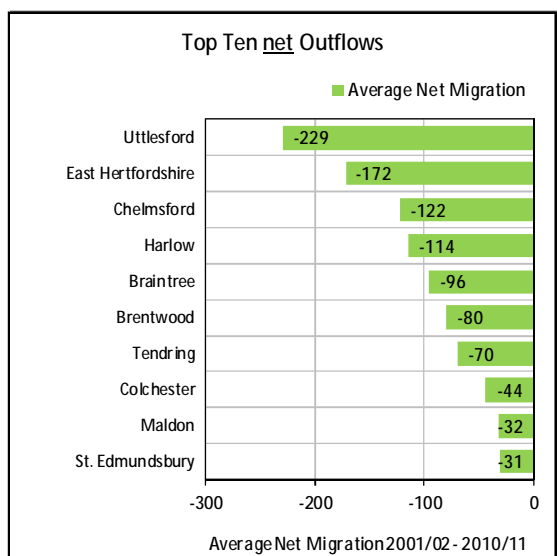
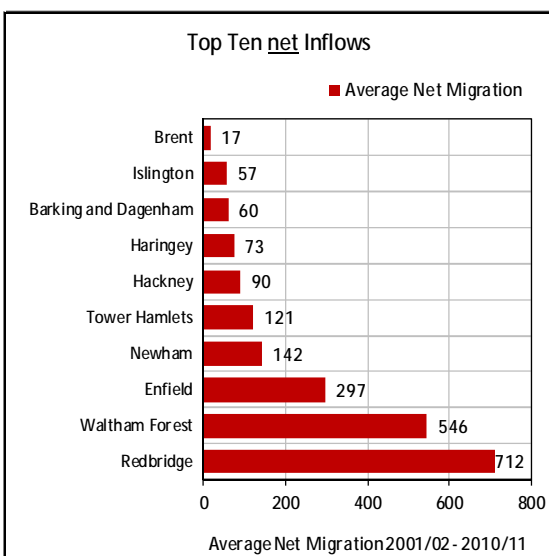
- 4.3 The internal migration profile of Epping Forest District is characterised by a large inflow (average +6,671 per year over the ten-year period) generally in excess of a large outflow (average +6,361 per year) to provide a small annual net growth (average +310 per year). In 2002/2003, out-

migration exceeded in-migration resulting in a net loss of migrants. In all other years there was a net gain through migration into Epping Forest District, with the largest inflow being approximately +610 persons in 2005/06 (Figure 9).

- 4.4 The evidence suggests that levels of both in- and out-migration increased over the first half of the decade, peaking in 2006/07, and generally declining thereafter. Despite this decline in gross flows, the net balance of inflow to Epping Forest District has been maintained.
- 4.5 The internal migration totals hide a complex mix of inflows and outflows from and to a large number of localities, across different age-groups. However, within this complexity there are some dominant trends (Figure 10).
- 4.6 The dominant feature of migration is the exchange between Epping Forest District and its immediate neighbours, particularly Redbridge. Whilst inflows and outflows are apparent with Redbridge and Waltham Forest, the overall balance has been a net gain to Epping Forest District, highest for the exchange with Redbridge (average 712 per year). In contrast, the exchange with Uttlesford and East Hertfordshire has resulted in an average net loss to Epping Forest District (-229 and -172 per year respectively).
- 4.7 Epping Forest District has a distinctive age structure to its internal migration profile with a large net outflow in the 15-19 age-group reflecting the movement of students to higher education. There is also a prominent net outflow associated with the groups around the retirement ages (55-69). A positive net-migration balance is associated with all other age groups.

**Epping Forest District: Breakdown of locations which Epping Forest District most commonly gains people from, and loses people to, through internal migration**

Top Ten Inflows		Top Ten Outflows	
average 2001/02-2010/11		average 2001/02-2010/11	
Redbridge	1,295	Redbridge	583
Waltham Forest	784	Harlow	434
Enfield	393	East Hertfordshire	367
Harlow	320	Uttlesford	321
Broxbourne	311	Broxbourne	295
East Hertfordshire	195	Waltham Forest	238
Newham	186	Chelmsford	207
Tower Hamlets	180	Brentwood	184
Havering	164	Havering	158
Hackney	126	Braintree	137

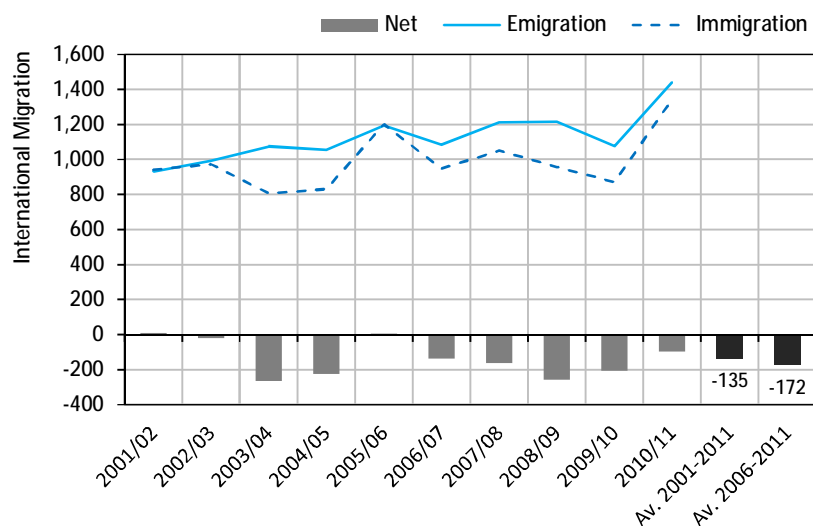


Source: PRDS

Figure 10: Epping Forest District – Internal migration profile, 2001/2–2010/11

## The balance of immigration and emigration

- 4.8 International migration is the most difficult component of demographic change to measure accurately. ONS mid-year population totals include estimates of immigration (migrants entering the UK) and emigration (migrants exiting the UK) that have been derived primarily from the International Passenger Survey (IPS), distributed to local authority areas based upon evidence from administrative data records. These data provide 'long-term' migration statistics on the population that is estimated to stay or leave the UK for more than 12 months duration.
- 4.9 The international migration estimation methodology has been subject to substantial revision by ONS during the last five years and resulted in the recalibration of immigration and emigration estimates for 2005/06–2009/10 and the publication of revised, 'indicative' mid-year population estimates for each local authority. These data have been superseded by the latest mid-year population estimate revisions which provide a consistent transition in the 'components of change' between successive censuses.
- 4.10 The revised international migration assumptions from the latest mid-year estimates of population for 2001–2011 include asylum seekers. For the analysis presented here, they also include the 'other unattributable' count from the ONS estimates, which contribute to annual population change but have not been assigned to any specific component. As births, deaths and internal migration are robustly recorded, it is assumed that international migration are the most likely sources of this 'other unattributable' count.
- 4.11 Over the period 2001/02 to 2010/11 emigration is estimated to have exceeded immigration in the majority of years, resulting in a negative impact of net international migration for Epping Forest District. The net impact of emigration was highest between 2006/07 and 2010/11 (Figure 11), a result of higher emigration estimates and low immigration.
- 4.12 In consideration of the assumptions which might drive an updated trend forecast for Epping Forest District, international migration averaged -135 persons per year over the 10-year period 2001/02 to 2010/11, decreasing to -172 for the 5-year period 2006/07 to 2010/11 (Figure 11).

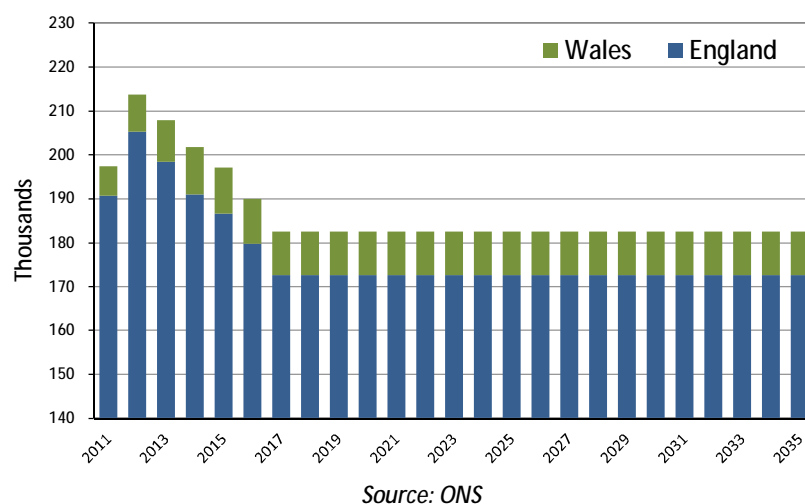


Source: ONS

Figure 11: Epping Forest District: International migration history, 2001 – 2010

## ONS long-term assumptions

- 4.13 For international migration, projection assumptions are typically based upon a prior five-year period but will be scaled to the 'national' level of immigration and emigration that is forecast<sup>1</sup>. The current long-term assumption on net immigration to England and Wales suggest an annual increase of +183,000 per year (Figure 12).



Source: ONS

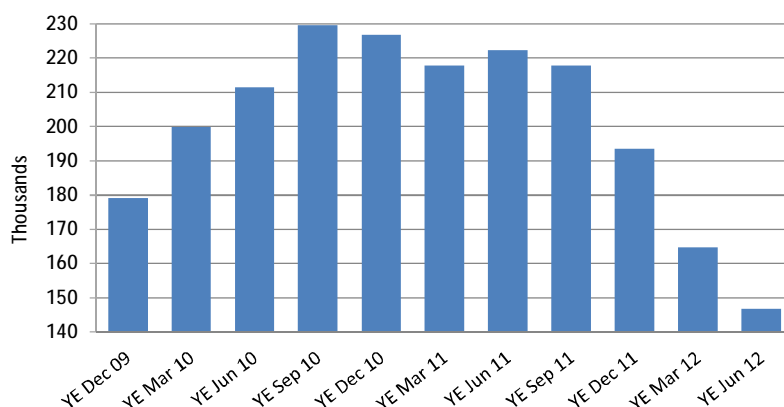
Figure 12: England & Wales: International migration assumptions (2010-based projection)

<sup>1</sup> ONS 2012 National Population Projections 2010-based Statistical Bulletin: assumptions underlying the 2010-based projections.

<http://ons.gov.uk/ons/rel/npp/national-population-projections/2010-based-projections/stb-2010-based-npp-principal-and-key-variants.html#tab-Assumptions-underlying-the-2010-based-projections>



4.14 This net immigration assumption is high relative to the government's policy target of (less than) +100,000 per year. It is also relatively high compared to the latest net immigration evidence which reflects some of the government's policy interventions designed to reduce annual immigration totals (Figure 13). Tighter restrictions on the length of stay of international students plus constraints on non-EU immigration have begun to reduce the overall net immigration balance to England and Wales. The latest estimate for year-end June 2012 suggests a net balance of less than 150,000, significantly below the long-term assumption in the 2010-based projections.



Source: ONS (England and Wales totals estimated @ 90% of published UK totals)

**Figure 13: England & Wales: Recent international migration trends, 2009–2012**

4.15 These international migration trends will have an important impact upon trend projections for local authorities across the UK, particularly those where net immigration has been the dominant driver of growth in the last 10 years. Lower levels of immigration are inevitable given the current policy pressures and these should be reflected in revisions to long-term demographic forecasts.

4.16 For Epping Forest District, where the impact of international migration has been estimated as 'net loss' since 2001, the policy changes are likely to have a less significant impact but the scenario analysis presented here examines the potential sensitivity of changes to this component in determining future population growth.

## 5. A sub-district profile of change: 2001 - 2011

### Epping Forest District ward statistics

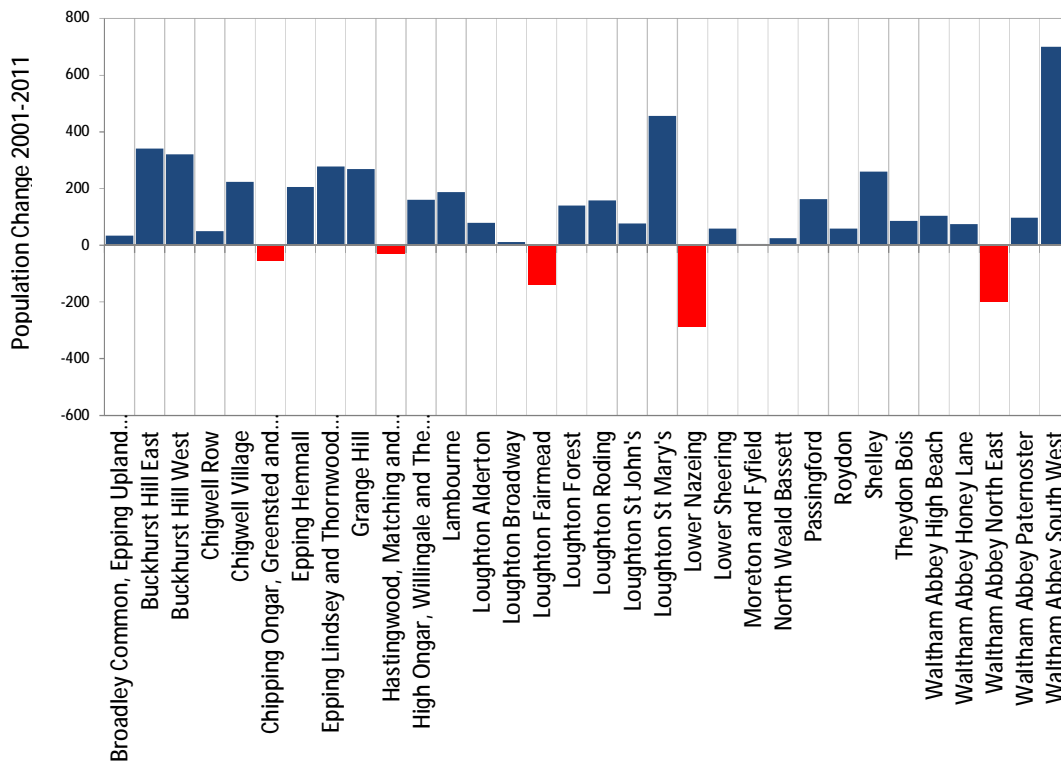
- 5.1 Within Epping Forest District, demographic change is a composite of change in smaller geographical areas. Ward-level data are presented here to illustrate how 2001-2011 population growth has varied geographically, including the relative importance of natural change and net migration as drivers of growth and their relationship to changes to the housing stock.
- 5.2 Using 2011 wards as the geographical unit for analysis, 2001 and 2011 Census data have been aggregated from individual output areas. ONS provides a (best-fit) match between 2011 output areas and wards. Where there have been changes in output area definition between 2001 and 2011, an appropriate proportional assignment has been applied based upon the distribution of address counts.
- 5.3 Given this need to manipulate Census statistics to enable the 2001-2011 comparison, there may be minor inconsistencies when change over the decade is being considered. The district totals will be robust but the ward-level analysis may incorporate small inconsistencies due to geographical alignment issues. However, the analysis does otherwise provide a robust profile of change over time for local geographical areas.

### Local population change

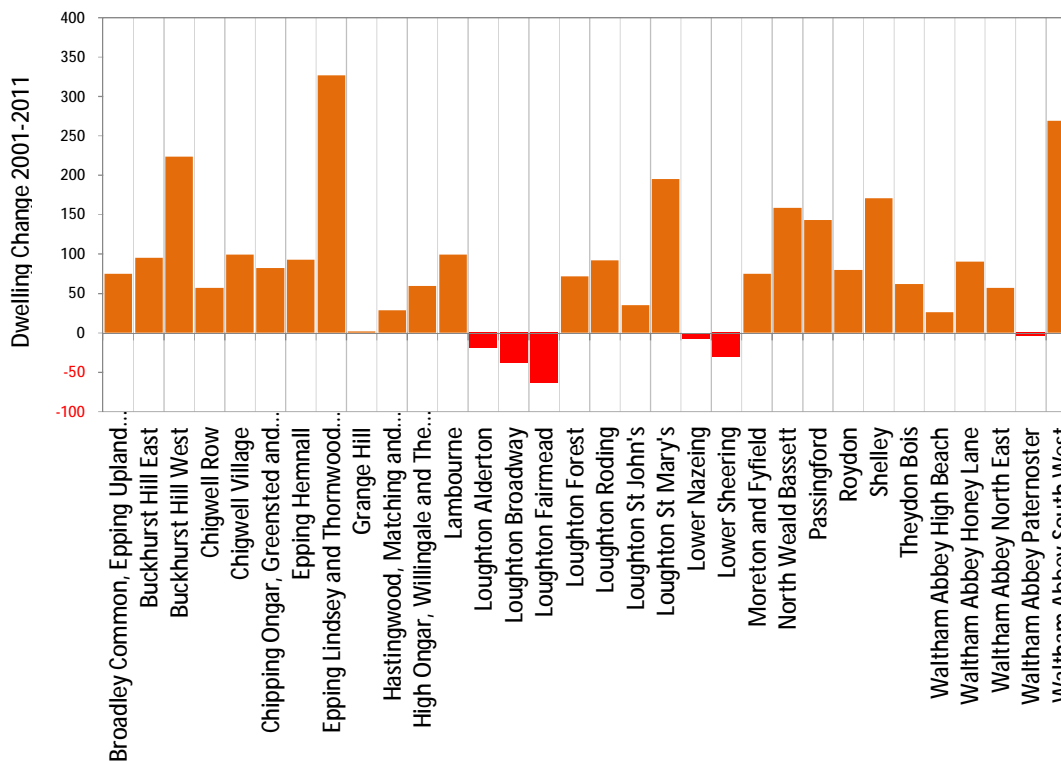
- 5.4 Epping Forest District's population change over the 2001-2011 decade reveals a number of local concentrations of growth and decline (Figure 14a).
- 5.5 The wards of Waltham Abbey South West, Loughton St Mary's, Buckhurst Hill East and Buckhurst Hill West have together accounted for 46% of population growth since 2001. Epping Lindsey and Thornwood Common, Grange Hill, and Shelley wards contributed a further 21% of growth.
- 5.6 Other wards have contributed smaller amounts to population growth, with seven wards, Loughton Broadway, Moreton and Fyfield, Hastingwood, Matching and Sheering Village, Chipping Ongar, Greensted and Marden Ash, Loughton Fairmead, Waltham Abbey North East, and Lower Nazeing suggesting either zero growth or a decline in their respective population totals.

- 
- 5.7 These concentrations of population growth are generally reflected in the statistics on dwelling growth for the 2001-2011 decade although there are exceptions (Figure 14b).
- 5.8 Whilst higher dwelling growth matches higher population growth in Waltham Abbey South West, Loughton St Mary's and Buckhurst Hill West; Epping Lindsey and Thornwood Common has been an area of particularly high dwelling growth relative to population.
- 5.9 These absolute changes in population and dwelling totals translate to a geographical distribution of percentage change with particular concentrations of growth. The largest percentage growth in population (10+%) has been evident in Lambourne, Loughton St Mary's, Shelley and Waltham Abbey South West (Figure 15). Dwelling growth hotspots (10+% change) include Epping Lindsay and Thornwood Common, Lambourne, Loughton St Mary's, Passingford, Shelley and Waltham Abbey South West.

a. Population change 2001 - 2011

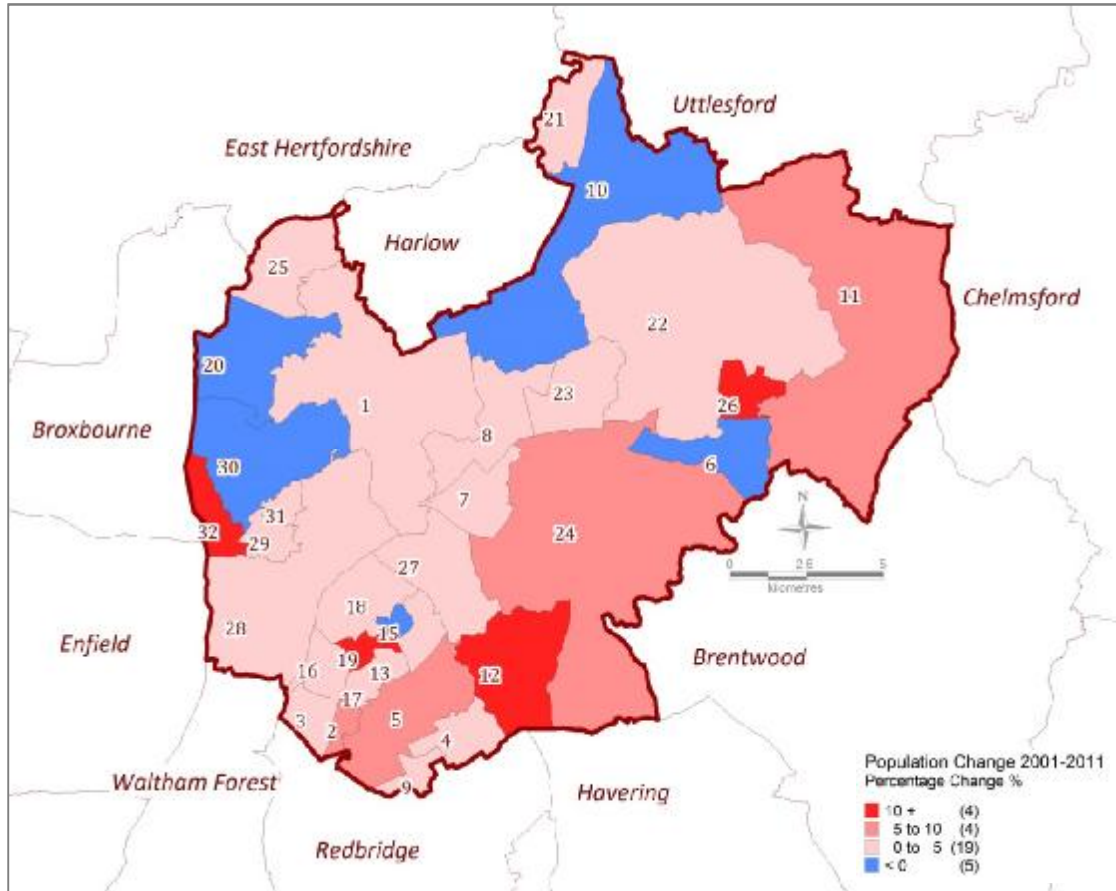


b. Change in the number of dwellings 2001 - 2011



Source: ONS; 2001 and 2011 Census

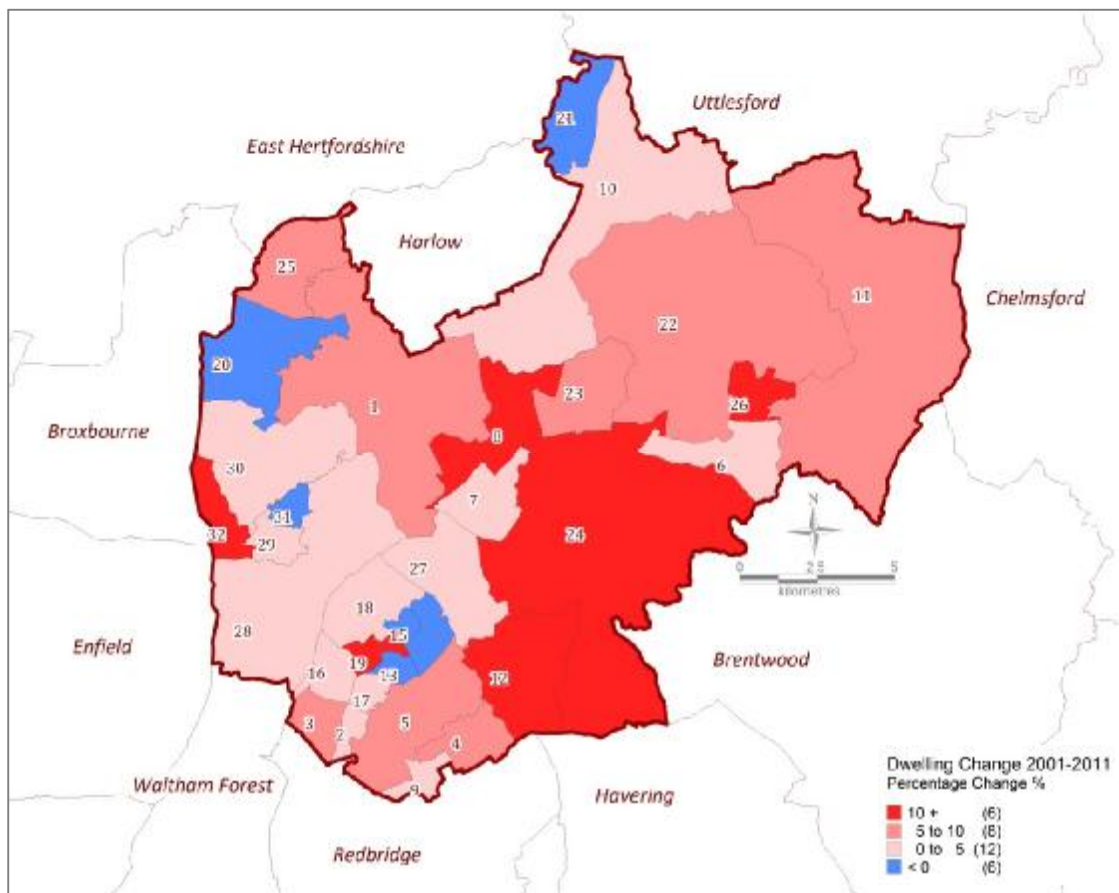
Figure 14: Epping Forest District wards: Population and dwelling change 2001 - 2011



Reference	Ward Name	Reference	Ward Name
1	Broadley Common, Epping Upland and Nazeing	17	Loughton Roding
2	Buckhurst Hill East	18	Loughton St John's
3	Buckhurst Hill West	19	Loughton St Mary's
4	Chigwell Row	20	Lower Nazeing
5	Chigwell Village	21	Lower Sheering
6	Chipping Ongar, Greensted and Marden Ash	22	Moreton and Fyfield
7	Epping Hemnall	23	North Weald Bassett
8	Epping Lindsey and Thornwood Common	24	Passingford
9	Grange Hill	25	Roydon
10	Hastingwood, Matching and Sheering Village	26	Shelley
11	High Ongar, Willingale and The Rodings	27	Theydon Bois
12	Lambourne	28	Waltham Abbey High Beach
13	Loughton Alderton	29	Waltham Abbey Honey Lane
14	Loughton Broadway	30	Waltham Abbey North East
15	Loughton Fairmead	31	Waltham Abbey Paternoster
16	Loughton Forest	32	Waltham Abbey South West

