Population and Household Forecasts - Topic Paper

1. Background

1.1   As the local planning authority, it is the responsibility of East Herts Council to plan for and meet the future development needs of the district, including by ensuring that every year enough houses are delivered to meet its housing requirement and that the future population has somewhere to live[i].

1.2   Previously, the number of houses that East Herts Council had to plan for was set by the strategic planning authority: originally Hertfordshire County Council (HCC) through the Structure Plan and then, between 2004 and 2012, the East of England Regional Assembly (EERA) through the Regional Spatial Strategy (RSS) or Regional Plan. In 2011, regional assemblies were abolished and their strategic planning functions ceased. Regional Plans will be formerly abolished in 2012.

1.3   In the absence of the East of England Regional Plan, the requirement to deliver the district housing requirement has not disappeared. Instead, East Herts Council is now solely responsible for setting its own district housing requirement.

1.4   In doing so, East Herts Council must ensure that its plans are consistent with national planning policy[ii]. The Draft National Planning Policy Framework (NPPF) states that *'objectively assessed development needs should be met'*[iii] and *'to boost the supply of housing, local planning authorities should use an evidence-base to ensure that their Local Plan meets the full requirements for market and affordable housing in the housing market area'*[iv].

1.5   To inform its housing policies, East Herts has already undertaken a Strategic Housing Market Assessment (SHMA) that considers housing need and demand across the wider London Commuter Belt (East)/M11 Sub-region[v].

1.6   To further assist the Council, population and household forecasting technical work has also been commissioned to generate and test a range of demographic scenarios, to inform plan-making and the setting of robust district housing requirements. This information forms the basis of this Topic Paper, although it should be noted that all figures quoted are preliminary. As explained in Section 2 below, this work is ongoing and further testing is being undertaken using more up-to-date

demographic data. Notwithstanding this, it is considered important to consider the likely issues that will arise as soon as possible.

1.7 It should also be noted that East Herts Council is also undertaking population and household forecasting work at the sub-district level[vi]. This work will test the outputs of district work to understand what are the household requirements of each town in East Herts.

1.8 It should be noted that this Topic Paper does not consider the spatial or geographic distribution of housing growth. It looks at the issue from a purely district-wide or strategic level. Whilst reference is made to growth in the Harlow area, the geographic implications of development to the north of Harlow are not considered. As part of the preparation of the East Herts LDF (District Plan), the environmental implications of development in a particular location will be considered.

2. Population and Household Forecasts

2.1 Population and Household Forecasts technical work is being undertaken by Edge Analytics Ltd for the Greater Essex area, including East Herts and Welwyn Hatfield, on behalf of the Essex Planning Officers Association[vii].

2.2 The technical work uses the POPGROUP suite of demographic forecasting models, which are used extensively by local authorities across the UK, enabling the evaluation of alternative growth scenarios to support local planning.

2.3 The technical work is being undertaken in three stages:

- Stage 1 (Winter 2011) - Preliminary forecasts
- Stage 2 (Spring 2012) - Updated forecasts
- Stage 3 (Summer 2012) - Final forecasts (taking into account publication of the 2011 mid-year estimates and 2011 Census data)

2.4 The starting point for estimating any future requirements is to base the estimates on an analysis of past long-term demographic trends. In terms of housing, the number of houses is derived from the number of households which in turn, is derived from the population.

2.5   There are two main components to population demographics: natural change (i.e. the difference between births over deaths) and migration (i.e. the movement of people from one area to another). It should be noted that migration refers not to immigration per se, but rather to the movement of people into the district from outside of the district. In East Herts, the majority of migrants come from other parts of the UK.

2.6   A range of scenarios have been tested for each of the twenty four local authority districts within the study area and for a number of 'macro areas' consisting of various aggregates of the local authority districts, including Hertfordshire (East) (i.e. Broxbourne and East Herts districts), the Stansted/M11 Corridor (i.e. Broxbourne, East Herts, Epping Forest, Harlow and Uttlesford districts) and the Harlow Joint Working Area (i.e. East Herts, Epping Forest and Harlow districts).

2.7   The scenarios can be grouped in the following three types:

- Migration Based - assumptions on the future scale of migration are input into the model and outputs forecasting the future population, households, dwellings and labour force that would result from that level of migration are generated.
- Economic Based - assumptions on the future scale of the labour force are input into the model and outputs forecasting the future migration, population, households and dwellings that would result from that level of labour force.
- Dwelling Based - assumptions of the future scale of dwellings are input into the model and outputs forecasting the future migration, population, households and labour force that would result from that level of dwelling provision are generated.

2.8   The distinction between the migration-based and economic and dwelling-based scenarios should be noted. The former will generate a housing requirement. The latter two test the implications of a particular housing target, thus enabling comparisons to be made. For the economic and dwelling based scenarios, migration is used to balance the level of population required to meet the labour force or dwelling target set.

2.9   By testing this full range of scenarios, the demographic implications of the various forecasts can help inform policy decisions about the most appropriate level of growth for East Herts. For each scenario, population and household change figures for the period to 2033 are provided as well as annualised statistics enabling comparison between the three types of scenario.

3.   Migration Based Scenarios

3.1   The first three scenarios are 'migration-based':

1. Sub-National Population Projections (SNPP)
2. Nil-Net Migration
3. Migration Led

3.2   The **Sub-National Population Projections (SNPP)** replicates the 2008-based sub-national projection from the Office for National Statistics (ONS); the latest set of 'official' projections for local authority districts in England. It is a 'trend' scenario, based on historical evidence from 2004-2008 and does not take account of any later information from the 2009 and 2010 mid-year population estimates.