Source: ONS; 2001 and 2011 Census

Figure 15: Epping Forest District wards: Population change (%) 2001 to 2011



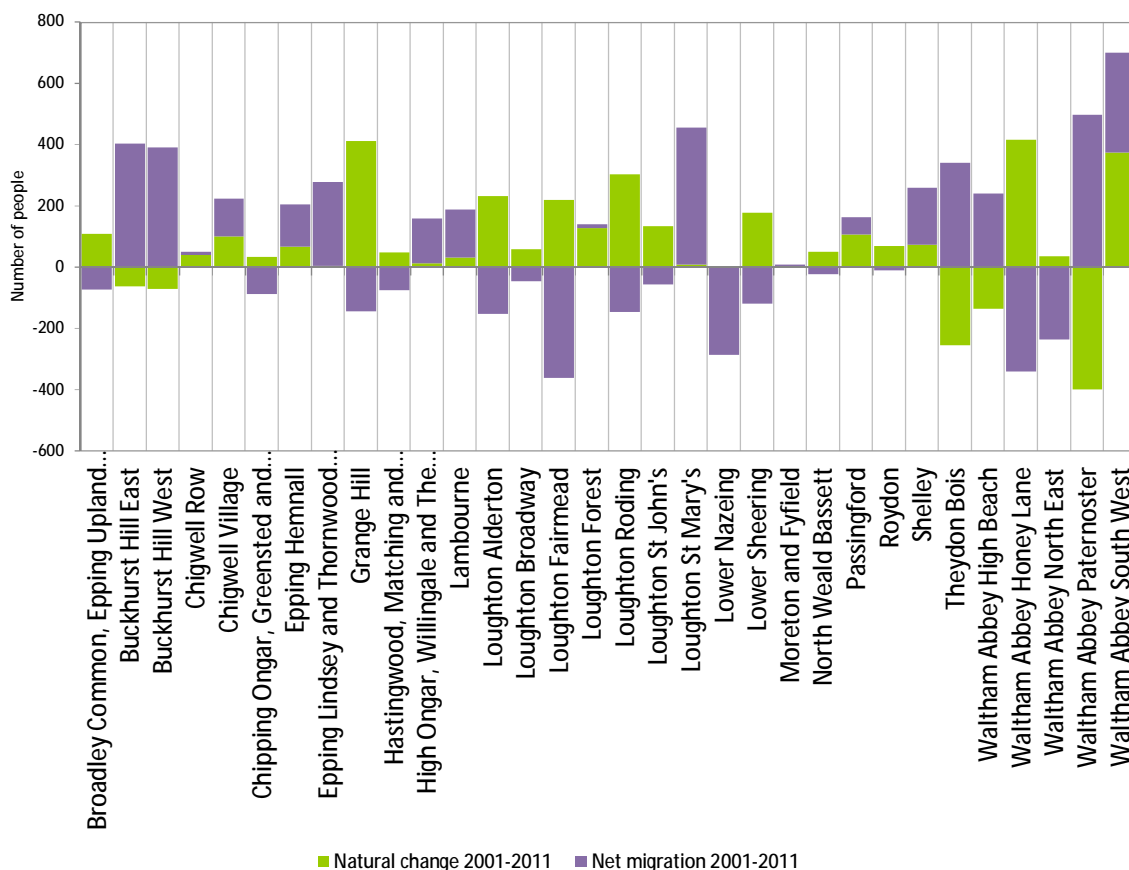
Reference	Ward Name	Reference	Ward Name
1	Broadley Common, Epping Upland and Nazeing	17	Loughton Roding
2	Buckhurst Hill East	18	Loughton St John's
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4	Chigwell Row	20	Lower Nazeing
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6	Chipping Ongar, Greensted and Marden Ash	22	Moreton and Fyfield
7	Epping Hemnall	23	North Weald Bassett
8	Epping Lindsey and Thornwood Common	24	Passingford
9	Grange Hill	25	Roydon
10	Hastingwood, Matching and Sheering Village	26	Shelley
11	High Ongar, Willingale and The Rodings	27	Theydon Bois
12	Lambourne	28	Waltham Abbey High Beach
13	Loughton Alderton	29	Waltham Abbey Honey Lane
14	Loughton Broadway	30	Waltham Abbey North East
15	Loughton Fairmead	31	Waltham Abbey Paternoster
16	Loughton Forest	32	Waltham Abbey South West

Source: ONS; 2001 and 2011 Census

Figure 16: Epping Forest District wards: Dwelling change (%) 2001 to 2011

## Births, deaths and migration

5.10 Using data recorded on births and deaths in each ward in combination with 2001 and 2011 Census population estimates, it is possible to disaggregate growth between Censuses into two distinct demographic components: natural change (the difference between births and deaths) and net migration. At this geographical level, the net migration does not distinguish between internal and international migration (Figure 17).



Source: ONS

Figure 17: Epping Forest District: Components of population change, 2001 – 2011

5.11 There is variation between wards with respect to the relative importance of net migration and natural change as drivers of population change over the ten-year period. In Loughton St Mary's for example, the large growth in population is almost exclusively a result of net migration, whereas in Buckhurst Hill East and Buckhurst Hill West growth due to net migration has offset a small net loss resulting from natural change to give a high population growth overall.

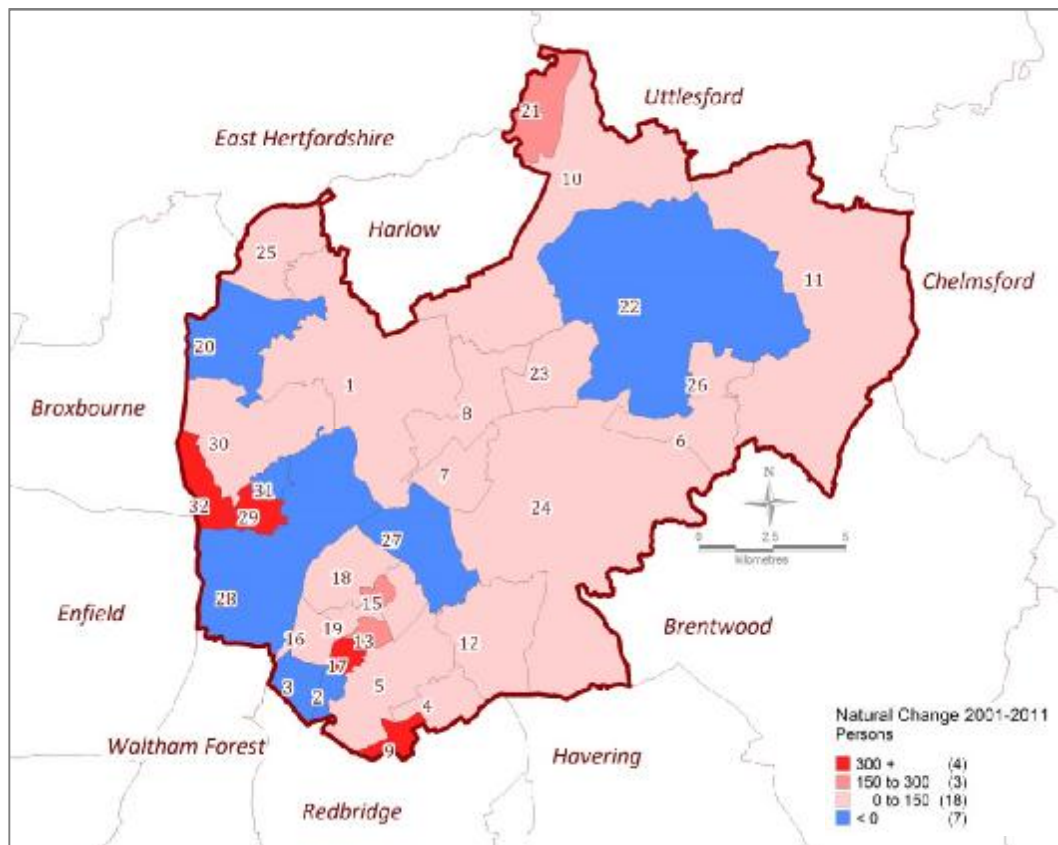
5.12 In Waltham Abbey South West, where population growth has been particularly strong, both

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natural change and net migration have made significant contributions to the changing profile of the area.

- 5.13 In a number of areas (e.g. Grange Hill, Waltham Abbey Honey Lane), natural change has been the significant driver of growth, offset by a net outflow of population due to migration.
- 5.14 The geographical presentation of the natural change and net migration statistics reveals the pattern of variation across the district. In the majority of wards the impact of natural change is small (0-150 over the decade) but Waltham Abbey, Loughton and Grange Hill have been the hotspots where natural growth has exceeded +300 over the 2001-2011 period (Figure 18).
- 5.15 The distribution of net migration reveals the general pattern of 'net loss' of population in the northernmost wards bordering Harlow, Uttlesford and Broxbourne (Figure 19).

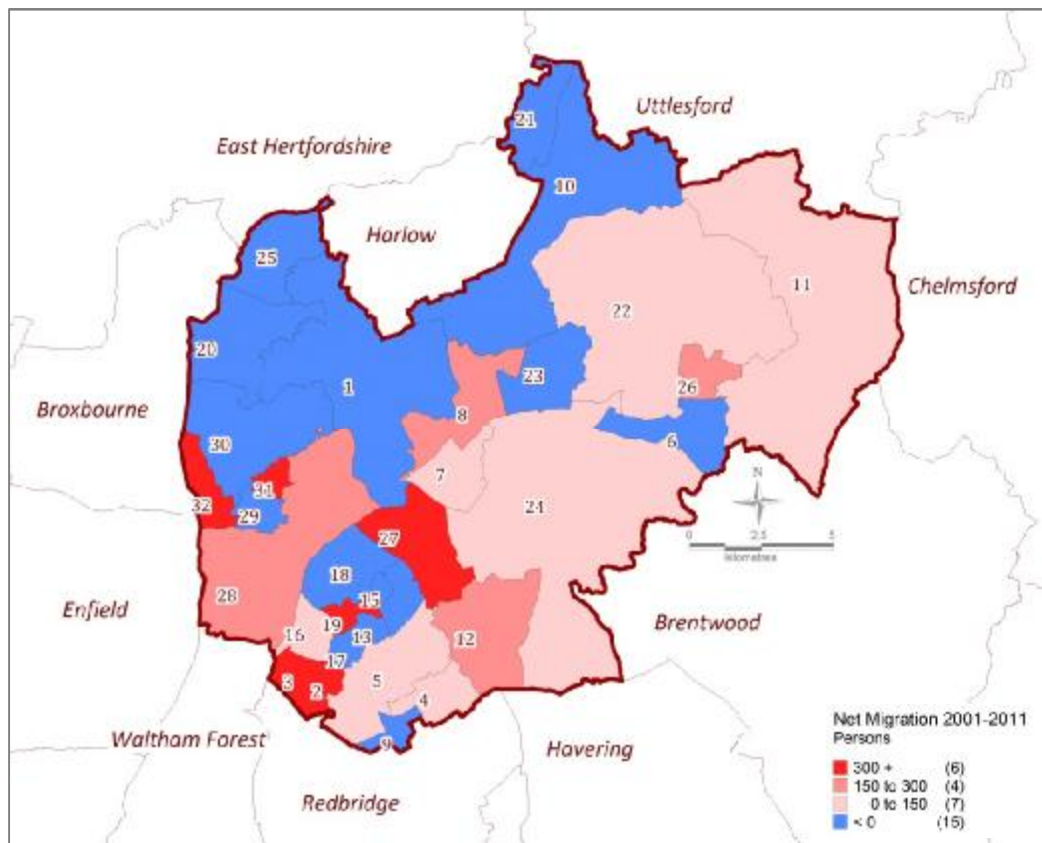




Reference	Ward Name	Reference	Ward Name
1	Broadley Common, Epping Upland and Nazeing	17	Loughton Roding
2	Buckhurst Hill East	18	Loughton St John's
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13	Loughton Alderton	29	Waltham Abbey Honey Lane
14	Loughton Broadway	30	Waltham Abbey North East
15	Loughton Fairmead	31	Waltham Abbey Paternoster
16	Loughton Forest	32	Waltham Abbey South West

Source: ONS; 2001 and 2011 Census

Figure 18: Epping Forest District: Natural change 2001 - 2011



Reference	Ward Name	Reference	Ward Name
1	Broadley Common, Epping Upland and Nazeing	17	Loughton Roding
2	Buckhurst Hill East	18	Loughton St John's
3	Buckhurst Hill West	19	Loughton St Mary's
4	Chigwell Row	20	Lower Nazeing
5	Chigwell Village	21	Lower Sheering
6	Chipping Ongar, Greensted and Marden Ash	22	Moreton and Fyfield
7	Epping Hemnall	23	North Weald Bassett
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14	Loughton Broadway	30	Waltham Abbey North East
15	Loughton Fairmead	31	Waltham Abbey Paternoster
16	Loughton Forest	32	Waltham Abbey South West

Source: ONS; 2001 and 2011 Census

Figure 19: Epping Forest District: Net migration, 2001 – 2011

## 6. Scenario Definition

### Scenario context

- 6.1 The NPPF provides guidance on the development of a robust evidence base to support the formulation of local housing plans. The guidance makes it clear that data inputs, assumptions and methodology should be robust and should consider future growth potential from a number of perspectives.
- 6.2 There is no single, definitive view on the likely level of growth expected in Epping Forest District, with a mix of economic, demographic and national/local policy issues ultimately determining the speed and scale of change. For local planning purposes, it is necessary to evaluate a range of growth alternatives to establish the most 'appropriate' basis for determining future housing (and other service) provision.
- 6.3 The development of Local Plans is made considerably more challenging by the dynamic nature of key data inputs. Economic and demographic factors, coupled with the continuous release of new statistics, often undermine the robustness of underpinning evidence. This has been a particular issue during 2013, with the release of new 2011 Census statistics, updated household projections and revisions to historical population estimates.
- 6.4 Evidence presented in Local Plans is often challenged on the basis of the 'appropriateness' of the methodology that has been employed to develop growth forecasts. The use of a recognised forecasting product (POPGROUP), which incorporates an industry-standard methodology (cohort component model), removes this obstacle and enables a focus on assumptions and output, rather than methods.
- 6.5 Transparency is an important component of any forecasting analysis. It is necessary to ensure that all data inputs and assumptions are clearly documented and that outcomes are benchmarked against the latest 'official' forecasts, wherever possible.
- 6.6 A number of alternative growth scenarios have been tested for Epping Forest District. These scenarios have been developed using POPGROUP technology; they use the latest available statistics from both ONS and CLG; they evaluate trend, policy and economic considerations; they are accompanied by a transparent definition of key assumptions; and they are presented in a

consistent format that contrasts the impact of scenario assumptions upon changes to population, households, dwellings, labour force and jobs. All scenarios are run from a 2011 base year, with both a 2026 and a 2033 horizon. For context, historical data are included for 2001–2011.

## Official projections (ONS)

- 6.7 In all scenario analysis it is important to 'benchmark' any growth alternatives against the latest 'official' population projection. Although ONS has released an 'interim' 2011-based population projection, it has used assumptions from the 2010-based population projection to define its fertility, mortality and migration components of change. For this reason, the 2011-based population projections do not provide a suitably robust benchmark trend projection.
- 6.8 The 2010-based sub-national projection (SNPP-2010) from ONS is used in this analysis as the trend benchmark. This scenario has been developed using historical evidence from the period 2006-10 and incorporates long-term assumptions on fertility, mortality and international migration that were defined in the 2010-based national projection for England.
- 6.9 The SNPP-2010 scenario has been scaled to ensure consistency with the 2011 Census population, following its designated growth trend thereafter.

## Alternative trend scenarios

- 6.10 During 2012-13, ONS has released detailed statistics from the 2011 Census and has followed this with a release of the revised mid-year population estimates for 2002-10. These new data provide the basis for the derivation of a number of alternative 'trend' scenarios to complement the most recent official projection (SNPP-2010).
- 6.11 In determining the migration assumptions for a new '2011-based' trend projection, historical data on the components of demographic change during the 2001–2011 time period are a key consideration (see Section 3).
- 6.12 A five year historical period is a typical time-frame from which migration 'trend' assumptions are derived (this is consistent with the ONS official methodology). However, given the unprecedented economic changes that have occurred since 2008, it is important to give due consideration to an extended historical time period for assumption derivation. In addition, the

government has made its intentions on immigration control clear. The current ONS national long-term assumption of an annual +183,000 net increase due to international migration is high compared to current statistics (approximately +155,000) and government targets (< +100,000 per year). Taking due account of these differences is also an important consideration in the calculation of alternative trend assumptions.

- 6.13 A range of 'migration-led' scenario alternatives have been developed and tested, as follows:
- 'Mig-led 5yr': internal and international migration assumptions are based on five years of historical evidence (2006/7 – 2010/11).
  - 'Mig-led 10yr': internal and international migration assumptions are based on 10 years of historical evidence (2001/2 – 2010/11).
  - 'Mig-led 10yr 5yr': internal migration assumptions are based on 10 years, international migration assumptions are based on five years of historical evidence.
  - 'Mig-led 10yr Zero Int Mig': internal migration assumptions are based on 10 years of historical evidence, international migration is assumed to be zero over the projection period.
  - 'NetNil': in-migration, out-migration, immigration and emigration are maintained, but the net migration balance is set at zero.

## Dwelling-led scenarios

- 6.14 Previous analysis undertaken by Edge Analytics for the Essex Planning Officers Association (EPOA) tested a range of Regional Spatial Strategy (or RSS, for Epping Forest District this was formerly the East of England Plan) dwelling completion trajectories, and the implications which these have for population growth within Epping Forest District.
- 6.15 The impact of dwelling growth targets upon likely demographic change is evaluated with a 'dwelling-led' formulation of the POPGROUP model, which uses in- and out-migration to balance the relationship between population size and housing provision.
- 6.16 Dwelling-led scenarios have been developed using four RSS housing growth trajectories (Figure 20). The 'Draft' and 'Approved' label refers to the review stages of the RSS targets. The 'Realistic' version of each of these has been derived following Epping Forest District's final review of the 'Pure' statistics from the RSS process. The scenarios are defined as follows:

- 'Approved RSS Pure': population growth is constrained to a dwelling completion rate of 10,000 dwellings over the projection period (455 dpa).
- 'Approved RSS Realistic': population growth is constrained to a dwelling completion rate of 9,990 dwellings over the projection period (454 dpa).
- 'Draft Review RSS Pure': population growth is constrained to a dwelling completion rate of 7,920 dwellings over the projection period (360 dpa).
- 'Draft Review RSS Realistic': population growth is constrained to a dwelling completion rate of 8,020 dwellings over the projection period (365 dpa).

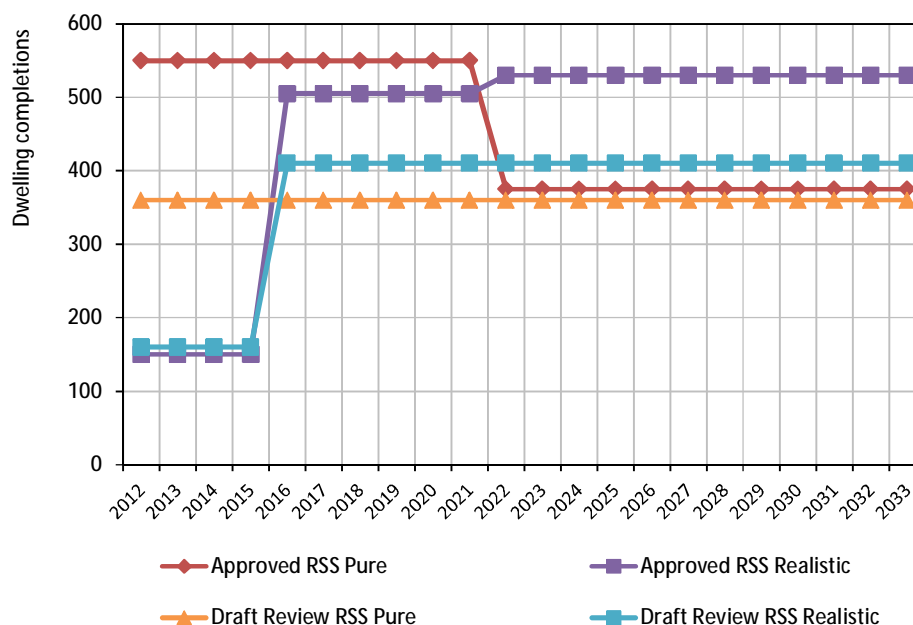


Figure 20: Epping Forest District: RSS housing growth trajectories 2012-33

- 6.17 POPGROUP is able to evaluate the impact of a particular dwelling trajectory by measuring the relationship between the number of homes in an area, the number of households and the size of the resident population.
- 6.18 If there is an 'imbalance' between the 'target' number of new homes and the resident population, then migration is used to redress the imbalance. A higher level of net in-migration will occur if there is insufficient population to meet dwelling targets. A higher level of net out-migration will occur if the population is too high relative to dwelling targets.

## Employment-led scenarios

- 6.19 The impact of an anticipated growth in employment can also be evaluated using an 'employment-led' formulation of the model, which uses in- and out-migration to balance the relationship between the size of the labour force and the number of new jobs anticipated.
- 6.20 In modelling the potential impact of jobs growth upon demographic change, three key parameters are used: economic activity rates by age and sex; an unemployment rate for the District; and a commuting ratio for the District. Further detail on these assumptions is provided in the Appendix to this document.
- 6.21 Two employment-led scenarios have been developed using growth trajectories provided by EFDC:
- 'Economic-led Historical Trend': Population growth is constrained to a growth in employment of 5,617 over the projection period (255 per year).
  - 'Economic-led Historical Trend Plus 10%': Population growth is constrained to a growth in employment of 6,179 over the projection period (281 per year).
- 6.22 The employment trajectories have been developed through analysis of historical employment change. They are assumed to relate to a change in the size of the labour force, not in the number of jobs and the growth impact is evaluated on the basis of a fixed commuting and unemployment assumption, plus economic activity rates which vary to account for mandatory changes to the state pension age. Anticipated labour force growth is applied at a constant rate between 2011 and 2033.
- 6.23 POPGROUP is able to evaluate the impact of a particular employment growth trajectory by measuring the relationship between the number of jobs in an area, the size of its labour force and the size of the resident population. Economic activity rates control the relationship between the size of the population and the size of the labour force. The unemployment rate and the commuting ratio determine the relationship between the size of the labour force and the number of jobs available (see Appendix B for more detail on key assumptions).
- 6.24 If there is an 'imbalance' between the 'target' employment growth and the resident population, then migration is used to redress the imbalance. A higher level of net in-migration will occur if there is insufficient population to meet employment targets. A higher level of net out-migration will occur if the population is too high relative to employment targets

## Household forecasts

- 6.25 Section 4 has provided a summary of the impact of the CLG's latest household projection model. Using evidence from the 2011 Census, this has introduced new 'headship rates' (the proportion of a population who 'head' or 'represent' a household of a particular type, e.g. single persons) which determine the scale and profile of future household formation.
- 6.26 For the analysis presented here, two alternative headship rate assumptions are used, reflecting the uncertainty associated with future rates of household formation and accommodating the fact that the latest 2011-based data only run to 2021.
- Option A: CLG 2011-based headship rates, with the 2011-21 trend continued after 2021.
  - Option B: CLG 2008-based headship rates, scaled to be consistent with the 2011 Census but following the original trend thereafter.
- 6.27 The household impact of the population growth scenarios is modelled using each of the two headship rate alternatives.
- 6.28 The relationship between households and dwellings is modelled using a 'vacancy rate' based on the ratio between households (occupied, second homes and vacant) and dwellings (shared and unshared) from the 2011 Census. The vacancy rate for Epping Forest District is 4.4%. This value remains constant throughout the forecast period.



## Scenario definition summary

6.29 To summarise, the following suite of scenarios was evaluated as part of this analysis (Table 4):

Table 4: Epping Forest District: Scenario definition summary

Scenario Type	Household Headship Rates	
	CLG 2011-trend	CLG 2008
Official	SNPP-2010_A	SNPP-2010_B
Trend	Mig-led5yrs_A Mig-led10yrs_A Mig-led10yrs-5yrs_A Mig-led 10yrs Zero Int Migration_A NetNil_A	Mig-led5yrs_B Mig-led10yrs_B Mig-led10yrs-5yrs_B Mig-led 10yrs Zero Int Migration_B NetNil_B
Dwelling-led	Approved RSS Pure - R_A Approved RSS Realistic - R_A Draft Review RSS Pure - R_A Draft Review RSS Realistic - R_A	Approved RSS Pure - R_B Approved RSS Realistic - R_B Draft Review RSS Pure - R_B Draft Review RSS Realistic - R_B
Jobs-led	Employment_Historical Trend_A Employment_Historical Trend Plus 10%_A	Employment_Historical Trend_B Employment_Historical Trend Plus 10%_B

## 7. Scenario Results

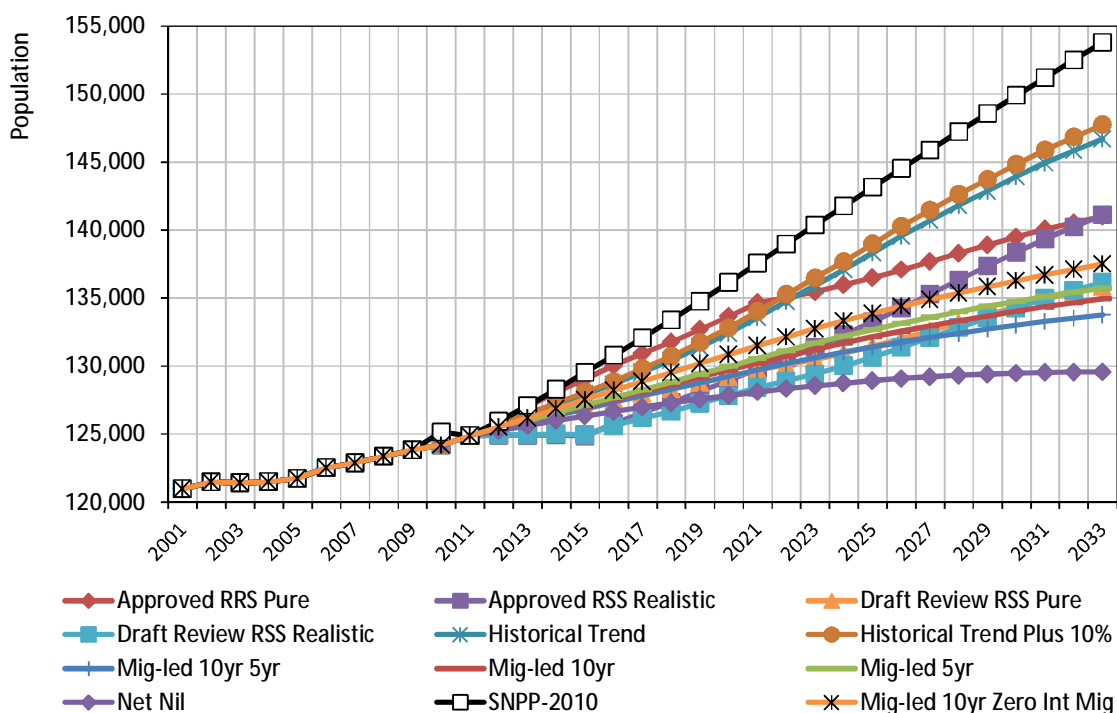
### Scenario summary

- 7.1 A summary of the results of each scenario is provided in the form of a chart and an accompanying table of statistics. The chart illustrates the trajectory of population change resulting from each scenario. The table summarises the change in population and household numbers from 2011-33 that result from each scenario. The scenarios are 'ranked' (high to low) according to the estimated level of population change throughout 2011-33. The table also shows the average annual net migration associated with the population change; plus the expected average annual dwelling and jobs growth based on the assumptions used in each scenario.
- 7.2 Scenario results are presented in two separate illustrations, each one relating to the application of different household headship rates:
- Option A: CLG 2011-based headship rates, with the 2011–2021 trend continued after 2021;
  - Option B: CLG 2008-based headship rates, scaled to be consistent with the 2011 Census but following the original trend thereafter.

### Scenario outcomes (A)

- 7.3 This first set of scenarios has been run using CLG's 2011-based household headship rates, trended after 2021. The scenario outcomes suggest a range of growth trajectories depending upon the key assumptions that have been applied. Population growth ranges from 3.8 to 23.2%, with estimated dwelling growth from 240 to 698 units per year (Figure 21).
- 7.4 All scenarios, with the exception of 'SNPP-2010', use the same historical data to generate a forecast. The SNPP-2010 projection was developed by ONS using the, now out-dated, mid-year estimates. It does not include 2011 Census information, although the forecast presented here has rescaled the 2010 trajectory to the 2011 Census population total, continuing its trend thereafter.
- 7.5 As it uses 'old' data, the age profile of the 'SNPP-2010' scenario will differ from that of the other scenarios, all of which are based on the latest mid-year estimates but more importantly on the 2011 Census single year population age profile for Epping Forest District.

Option A: CLG 2011-based headship rates



Scenario	Change 2011 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP-2010	28,913	23.2%	14,683	28.3%	940	698	295
Historical Trend Plus 10%	22,860	18.3%	12,095	23.2%	678	575	174
Historical Trend	21,816	17.5%	11,697	22.5%	638	556	158
Approved RSS Realistic	16,236	13.0%	9,546	18.3%	441	454	75
Approved RRS Pure	16,116	12.9%	9,556	18.3%	403	455	70
Mig-led 10yr Zero Int Mig	12,634	10.1%	7,568	14.5%	301	360	23
Draft Review RSS Realistic	11,286	9.0%	7,664	14.7%	248	365	0
Draft Review RSS Pure	10,977	8.8%	7,568	14.5%	226	360	-5
Mig-led 5yr	10,845	8.7%	7,519	14.4%	211	358	-9
Mig-led 10yr	10,068	8.1%	6,529	12.5%	169	311	-16
Mig-led 10yr 5yr	8,890	7.1%	6,356	12.2%	133	302	-29
Net Nil	4,689	3.8%	5,048	9.7%	0	240	-67

Figure 21: Epping Forest District: Scenario forecasts 2011-2033 (A - CLG 2011-based headship rates)

- 7.6 The highest growth trajectory is suggested by the 'SNPP-2010' scenario. This scenario suggests a 23.2% increase in population between 2011 and 2033, which is considerably in excess of the growth estimates resulting from the updated trend scenarios. The high population growth results in a high household growth (28.3%) and annual dwelling requirement (698 per year).
- 7.7 The 'Net Nil' scenario suggests that, in the *hypothetical* absence of migration, population growth would be approximately 3.8% between 2011 and 2033, with a household growth of 9.7% and an annual dwelling requirement of 240 units per year. An artificial absence of migration results in a gradual 'ageing' of the resident population, which in turn has implications for job requirements which are estimated to decline by -67 units per year over the forecast period.
- 7.8 The updated trend scenarios ('Mig-led 5yrs', 'Mig-led 10yrs' and 'Mig-led 10yrs-5yrs'), which have used the revised mid-year estimates to establish new migration assumptions, each results in considerably lower growth than the SNPP2010 alternative. The 'Mig-led 5yr' scenario suggests the highest population growth of the three, reflecting a higher overall migration impact in the five years to 2011 compared to the 2001-2011 decade in total. Population growth under this scenario is estimated at 8.7% to 2033; a dwelling requirement of +358 per year.
- 7.9 Under each of these three 'core' trend scenarios, the job requirement is estimated to reduce over the forecast period, reflecting a decline in the size of the resident labour force.
- 7.10 To test the *hypothetical* situation of no international migration, the removal of this more 'uncertain' component of change, results in slightly higher growth ('Mig-led 10yr Zero Int Migration') as its effect on population change is 'negative' in other trend scenarios. It suggests 10.1% population growth to 2033; a dwelling requirement of +360 per year. The estimated job requirement is positive under this scenario; +23 per year to 2033.
- 7.11 The dwelling-led scenarios produce a range of growth options, higher than the three core trend scenarios but lower than the jobs-led alternatives and the SNPP2010. The two 'Approved RSS' scenarios have similar dwelling growth totals but they follow very different trajectories, the 'Realistic' alternative having lower growth in the short-term, rising in later years to mimic anticipated economic recovery. Population growth estimated to result from the 'Realistic' dwelling-led scenario is approximately 13% over the forecast period, matched to jobs growth of approximately +75 new jobs per year to 2033.
- 7.12 The employment-led scenarios ('Employment Historical Trend', 'Employment Historical Trend

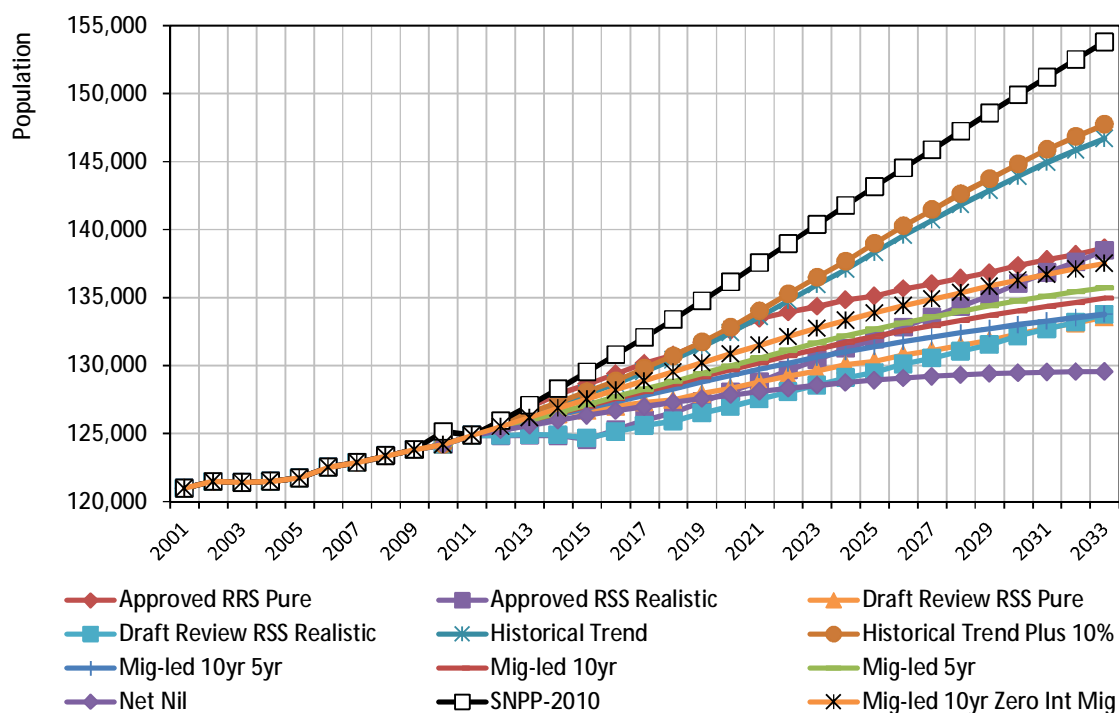
Plus 10%') present two final growth alternatives, options that are more difficult to interpret given the interaction of the different model assumptions that determine the outcomes.

- 7.13 The growth in 'employment' is modelled as a change in the size of the labour force, taking into account a fixed unemployment rate (7.5%), a fixed commuting ratio (1.49) and economic activity rates which increase over time (in older age groups) to accommodate changes in the State Pension age. To achieve the targeted increase in the size of the labour force under these conditions, migration is used as a balancing factor. Higher net in-migration results when the targeted increase in the labour force is not matched by that resulting from Epping Forest District's resident population.
- 7.14 The resulting outcome of the employment-led scenarios is a dwelling requirement of 550-575 units per year over the forecast period, with anticipated population growth of 17.5 – 18.3% to match these conditions. This population growth is fuelled by an average annual net migration of 638-678 to 2033.
- 7.15 The potential sensitivity of the key assumptions upon scenario outcomes is important. For example, higher economic activity rates and/or a lower unemployment rate would reduce the requirement for higher net in-migration and thus dampen the annual dwelling requirement.

## Scenario outcomes (B)

- 7.16 The second set of scenarios has been run using CLG's 2008-based household headship rates (Figure 22). The rates have been scaled to ensure that they reproduce the 2011 Census household totals but follow their original trend for the remainder of the projection period.
- 7.17 Section 4 provided context to the alternative use of 2011-based and 2008-based headship rates. The latter have higher rates of household formation for single-person and two-person-no-children households, resulting in a sharper decline in occupancy rates. This is reflected in the Option B scenario outcomes which generate the highest household growth forecasts of the two A & B alternatives.
- 7.18 For the trend forecasts, the Option B scenarios result in higher dwelling requirements; the 2008-based headship rates applying a lower average household size resulting in more households per head of population. For example, the 'Mig-led\_10yr' scenario suggests a dwelling requirement of 311 per year in Option A, rising to 353 per year in Option B.

### Option B: CLG 2008-based headship rates



Scenario	Change 2011 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP-2010	28,913	23.2%	15,568	30.0%	940	741	295
Historical Trend Plus 10%	22,860	18.3%	13,206	25.4%	678	628	174
Historical Trend	21,816	17.5%	12,792	24.6%	638	609	158
Approved RRS Pure	13,770	11.0%	9,556	18.4%	315	455	35
Approved RSS Realistic	13,595	10.9%	9,546	18.3%	339	454	35
Mig-led 10yr Zero Int Mig	12,634	10.1%	8,433	16.2%	301	401	23
Mig-led 5yr	10,845	8.7%	8,410	16.2%	211	400	-9
Mig-led 10yr	10,068	8.1%	7,416	14.2%	169	353	-16
Mig-led 10yr 5yr	8,890	7.1%	7,238	13.9%	133	344	-29
Draft Review RSS Realistic	8,885	7.1%	7,664	14.7%	155	365	-37
Draft Review RSS Pure	8,684	7.0%	7,568	14.5%	137	360	-40
Net Nil	4,689	3.8%	5,741	11.0%	0	273	-67

Figure 22: Epping Forest District: Scenario forecasts 2011-2033 (B - CLG 2008-based headship rates)

- 7.19 Headship rate differences again affect the relationship between the annual dwelling constraint and the population growth associated with the dwelling-led scenario. Population growth is lower in the (B) scenario due to the headship rate trajectory resulting in a lower average household size; the same number of dwellings is associated with a smaller population size.
- 7.20 With a more significant reduction in average household occupancy, population growth associated with the dwelling-led scenarios reduces further to 11.0% ('Approved RSS Pure') and 12.9% ('Approved RSS Realistic'), with similar reduction witnessed in the 'Draft Review' dwelling-led scenarios. The same number of dwellings is accommodating a smaller population given the effect of the 2008-based headship rates.
- 7.21 For the employment-led scenario, household growth is again higher in Option B; the 2008-based headship rates applying a lower average household size resulting in more households per head of population.

## A changing age profile

- 7.22 Underpinning the growth scenarios are some fundamental changes to the age structure of Epping Forest District's population. These changes affect the profile of household formation and the relative size of the District's labour force.

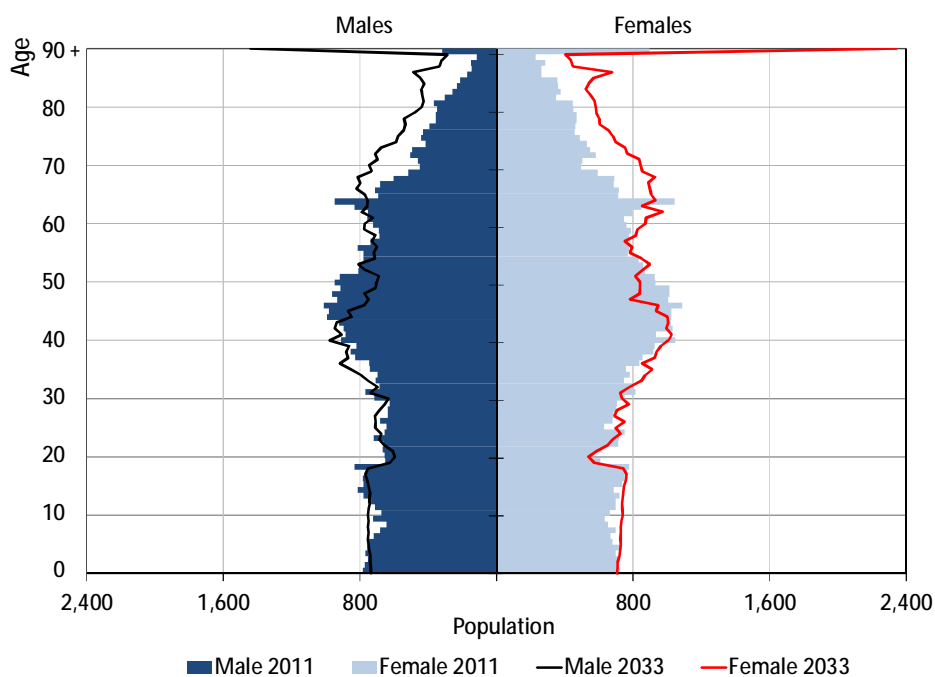
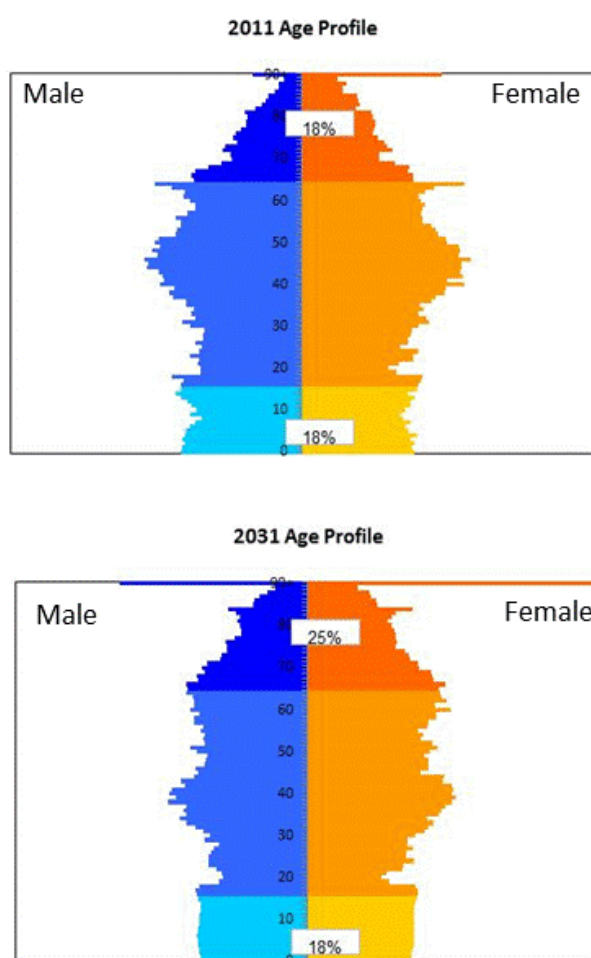


Figure 23: Epping Forest District scenario age profile 2011–2033 ('Mig-led-5yrs')

- 7.23 Using the 'Mig-led5Yrs' scenario as an example, Epping Forest District's 2011 population is compared with its 2033 outcome. Over the projection period, there is an increase in the population of the older age-groups, with the 'inevitable' process of population ageing producing a substantial increase in the old-age dependency balance for the district (Figure 23).
- 7.24 Whilst the number of 0–16 year-olds is maintained at a similar proportion of the total population in 2033, the 65+ age-group increases its share to 25%, from 32% in 2033. Overall, this results in a reduction in the relative size of the labour-force; 57% in 2011 but only 51% in 2033 (Figure 24).



*Profiles are cut at ages 16 and 65*

Figure 24: Epping Forest District scenario age profile 2011 & 2033 ('Mig-led5Yrs')



## 8. Summary & Recommendations

### Requirements summary

- 8.1 As it formulates its Local Plan, Epping Forest District Council has sought to update the supporting demographic evidence, with the development of a suite of population, household and housing forecasts which incorporate the latest demographic data from:
- 2011 Census statistics on population and households;
  - Revised mid-year population estimates for the period 2002–2010 (ONS);
  - 2011-based household projections for 2011–2021 (CLG).
- 8.2 This report has presented the suite of alternative growth scenarios using POPGROUP technology. They evaluate trend, policy and economic considerations; they are accompanied by a transparent definition of key assumptions; and they are presented in a consistent format that contrasts the impact of scenario assumptions upon changes to population, households, dwellings, labour force and jobs. All scenarios have been run from a 2011 base year, with a 2033 horizon. Historical data has been included for 2001–2011.

### Scenario outcomes

- 8.3 The latest demographic evidence has provided a timely update to Epping Forest District's population profile, aligning the new 2011 Census total with an historical time series back to 2001. But the 're-calibration' of Epping Forest District's population estimates has presented uncertainty with regard to the factors that have driven the downward adjustment in the district's 2011 population.
- 8.4 On the assumption that both the 2001 and 2011 Censuses provided a robust enumeration of Epping Forest District's population, it is the mis-estimation of international migration that is most likely to have resulted in the over-estimation of mid-year population totals between the two Censuses. However, ONS does not attribute the population adjustment to international migration, classifying the required change as 'other unattributable' factors. This is unhelpful when determining assumptions for trend projections but the analysis presented here has assumed that the 'unattributable' is allocated to an adjustment to international migration estimates.

- 8.5 The new demographic evidence has enabled the development of alternative 2011-based trend projections that consider the potential future impact of migration. These provide an important update to ONS' 2010-based and 2011-based projections, the former suggesting very high (23.2%) population growth driven by high internal migration assumptions that depart significantly from historical trends.
- 8.6 The profile of internal migrants presented in this analysis has demonstrated the importance of the migration exchange between neighbouring local authorities. A net inward movement from Greater London Boroughs has to some extent been countered by a net outward movement to Uttlesford and East Herts plus other Essex local authorities.
- 8.7 Five-year and ten-year historical perspectives have been used to set migration assumptions in the updated trend scenarios, resulting in forecast population growth of 7.1-8.7%. The 5-year alternative suggests a higher growth forecast than the 10-year, reflecting an increase in net in-migration to Epping Forest District in the five years prior to 2011, compared to the ten-year period 2001-2011.
- 8.8 The robust estimation of the past and future impact of international migration remains an issue. The re-calibration of Epping Forest District's mid-year populations, estimates a consistent net loss due to international migration during 2001-2011, although the latest mid-year population estimate implies a small net gain in 2012. Existing government policy suggests that net immigration to the UK will continue to be targeted for reduction; a factor that will have particular impact upon localities with historically high international migration but should be given due consideration in all local authority areas when evaluating trend forecasts.
- 8.9 A final trend scenario has been presented here, which 'removes' the international migration component of change completely, assuming a zero net balance in the future. This results in higher forecast growth than the 'core' trend scenarios; 10% over the 2011-2033 period.
- 8.10 All trend scenarios suggest growth below that defined by the Approved RSS trajectories and considerably below that suggested by the employment-led scenarios tested here. The latter are particularly sensitive to the assumptions used to generate the scenario outcomes and careful consideration should be given, not only to the employment targets, but also to long-term economic activity and unemployment rates and the commuting balance which determines the movement of workers to and from Epping Forest District.

- 8.11 The analysis of scenario outcomes is complicated by the 'choice' of appropriate headship rates with which household (and dwelling) growth is estimated. The latest 2011-based rates have been calibrated after a period of unprecedented economic change and stagnation in the housing market and thus suggest a slower rate of household formation than the previous 2008-based rates, calibrated from data collected in a time period with very different market characteristics.
- 8.12 Deciding which is the most 'appropriate' trajectory of household growth is difficult. The 2011-based rates have been trended to 2033 for direct comparison with the 2008-based rates. Dwelling growth suggested by the 2011-based (A) scenarios is lower than the 2008-based (B) scenarios. An indication of the dwelling growth that would result if an 'average' of the two extremes were applied is provided (Table 5).

**Table 5: Scenario dwelling growth summary**

Scenario	Dwellings per year 2011-2033		
	Option A CLG 2011-trend	Option B CLG 2008	Average
SNPP-2010	698	741	719
Employment_Historical Trend Plus 10%	575	628	602
Employment_Historical Trend	556	609	582
Approved RSS Pure - R	455	455	455
Approved RSS Realistic - R	454	454	454
Mig-led 10yrs Zero Int Migration	360	401	381
Mig-led 5yrs	358	400	379
Draft Review RSS Realistic - R	365	365	365
Draft Review RSS Pure - R	360	360	360
Mig-led 10yrs	311	353	332
Mig-led 10yrs-5yrs	302	344	323
NetNil	240	273	257

Option A: CLG 2011-based headship rates, with the 2011-21 trend continued after 2021

Option B: CLG 2008-based headship rates, scaled to be consistent with the 2011 Census but following the original trend thereafter.

## Recommendations

- 8.13 The scenario evidence presented here has provided an important update to Epping Forest District's demographic intelligence. The District Council should give particular consideration to the longer-term impacts of migration, both internal and international and its influence upon

---

future housing growth.

- 8.14 It is recommended that Epping Forest District Council evaluates the robustness of its underlying economic forecast, which suggests consistent employment growth in conjunction with an ageing population and a shrinking labour force. Higher net in-migration and a higher housing requirement is the consequence of this scenario.
- 8.15 In relation to future household formation, due consideration should be given to both Option A and Option B scenarios. The Option A scenarios may be driven by assumptions calibrated from a period of slower rates of household formation, but these conditions are likely to continue, certainly in the short term.
- 8.16 As it formulates its Local Plan using the new evidence presented here, Epping Forest District Council should continue to cooperate with its neighbouring authorities, to consider the important migration and economic exchanges between these areas and the likely impact upon housing growth in the district.

## Glossary

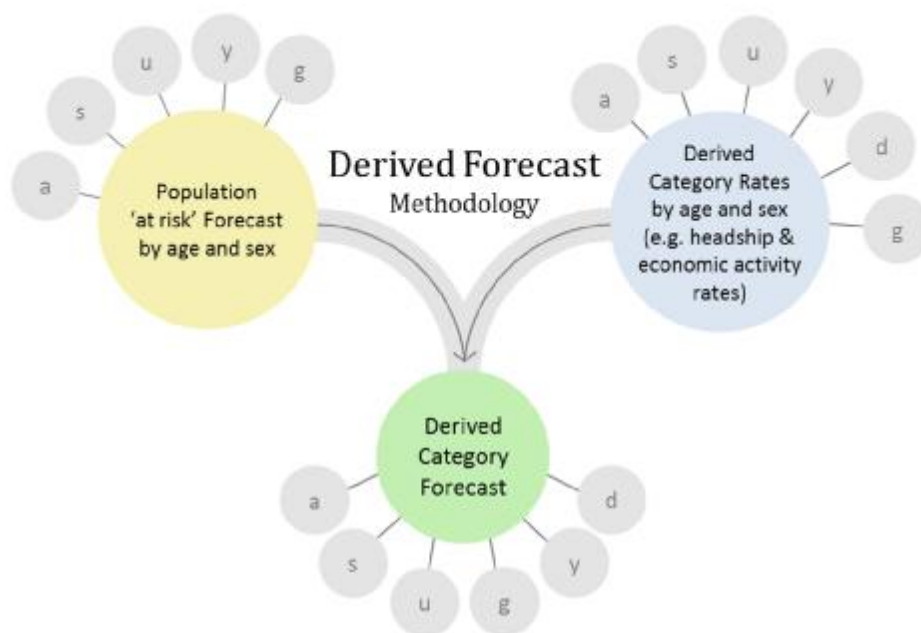
Abbreviation	Definition
ASFR	Age-specific fertility rate
ASMR	Age-specific mortality rate
CLG	Department for Communities and Local Government
EFDC	Epping Forest District Council
IPS	International Passenger Survey
LGA	Local Government Association
MYE	Mid-year population estimates
NPPF	National Planning Policy Framework
ONS	Office for National Statistics
PRDS	Patient Register Data Service
RSS	Regional Spatial Strategy
SNPP	Sub-national population projections

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## Appendix A: Forecasting Methodology

- 8.17 The POPGROUP suite of models is used extensively by local authorities across the UK, providing a desktop utility for the evaluation of alternative growth scenarios to support local planning. Under licence to the Local Government Association (LGA), Edge Analytics provides product development and technical support to the product suite and its user base.
- 8.18 For a more complete review of the functionality and methodology which underpin POPGROUP and the Derived Forecast model, users are referred to the respective user manuals, available from the POPGROUP website: <http://www.popgroup.org.uk/>.
- 8.19 The main POPGROUP model (Figure 25) is a cohort component model which enables the development of population forecasts based on births, deaths and migration inputs and assumptions. The Derived Forecast model (Figure 26) sits alongside the population model, providing a headship rate model for household projections and an economic activity rate model for labour-force projections.





$$D_{a,s,u,y,d,g} = \frac{P_{a,s,u,y,g} R_{a,s,u,y,d,g}}{100}$$

- D* Derived Category Forecast
- P* Population 'at risk' Forecast
- R* Derived Category Rates
- a* Age-group
- s* Sex
- u* Sub-population
- y* Year
- d* Derived category
- g* Group (usually an area, but can be an ethnic group or social group)

Figure 26: Derived Forecast (DF) methodology



## Appendix B: Data Input, Assumptions & Methodology

- 8.20 The POPGROUP model draws data from a number of sources, building an historical picture of population, households, fertility, mortality and migration on which to base its scenario forecasts. Using the historical data evidence for 2001-2010, in conjunction with information from ONS national projections, a series of assumptions have been derived which drive the scenario forecasts.

### Population

- 8.21 Historical population statistics are provided by the mid-year population estimates for 2001 to 2011. All data are recorded by single-year of age and sex. These data include the revised mid-year population estimates for 2002–2010, released by ONS in May 2013, providing consistency in the measurement of the components of change (births, deaths, internal migration and international migration) between the 2001 and 2011 Censuses.