3.3   **Nil-Net Migration** assumes that the 'net' impact of migration is zero throughout the projection period. This does not mean zero migration. The scenario assumes that in and out-migration continue (for both internal and international flows) but the overall balance between the two is zero. Fertility and migration assumptions remain consistent with the Migration-led scenario.

3.4   To take account of more recent evidence from the 2009 and 2010 mid-year estimates, an alternative, **Migration-Led**, 'trend' scenario has been run. This uses the later 2006-2010 period as the basis for the derivation of its migration assumptions, from the components-of-change evident in the mid-year estimates. The scenario assumes that long-term variations in mortality and fertility are consistent with those evident in the latest (2008-based) national assumptions but takes into account important recent shifts in the components of demographic change upon existing trend projections.

3.5   It should be noted that a pure 'natural change' scenario has not been tested. This is because such a scenario is not particularly realistic since, as outlined above, migration is a key component of demographic change not just in numeric terms (as a driver of population growth) but because migration affects the profile of the population. This is especially important when converting population into households because different population age groups generate different housing requirements. It should also be borne in mind that the age profile of the population and therefore their housing requirements will change over time. Instead, the 'nil-net migration' scenario allows the impacts of a different population profile to be taken into account without increasing the overall numbers of the population.

4. Economic Based Scenario

4.1   The next scenario is 'economic based' and generates how many dwellings would be required to fulfil the predicted number of jobs estimated for the district.

4.2   The **Economic-Led** scenario (Scenario 4) constrains the future population and household growth to an economic forecast produced by the East of England Economic Forecasting Model (EEFM). This model captures the interdependence of the economy, demographic change and housing at a local level, as well as reflecting the impact of the broader economic trends on the East of England including the supply and demand for labour, labour market trends and economic and demographic factors.

4.3   Output from the EEFM has suggested a projected growth trajectory for the size of the labour force in each district. For each district, the annual labour force growth acts as a 'constraint' on population and household growth, with 'migration' used to balance the population and households required to achieve the dwelling target.

4.4   The relationship between population, the labour force and the number of jobs in a district is controlled by three parameters: economic activity rates, unemployment rates and a commuting ratio. Economic Activity rates by age and sex have been derived from the EEFM and take account of changing labour force participation expected in the older age-groups. For each district, the unemployment rate and the

commuting ratio have been derived from the 2001 Census and remain constant throughout the projection period.

5. Dwelling Based Scenarios

5.1 The remaining scenarios are 'dwelling based', e.g. a dwelling target is applied to the population and household growth generated by natural change. Any shortfall in population or households against the target is then met by migration. Testing these constrained scenarios enable comparison of the effects of imposing a particular housing requirement.

      5. Dwelling Trajectory
      6. District RSS 2008
      7. District Draft RSS Review 2010
      8. District + Harlow Area RSS (pure) 2008
      9. District + Harlow Area Draft RSS Review (pure) 2010
      10. District + Harlow Area RSS (realistic) 2008
      11. District + Harlow Area Draft RSS Review (realistic) 2010

5.2 The first of these (Scenario 5) is based on the annual rate of East Herts completions to 2011 as set out in the Council's Annual Monitoring Report (AMR).

5.3 It should be noted that the Dwelling Trajectory scenario is based on housing trajectories that do not run for the full period to 2033 (the East Herts trajectory runs to 2024). This is because the trajectories are based on the current availability of identified sites for housing development, rather than potential housing provision set out in the regional plan. Thus, where there is a shortfall, the annual rate reverts to zero. This will of course, have an impact on the outputs from the scenario testing and should be borne in mind when undertaking comparisons.

5.4 The remaining dwelling-based scenarios apply 'constraints' based on iterations of the East of England Regional Plan 2008 and Draft East of England Plan Review 2010 housing requirements set out in Policy H1. Dwelling growth acts as a 'constraint' on population and household growth, with 'migration' used to balance the population and households required to achieve the dwelling target.

5.5   Scenarios 6 and 7 use the 'pure' housing requirements for each district: Scenario 6 being the actual district requirement for East Herts since 2008. However, it was concluded that such an approach did not fully reflect the requirements of Policy H1 in respect of East Herts, Harlow and Epping Forest districts, and the identification of Harlow as a Key Centre for Development and Change (KCDC). As such, the outputs for Scenarios 6 and 7 (using 'pure' district figures) are based on initial unpublished data from the draft report, which has not been included in the published preliminary technical work (dated March 2012).

5.6   However, notwithstanding this, it is still considered that the 'district' figures in Policy H1 provide a very useful crosscheck and benchmark against which the other scenarios can be compared, and Scenarios 6 and 7 have been included in this topic paper, alongside the final preliminary outputs on this basis.

5.7   The final four scenarios have been tested to take account of the issue of the identification of Harlow as a KCDC in the East of England Plan. Although allocated to Harlow district, to fulfil its housing requirement of 16,000, land was identified to the east, south and west in Epping Forest district and to the north of Harlow in East Herts district. Thus, a proportion of the Harlow housing requirement has been added to the existing district housing requirement for East Herts and Epping Forest. Two iterations of this have been run: a 'pure' iteration based on the annualised average rate of dwelling delivery, and a 'realistic' iteration based on a more informed likelihood of dwelling delivery, which assumes a lower annual rate in the first five years and a higher rate in later years.

5.8   The distribution of the Harlow area housing numbers to each district is based on the findings of the independent Harlow Area Options Appraisal 2010 technical work prepared by Scott Wilson Consultants[viii].

5.9   Based on the RSS and Draft RSS Review, respectively, Scenarios 8 and 9 apply the annualised average rate of dwelling delivery as set out in the relevant regional plan documents. In these 'pure' scenarios, dwelling growth acts as a 'constraint' on population and household growth, with 'migration' used to balance the population and households required to achieve the dwelling target.

5.10   Based on the RSS and Draft RSS Review, respectively, Scenarios 10 and 11 apply a 'realistic' iteration of the annualised average rate of dwelling delivery, as set out in the relevant regional plan documents. The scenarios are based on a more informed likelihood of dwelling delivery, which assumes a lower annual rate in the first five years and a higher rate in later years. In these 'realistic' scenarios, dwelling growth acts as a 'constraint' on population and household growth, with 'migration' used to balance the population and households required to achieve the dwelling target.

6.   Demographic Considerations

6.1   The most recent population projections at English district level are the 2008-based Sub-National Population Projections (SNPP) published by the Office for National Statistics (ONS) in 2010[ix]. As can be seen in Figure 1, in East Herts over the 20 year period the population is expected to grow by 18,900 whilst the number of households is expected to grow by 13,068.

Figure 1: Population and Households

	2011	**2031**	**% Change**
Population[x]	139,000	157,900	13.6%
Households[xi]	57,878	70,946	22.6%
Population/Household Ratio	2.4	2.2	-8%

Figures may not sum due to rounding

6.2   One of the causes of household growth is the reduction in household size and an increase of smaller households. Household size is expected to reduce from a ratio of currently 2.4 to 2.2 persons per household by 2031. This reduction is driven to a large degree by an ageing population with over two-thirds of the population growth by 2031 expected to be aged over 65 years[xii].

6.3   Figure 2 below sets out the demographic change outputs from the scenario testing. Scenario 2 (Nil-Net Migration) is the benchmark against which the other scenarios can be compared. All Scenarios

except for Scenario 5 would meet the 'natural' or 'internal' demographic requirements of East Herts district.

Figure 2: Demographic Change 2010 to 2033[xiii]

Scenario	Population		Households	
	No.	%	No.	%
1. SNPP	22,480	16.4	14,848	25.9
2. Nil-Net Migration	3,415	2.5	6,554	11.6
3. Migration Led	27,296	19.7	17,850	31.5
4. Economic Led	21,504	15.5	15,458	27.3
5. Dwelling Trajectory	-2,875	-2.1	5,403	9.5
6. District RSS 2008	19,924	14.4	14,829	26.2
7. District Draft RSS Review 2010	13,911	10.0	12,358	21.8
8. District + Harlow Area RSS (pure) 2008	46,630	33.7	25,771	45.5
9. District + Harlow Area Draft RSS Review (pure) 2010	29,106	21.0	18,590	32.8
10. District + Harlow Area RSS (realistic) 2008	46,773	33.8	25,819	45.6
11. District + Harlow Area Draft RSS Review (realistic) 2010	29,553	21.3	18,776	33.2

6.4 Perhaps the most striking finding is not the difference between the scenarios themselves, but rather the difference between the change in population and change in households within each scenario. This clearly reflects the continuing trend of increasing rates of household formation and smaller household size as reflected in Scenario 2, which is in effect a 'natural change' scenario.

6.5   Indeed, the fact that Scenarios 4 and 6 have a lower population growth but higher household growth than Scenario 1 confirms that it is not population growth *per se* that causes household growth; rather it is due to the actual profile of that population and their housing requirements.

6.6   Even more striking is the difference between the population and household growth for the Dwelling Trajectory scenario (Scenario 5). This shows that despite a reduction in population, there is still a corresponding approximate 10% increase in households. This is due to the fact that in the future, it is predicted that the existing dwelling stock will accommodate fewer people (i.e. due to smaller household size). Therefore even to maintain the existing population, additional dwellings need to be built.

6.7   It should also be noted that this scenario is affected by the fact that the housing trajectory reverts to zero before the end of the period and the impact of assuming that no additional dwellings are built between 2025 and 2033 must be taken into account.

6.8   The regional plan scenarios range from a 10% increase in population (Scenario 7) to a 33.8% increase under scenario 10, with a corresponding 21.8% and 45.6% increase in households, respectively. The outputs for Scenario 6 also show the demographic effect of the implementation of the East of England Plan (excluding development to the north of Harlow in East Herts, in respect of growth at Harlow).

6.9   Interestingly, for the four scenarios that take account of the impact of Harlow area growth, despite the totals for the period being the same, the different annualised rates generate slightly different population and household change increases (i.e. compare Scenarios 8 and 10 and 9 and 11). However, whilst these are not considered to be statistically significant, it perhaps reinforces the point about taking into account the changing population profile and different housing requirements it can generate over time.

7. Dwelling Considerations

7.1 The outputs from the demographic model produced the following dwelling requirements for each scenario, as shown in Figure 3. As can be seen, the requirement ranges from 240 dwellings per annum under Scenario 5 (Dwelling Trajectory) to 1,149 dwellings per annum under Scenario 10 (District + Harlow Area RSS (realistic)).

Figure 3: Scenario Outputs: Dwelling Requirements[xiv]

Scenario	Annual Rate	Total 2011-2031
1. SNPP	661	13,220
2. Nil-Net Migration	292	5,840
3. Migration-led	794	15,880
4. Economic	688	13,760
5. Dwelling Trajectory	240	4,800
6. District RSS 2008	660	13,200
7. District Draft RSS Review 2010	550	11,000
8. District + Harlow Area RSS (pure) 2008	1,147	22,940
9. District + Harlow Area Draft RSS Review (pure) 2010	827	16,540
10. District + Harlow Area RSS (realistic) 2008	1,149	22,980
11. District + Harlow Area Draft RSS Review (realistic) 2010	836	16,720

7.2 A simple comparison of the figures shows that the average is 14,262 equating to 713 dwellings per annum. The median equates to Scenario 4 (Economic).