### Births and fertility

- 8.22 Historical mid-year to mid-year counts of births by sex from 2001/2 to 2010/11 have been sourced from ONS Vital Statistics.
- 8.23 A 'national' age-specific fertility rate (ASFR) schedule, which measures the expected fertility rates by age and sex for England in 2011/12, is included in the POPGROUP model assumptions. Local birth statistics are combined with this ONS 2010-based standard fertility schedule to produce age-specific fertility rates for the district.
- 8.24 Long-term assumptions on change in age-specific fertility rates are taken from the ONS 2010-based national population projection for England.

### Deaths and mortality

- 8.25 Historical mid-year to mid-year counts of deaths by age and sex from 2001/2 to 2010/11 have been sourced from ONS Vital Statistics.
- 8.26 A 'national' age-specific mortality rate (ASMR) schedule, which measures the expected mortality

rates by age and sex for England in 2011/12, is included in the POPGROUP model assumptions. Local death statistics are combined with this ONS 2010-based standard mortality schedule to produce age-specific mortality rates for the district.

- 8.27 Long-term assumptions on change in age-specific mortality rates are taken from ONS 2010-based national population projection for England.

## Migration

- 8.28 In determining the migration assumptions for a new '2011-based' trend projection, historical data on the components of demographic change during the 2001–2011 time-period are a key consideration.
- 8.29 Since 2001, the population of Epping Forest District has increased by 3.1% from 121,000 to reach 124,700 in 2011. This population change has been driven by a mixture of (a) natural change (the difference between the number of births and deaths); (b) net internal migration (the difference between in-migration and out-migration from and to other locations within the UK); and (c) net international migration (the difference between immigration and emigration). There has been variation in the relative importance of these components over the 2001–2011 decade.
- 8.30 Implied within the international migration component of change is an 'other unattributable' figure, which ONS identified within its latest mid-year estimate revisions. The POPGROUP model has assigned the 'other unattributable' to international migration as it is the component with the greatest uncertainty associated with its estimation.
- 8.31 A five-year historical period is a typical time-frame from which migration 'trend' assumptions are derived. However, given the unprecedented economic changes that have occurred since 2008, it is important to give due consideration to an extended historical time-period for assumption derivation. For this reason, migration assumptions have been derived from a 5-year and a 10-year historical period, with scenarios configured accordingly.

## Household formation rates

- 8.32 The most recent household projections come from the 2011-based CLG model, released for local authority areas in 2013. The headship rate statistics and the communal household populations which underpin this model are used as the basis for the development of the household forecasts presented here.
- 8.33 To assess the impact of the newly-available household statistics, the 2008-based CLG statistics have been used in conjunction with the 2011-based rates in each scenario. Each of the scenarios has been run with the 2011-based (Option A) and the 2008-based (Option B) CLG headship rates and communal household population.
- 8.34 There is a 17-fold classification of household types used in both the 2008-based and 2011-based household forecasts (Table 6). This classification underpins the calculation of total household numbers in each scenario.

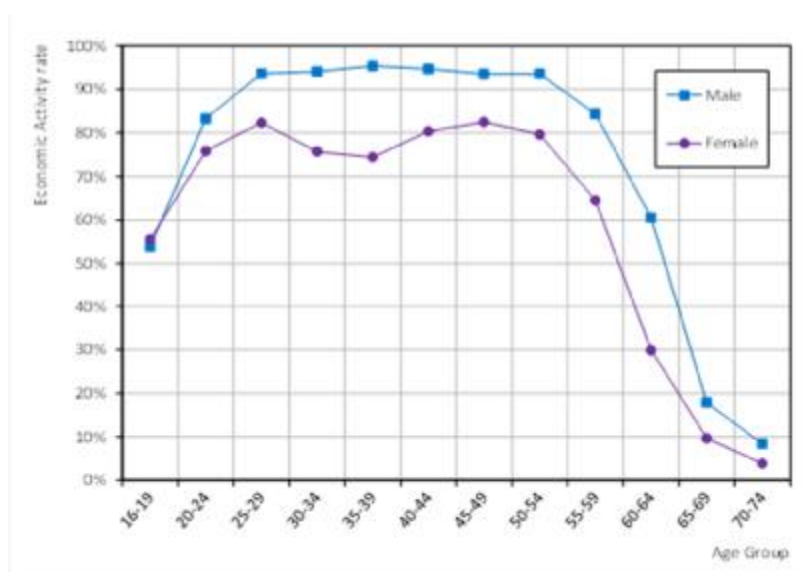
**Table 6: Household category descriptions**

ONS Code	DF Label	Household Type
OPM	OPMAL	One person households: Male
OPF	OPFEM	One person households: Female
OCZZP	FAMC0	One family and no others: Couple: No dependent children
OC1P	FAMC1	One family and no others: Couple: 1 dependent child
OC2P	FAMC2	One family and no others: Couple: 2 dependent children
OC3P	FAMC3	One family and no others: Couple: 3+ dependent children
OL1P	FAML1	One family and no others: Lone parent: 1 dependent child
OL2P	FAML2	One family and no others: Lone parent: 2 dependent children
OL3P	FAML3	One family and no others: Lone parent: 3+ dependent children
MCZDP	MIX C0	A couple and one or more other adults: No dependent children
MC1P	MIX C1	A couple and one or more other adults: 1 dependent child
MC2P	MIX C2	A couple and one or more other adults: 2 dependent children
MC3P	MIX C3	A couple and one or more other adults: 3+ dependent children
ML1P	MIX L1	A lone parent and one or more other adults: 1 dependent child
ML2P	MIX L2	A lone parent and one or more other adults: 2 dependent children
ML3P	MIX L3	A lone parent and one or more other adults: 3+ dependent children
OTAP	OTHHH	Other households
TOT	TOTHH	Total

- 8.35 The relationship between households and dwellings is modelled using a 'vacancy rate' based on the ratio between households (occupied, second homes and vacant) and dwellings (shared and unshared) from the 2011 Census. The vacancy rate for Epping Forest District is 4.4%. This value remains constant throughout the forecast period.

## Economic activity rates

- 8.36 Economic activity rates have been derived from a combination of 2001 Census statistics for Epping Forest District and the latest evidence from the Labour Force Survey (via NOMIS). NOMIS data provide an average economic activity rate for the period 2007–2011 by broad age-group for the County of Essex; sample data for Epping Forest District was insufficiently robust to enable its direct use. Using the 2001 Census data, these activity rates have been disaggregated to provide an economic activity rate by five year age-group and sex for all labour-force ages to age 74 (Figure 27).



Source: NOMIS; ONS

Figure 27: Economic Activity Rates – Epping Forest District

- 8.37 To account for an expected increase in the rate of labour force participation in the older age groups resulting from changes to stage pension age, economic activity rates have been increased in the following way:

- Women aged 60–64: 40% increase by 2020;
- Women aged 65–69: 20% increase by 2020;

- Men aged 60–64: 5% increase by 2020;
- Women aged 65–69: 10% increase by 2020.

8.38 From 2020, economic activity rates are kept constant.

## Unemployment rate

8.39 An average unemployment rate of 7.5% (aged 16+) has been calculated from Epping Forest District unemployment statistics for the period 2007–2012 (sourced from NOMIS). This value remains constant throughout the forecast period.

## Commuting ratio

8.40 Using 2001 Census statistics (2011 data is not yet available) a commuting ratio has been derived as the balance between the size of the resident labour force and the number of jobs available in Epping Forest District. The derived ratio of 1.49 for Epping Forest District indicates that there is a net outflow of commuters from surrounding districts. This value remains constant throughout the forecast period.

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# **LCB East Sub-region Strategic Housing Market Assessment Update 2012**

March 2013

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# 1. Introduction

## Project Overview

- 1.1 Opinion Research Services (ORS) was commissioned in 2008 to undertake a comprehensive and integrated Strategic Housing Market Assessment for the London Commuter Belt East/M11 Sub-region. The study area comprised the following local authorities;
  - » Brentwood;
  - » Broxbourne;
  - » East Hertfordshire;
  - » Epping Forest;
  - » Harlow; and
  - » Uttlesford
- 1.2 This document represents an update of the original study for East Hertfordshire, Epping Forest, Harlow and Uttlesford. It considers the following issues:
  - » The existing housing stock of the area;
  - » Property prices and affordability;
  - » The role of the private rented sector in meeting housing need;
  - » The impact of government policy changes since 2010;
  - » Current housing need; and
  - » Future housing requirements from 2011-2031 including scenario testing.

### The Role of SHMAs

A SHMA is a framework that local authorities can follow to develop a good understanding of how housing markets operate. It promotes an approach to assessing housing need and demand which can inform the development of local development documents and housing policies. The purpose of the SHMA is to form part of a wider evidence base for the development of housing and planning policies, which should be considered alongside other factors such as the viability of delivering Affordable Housing, land availability and local policy priorities including the creation of mixed and balanced communities. Therefore, the evidence provided in the SHMA should not be viewed in isolation and its results on their own cannot be used in support of development applications, as it does not set housing or planning policy. A SHMA provides part of the evidence needed to inform policy development, and other factors are equally important in the policy development process. The government has issued Practice Guidance setting out the scope of a SHMA and suggests how it might be carried out.

## The Existing Housing Stock

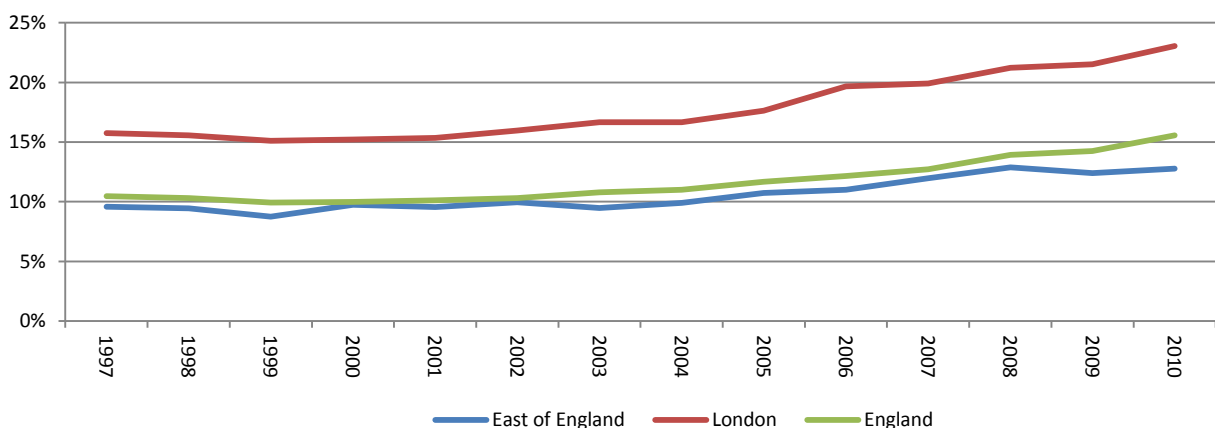
- 1.3 Figure 1 identifies the change in the number of dwellings registered for Council Tax in each of the local authorities since 2011. The data shows that the growth in Band A and B properties has been strongest in Harlow. However, even in Harlow it is still the case that less than 25% of the new dwelling stock has been Council Tax band A and B. This indicates that only a small share of the growth in dwellings has come through flats or the conversion of larger dwellings.

Figure 1  
Change in Dwellings by Council Tax Band 2001-2011 (Source: Valuation Office Agency)

Council Tax Band	East Hertfordshire		Epping Forest		Harlow		Uttlesford	
	Number	%	Number	%	Number	%	Number	%
Band A	163	3.4%	77	2.9%	188	10.5%	135	3.5%
Band B	699	14.6%	304	11.6%	231	12.9%	272	7.0%
Band C	1360	28.4%	425	16.3%	533	29.7%	667	17.1%
Band D	1092	22.8%	485	18.6%	404	22.5%	713	18.3%
Band E	447	9.3%	595	22.8%	301	16.8%	905	23.2%
Band F	482	10.1%	380	14.5%	132	7.4%	648	16.6%
Band G	380	7.9%	255	9.8%	3	0.2%	483	12.4%
Band H	173	3.6%	92	3.5%	0	0.0%	73	1.9%
<b>Total Dwellings</b>	<b>4,796</b>	<b>100%</b>	<b>2,613</b>	<b>100%</b>	<b>1,792</b>	<b>100%</b>	<b>3,896</b>	<b>100%</b>

- 1.4 There has been a large growth in the private rented sector in the last ten years, and the legacy of the credit crunch is that there has been less lending to lower income households and households unable to provide a substantial deposit. This has accelerated the structural change in the housing market from owning to renting, as fewer households are considered to have the financial standing to access a loan.
- 1.5 Figure 2 shows that growth in the private rented sector for the East of England since 1997. Since 2001, the average growth in the size of the private rented sector has been 33% across the East of England. This is below the 50% average for England as a whole and for London. Evidence from recent household and stock condition surveys undertaken by ORS across the country shows that coastal towns and larger urban settlements with lower priced properties have seen the greatest growth in private renting.

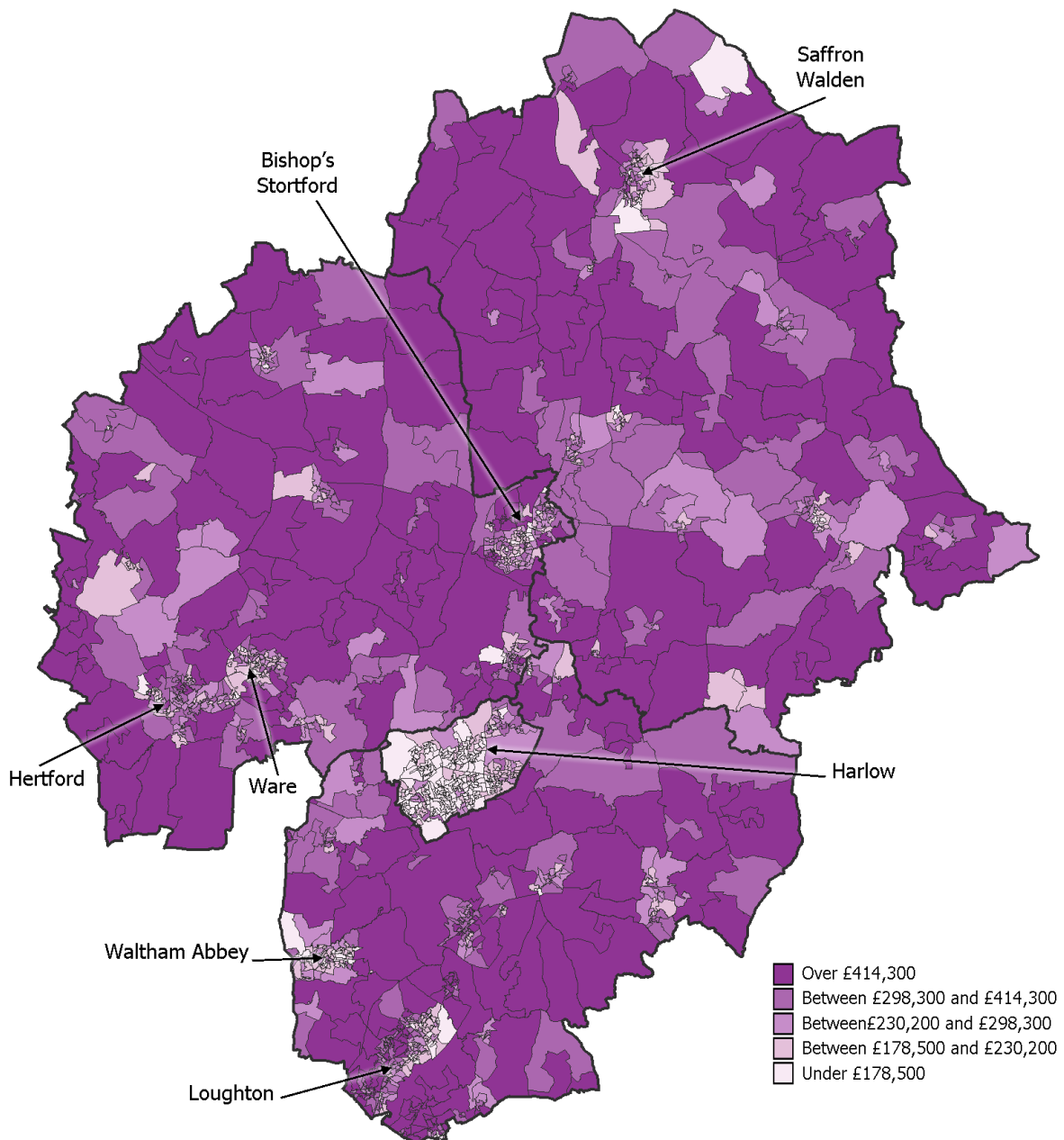
Figure 2  
Change in the Size of the Private Rented Sector 1997-2001 (Source: Labour Force Survey and English Housing Survey)



## Property Prices and Affordability

- 1.6 Figure 3 shows the variation of house prices across LCB East from January 2011 to December 2011. Areas in darker shades of purple contain higher average house prices. This shows that Harlow contains lower than average house prices when compared to the wider surrounding area. Figure 3 also shows that rural house prices are typically higher than those in urban areas. However, there are some low value rural areas which often are in areas where much of the land is used for business, which may explain lower house prices in these areas.

Figure 3  
Relative House Prices within LCB East (Source: UK Land Registry 2011)



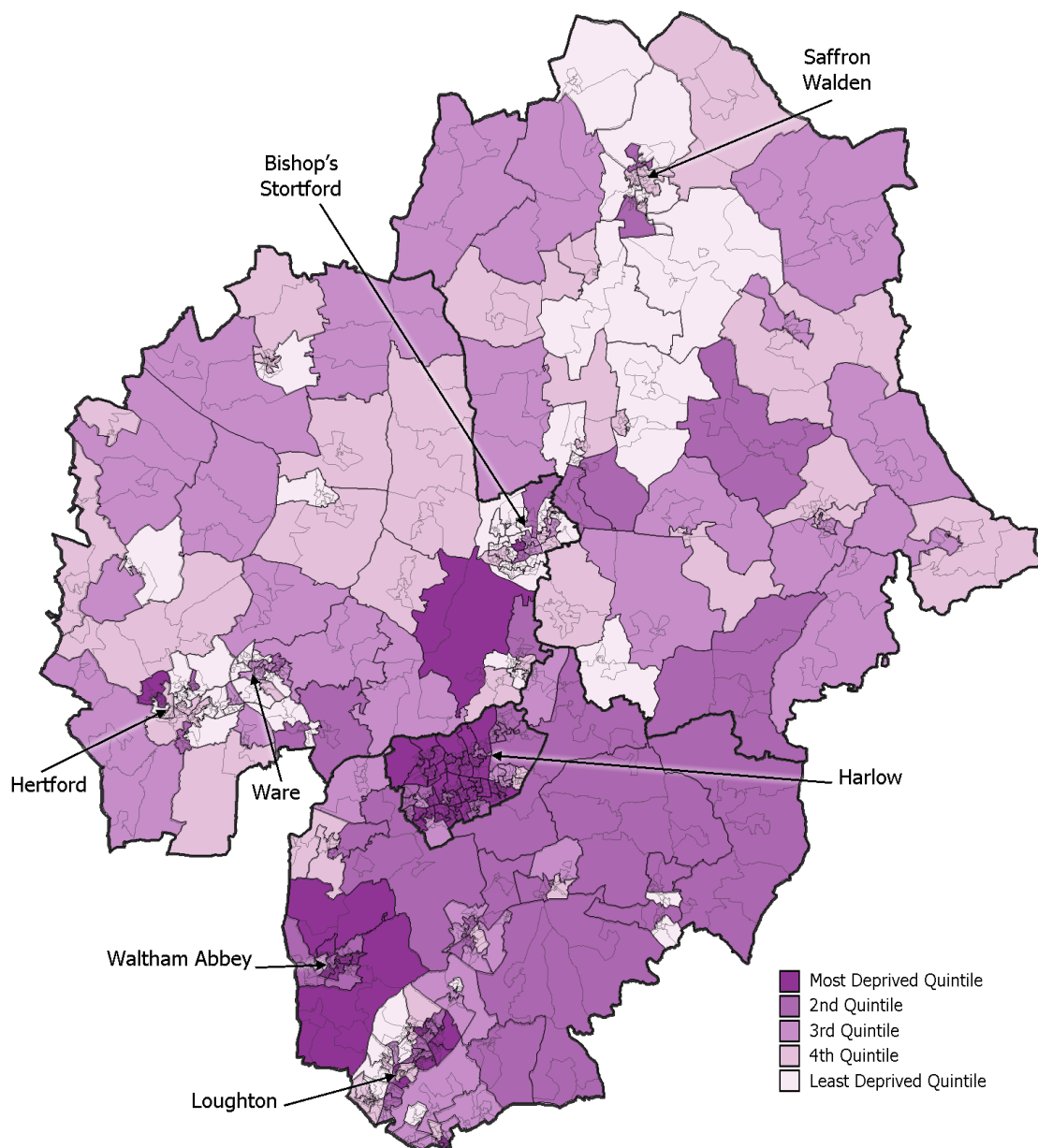
- 1.7 Many of the characteristics of an area can be aggregated to generate an overall picture of the relative wellbeing of the area. This is the purpose of The Index of Multiple Deprivation (IMD), produced by

Department of Communities and Local Government. IMD shows relative levels of deprivation using multiple domains. Domains include: crime; employment; education, skills and training; income; living environment; health deprivation and disability; and barriers to housing and services. We would note that while there is a specific barrier to housing and services sub-domain for IMD, this is dominated by issues such as distance from a shop and a Post Office. Therefore, rural areas tend to score poorly and show high levels of deprivation, while poor quality housing is often found in urban areas. Therefore, the results for the barriers to housing and services sub-domain for IMD are frequently counter-intuitive and hence have not been used here.

- 1.8 In Figure 4 areas marked in darker shades contain higher levels of relative deprivation. This shows that areas scoring poorly for IMD typically have lower house prices in Figure 3.

Figure 4

Index of Multiple Deprivation for LCB East 2010 (Source Index of Multiple Deprivation 2010)



- 1.9 Figure 5 shows the average property prices in LCB East from the first quarter of 2000 until the first quarter of 2012. The data is the average price of all dwellings sold, with the top and bottom 2.5% of property prices excluded to remove potential outliers. The bottom and top 2.5% have been excluded based on extensive experience by ORS of using Land Registry data and reflect that it does contain some anomalously low price data and that a small number of high price sales can skew the results for average prices. Properties bought under 'right-to-buy' are not included in the statistics.
- 1.10 In this period the average property price rose by 113% in East Hertfordshire, 116% in Epping Forest, 107% in Harlow and 92% in Uttlesford. Much of the increase in property prices occurred between 2001 and 2005, with average prices falling in the final period of 2007 until 2009 before starting to rise again.
- 1.11 Figure 6 shows the ratio of median full time earnings to average house prices in each of the local authority districts between 2002 and 2011. The figure clearly shows a worsening affordability trend until 2007. However, the decline in house prices in 2008 combined with continued growth in average full-time earnings have made properties more affordable to those in work in 2009. However, it should be remembered that the availability of mortgages to first time buyers has been limited to those with larger deposits and therefore while affordability may have improved first time buyers will not have been able to take advantage of this. It should also be noted that affordability has worsened again since 2010.

Figure 5  
**Average Price of Properties Sold by Local Authority: Q1 2000-Q1 2012** (Source: HM Land Registry)

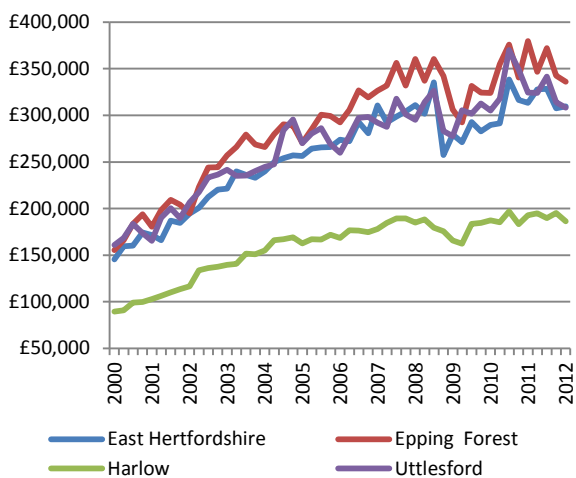
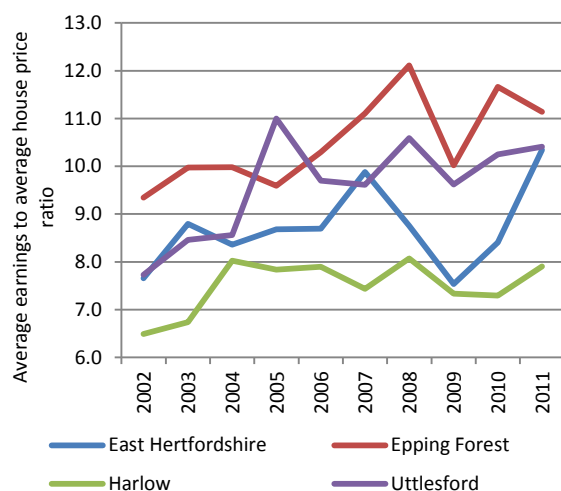


Figure 6  
**Median Full-time Earnings to Average House Price Ratio for Properties Sold in LCB East 2002-2011** (Source: ASHE and HM Land Registry)



1.12 Figure 7 to Figure 14 illustrate how property prices and the volume of sales have changed in LCB East. In East Hertfordshire less than 10% of the stock now sells for under £150,000, with around 50% selling for more than £250,000. Comparing 2007 with 2009, annual transactions fell in East Hertfordshire by 63%.

Figure 7  
Percentage of Houses Sold for Less Than Key Price Bands in East Hertfordshire Sub-region Q2 2000-Q4 2011 (Source: HM Land Registry)

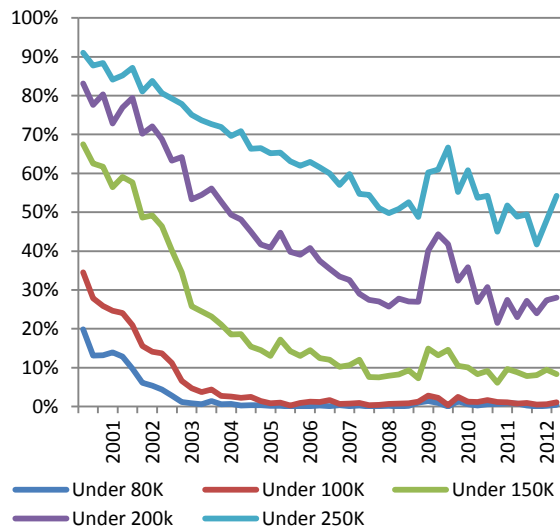
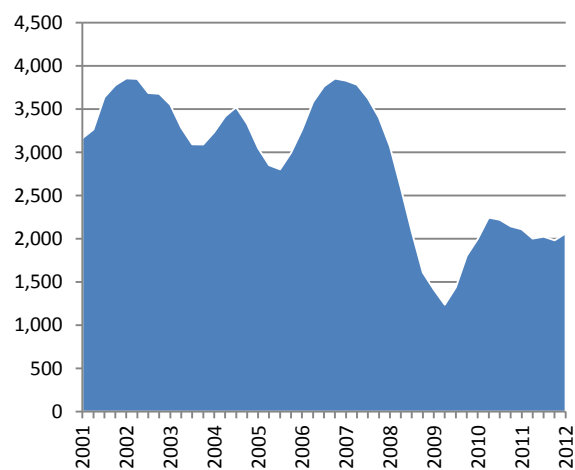


Figure 8  
Volume of Properties Sold Annually in East Hertfordshire Q2 2000-Q1 2012 (Source: HM Land Registry. Note: Figures show rolling annual total based on quarterly data)



1.13 In Epping Forest, only around 6% of the stock now sells for under £150,000, with around 60% selling for more than £250,000. Annual transactions fell in Epping Forest by 72% between 2007 and 2009.

Figure 9  
Percentage of Houses Sold for Less Than Key Price Bands in Epping Forest Q1 2000-Q1 2012 (Source: HM Land Registry)

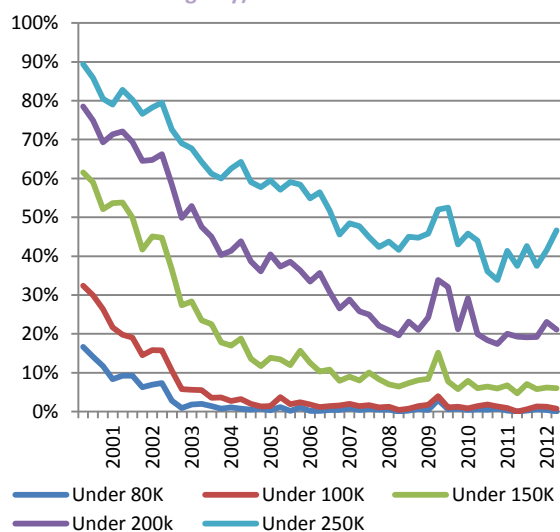
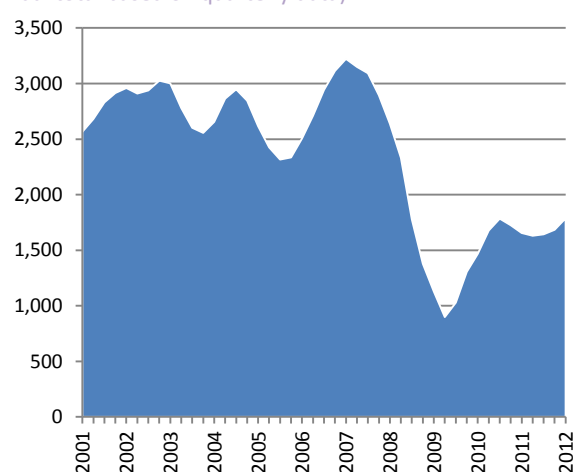


Figure 10  
Volume of Properties Sold Annually in Epping Forest Q2 2000-Q4 2011 (Source: HM Land Registry. Note: Figures show rolling annual total based on quarterly data)



1.14 In Harlow, from 2005 onwards fewer than 10% of all sales were for prices of less than £100,000.. Conversely, the number of dwellings selling for over £200,000 rose from almost zero to around 20% of the total. However, in 2008 and 2009 a higher share of sold properties did so for lower prices. Comparing 2007 with 2009, annual transactions fell in Harlow by 67%.

Figure 11  
Percentage of Houses Sold for Less Than Key Price Bands in Harlow Q1 2000-Q1 2012  
(Source: HM Land Registry)

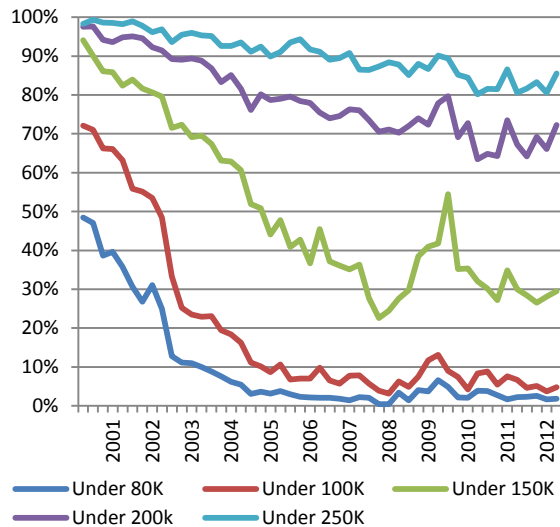
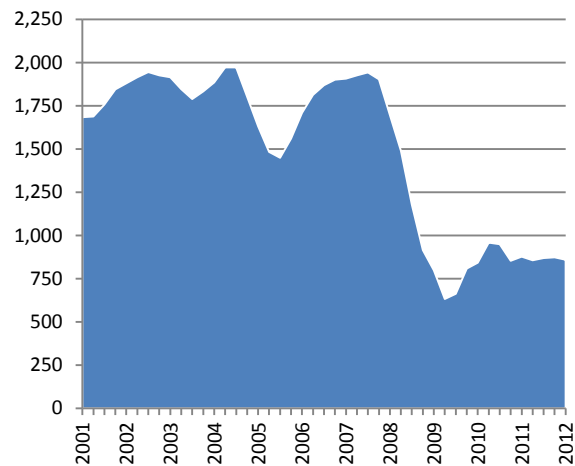


Figure 12  
Volume of Properties Sold Annually in Harlow Q2 2000-Q4 2011 (Source: HM Land Registry. Note: Figures show rolling annual total based on quarterly data)



1.15 In Uttlesford, around 10% of the stock now sells for under £150,000, with around 50% selling for more than £250,000. Annual transactions fell in Uttlesford by 56% between 2007 and 2009.

Figure 13  
Percentage of Houses Sold for Less Than Key Price Bands in Uttlesford Q1 2000-Q1 2012  
(Source: HM Land Registry)

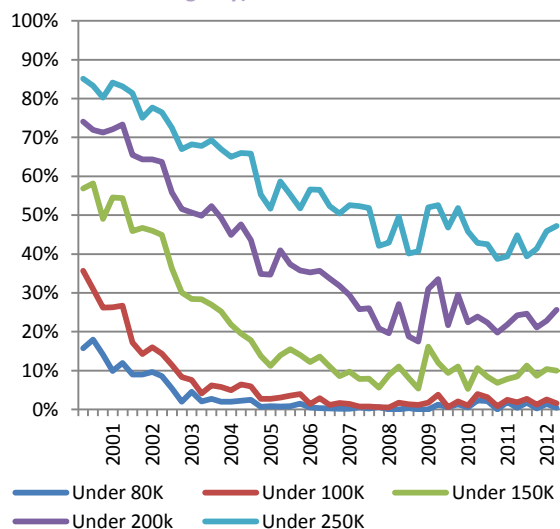
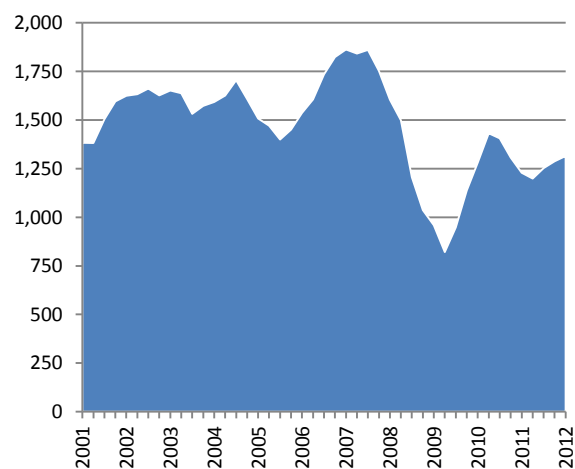


Figure 14  
Volume of Properties Sold Annually in Uttlesford Q2 2000-Q4 2011 (Source: HM Land Registry. Note: Figures show rolling annual total based on quarterly data)





- <sup>1.16</sup> The impact of the credit crunch from the end of 2007 onwards is clearly shown in the reduction in transactions from 2007 onwards. Some of this change is due to a fall in newbuild completions in this period, but much of the change is due to a decline in sales in the second hand market. It was also the case that the number of buy to let landlords entering the market nationally in 2008 and 2009 fell away sharply when compared with earlier years as shown in Figure 15.

Figure 15

**Buy to Let Mortgages in England and Wales 2006-2011** (Source: Council of Mortgage Lenders)



- <sup>1.17</sup> Figure 16 to Figure 19 show how property prices have changed by property type since 2000. In all cases, the figures show the growth in house prices by property type since the first quarter of 2000. With the exception of Uttlesford, the highest rate of house price growth has occurred in flats with the lowest rate of growth typically being in detached dwellings. However, the rate of growth in the price of flats was steepest in the period 2000-2007 and has since fallen back more sharply. Prices in houses have remained more stable since 2007.



Figure 16  
**Growth in Average Price of Properties Sold by Dwelling Type for East Hertfordshire: Q1 2000-Q1 2012** (Source: HM Land Registry)

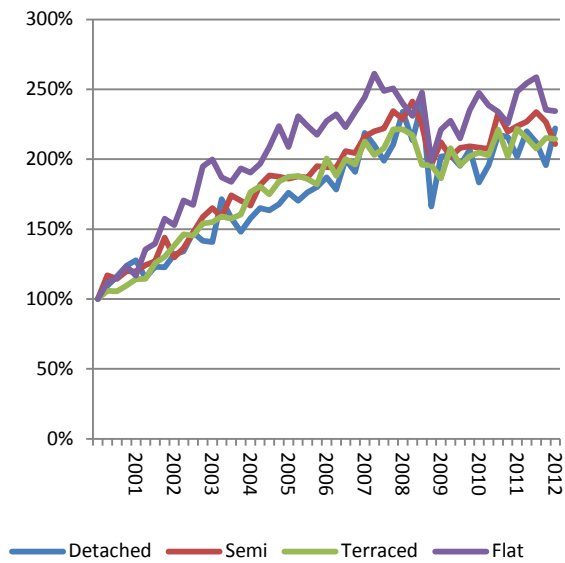


Figure 17  
**Growth in Average Price of Properties Sold by Dwelling Type for Epping Forest: Q1 2000-Q1 2012** (Source: A HM Land Registry)

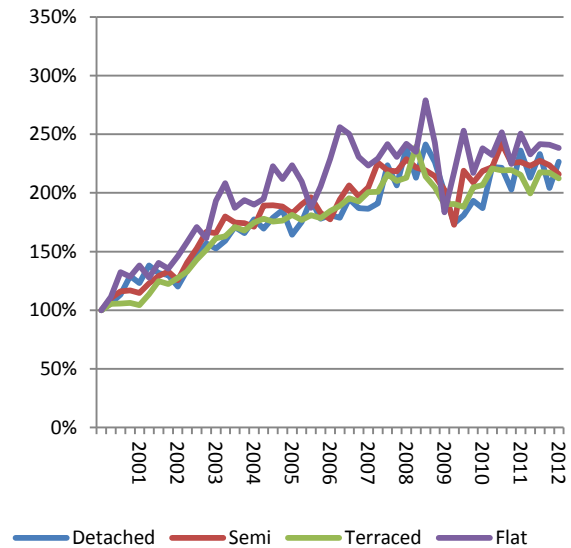


Figure 18  
**Growth in Average Price of Properties Sold by Dwelling Type for Harlow: Q1 2000-Q1 2012** (Source: HM Land Registry)

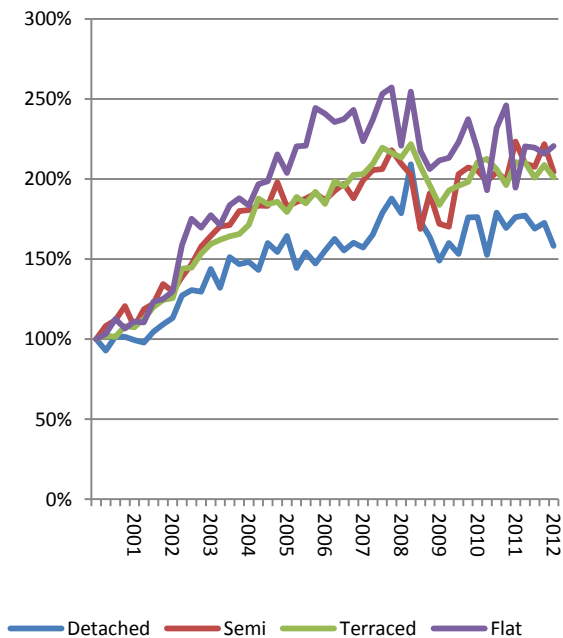
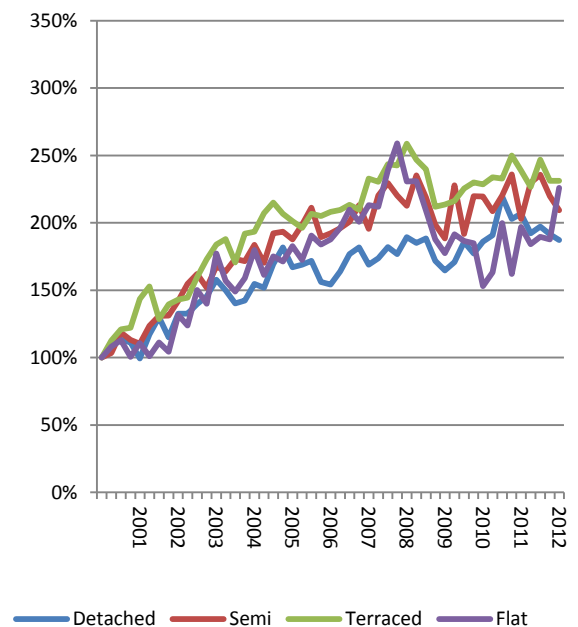


Figure 19  
**Growth in Average Price of Properties Sold by Dwelling Type for Uttlesford: Q1 2000-Q1 2012** (Source: A HM Land Registry)



## The Impact of Government Policy Changes: Affordable Rent and Housing Needs

- 1.18 The Government's new Affordable Rent model allows housing associations to charge rents which are up to 80% of market rents for the area on new build developments and re-lets. All new affordable homes funded through the National Affordable Housing Programme are expected to be at Affordable Rents, with a proportion of relets also being converted to Affordable Rent. The Affordable Rent model is designed to bring greater flexibility for housing associations and to provide financial support to allow new Affordable Housing to be delivered with less grant from the HCA.
- 1.19 The National Planning Policy Framework March 2012 contains the following statements on the supply of new dwellings across all tenures.
- » **Affordable Housing:** Social Rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market. Eligibility is determined with regard to local incomes and local house prices. Affordable Housing should include provisions to remain at an affordable price for future eligible households or for the subsidy to be recycled for alternative Affordable Housing provision.
  - » **Social Rented housing** is owned by local authorities and private registered providers (as defined in section 80 of the Housing and Regeneration Act 2008), for which guideline target rents are determined through the national rent regime. It may also be owned by other persons and provided under equivalent rental arrangements to the above, as agreed with the local authority or with the Homes and Communities Agency.
  - » **Affordable rented housing** is let by local authorities or private registered providers of social housing to households who are eligible for Social Rented housing. Affordable Rent is subject to rent controls that require a rent of no more than 80% of the local market rent (including service charges, where applicable).
  - » **Intermediate housing** is homes for sale and rent provided at a cost above Social Rent, but below market levels subject to the criteria in the Affordable Housing definition above. These can include shared equity (shared ownership and equity loans), other low cost homes for sale and intermediate rent, but not affordable rented housing.

The term **Market housing** refers to homes for sale or rent where the price is set by the open market and there are no eligibility restrictions on occupiers.

- 1.20 As will be discussed later in this report, Affordable Rent can typically be considered as another form of Social Rent. In our core modelling assumptions in Chapter 2 we have assumed that Affordable Rent dwellings are allocated to households who are eligible for Social Rent. This process would allow all new build lets and re-lets to be converted to Affordable Rent without any consequence for Affordable Housing requirements.
- 1.21 However, in Chapter 2 we also test a scenario where Affordable Rent dwellings are only targeted at households who can afford to pay the rent associated with these dwellings without receiving Housing Benefit. This has the effect of turning new Affordable Housing provision and a proportion of relets into intermediate tenure dwellings.

1.22 This section looks at available evidence for current and prospective Social Renters and examines whether households currently being allocated Social Rent could afford to pay Affordable Rents without Housing Benefit.

### Affordable Rent and the Allocation of Social Housing

1.23 Current tenancies will not be affected by Affordable Rent, but the allocation of new households to social housing may be affected. It is possible that those applicants on low incomes, but not in receipt of Housing Benefit / Universal Credit, may be less likely to seek affordable rented accommodation than those in receipt of Housing Benefit or who have incomes that can afford Affordable Rents.

1.24 An analysis of the income distribution of non homeowners shows some interesting results. Figure 20 to Figure 23 show CACI Paycheck data which has been adjusted to show only non-owners. CACI Paycheck shows the distribution of all household incomes in an area. ORS have developed a method which adapts this so as to only show the incomes of non-owners.

1.25 This reveals that over 46% of all non-homeowners in East Hertfordshire, 47% in Epping Forest, 55% in Harlow and 47% in Uttlesford have incomes of under £15,000 per annum and these households can realistically afford no more than Social Rent. In most cases these households would need assistance from Housing Benefit before they would be able to meet the cost of Affordable Rents. This assessment of affordability is based upon households spending no more than 25% of their gross income on rent. Therefore, to meet a rent of £75 per week requires an income of £15,600 per annum (£75x 52weeks x 4). It should also be noted that rents on larger dwellings will be higher, so higher levels of income will be required to meet housing costs.

1.26 An analysis of recent (2006-2010) social lets in LCB East from the CORE system shows around 80% of all new social lets were made to households with no earnings from work. Therefore, the incomes of those who are accessing Social Rent are even lower than the average income of non-owners in the study area.

Figure 20:

**Income distribution of non owners in East Hertfordshire in 2011** (Source: CACI Paycheck adjusted to account for non-owners)

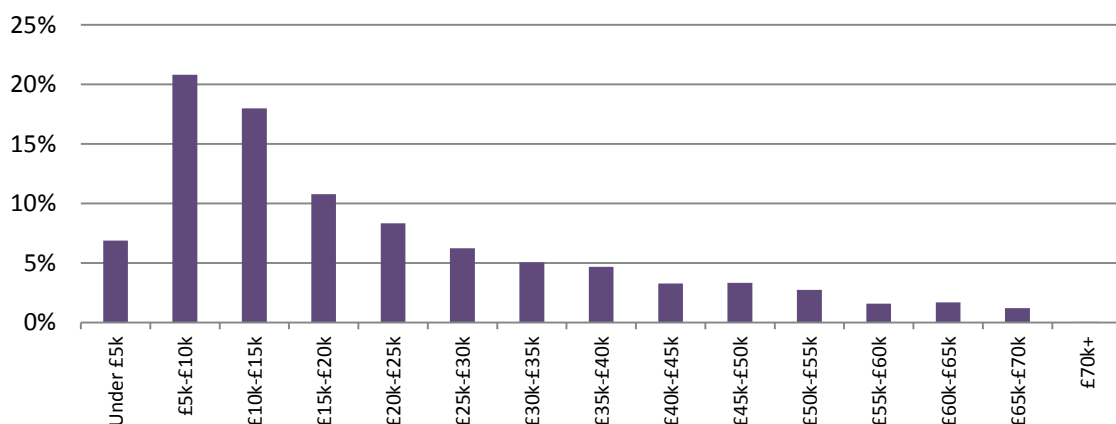


Figure 21:  
Income distribution of non owners in Epping Forest in 2011 (Source: CACI Paycheck adjusted to account for non-owners)

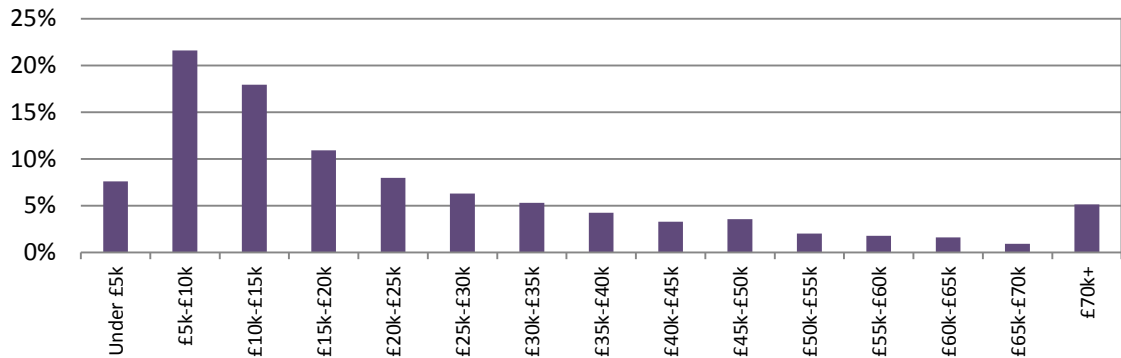


Figure 22:  
Income distribution of non owners in Harlow in 2011 (Source: CACI Paycheck adjusted to account for non-owners)

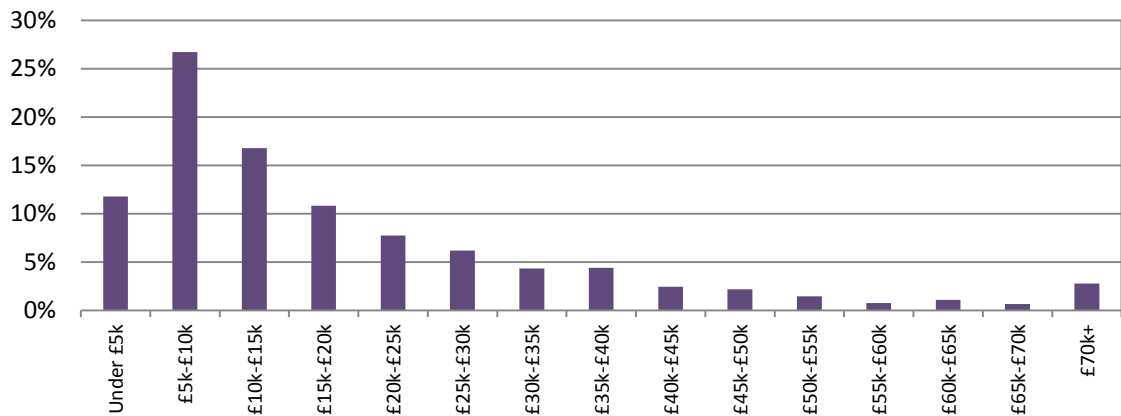
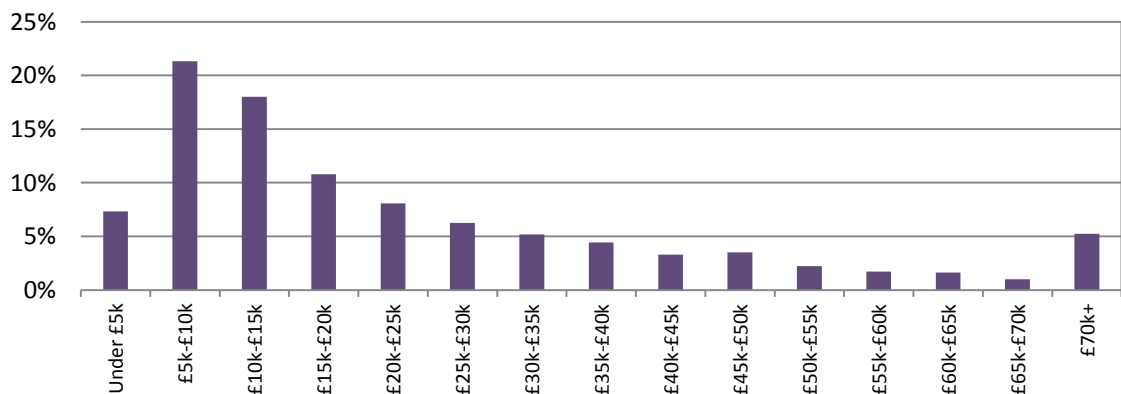


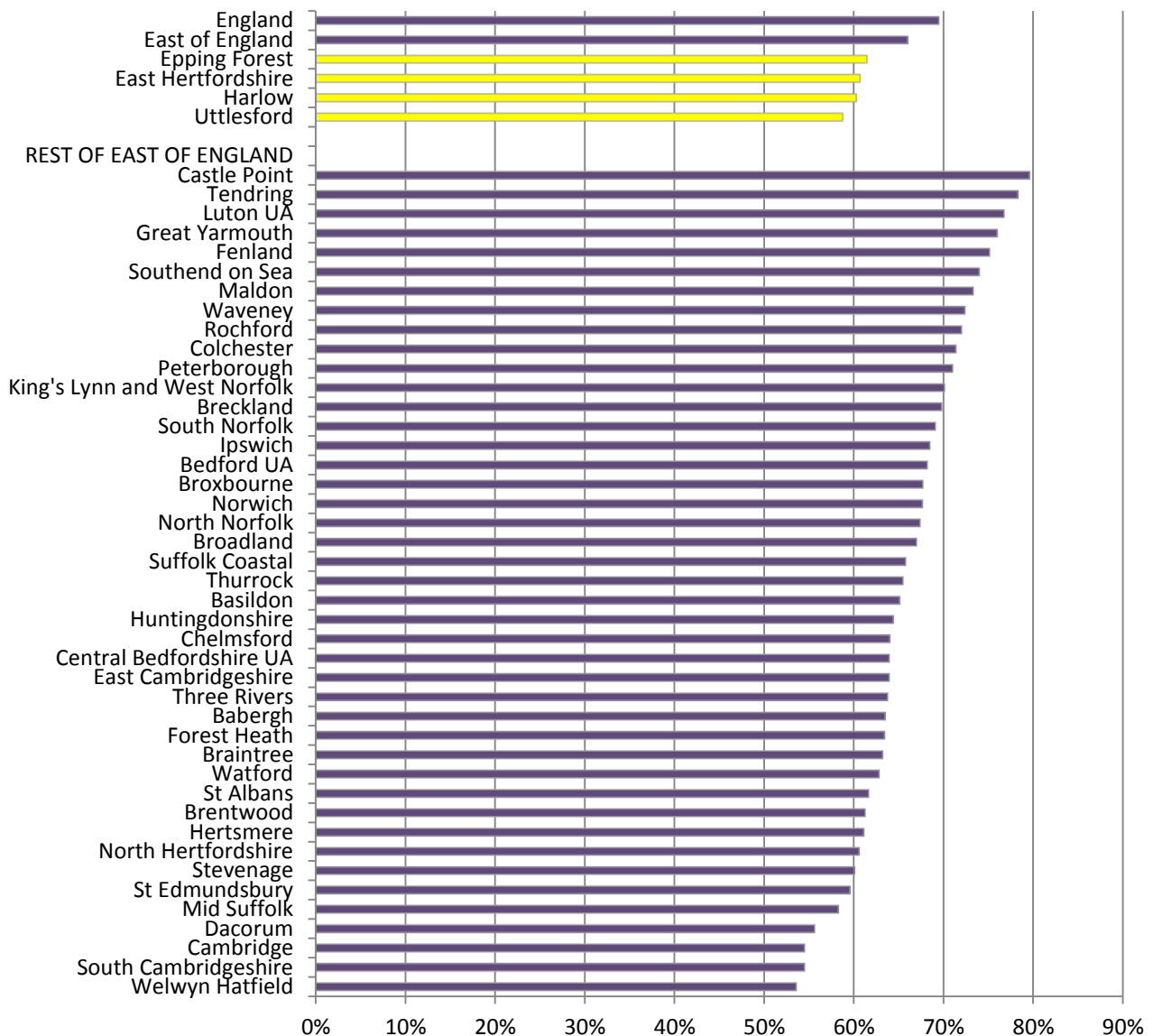
Figure 23:  
Income distribution of non owners in Uttlesford in 2011 (Source: CACI Paycheck adjusted to account for non-owners)



<sup>1.27</sup> To emphasise the importance of this issue, Figure 24 shows the percentage of all current Social Rented tenants who receive Housing Benefit. 61% of all social tenants in Epping Forest and East Hertfordshire, 60% in Harlow and 59% in Uttlesford are in receipt of Housing Benefit. Therefore, these households have been assessed as not being able to afford current Social Rents, so will not be able to afford to pay Affordable Rent.