7.3 It is also useful to place the dwelling requirements into context by considering previous district dwelling requirements as set out in Figure 4. These average 640 per annum.

Figure 4: Previous District Dwelling Requirements for East Herts[xv]

Plan	Annual Rate	Total Requirement
Hertfordshire County Structure Plan 1986 (1981 - 1996) [15 Year Period]	733	11,000
Hertfordshire County Structure Plan 1991 (1986 - 2001) [15 Year Period]	707	10,600
Hertfordshire County Structure Plan 1998 (1991 - 2011) [20 Year Period]	555	11,100
East of England Regional Spatial Strategy 2008 (2001 - 2021) [20 Year Period]	600	12,000
East of England Regional Spatial Strategy 2008 (2021 - 2031)* [10 Year Period]	660	6,600

* The East of England Plan 2008 requires the Council to assume a continuation of same rate of growth for the period 2021-2031 until replaced by Plan Review

7.4   In respect of the East of England Plan, the draft version of this plan set the East Herts district housing requirement as 20,800. This figure allowed for about 10,000 dwellings to the north of Harlow, in East Herts. The independent Examination in Public (EiP) of this plan concluded that whilst continuing to identify Harlow as a key regional centre and the focus of development and regeneration, growth to the north of Harlow was unsustainable[xvi]. Thus, the East Herts housing requirement was reduced to 12,000 accordingly[xvii].

7.5   The recommendations of the EiP Panel were then submitted to the Secretary of State for consideration, prior to formal adoption. The Secretary of State disagreed with the EiP Panel in respect of growth to the north of Harlow and reinstated the requirement for 10,000 dwellings, albeit, identifying them in the housing requirement for Harlow district rather than East Herts[xviii]. Thus, the actual housing requirement in the East of England Plan for East Herts is 22,000 or 1,100 per annum for the period 2001 - 2021, and 1,660 per annum for the period 2021 - 2031. This has the effect of increasing the previous district requirements average to 966 per annum.

7.6   An important planning issue that must be taken into account when preparing plans is the issue of viability and ensuring that the plan is deliverable. In terms of housing requirements, a useful indication is the rate of housing completions over the long-term to take account of the

natural economic cycles in the UK housing market. The completion rates for East Herts since 1991 are shown in Figure 5[xix]:

Figure 5: East Herts Completion Rates

1991/92	1992/93	1993/94	1994/95	1995/96
454	392	621	1,128	694
1996/97	**1997/98**	**1998/99**	**1999/00**	**2000/01**
800	700	540	336	464
2001/02	**2002/03**	**2003/04**	**2004/05**	**2005/06**
605	376	205	347	562
2006/07	**2007/08**	**2008/09**	**2009/10**	**2010/11**
777	557	553	469	200

Figure 6:   Five Year Supply[xx]

Scenario	Annual Rate	5 Year Requirement	5 Year Supply
1. SNPP	661	3,305	4.4
2. Nil-Net Migration	292	1,460	10
3. Migration-led	794	3,970	3.7
4. Economic	688	3,440	4.2
5. Dwelling Trajectory	240	1,200	12.2
6. District RSS 2008	660	3,300	4.4
7. District Draft RSS Review 2010	550	2,750	5.3
8. District + Harlow Area RSS (pure) 2008	1,147	5,735	2.5
9. District + Harlow Area Draft RSS Review (pure) 2010	827	4,135	3.5
10. District + Harlow Area RSS (realistic) 2008	1,149	5,745	2.5
11. District + Harlow Area Draft RSS Review (realistic) 2010	836	4,180	3.5

7.7 As can be seen, completions range from just 200 per annum to 1,128 per annum, although the average annual rate is 541 and the median is 547. The high level of completions in 2006/07 reflects the high number of flats delivered, especially in Bishop's Stortford. The gradual decline in completions since 2007 reflects the general downturn in the housing market.

7.8 East Herts Council is also required to maintain a continuous five-year supply of housing[xxi]. This is calculated by dividing the total number of dwellings that are expected to be built within the first five years of the Council's housing trajectory by the annual requirement. As set out in the housing trajectory, the five-year figure totals 2,920. Figure 6 (above) shows how the current five-year supply compares with the various scenarios. However, it should be noted that through the plan-making process, further sites will be identified.

8. Affordable Housing Considerations

8.1 The Housing Register provides an indication of housing need. As of December 2011 there are 2,754 live housing applications on the East Herts Housing Register, consisting of 5,404 people. This is a 91.5% increase since 2001, although this may reflect the impact of the introduction of Choice Based Lettings and the fact that anyone can join the register. Of the 2,754 applications, 1,628 (59%) are considered to be in housing need.

8.2 Affordable housing is provided 'off the back of' market housing on eligible sites (i.e. those above the site size thresholds[xxii]). Therefore, a higher housing target would more likely provide for greater provision of affordable housing.

8.3 The Council has a target of delivering 200 affordable homes per annum on average over a five year period[xxiii]. As can be seen in Figure 7 below, when applying the Council's policy of 40% affordable housing[xxiv] only the Nil-net Migration and Dwelling-led scenarios do not meet the target. However, it must be remembered that the affordable housing policy only applies to eligible sites (i.e. those above the site size threshold). For example, in 2010/11, whilst the Council achieved 37% affordable housing from eligible sites, this represented a figure of only 13% of all sites[xxv]. However, having said that, it is likely that for the

period to 2031 the majority of development in East Herts will be from large sites that would be eligible for affordable housing.

Figure 7: Indicative Affordable Housing Targets[xxvi]

| Scenario	Annual Dwelling Requirement	Indicative Number of Affordable Homes Built Assuming…	
		40%	24%
1. SNPP	661	264	159
2. Nil-Net Migration	292	117	70
3. Migration Led	794	318	191
4. Economic	688	275	165
5. Dwelling Trajectory	240	96	58
6. District RSS 2008	660	264	158
7. District Draft RSS Review 2010	550	220	132
8. District + Harlow Area RSS (pure) 2008	1,147	459	275
9. District + Harlow Area Draft RSS Review (pure) 2010	827	331	198
10. District + Harlow Area RSS (realistic) 2008	1,149	460	276
11. District + Harlow Area Draft RSS Review (realistic) 2010	836	334	201

8.4   Thus, taking the average of the percentage of total affordable housing completions for the period 2004/05 - 2010/11, it is appropriate to apply a figure of 24% as the affordable housing percentage requirement[xxvii]. As can be seen, applying the indicative figure of 24% only the scenarios that take account of growth in the Harlow Area would meet the Council's affordable housing target. Such a target could only be met by delivering at least 833 additional homes per annum, giving an indication of the scale of growth required.

8.5   However, should the Council seek to principally meet its housing requirement from allocated sites that meet or exceed the current site size thresholds (enabling a figure of 40% to be applied), a housing requirement of at least 500 dwellings would facilitate 200 of these being provided as affordable.

8.6   Another way of looking at the implications of various housing targets on affordability is to consider the affordable housing percentage that would be required to 'balance' the housing market: that is, to ensure (numerically at least) that there is sufficient housing available that can be afforded by local households.

8.7   As shown in Figure 8, the SHMA technical study identified a 'gap' in the housing market in East Herts[xxviii]. If the housing market was balanced, the amount of housing stock (columns) would exceed the proportion of local households who can afford housing in that income band (dotted line) in every income bracket. As can be seen, for those households earning between £20,000 and £29,999 per annum, the columns do not exceed the dotted line so there is a shortage of homes available to these households to either rent or buy.

Figure 8: Balancing the Housing Market
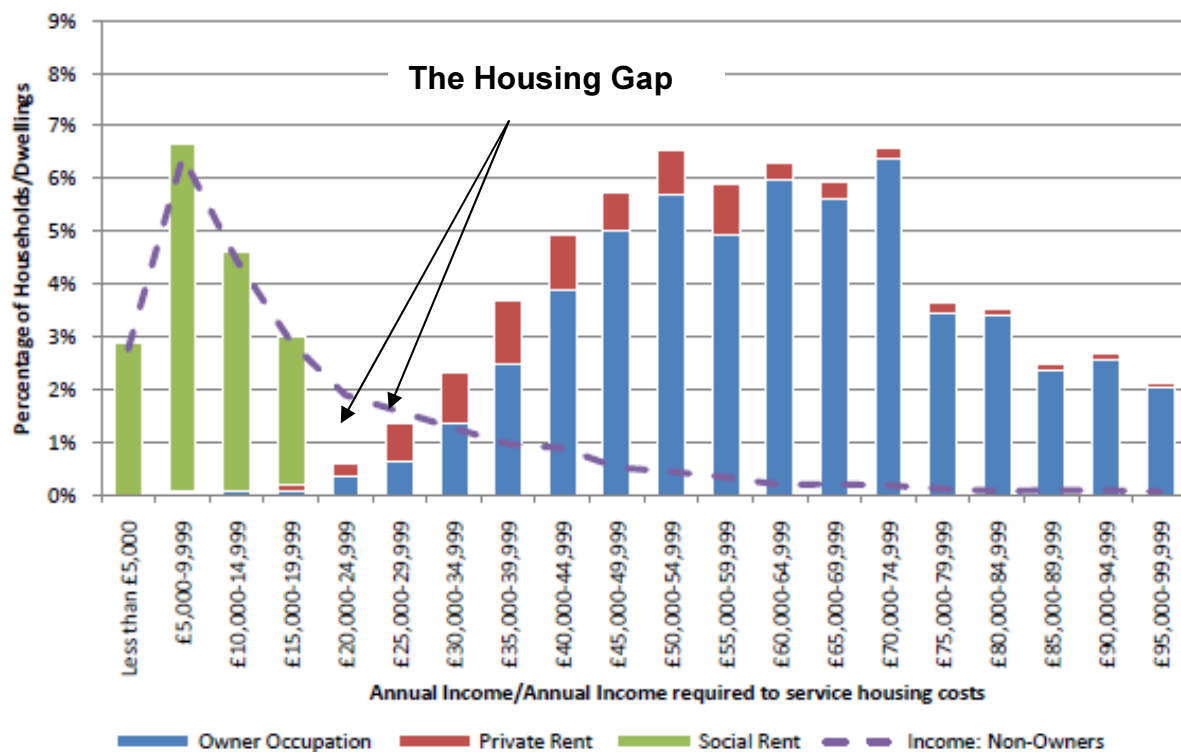
8.8   The purpose of the SHMA is to help generate an affordable housing percentage for the district. That is, by inputting a total housing requirement for the plan period, it generates an affordable housing percentage. Thus, the SHMA enables the various housing scenarios to be tested to see what percentage would need to be delivered off the back of market housing in order to balance the housing market (see Figure 9)[xxix].