- 1.28 This does still imply a large number of households currently in the social sector who could potentially be able to pay more than current Social Rents. Currently in East Hertfordshire 2,900 households in Social Rent do not receive Housing Benefit while the figure is 3,200 in Epping Forest. Meanwhile, Harlow has 4,600 households in Social Rent who do not receive Housing Benefit while the figure in Uttlesford is 1,700.
- 1.29 However, we would note that the incomes of current housing applicants are typically lower than current tenants so few households newly allocated to Affordable Rent are likely to be able to afford to meet their own rents. However, their circumstances may improve in the future, allowing them to meet their own housing costs.

**Figure 24:**  
**Percentage of all Social Tenants who Receive Housing Benefit** (Source: CLG Live Table 100 for Tenure in March 2011 and DWP Housing Benefit Statistics March 2012)



### Affordable Rent and the Supply of Social Rent

- 1.30 The impact of converting Social Rented re-lets to Affordable Rents will ultimately depend upon who is housed in these properties. If the properties are let to households who can afford to pay the Affordable Rents then these dwellings will form part of the effective intermediate housing stock. However, if they are let to households who meet the cost of the properties through Housing Benefit receipt they form part of the effective social housing stock and therefore there will be no change in this stock.

### Key Findings on Affordable Rent

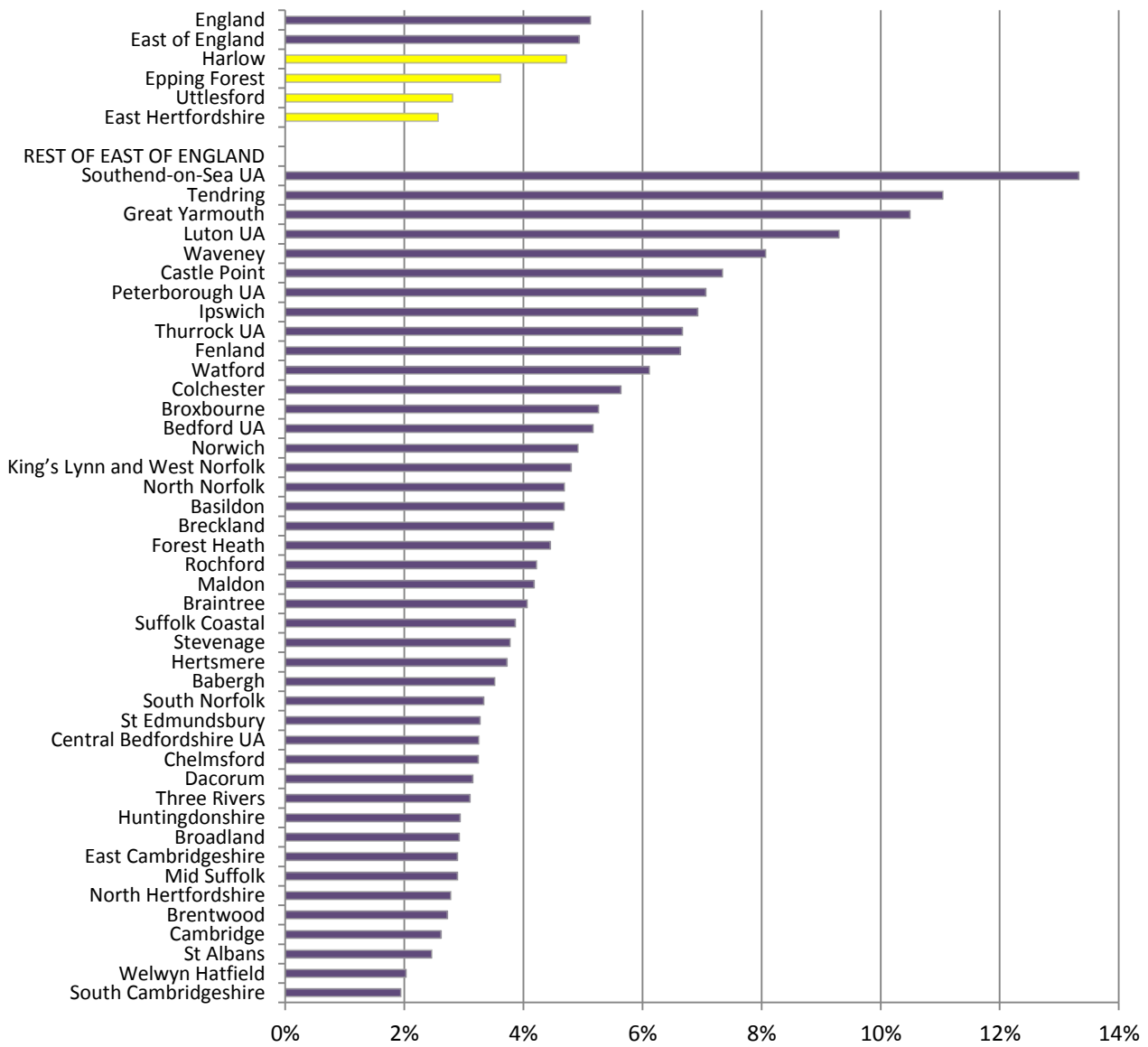
- 1.31 Under the following combined circumstances the introduction of Affordable Rent will have no impact on the requirement for Affordable Housing or the way in which housing need is modelled in the ORS Housing Mix Model:
- » The allocation policies currently in place continue and households are required to pay Affordable Rent if they are able to afford to do so; and
  - » Households who cannot afford to meet the costs of Affordable Rent receive Housing Benefit to cover the cost of the Affordable Rent.
- 1.32 Under these circumstances Affordable Rent dwellings will form part of the effective social housing supply. The only impact would be on the rents paid by those who do not receive Housing Benefit. Currently they only pay Target Social Rents (or lower rents, if Target Social Rents cannot yet be achieved), but would now be required to pay Affordable Rents.
- 1.33 Affordable Rent may also make the problem of the poverty trap worse for many households who are currently out of work, as they may have to pay higher rents if they take a job. Therefore, the disincentive to take a job will become worse. However, this in turn should at least be partly addressed by the introduction of the Universal Credit, which commences in 2013 and will be fully implemented by 2017, and which is intended to deliver a more gradual withdrawal of benefits for those in work.
- 1.34 The area where Affordable Rents may impact upon housing requirements is if they are only let to households who can afford to pay the cost of the property and are not let to households in receipt of Housing Benefit, or such households affected by the proposed benefits cap and, thereafter, the Universal Credit cap. Under these circumstances Affordable Rent becomes interchangeable with Intermediate Rent. This could see existing Social Rented dwellings converted to become part of the effective intermediate stock and then let to households who would not normally be considered for Social Rent. This scenario is explored in Chapter 2.

## The Private Rented Sector and the Role of Housing Benefit

- 1.35 Many households in both the social and private rented sectors are currently able to claim support with rent costs in the form of Housing Benefit. The Department of Work and Pensions (DWP) publish monthly statistics for Housing Benefit recipients.
- 1.36 In recent years Housing Benefit support in the private rented sector has increased in order to help meet housing need. In March 2012, just over 1,500 households in East Hertfordshire, 2,000 households in Epping Forest, 1,700 households in Harlow and 900 households in Uttlesford received Housing Benefit support to live in the private rented sector.
- 1.37 Figure 25 shows that 4.7% of households in Harlow, 3.6% in Epping Forest, 2.8% in Uttlesford and 2.6% in East Hertfordshire claim Housing Benefit while living in the private rented sector. The figure is obtained by dividing the number of Housing Benefit claims in the private rented sector by the total dwelling stock of the area. This may overstate the number of dwellings occupied because some Houses in Multiple Occupation (HMOs) will have more than one claimant household within them.
- 1.38 While many households choose to live in private rented accommodation with Housing Benefit support, other households would prefer a social tenancy, but are unable to obtain one due to shortages in Social Rented stock. Households receiving Housing Benefit in the private rented sector typically cannot afford more than Social Rents. Therefore, to reduce the number of households claiming Housing Benefit in the private rented sector, more Social Rented housing would need to be provided
- 1.39 As outlined in Section 2 of this report, within the ORS Housing Mix Model the future supply of social housing includes existing Housing Benefit supported private rent dwellings. Therefore, the core model seeks to assess the level of Affordable Housing required to prevent more households living in the private rented sector with Housing Benefit support. However, this assumption is also sensitivity tested within the model and if local authorities wish to reduce the number of households claiming Housing Benefit in the private rented sector they would simply need to provide more dedicated Affordable Housing. .

Figure 25

Housing Benefit in Private Rented Sector as a Share of Total Dwellings by East of England Local Authority (Source: CLG Live Table 100 March 2011; DWP March 2012)

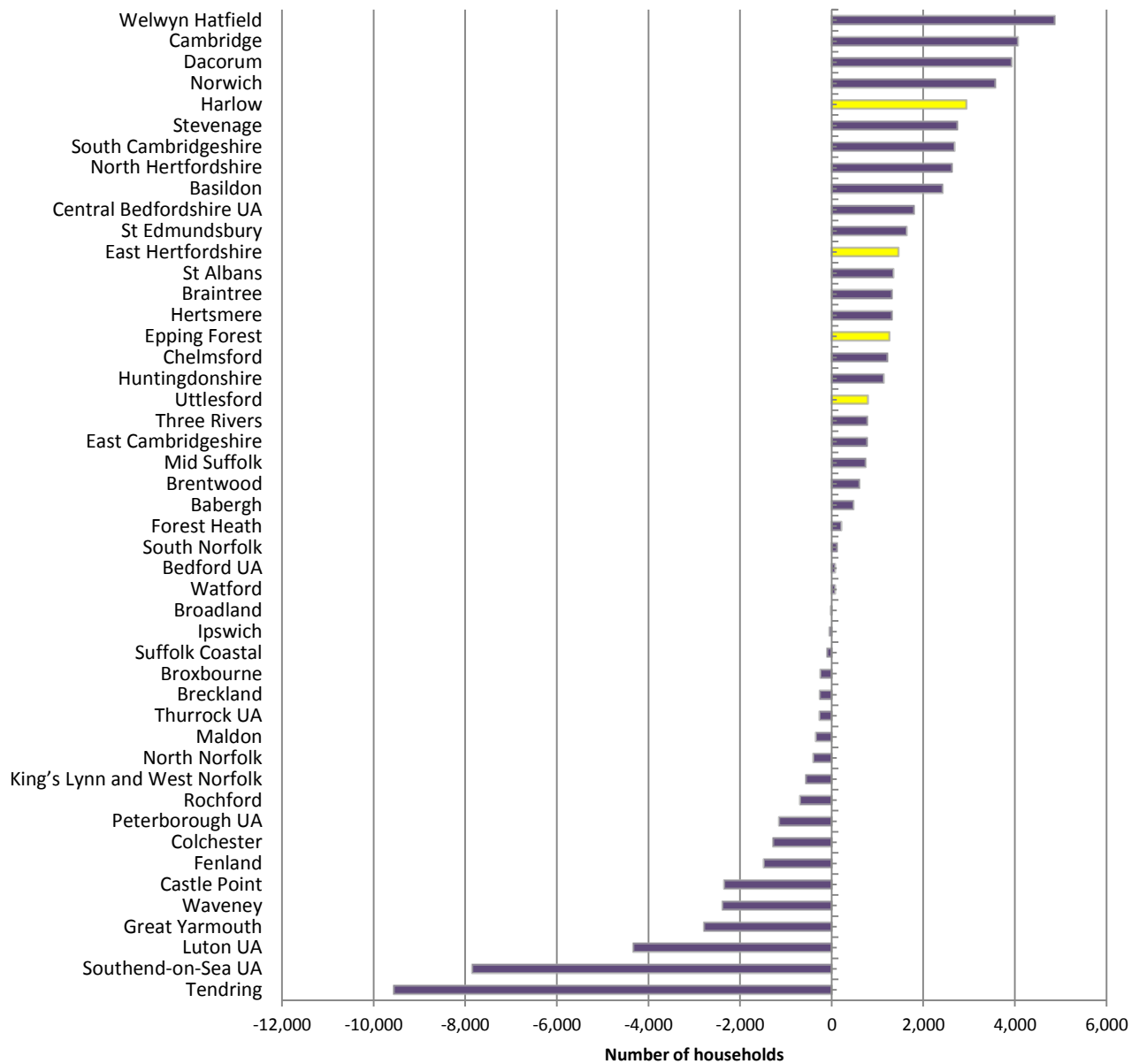


1.40 Figure 26 illustrates an alternative way of looking at the issue. It shows the difference which exists between the number of Social Rented dwellings in the local authority, and the number of households claiming Housing Benefit. This shows that if only households claiming Housing Benefit were to be housed in Social Rented dwellings there would be sufficient dwellings in all four authorities. In Harlow's case there is a relatively large social housing stock, while in the remaining three authorities there is a relatively low number of Housing Benefit claimants when compared to other parts of the East of England.



Figure 26

Gap between Number of Social Rented Dwellings and Number of Local Housing Allowance/Housing Benefit Recipients by East of England Local Authority (Source: CLG Live Table 100 March 2011; DWP March 2012)



## Changes to Social Housing Letting Policy and Local Housing Allowance in the Welfare Reform Act 2012

1.41 The Coalition Government's first budget in June 2010 contained a number of proposed reforms to the local housing allowance, many of which have subsequently been included within the Welfare Reform Act 2012.

These included:

- » From April 2011, local housing allowance rates were capped at £250 per week for a one bedroom property, £290 per week for a two bedroom property, £340 per week for a three bedroom property and £400 per week for four bedrooms or more.
- » From April 2011, local housing allowance rates were set at the 30<sup>th</sup> percentile of local rents (previously the 50<sup>th</sup> percentile)
- » From 2013-14, local housing allowance rates will be uprated in line with CPI
- » Deductions for non-dependants were uprated in April 2011 on the basis of prices. This reversed the freeze in these rates since 2001-02
- » From April 2013, housing entitlements for working age people in the social sector will reflect family size.
- » From April 2011, Housing Benefit claimants with a disability and a non-resident carer were entitled to funding for an extra bedroom.

1.42 The change from using the 50th percentile to the 30th percentile for calculating local housing allowance rates could have a significant impact on the study area. Figure 27 shows the local housing allowance rates for March 2011 (based on the 50th percentile) alongside the 30th percentile rents which currently set the LHA limit. The figures were obtained by taking the weekly allowance multiplying this by 52 and dividing by 12 to obtain an average monthly figure. This shows that the maximum LHA allowance for almost all property sizes in all areas has fallen since March 2011.

Figure 27:  
March 2011 and March 2012 Monthly Local Housing Allowance Thresholds for Broad Rental Market Areas in LCB East .(Source: LHA Direct)

Broad Rental Market Area	March 2011 LHA (50 <sup>th</sup> percentile)				April 2013 LHA (30 <sup>th</sup> percentile)			
	1 bed	2 bed	3 bed	4 bed	1 bed	2 bed	3 bed	4 bed
Cambridge	£549.24	£600.00	£715.40	£1,015.40	£520.00	£597.87	£694.94	£899.99
Harlow & Stortford	£530.76	£669.24	£826.16	£1,153.84	£549.99	£700.01	£849.98	£1,199.99
Outer North East London	£623.08	£784.60	£969.24	£1,292.32	£664.30	£819.30	£1,000.00	£1,328.60
South East Herts	£576.92	£733.84	£876.92	£1,287.68	£604.67	£792.05	£950.00	£1,248.00
Stevenage & North Herts	£484.60	£609.24	£733.84	£1,015.40	£524.98	£660.01	£792.05	£995.02

## Further Consideration of the Government's June 2010 Budget and Welfare Reform Act 2012

1.43 The key issue to consider is how the changes to the local housing allowance will affect the market for Affordable Housing, particularly in terms of demand and supply. Some considerations are set out below.

*In April 2013, Housing Benefit entitlements for working age people in the social sector will reflect family size*

1.44 **Example:** a working age couple with two adult children occupy a 3 bed Social Rented property and receive Housing Benefit. If the adult children move out of the house, the couple will technically only require a 1 bed dwelling. The policy impact is that they will no longer receive Housing Benefit for a 3 bedroom property since their Housing Benefit/Universal Credit would be reduced by 25%. They will either:

- » be required to pay the balance of rent from their own funds, or,
- » move to a small dwelling and continue to receive full Housing Benefit.

1.45 There are a range of possible implications arising from such a change (and we have not considered the ethical implications of the change):

- » More households may downsize from family sized Social Rented dwellings into smaller units
- » Some larger properties may become available for overcrowded households with children
- » There may be or may not be a corresponding 'balancing effect', as larger homes and smaller homes are vacated
- » Adult children may subsidise their parents to allow them to remain in the larger family home
- » Some households who will see the benefit reduced may choose to remain and find the additional rent required. This could lead to potential difficulties in paying other living costs as their income may not have changed, or result in rent arrears and possible eviction

*Deductions for non-dependants were uprated in April 2011 on the basis of prices. This reversed the freeze in these rates since 2001-02*

1.46 **Example:** a pensioner couple with two adult children occupy a 3 bed Social Rented property and receive Housing Benefit. Current deductions for non-dependants have risen, thus reducing the amount of Housing Benefit received by this household. If the adult children move out of the house, the couple will be allowed to remain in their dwelling because they are not working age and will receive more Housing Benefit.

1.47 The policy impact is that the financial incentive is for the adult children to leave home and seeking their own independent accommodation, hence the rate of household formation will rise.

1.48 Meanwhile, changes to the level of local housing allowance available may have a considerable impact on the supply of dwellings available for households who require financial support in the private rented sector. These changes will not reduce the number of households seeking affordable or subsidised housing – however, it may increase the demand on local authorities to meet these households housing need.

1.49 The ability of authorities to meet housing need is dependent upon many issues. For example, how willing will private landlords in LCB East be to accept households in receipt of Housing Benefit at the reduced levels from April 2011? Potential scenarios include:

- » Market rent levels fall as landlords accept lower yields on their investments.
- » If the new rent thresholds are too low then landlords may simply not be willing to accept Housing Benefit dependent households and instead return their stock to the market sector.
- » This in turn may see house prices and rents fall as more housing becomes available to buy or rent - more households may be able to meet their housing requirements in the open market.

1.50 However, if landlords are not prepared to accept households in receipt of Housing Benefit, where will these households have their housing needs addressed? Social housing has limited supply. Homelessness presentations may increase and overcrowding might rise. The percentage of disposable income paid to rent may rise in households seeking housing in the private sector.

1.51 In summary:

- » Potentially, there could be reduced household formation rates which may reduce the number of households seeking Affordable Housing. However, some changes in the LHA may also see formation rates rise.
- » The supply of private rented dwellings may change significantly, especially for households on lower incomes.
- » The total number of Housing Benefit claimants in the private rented sector is unlikely to fall, but their locations may change to lower priced areas.
- » Alternatively, where landlords do not accept the lower rents more properties may return to 'pure' market housing.
- » Local authorities may be pressed to find housing solutions for increasing demand from households who cannot resolve their own needs - homelessness presentations and overcrowding may also rise further.

1.52 Indications of the likely changes which will occur due the LHA reforms are shown in Figure 28 and Figure 29. These show the growth which has occurred in Housing Benefit claimant numbers in the private rented sector in each East of England local authority between October 2009 and March 2012. Figure 28 shows the growth in the total number of claimants and Figure 29 shows the percentage growth from an October 2009 base.

1.53 It is clear that the highest growth has been in coastal authorities such as Southend on Sea, Tendring, Thurrock and Kings Lynn and West Norfolk. Meanwhile, the LCB East authorities have seen lower rates of growth. This does not necessarily mean that the coastal authorities, have higher levels of local housing need, but instead may reflect that these areas have more capacity in their private rented stock to house Housing Benefit claimants. Many coastal towns have former bed and breakfast properties which are suitable for conversion to Housing Benefit supported Houses in Multiple Occupation (HMOs).

Figure 28

Growth in Number of Housing Benefit Claimants in the Private Rented Sector Oct 2009-March 2012 by East of England Local Authority (Source: DWP)

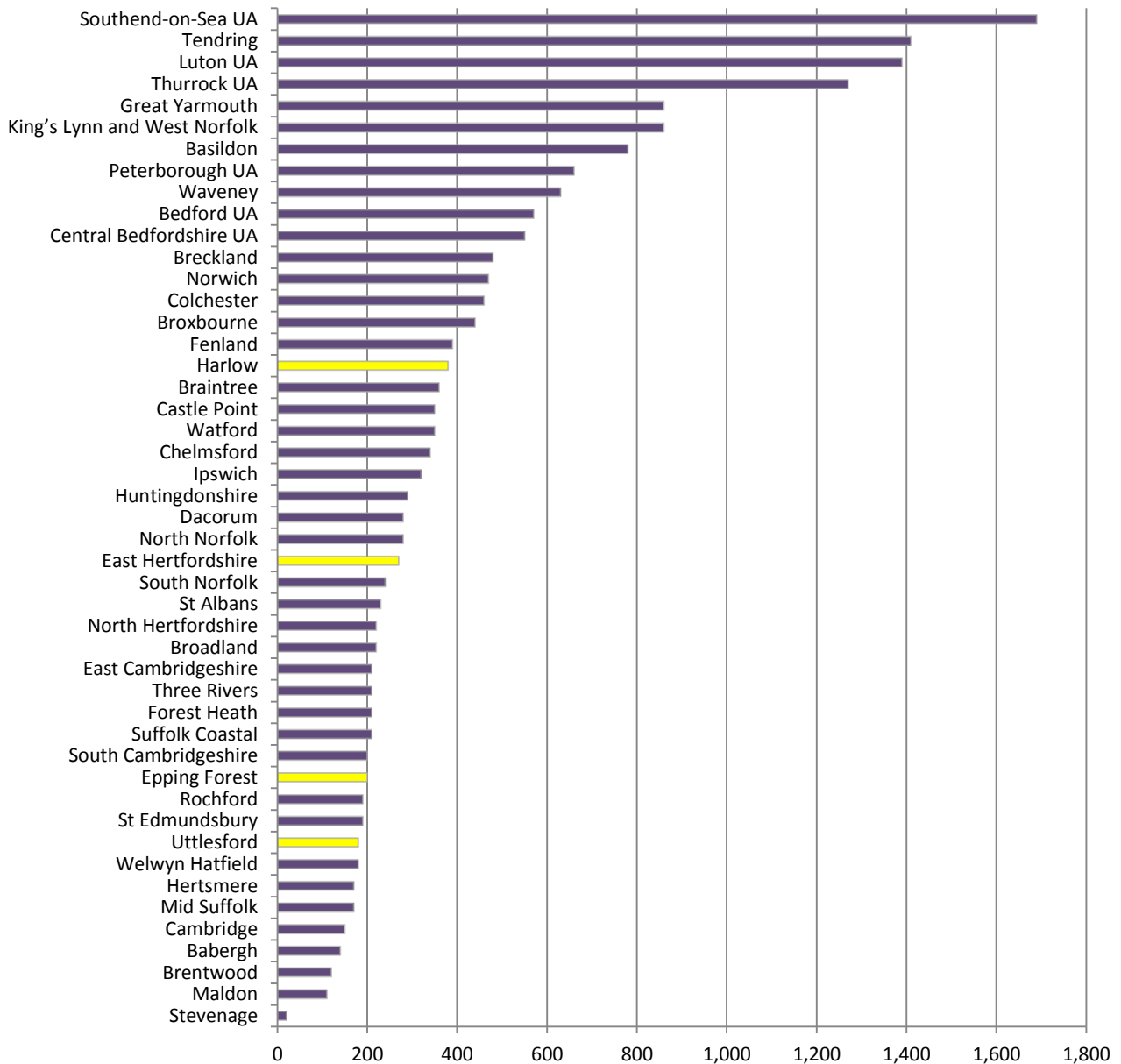
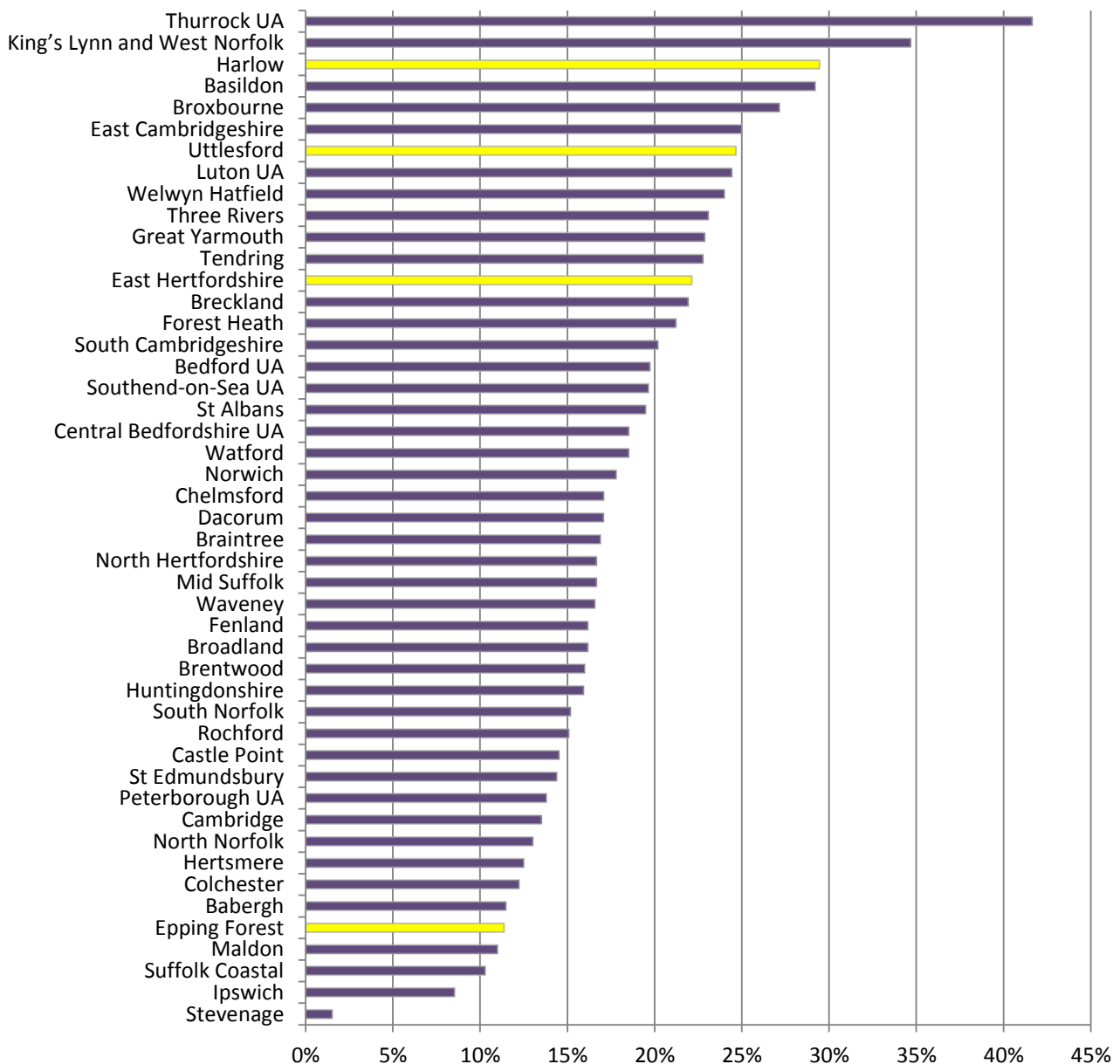


Figure 29

Growth in Housing Benefit Claimants in the Private Rented Sector Oct 2009-March 2012 by East of England Local Authority as a Percentage of the October 2009 Base (Source: DWP)



<sup>154</sup> The LHA reforms are likely to see this process exaggerated with landlords withdrawing Housing Benefit supported stock and either letting the property to tenants not in receipt of Housing Benefit or returning it to the open market in more affluent and expensive authorities. Therefore, if the LCB East authorities with higher property prices wish to meet their own housing needs within their own boundaries then this would require a higher level of Affordable Housing provision.

<sup>155</sup> Additional changes to the benefit system which will impact upon the receipt of Housing Benefit were announced in October 2010. These will see the total level of benefit received by most households capped at £500 per week, with the exception of benefit for single people with no children, which is capped at £350 per week. The amount of Housing Benefit any household can receive will be assessed after any Jobseekers Allowance, Income Support, Council Tax benefit, child tax credit and child benefit have been deducted. For

larger benefit dependent households the cap may severely restrict their housing options as the Housing Benefit received will not cover the typical rent on a larger private rented dwelling.

1.56 This in turn may start to alter long-term demographic trends if households seek to move to lower rent areas to ensure their total benefit claim remains within the £500 cap.

**Right to Buy: Housing Need and the Housing Register**

1.57 Right to Buy sales have fallen to negligible levels in recent years in LCB East. However, the Government announced in September 2011 that it was planning to revive the scheme with greater discounts being offered to tenants to buy their property. The revived Right to Buy scheme which was announced and came into effect in March 2012 saw households receiving a 35% discount after five years' tenancy, with an extra 1% for each additional year's tenancy, up to a maximum of the smaller of 60% of the property value or £75,000. Tenants in flats will now receive 50% discount after five years' tenancy, with 2% increase for each additional year of tenancy up to the lower of 70% of the property value or £75,000. In the April 2013 Budget, it was announced that the eligibility period for Right to Buy will be reduced to 3 years, and the maximum property value has been increased to £100,000 in London.

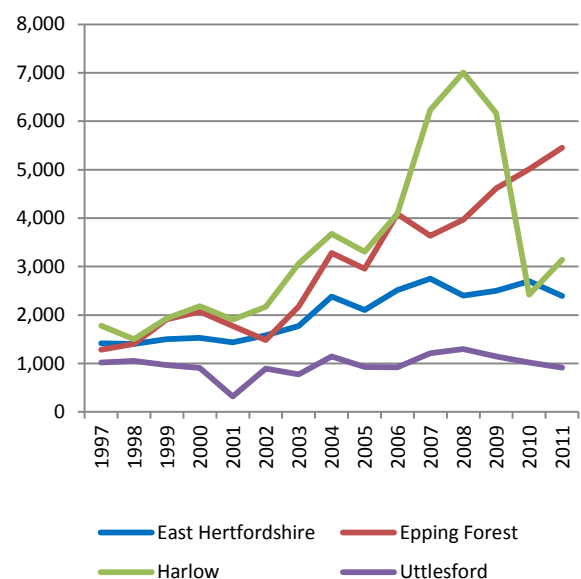
1.58 The policy aims for each additional property sold under Right to Buy as a result of the changes in 1.57 above to be replaced by an Affordable Rent property. However, Councils will only be able to keep additional receipts from sales if they limit the use of those receipts to 30 per cent of the cost of the replacement homes and spend them within 3 years of receipt. They will be expected to secure the remainder of the funding from other sources. Otherwise, the Right to Buy receipts will be placed in a central pot to support house building nationally rather than in the local authority where the sale occurred.

1.59 This clearly has long-term implications for LCB East. A large number of sales per annum may reduce the long-term capacity of the area to meet its own housing needs.

1.60 The policy may also have more subtle effects such as on the housing register. Figure 30 shows that the housing registers of the area have shown erratic long-term growth. Notably, Harlow's waiting list fell sharply from over 6,000 in 2009 to 2,400 following a detailed review. However, an improved incentive to exercise the Right to Buy will make Social Rent a potentially more attractive housing solution to those who cannot afford owner occupation in the area. Therefore, the housing register may start to grow as households hope to access Social Rent to be able to access Right to Buy.

1.61 Changes to local residency criteria may have an impact on waiting lists. For example, Epping Forest District Council is in the process of implementing agreed changes to the criteria for applying for social housing properties in the district, and it is estimated by September 2013 the waiting list will have reduced from around 6,500 to approximately 3,500.

Figure 30  
Local Authority Social Housing Waiting List for Non-transfer Applicants 1997-2011 (Source: Housing Strategy Statistical Appendix)



### Acute Housing Need: Homelessness

- 1.62 A key duty of local authorities is to provide a service to households who become homeless or are at risk of becoming homeless where they are satisfied that the applicant has a priority need. Data on homelessness cases was formerly published quarterly by local authorities, but is now only published on an annual basis.
- 1.63 The Localism Act allows for an offer private rented accommodation to homeless households to be a discharge of their duty under homelessness legislation. Epping Forest District Council has adopted this measure as part of a revised allocations policy, and therefore reliance on the private rented sector is likely to increase.
- 1.64 Figure 31 shows that acceptances for homelessness significantly reduced from 2003 until 2011. The number of households housed in temporary accommodation rose sharply in Harlow between 2003 and 2005, but has declined significantly since this time (Figure 32). East Hertfordshire also saw a spike in the use of temporary accommodation in 2005 which matched a period of a high number of households being assessed as being homeless and in priority need. Meanwhile, Epping Forest saw a rise in the use of temporary accommodation until 2006, while Uttlesford has rarely used temporary accommodation to meet housing needs.

Figure 31  
**Unintentionally Homeless and in Priority Need Households by Local Authority Q1 2003- Q1 2011** (Source: Local Authority P1E Homelessness Data. Note: Number of cases based on 12-months to end of quarter)

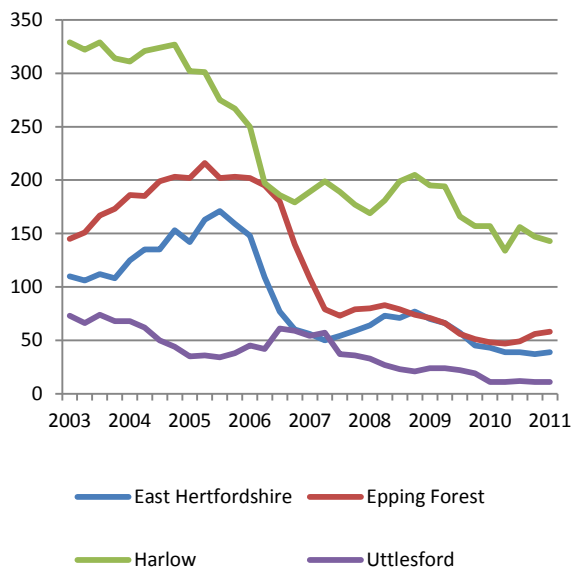
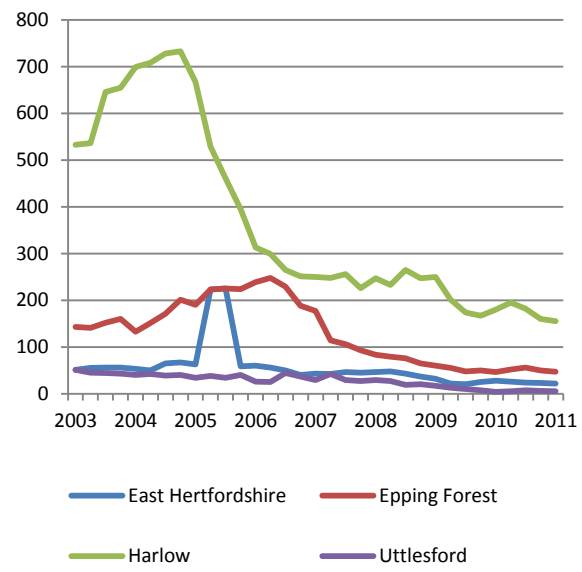


Figure 32  
**Households in Temporary Accommodation by Local Authority Q1 2003- Q1 2011** (Source: Local Authority P1E Homelessness Data)





## 2. Projecting Future Housing Requirements

- 2.1 Future housing demand is extremely difficult to quantify – so local planning authorities are encouraged to ensure that the evidence brought together enables the identification of high-level messages about the key trends and drivers to which future policies will need to respond (including an estimate of the scale of future housing requirements based on net household projections) rather than aiming to pin down numerous details.
- 2.2 24 authorities, including all those in LCB East, in the East of England have had detailed household projections undertaken in May 2012 for them by Edge Analytics using the PopGroup software. This study is known as the 'Greater Essex Demographic Forecasts: Phase 3: Scenario Development'. The 2010 based sub-national population projections for each authority are detailed in Figure 33 to Figure 38.

Figure 33

**Household Projections to 2033 by Household Type for East Hertfordshire** (Source: Greater Essex Demographic Forecasts. Note: Figures rounded to the nearest 100)

Household Type	Year				
	2010	2018	2023	2028	2033
<b>2010 Based Trend based Household Projections</b>					
One person households:	16,800	20,300	22,500	24,600	26,600
One family and no others: Couple households	30,400	33,700	35,600	37,400	39,100
One family and no others: Lone parents households	2,800	3,400	3,900	4,300	4,600
Couple and one or more other adults	4,600	3,900	3,400	3,100	2,800
Lone parent and one or more other adults	400	400	400	400	400
Other household type	2,400	2,200	2,100	2,000	2,000
<b>All household groups</b>	<b>57,200</b>	<b>63,900</b>	<b>67,900</b>	<b>71,800</b>	<b>75,400</b>

Figure 34

**Household Projections to 2033 by Household Type for Epping Forest** (Source: Greater Essex Demographic Forecasts. Note: Figures rounded to the nearest 100)

Household Type	Year				
	2010	2018	2023	2028	2033
<b>2010 Based Trend based Household Projections</b>					
One person households:	18,100	21,600	24,200	26,800	29,400
One family and no others: Couple households	24,400	26,200	27,400	28,700	29,900
One family and no others: Lone parents households	3,200	4,200	4,800	5,200	5,700
Couple and one or more other adults	4,900	4,100	3,600	3,200	2,900
Lone parent and one or more other adults	400	500	500	500	500
Other household type	2,200	2,000	1,900	1,800	1,600
<b>All household groups</b>	<b>53,300</b>	<b>58,600</b>	<b>62,300</b>	<b>66,200</b>	<b>70,100</b>

Figure 35

**Household Projections to 2033 by Household Type for Harlow** (Source: Greater Essex Demographic Forecasts. Note : Figures rounded to the nearest 100)

Household Type	Year				
	2010	2018	2023	2028	2033
<b>2010 Based Trend based Household Projections</b>					
One person households:	12,100	13,900	15,000	16,300	17,500
One family and no others: Couple households	15,000	16,000	16,400	16,800	17,200
One family and no others: Lone parents households	2,700	3,300	3,700	4,000	4,200
Couple and one or more other adults	3,000	2,500	2,300	2,100	1,900
Lone parent and one or more other adults	400	400	400	400	500
Other household type	1,800	1,800	1,800	2,000	2,200
<b>All household groups</b>	<b>35,000</b>	<b>37,800</b>	<b>39,600</b>	<b>41,500</b>	<b>43,500</b>

Figure 36

**Household Projections to 2033 by Household Type for Uttlesford** (Source: Greater Essex Demographic Forecasts. Note: Figures rounded to the nearest 100)

Household Type	Year				
	2010	2018	2023	2028	2033
<b>2010 Based Trend based Household Projections</b>					
One person households:	8,500	10,200	11,500	12,600	13,600
One family and no others: Couple households	17,300	19,600	20,900	22,200	23,300
One family and no others: Lone parents households	1,500	1,900	2,200	2,500	2,600
Couple and one or more other adults	2,600	2,500	2,300	2,300	2,300
Lone parent and one or more other adults	200	200	200	300	300
Other household type	1,000	900	800	800	700
<b>All household groups</b>	<b>31,200</b>	<b>35,400</b>	<b>38,000</b>	<b>40,500</b>	<b>42,800</b>

- 2.3 In all four authorities there is projected to be a sharp increase in the number of single persons, lone parents and couples living as a single family unit. This excludes couples who are living with other adults such as adult children, with this number projected to decline.

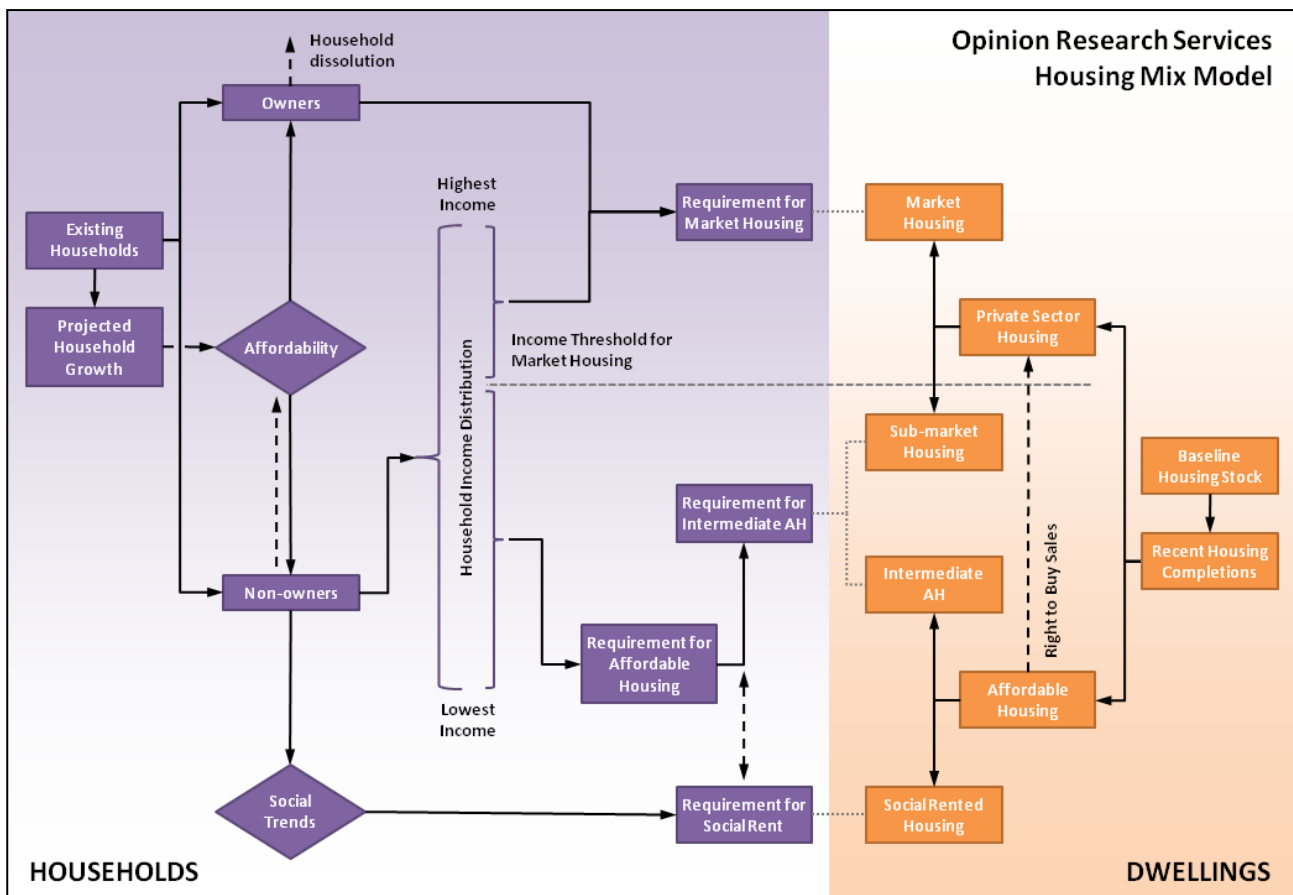
## Modelling Future Housing Requirements

- 2.4 In 2007, government guidance for undertaking studies to understand local housing markets was issued by the Department for Communities and Local Government in the form of the document, 'Strategic Housing. Market Assessments. Practice Guidance. Version 2. August 2007'. This considers the future housing market from a high-level, strategic perspective; considering how key drivers and long-term trends will impact on the structure of the household population over the full planning period. In order to meaningfully compare the assessment of housing need with the change in total numbers of households (and the overall requirement for additional housing), both numbers need to be derived in comparable ways.
- 2.5 The ORS Housing Mix Model considers both housing need and overall housing requirements on a longer-term basis, providing robust and credible evidence about the required mix of housing over the full planning

period and understanding how key housing market drivers (such as affordability) will impact on the appropriate housing mix.

- 2.6 The model uses a wide range of secondary data sources to build on existing household projections and profile how the housing stock will need to change in order to accommodate the projected future population. The secondary data sources are readily updateable as new information is published, and a range of assumptions can be varied to enable effective sensitivity testing to be undertaken. In particular, the model has been designed to help understand the key issues and provide insight into how different assumptions will impact on the required mix of housing over future planning periods.
- 2.7 Details on the technical workings of the model can be found in the separate ‘ORS Housing Mix Model Technical Paper’ which can be viewed online. In summary, Figure 37 provides a detailed overview of the structure of the Housing Mix Model and the way in which the different stages of the model interact:
  - » The left hand section of the diagram considers households in terms of the baseline population and projected household growth, and their associated affordability and housing requirements;
  - » The right hand section of the diagram considers the dwelling stock in terms of the tenure and housing costs for both the existing stock and the recent housing completions.

Figure 37  
Detailed Overview of the ORS Housing Mix Model



- 2.8 The Housing Mix Model considers the projected household population alongside the existing dwelling stock in order to establish the necessary balance between Market Housing and Affordable Housing in relation to

the additional dwellings to be provided, and within the Affordable Housing dwelling provision the appropriate role of Intermediate Affordable Housing and Social Rented Housing.

## Core Future Housing Requirements for Original LCB East SHMA

2.9 Figure 38 shows the relevant identified future housing requirements from the original LCB East SHMA for the period 2007-2026. For this update, the figures for the four districts plus West Essex (Epping Forest, Harlow and Uttlesford) and the Harlow Joint Working Area (East Hertfordshire, Epping Forest and Harlow) are updated in Figure 39 to cover the period 2010-2033 using four sets of alternate household projections, namely:

- » Sub-National Population Projections 2010 – base line
- » Approved Regional Spatial Strategy
- » Nil net migration
- » Jobs-led – using output from the East of England Forecasting Model

Figure 38:  
**Tenure Mix of Housing Requirement to 2026 by Local Authority from 2008 SHMA** (Note: All figures rounded to the nearest 100. Figures may not sum due to rounding. All percentages are calculated based on data before rounding)

Housing Type	Local Authority			
	East Hertfordshire	Epping Forest	Harlow	Uttlesford
<b>House prices based on 2007-08 levels</b>				
Market housing	5,400	-500	8,400	2,500
Intermediate Affordable Housing	8,000	4,200	1,300	4,300
Social Rented housing	1,800	2,900	2,500	1,300
<b>Total Housing Requirement</b>	<b>15,200</b>	<b>6,600</b>	<b>12,200</b>	<b>8,100</b>
Market housing	35.7%	0.0%	68.7%	30.7%
Intermediate Affordable Housing	52.8%	59.1%	10.7%	53.2%
Social Rented housing	11.5%	40.9%	20.5%	16.1%
<b>House prices based on long-term trends</b>				
Market housing	8,300	2,000	9,700	4,200
Intermediate Affordable Housing	5,100	1,800	0	2,600
Social Rented housing	1,800	2,900	2,500	1,300
<b>Total Housing Requirement</b>	<b>15,200</b>	<b>6,600</b>	<b>12,200</b>	<b>8,100</b>
Market housing	54.7%	29.6%	79.5%	51.5%
Intermediate Affordable Housing	33.7%	26.5%	-	32.4%
Social Rented housing	11.5%	43.9%	20.5%	16.1%

## Core Modelling Assumptions

2.10 For the results presented below the following assumption are contained within the model:

- » Mortgage multiplier used is 3.5%, so households are able to borrow up to 3.5 times their household income. This figure is based on recommendation in SHMA Practice Guidance;

- » Households can spend up to 25% of their income for rent in accordance with CLG Practice Guidance recommendations;
- » The annual rental yield for private rented dwellings is 5.9%. This is the rate of return on private rented dwellings so a property valued at £100,000 is assumed to yield a rent of £5,900 per annum. There are no official statistical sources for rental yields, so the figure used in the model is taken from the Paragon Private Rented Sector Survey Q4 2011. This is a survey of 500 buy to let landlords who are also members of the National Landlords Association;
- » House prices are set as a baseline rate of their 2011/12 levels, which are close to long-term trend real house prices. This assumption is sensitivity tested in the model by exploring the impact of both higher and lower house prices;
- » A vacancy rate on households to dwellings of 3.8%. Therefore, at any point in time 3.8% of dwellings will be vacant including new build dwellings. This figure is consistent with recent HSSA submissions on vacant dwellings for each authority;
- » It is assumed that any Right to Buy/Right to Acquire sales since 2001 are required to be replaced within the model by additional new build of Social Rented dwellings. This is due to a Right to Buy/Right to Acquire sale representing a loss of a Social Rented dwelling without any reduction in the number of households seeking Social Rent, so each sale requires a new build to replace it. Projected Right to Buy/Right to Acquire sales to 2033 are based upon the average number of sales since 2008. As discussed in para 1.57 onwards, future Right to Buy sales may not be replaced one for one in the local authority where they occur. This will simply increase the number of Social Rented units required to be delivered from other sources.
- » The requirements assume a site delivery threshold of zero, so all sites yield Affordable Housing. If some sites do not deliver Affordable Housing, the remaining sites will be required to absorb the remaining requirements. Therefore, if only 50% of sites deliver Affordable Housing the then identified percentages for delivery would require doubling if all requirements are to be met;
- » The number of households receiving Housing Benefit in the private rented sector is assumed to remain at March 2012 levels. This assumption is sensitivity tested in the model by showing the level of Affordable Housing which would be needed to reduce the number of claimants in the private rented sector;
- » Social letting policies are assumed to remain constant. This leads to most households entering social housing requiring Housing Benefit and Affordable Rent dwellings being effective Social Rent;
- » Intermediate Affordable Housing is housing whose cost is above target Social Rents, but below the cost of market housing (rent or owner occupier). Therefore, intermediate Affordable Housing must be cheaper than the cost of renting a dwelling at the lower quartile of private rents;
- » The number of converted dwellings has been assumed to have remained at its level at the time of the 2001 Census. However, this is sensitivity tested within the model;
- » A converted dwelling has a 20% uplift on the rent it receives. Therefore, the landlord receives 20% more rent if they let their property as an HMO or they formally convert the dwelling than if they let in the private rented sector to one household;
- » The period for results is 2011-2033.
- » All figures are rounded to the nearest 100.

## Updated Future Housing Requirements for LCB East

2.11 Figure 39 shows the updated housing requirement projections for the four local authorities and two combined areas. It is important to emphasise that these figures are based:

- » Purely upon the affordability of households, not their preferences or the Affordable Housing allocation policies of the local authorities. Households are allocated to market housing if they can afford market housing costs, to intermediate housing if they can afford more than Social Rents, but less than market housing costs and to Social Rent if they cannot afford to pay existing Social Rents without Housing Benefit.
  - » The supply of social housing includes existing Housing Benefit supported private rent dwellings, so the model assumes that the same number of households will receive Housing Benefit support in the private rented sector in 2033 as was the case in March 2012;
  - » The supply of intermediate housing includes the lower quartile of the private rented sector, so cheaper private rented sector help to meet the housing needs of those who would otherwise require intermediate housing.
- For clarity, we would also note that:
    - » **Market Housing:** is homes for sale and rent provided at a cost above the market threshold, as defined as being above the lower quartile for renting and owner occupation
    - » **Intermediate Rent/Shared Ownership:** is homes for sale and rent provided at a cost above Social Rent, but below market levels. The existing supply includes shared equity, other low cost homes for sale and Intermediate Rent along with private sector housing which is below market thresholds. We would note that Intermediate Rent is distinct from Affordable Rent because households who cannot meet the costs of Affordable Rent are able to claim Housing Benefit support, which is not available for Intermediate Rent. All new provision is assumed to be dedicated intermediate Affordable Housing products.
    - » **Social Rented/ Affordable Rented:** is existing Social Rented dwellings with rents set by the national Rent Regime and newly provided or converted Affordable Rent dwellings with a rent of no more than 80% of the local market rent. As noted in Chapter 1, Affordable Rent can be considered as part of the effective social housing supply because households who cannot afford to meet the rents themselves will be entitled to obtain Housing Benefit to do so.