Figure 9:   SHMA Affordable Housing Percentage Requirements[xxx]

| Scenario	Total Housing Requirement for the 20 Year Period	Recommended Affordable Housing %
1. SNPP	13,220	47%
2. Nil-Net Migration	5,840	89%
3. Migration Led	15,880	43%
4. Economic	13,760	46%
5. Dwelling Trajectory	4,800	100%
6. District RSS 2008	13,200	47%
7. District Draft RSS Review 2010	11,000	52%
8. District + Harlow Area RSS (pure) 2008	22,940	38%
9. District + Harlow Area Draft RSS Review (pure) 2010	16,540	43%
10. District + Harlow Area RSS (realistic) 2008	22,980	38%
11. District + Harlow Area Draft RSS Review (realistic) 2010	16,720	43%

8.9   Whilst it is not surprising that a lower housing requirement will generate a higher affordable housing percentage requirement, two things are noticeable. Firstly, that even the highest housing requirements that incorporate Harlow area growth still require an affordable housing percentage of 38%, and secondly, the effect of significantly reducing

the housing requirement to only 4,800 means that to balance the housing market, all the houses built in East Herts would have to be built as affordable. It should be noted that the SHMA Viability Study concluded that for East Herts up to 40% affordable housing requirement was viable[xxxi]. Thus, it is considered that neither Scenarios 2 nor 5 are realistic.

9. Migration Considerations

9.1 The demographic projections also reflect the fact that East Herts' population and household growth is in-part caused by external pressures, reflecting the location of East Herts district on the periphery of London: a fact that cannot be ignored. East Herts "imports" population from London and in terms of neighbouring districts, Broxbourne, Epping Forest and Harlow and "exports" population to Uttlesford and the rest of the eastern England[xxxii].

Figure 10: Housing Market Areas in the LCB (East)/M11 Sub-region
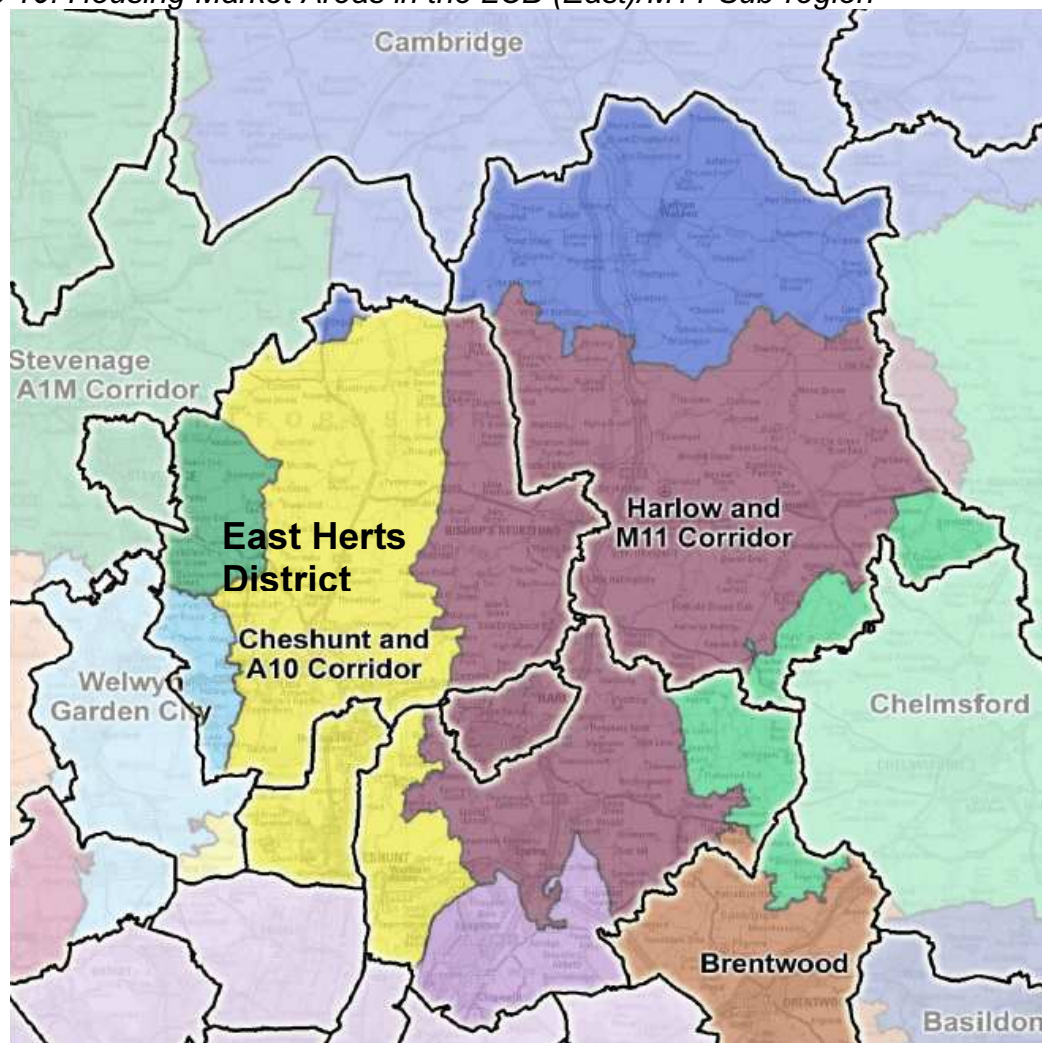
9.2   These flows reflect the fact that East Herts is not an 'island', nor is it a single housing market area and that when purchasing a home, people tend to ignore local government administrative boundaries preferring to relocate along travel-to-work corridors. The housing market areas are shown in Figure 10 above[xxxiii].

9.3   Figure 11 shows in the last two columns the predicted level of migration for each scenario (NB: these figures refer to individuals, not households or dwellings).

Figure 11: Scenario Outputs: Migration 2011-2031[xxxiv]

Scenario	Dwellings		Migration	
	Annual	Total	Annual	Total
1. SNPP	661	13,220	525	10,500
2. Nil-Net Migration	292	5,840	0	0
3. Migration Led	794	15,880	823	16,460
4. Economic	688	13,760	608	12,160
5. Dwelling Trajectory	240	4,800	-322	-6,440
6. District RSS 2008	660	13,200	553	11,060
7. District Draft RSS Review 2010	550	11,000	331	6,620
8. District + Harlow Area RSS (pure) 2008	1,147	22,940	1,550	31,000
9. District + Harlow Area Draft RSS Review (pure) 2010	827	16,540	893	17,860
10. District + Harlow Area RSS (realistic) 2008	1,149	22,980	1,559	31,180
11. District + Harlow Area Draft RSS Review (realistic) 2010	836	16,720	920	18,400

9.4   The base position in terms of migration is Scenario 3. This continues recent migration trends for the five year period 2006-2010. Comparing these figures with the benchmark Scenario 1 shows that migration has

been running at a higher level than was previously predicted. Obviously, for Nil-Net Migration the figure is zero because whilst there is migration, there is no increase in population caused by migration. It should be noted that for the economic and dwelling based scenarios (Scenarios 4-11), migration is used to balance the level of population required to meet the labour force or dwelling target set. Thus, in these scenarios, migration is an output rather than a driver of the scenario.

9.5   Whilst Scenarios 1, 3, 4 and 6 to 11 would all provide for an increasing population, only Scenarios 8, 9, 10 and 11 fully accommodate East Herts 'external' requirements. Scenarios, 1, 4, 6 and 7 provide for some of the 'external' requirements to be met.

9.6   In respect of Scenario 2 (Nil-Net Migration), whilst this scenario would match the 'internal' housing needs of the existing East Herts population *numerically*, it is not considered that it would adequately meet the *actual* housing needs of the resident's of East Herts. This is because the UK has a free housing market and anyone can buy a house (or houses) anywhere. Given that East Herts is a desirable location in which to live, individuals and families from outside the district may have a higher purchasing power and successfully out-price local people. A lower housing target which limits supply will therefore exacerbate this problem causing un-affordability to increase and local people being forced to move outside the district away from their families, and social and community networks.

9.7   Under Scenario 5 (Dwelling Trajectory) there is a minus migration figure. Thus, not only would this scenario not meet the 'external' pressures facing East Herts, but it would fail to meet the district's 'internal' requirements.

10. Economic Considerations

10.1 Figure 12 (below) shows the predicted number of jobs that would be generated by each scenario taking into account population, economic activity and unemployment and commuting rates. The number of jobs represents those generated in the district, not the number of economically active people. The latter figure would be much higher as it would include those who commuted out of the district.

10.2   The base position in terms of jobs is Scenario 4. This uses the East of England Forecasting Model (EEFM) to produce economic forecasts for local authority areas. It seeks to indentify the level of population and number of dwellings needed to meet the jobs target.

Figure 12: Scenario Outputs: Jobs 2011-2031[xxxv]

Scenario	Dwellings		Jobs	
	Annual	Total	Annual	Total
1. SNPP	661	13,220	318	6,360
2. Nil-Net Migration	292	5,840	-184	-3,680
3. Migration Led	794	15,880	434	8,680
4. Economic	688	13,760	307	6,140
5. Dwelling Trajectory	240	4,800	-234	-4,680
6. District RSS 2008	660	13,200	274	5,480
7. District Draft RSS Review 2010	550	11,000	142	2,840
8. District + Harlow Area RSS (pure) 2008	1,147	22,940	865	17,300
9. District + Harlow Area Draft RSS Review (pure) 2010	827	16,540	475	9,500
10. District + Harlow Area RSS (realistic) 2008	1,149	22,980	865	17,300
11. District + Harlow Area Draft RSS Review (realistic) 2010	836	16,720	486	9,720

10.3   Comparing these figures with the benchmark Scenario 1 shows that whilst the economic predictions produce slightly lower figures, in statistical terms they are broadly consistent with the SNPP. Assuming that Scenario 4 represents the minimum number of jobs that East Herts needs, Scenarios 1, 3, and 8-11 generate a dwelling requirement that would exceed this level and ensure that the economy of the district continues to grow. Growth levels range from 6,360 jobs under Scenario 1 to 17,300 additional jobs under Scenarios 8 and 10.

10.4   Whilst the EEFM is considered robust, it is a forecasting model and in reality, the relationship between the number of additional dwellings delivered in an area and the number of additional jobs generated do not always directly correspond. This is because the employment market is more fluid than the housing market and subject to local as well as macro fluctuations which change employment patterns. Another difficultly is in deriving robust employment floor space requirements from dwelling requirements since different employment uses generate different numbers of jobs, which in turn can also fluctuate over time.

10.5   Indeed, what are the implications if jobs were not to materialise? Would new dwellings continue to be built but remain empty? Would the annual rate of delivery fall significantly below the housing requirement? What would the social consequences of this be? Or would new homes continue to be built but simply house commuters leading to an increase in levels of commuting?

10.6   Certainly, under the two scenarios with a low dwelling requirement (i.e. Scenarios 2 and 5) the number of jobs generated is predicted to be below the base level. Here the economic consequences of a low housing requirement can be seen resulting in a shrinking of the East Herts local economy over time. Not only would the economy become smaller, but as a result, it would have the effect of increasing the number of commuters as a proportion of the total workforce. This then has other knock-on economic consequences.

11. Other Considerations

11.1   Whilst the full implications of the various housing scenarios can only be understood once the geographic locations for development have been decided, it is useful to look at the indicative total amount of land that may be required to service each housing scenario.

11.2   Figure 13 shows how much land would be required at a range of gross densities. These figures are purely indicative because in reality, dwellings will be built at a range of densities dependent upon the type and location of development.