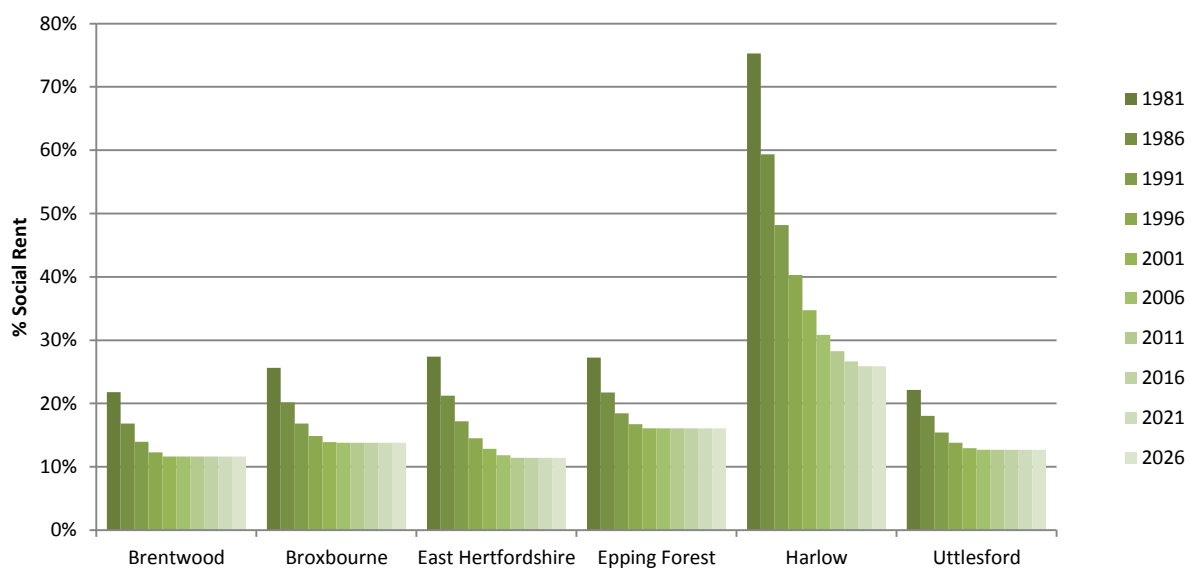
Figure 39:

**Tenure Mix of Housing Requirement to 2033 by Area** (Note: All figures rounded to the nearest 100. Figures may not sum due to rounding. All percentages are calculated based on data before rounding)

Housing Type	Area					
	East Hertfordshire	Epping Forest	Harlow	Uttlesford	West Essex	Harlow Joint Working Area
<b>Trend Based Projections 2011-2033</b>						
Market	9,500	5,900	4,400	5,300	18,300	23,500
Intermediate Affordable/Shared Ownership	6,000	6,700	0	4,200	7,400	8,400
Social Rented/Affordable Rented	3,100	4,100	3,600	2,000	10,400	11,400
<b>Total Housing Requirement</b>	<b>18,600</b>	<b>16,700</b>	<b>8,000</b>	<b>11,500</b>	<b>36,100</b>	<b>43,300</b>
Market	51.1%	35.3%	55.0%	46.1%	50.7%	54.3%
Intermediate Affordable/Shared Ownership	32.3%	40.1%	0.0%	36.5%	20.5%	19.4%
Social Rented/Affordable Rented	16.7%	24.6%	45.0%	17.4%	28.8%	26.3%
<b>Approved Regional Spatial Strategy Based Household Projections 2011-2033</b>						
Market	9,000	5,600	4,300	5,000	17,700	22,400
Intermediate Affordable/Shared Ownership	5,800	6,600	0	4,100	7,200	8,200
Social Rented/Affordable Rented	3,000	4,000	3,500	2,000	10,200	11,200
<b>Total Housing Requirement</b>	<b>17,800</b>	<b>16,200</b>	<b>7,800</b>	<b>11,100</b>	<b>35,100</b>	<b>41,800</b>
Market	50.6%	34.6%	55.1%	45.0%	50.4%	53.6%
Intermediate Affordable/Shared Ownership	32.6%	40.7%	0.0%	36.9%	20.5%	19.6%
Social Rented/Affordable Rented	16.9%	24.7%	44.9%	18.0%	29.1%	26.8%
<b>Net Nil Migration Based Household Projections 2011-2033</b>						
Market	3,400	-300	-400	-500	5,500	9,800
Intermediate Affordable/Shared Ownership	3,900	4,300	0	2,500	4,200	5,100
Social Rented/Affordable Rented	1,800	2,200	1,900	700	6,100	7,300
<b>Total Housing Requirement</b>	<b>9,100</b>	<b>6,200</b>	<b>1,500</b>	<b>2,700</b>	<b>15,800</b>	<b>22,200</b>
Market	37.4%	-4.8%	-26.7%	-18.5%	34.8%	44.1%
Intermediate Affordable/Shared Ownership	42.9%	69.4%	0.0%	92.6%	26.6%	23.0%
Social Rented/Affordable Rented	19.8%	35.5%	126.7%	25.9%	38.6%	32.9%
<b>Jobs-led Household Projections 2011-2033</b>						
Market	8,500	5,400	2,800	3,600	15,000	20,700
Intermediate Affordable/Shared Ownership	5,600	6,500	0	3,600	6,500	7,700
Social Rented/Affordable Rented	2,800	3,900	3,400	1,600	9,300	10,600
<b>Total Housing Requirement</b>	<b>16,900</b>	<b>15,800</b>	<b>6,200</b>	<b>8,800</b>	<b>30,800</b>	<b>39,000</b>
Market	50.3%	34.2%	45.2%	40.9%	48.7%	53.1%
Intermediate Affordable/Shared Ownership	33.1%	41.1%	0.0%	40.9%	21.1%	19.7%
Social Rented/Affordable Rented	16.6%	24.7%	54.8%	18.2%	30.2%	27.2%

- 2.12 The results for East Hertfordshire, Epping Forest and Uttlesford are very clearly comparable to those obtained in the 2008 LCB East SHMA. Any changes to the findings can be assigned to the total level of the household growth, changes in Right to Buy levels since 2008 and changes in house prices since 2008.
- 2.13 The findings for Harlow are very different from those in the original SHMA. The major change is driven by changes in the trend rates of Social Renting. Figure 40 is taken from the 2008 LCB East SHMA and shows the steep long-term decline which has occurred in the size of the Social Rented sector in Harlow. This trend was projected to continue into the future, which limited the requirement for additional Social Rented dwellings.
- 2.14 However, data from 2007 onwards indicates that the decline in Social Renting rates in Harlow has slowed considerably. When factored back into the housing model this implies that more households will require social housing in the future and that leads to a greater requirement for Social Rent in the future in Harlow.
- 2.15 For the larger areas such as West Essex and Harlow Joint Working Area the results are based upon the data for the whole area. Therefore if a household cannot afford market housing in Epping Forest, but can afford in Harlow they will have their requirements addressed in Harlow. In practice households may not be prepared to move from Epping Forest to Harlow, but this scenario gives a sub-regional perspective on need.

Figure 40  
**Change in the Proportion of Households in Social Rented Housing by LA and Year** (Source: Modelled based on UK Census of Population 1981, 1991 and 2001)



### Estimate of the Size of Housing Required

- 2.16 The model also estimates the size mix for all tenures. All projections show a similar distribution within tenures. Figure 41 shows these as the number of dwellings using the trend based household projections. The areas show distinct differences in modelled size mix requirements within and across the tenures. In particular the requirement for market housing in Harlow shows a lower need for 3+ bedroom properties. Meanwhile the need for intermediate housing is more heavily concentrated on smaller dwellings.



Figure 41:

**Size Mix of Housing Requirement to 2033 by Area for Trend Based Household Projections** (Note: All figures rounded to the nearest 100. Figures represented by “-” show any shortfall or surplus which is less than 50, although this will normally be greater than 0. Figures may not sum due to rounding)

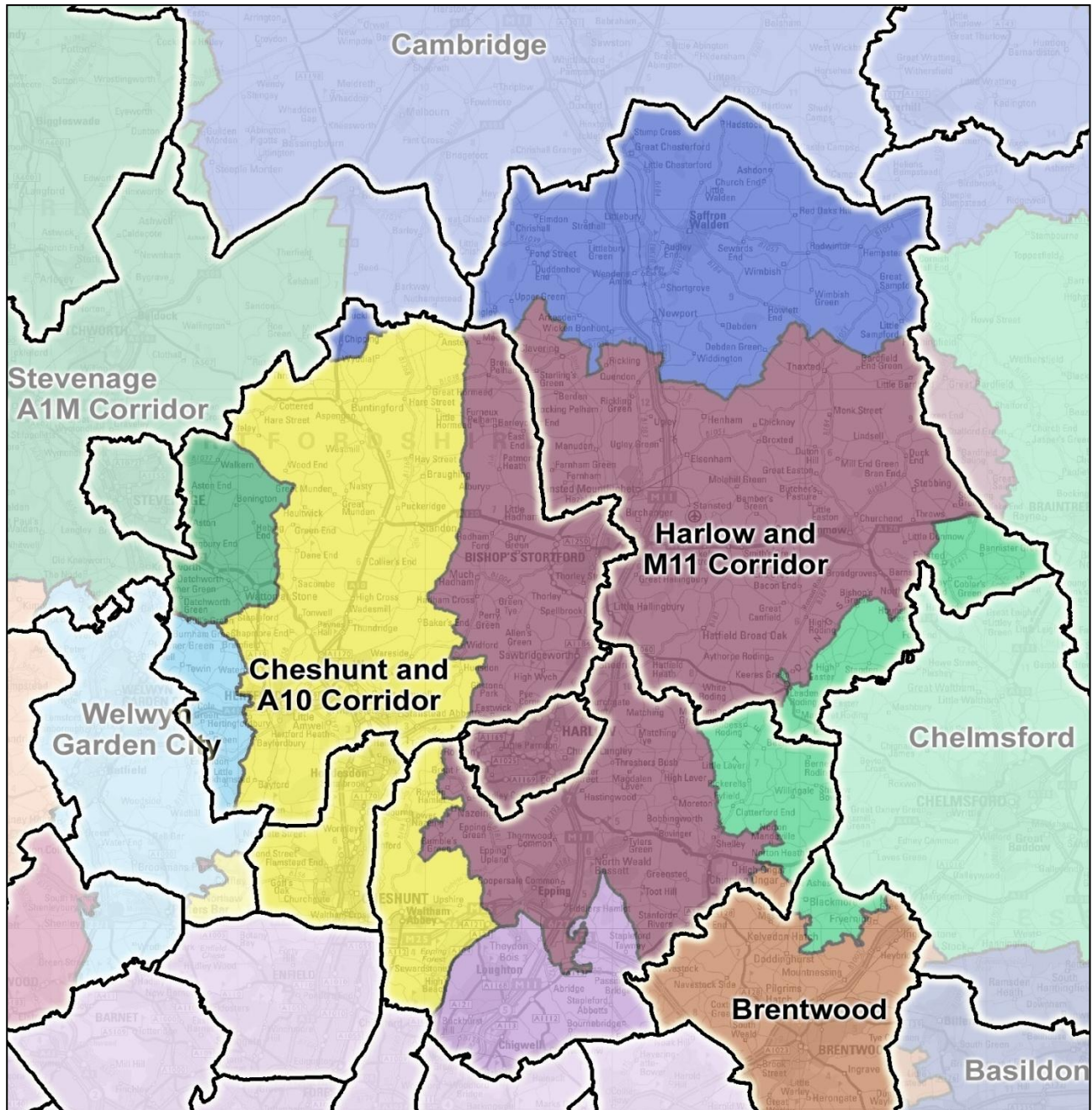
Housing Type	Area					
	East Hertfordshire	Epping Forest	Harlow	Uttlesford	West Essex	Harlow Joint Working Area
<b>Market</b>						
1 bedroom	500	100	700	0	1,500	2,200
2 bedrooms	1,000	300	1,600	0	3,900	5,400
3 bedrooms	5,200	4,000	1,800	2,700	9,200	11,600
4 bedrooms	2,300	1,200	300	2,000	3,000	3,500
5+ bedrooms	500	300	0	600	700	700
<b>Sub-total</b>	<b>9,500</b>	<b>5,900</b>	<b>4,400</b>	<b>5,300</b>	<b>18,300</b>	<b>23,500</b>
Intermediate Affordable Housing/Shared Ownership						
1 bedroom	1,300	1,500	-	700	1,500	1,800
2 bedrooms	3,000	3,900	-	2,000	4,000	4,500
3 bedrooms	1,500	1,200	-	1,300	1,800	1,900
4 bedrooms	100	100	-	100	100	100
5+ bedrooms	0	0	-	0	0	0
<b>Sub-total</b>	<b>6,000</b>	<b>6,700</b>	<b>0</b>	<b>4,200</b>	<b>7,400</b>	<b>8,400</b>
Social Rented/Affordable Rented						
1 bedroom	1,300	2,100	1,500	600	4,500	5,100
2 bedrooms	1,000	1,100	1,200	700	3,300	3,500
3 bedrooms	800	800	900	600	2,500	2,600
4 bedrooms	100	100	100	100	200	200
5+ bedrooms	0	0	0	0	0	0
<b>Sub-total</b>	<b>3,100</b>	<b>4,100</b>	<b>3,600</b>	<b>2,000</b>	<b>10,400</b>	<b>11,400</b>
All Housing						
1 bedroom	3,100	3,600	2,000	1,300	7,100	8,900
2 bedrooms	4,900	5,200	2,800	2,600	11,000	13,200
3 bedrooms	7,500	6,200	2,800	4,700	13,700	16,400
4 bedrooms	2,500	1,500	300	2,300	3,500	4,000
5+ bedrooms	600	300	100	600	800	800
<b>Total</b>	<b>18,600</b>	<b>16,700</b>	<b>8,000</b>	<b>11,500</b>	<b>36,100</b>	<b>43,300</b>

## Housing Requirements by Housing Sub-market Areas

- 2.17 The LCB East/M11 SHMA 2008 identified a series of housing sub-markets within the study area. These are shown in Figure 42.

Figure 42

Identifying the Functional Housing Sub-Markets in the Sub-Region (Source: LCB (East)/M11 Strategic Housing Market Assessment 2008.)



- 2.18 Figure 43 shows the modelled outputs for the sub-areas within the four local authorities. For clarity, the Cheshunt and A10 corridor housing sub-market only includes the area within East Hertfordshire and Epping Forest and does not include the areas in Broxbourne or Welwyn Hatfield. The Loughton sub-market has been modelled and entirely falls within Epping Forest, while the Harlow and M11 corridor housing market includes parts of all four local authorities.

- 2.19 The delivery of dwellings has been apportioned in line with the distribution of households at the time of the 2001 Census. Therefore, areas with more households have been allocated more of the household growth. Therefore, the pattern of development shown in Figure 43 may not match the actual pattern of development which will occur in any area until 2033.
- 2.20 The results of the modelling exercise show that the Harlow housing market has both the highest market and social/Affordable Rent requirement. The Loughton and Cheshunt housing sub-market contain very few lower priced dwelling so see a higher intermediate/Shared Ownership requirement.

Figure 43:

Tenure Mix of Housing Requirement to 2033 by Housing Sub-Market Area (Note: All figures rounded to the nearest 100. Figures may not sum due to rounding. All percentages are calculated based on data before rounding)

Housing Type	Area		
	Cheshunt	Harlow	Loughton
<b>Trend Based Household Projections 2011-2033</b>			
<b>Market</b>	2,100	12,200	2,100
<b>Intermediate Affordable/Shared Ownership</b>	3,600	2,800	3,600
<b>Social Rented/Affordable Rented</b>	1,700	7,400	1,700
<b>Total Housing Requirement</b>	<b>7,400</b>	<b>22,400</b>	<b>7,400</b>
<b>Market</b>	28.4%	54.5%	28.4%
<b>Intermediate Affordable/Shared Ownership</b>	48.6%	12.5%	48.6%
<b>Social Rented/Affordable Rented</b>	23.0%	33.0%	23.0%

## Scenario Testing

- 2.21 The findings outlined above are based on one set of assumptions. Many of the assumptions in the model can be varied to consider the impact of possible future changes to the housing market, or to look at possible policy options. The following sections highlight some of the key variables in the model and how sensitivity testing these impacts on the results of the model.

### House Prices

- 2.22 When considering the required housing mix on the basis of 2011/12 house price levels and trend based projections, the model identifies in East Hertfordshire that the overall intermediate affordable/Shared Ownership housing requirement is 32.3% of the total requirement. The equivalent figure in Epping Forest is 40.1% and in Uttlesford it is 36.5%. No intermediate/Shared Ownership requirement was identified in Harlow.
- 2.23 The Practice Guidance recommends that partnerships consider affordability trends, to understand how changes in affordability might affect the future housing mix – for as house prices fall or rise, dwellings in the private sector will become more or less affordable to households without equity, so the need for intermediate Affordable Housing will change. Figure 44 to Figure 47 shows the housing mix given a range of differing house price scenarios for each authority respectively.

Figure 44

Scenario Testing of Overall Trend Based Housing Requirement in East Hertfordshire 2011-2033 for House Price Changes

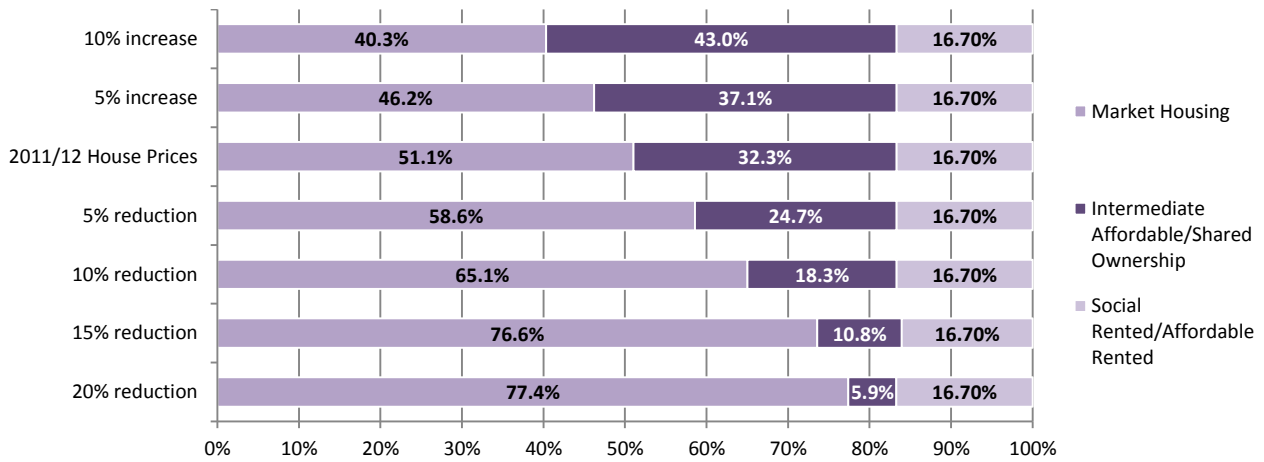


Figure 45

Scenario Testing of Overall Trend Based Housing Requirement Epping Forest 2011-2033 for House Price Changes

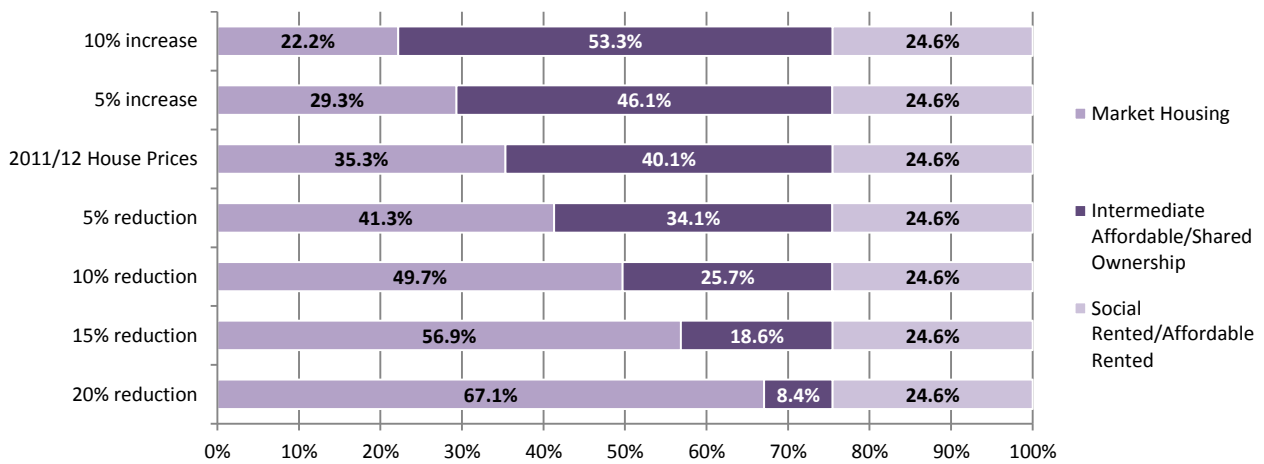
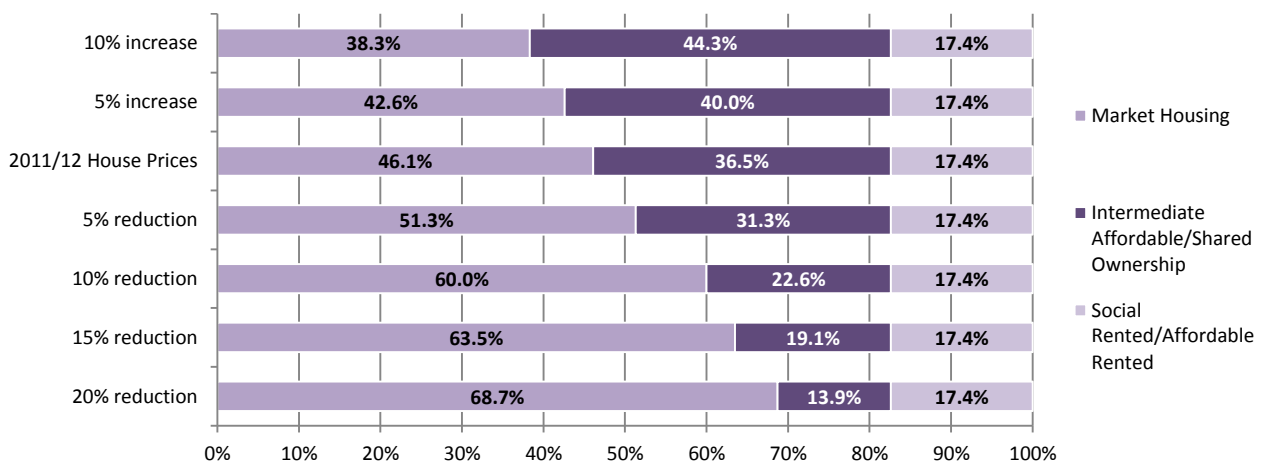


Figure 46  
Scenario Testing of Overall Trend Based Housing Requirement in Harlow 2011-2033 for House Price Changes



Figure 47  
Scenario Testing of Overall Trend Based Housing Requirement in Uttlesford 2011-2033 for House Price Changes



2.24 Apart from Harlow, the charts clearly identify that the required housing mix is sensitive to house price changes. However, it would take a massive change in real house prices of more than 20% to eliminate the intermediate/Shared Ownership requirement in East Hertfordshire, Epping Forest or Uttlesford .

**Housing Benefit in the Private Rented Sector**

2.25 The model results outlined in Figure 39 assume that Housing Benefit in the private rented sector is held at its current levels to 2033. As outlined earlier in this report, the Housing Benefit supported private rented sector has grown substantially in recent years and has played a key role in meeting housing need.

2.26 Figure 48 shows that any attempt to reduce the number of households claiming Housing Benefit in the private rented sector would clearly require an even larger Social Rent dwelling delivery to be provided.

Figure 48

**Trend based Housing Requirement for 2011-2033 for Changes in Housing Benefit Claimants in the Private Rented Sector** (Note: Figures may not sum due to rounding)

Tenure	Reduction in Private Rented Sector Housing Benefit Claimants				
	0% Change	25% reduction	50% reduction	75% reduction	100% reduction
<b>East Hertfordshire</b>					
Market	9,500	9,500	9,500	9,500	9,500
Intermediate Affordable/Shared Ownership	6,000	5,600	5,200	4,800	4,400
Social Rented/Affordable Rented	3,100	3,500	3,900	4,300	4,700
<b>Overall Housing Requirement</b>	<b>18,600</b>	<b>18,600</b>	<b>18,600</b>	<b>18,600</b>	<b>18,600</b>
<b>Epping Forest</b>					
Market	5,900	5,900	5,900	5,900	5,900
Intermediate Affordable/Shared Ownership	6,700	6,200	5,700	5,200	4,700
Social Rented/Affordable Rented	4,100	4,600	5,100	5,600	6,100
<b>Overall Housing Requirement</b>	<b>16,700</b>	<b>16,700</b>	<b>16,700</b>	<b>16,700</b>	<b>16,700</b>
<b>Harlow</b>					
Market	4,400	4,000	3,500	3,100	2,600
Intermediate Affordable/Shared Ownership	0	0	0	0	0
Social Rented/Affordable Rented	3,600	4,000	4,500	4,900	5,400
<b>Overall Housing Requirement</b>	<b>8,000</b>	<b>8,000</b>	<b>8,000</b>	<b>8,000</b>	<b>8,000</b>
<b>Uttlesford</b>					
Market	5,300	5,300	5,300	5,300	5,300
Intermediate Affordable/Shared Ownership	4,200	4,000	3,700	3,500	3,200
Social Rented/Affordable Rented	2,000	2,200	2,500	2,700	3,000
<b>Overall Housing Requirement</b>	<b>11,500</b>	<b>11,500</b>	<b>11,500</b>	<b>11,500</b>	<b>11,500</b>

- 2.27 Again, it is important to be clear as to the meaning of the finding outlined above. The ORS Housing Model is projecting a social housing requirement to help prevent further growth in households receiving Housing Benefit in the private rented sector. However, in most cases this requirement is unlikely to be delivered and therefore the model is projecting further rises in the number of households in the private rented sector who receive Housing Benefit. Hence the private rented sector is projected to play a growing role in meeting housing need due to viability constraints on the delivery of Affordable Housing.
- 2.28 One implication of this would be that even larger amounts of the private sector stock will need to become part of the private rented sector to allow sufficient stock to be available to meet this need. This rise is likely to occur across all household types, but in particular the changes in LHA allowances are likely to see a greater demand for shared accommodation from single persons under 35 years so there is likely to be a growing demand for HMO accommodation in the study area.