Figure 13: Indicative Land Requirements[xxxvi]

Scenario	Total 20 Year Housing Requirement	Land Required (Hectares)		
		@ 20 DPH	@ 30 DPH	@ 40 DPH
1. SNPP	13,220	661	441	331
2. Nil-Net Migration	5,840	292	195	146
3. Migration Led	15,880	794	529	397
4. Economic	13,760	688	459	344
5. Dwelling-led	4,800	240	160	120
6. District RSS 2008	13,200	660	440	330
7. District Draft RSS Review 2010	11,000	550	367	275
8. District + Harlow Area RSS (pure) 2008	22,940	1,147	765	574
9. District + Harlow Area Draft RSS Review (pure) 2010	16,540	827	551	414
10. District + Harlow Area RSS (realistic) 2008	22,980	1,149	766	575
11. District + Harlow Area Draft RSS Review (realistic) 2010	16,720	836	557	418

Figure 14: Existing Towns

Settlement	Size (Hectares)
Bishop's Stortford	1,000
Hertford	800
Ware	500
Sawbridgeworth	250
Buntingford	150

11.3   These figures can be compared with the size of the existing towns[xxxvii] (see Figure 14). However, it should be stressed that the impact of delivering a particular requirement would be spread across more than one location.

11.4 The Government has introduced a *"powerful, simple and transparent incentive that means that those local authorities which promote and welcome growth can share in the economic benefits, and build the communities in which people want to live and work"*[xxxviii]. The New Homes Bonus match funds the additional council tax raised for new homes (including empty properties brought back into use, with an additional amount for affordable homes), for the following six years.

11.5 Monies raised through the New Homes Bonus are not 'ring-fenced' and in East Herts, 80% goes to East Herts Council with the remaining 20% going to Hertfordshire County Council to fund additional county services. Of the East Herts 80%, one quarter is then given to the relevant parish council where the homes have been built.

11.6 Whilst the Council is able to take the existence of any New Homes Bonus into account[xxxix], applications for housing development should be determined on their own merits and the district housing requirement must be based on objectively assessed needs. Figure 15 (below) shows the indicative total amount[xl] of New Homes Bonus received if the Council were to deliver each of the various housing scenario requirements. This is based on the average Council Tax receipt for a Band D property.

11.7 It is stating the obvious, but the fewer additional dwellings East Herts delivers, the lower the amount of bonus Hertfordshire County Council, East Herts District Council and the relevant town or parish council will receive in New Homes Bonus monies to fund their respective public services and spend on their communities.

11.8 It should be noted that New Homes Bonus monies is set by the Government's Spending Review. Almost £1billion was set aside over the Spending Review period with the Bonus fully funded in year 1. For each of the years 2012-13, 2013-14 and 2014-15, £250m has been allocated to the New Homes Bonus from Communities and Local Government funding, and funding beyond these levels comes from formula grant[xli].

Figure 15: Indicative Total New Homes Bonus Monies[xlii]

Scenario	Annual Dwelling Requirement	New Homes Bonus	
		Year 1	Six Years
1. SNPP	661	£951,397	£5,708,383
2. Nil-Net Migration	292	£420,284	£2,521,706
3. Migration Led	794	£1,142,828	£6,856,968
4. Economic	688	£990,259	£5,941,554
5. Dwelling Trajectory	240	£345,439	£2,072,635
6. District RSS 2008	660	£949,958	£5,699,746
7. District Draft RSS Review 2010	550	£791,631	£4,749,789
8. District + Harlow Area RSS (pure) 2008	1,147	£1,650,911	£9,905,469
9. District + Harlow Area Draft RSS Review (pure) 2010	827	£1,190,326	£7,141,955
10. District + Harlow Area RSS (realistic) 2008	1,149	£1,653,790	£9,922,741
11. District + Harlow Area Draft RSS Review (realistic) 2010	836	£1,203,280	£7,219,679

12. Summary of Considerations

12.1 It should be remembered that outputs of the scenario testing are preliminary. It may be more helpful to group them, as set out in Figure 16. Such an approach ensures that numerical variations between the scenarios are not given undue significance at this stage. For example, it can be considered that there is no statistical difference between 688 and 661 (Scenarios 4 and 1, respectively).

Figure 16: Scenario Groupings[xliii]

Grouping	Scenario	Annual Rate	Total Requirement
Low (< 300pa)	5. Dwelling Trajectory	240	4,800
	2. Nil-Net Migration	292	5,840
Lower - Middle (500-700pa)	7. District Draft RSS Review	550	11,000
	6. District RSS	660	13,200
	1. SNPP	661	13,220
	4. Economic	688	13,760
Upper - Middle (750-850pa)	3. Migration-led	794	15,880
	9. District + Harlow Area Draft RSS Review (pure)	827	16,540
	11. District + Harlow Area Draft RSS Review (realistic)	836	16,720
High (>1,100pa)	8. District + Harlow Area RSS (pure)	1,147	22,940
	10. District + Harlow Area RSS (realistic)	1,149	22,980

12.2   As can be seen, the groupings are not numerically contiguous. This is because the figures are based on the per annum scenario outputs rounded to the nearest 50, allowing for flexibility given that the scenario outputs arepreliminary. It is considered that the use of contiguous 'bookend' figures for the groupings would increase the level of subjectivity: for example, would a figure of 400 be considered low or lower middle? Instead, the rounding approach bases the grouping interpretation on objectively derived dwelling forecasts.

12.3   It is useful to summarise the impacts of the various levels of housing growth, based on the objectively quantifiable considerations discussed above. The summaries use the following simple colour-coded rating system to assist with interpretation:

	Positive Consequences
	Potentially positive / both positive and negative consequences
	Negative Consequences

12.4 Figure 17 summarises the key implications for East Herts should it seek a low housing requirement (e.g. approximately below 300 dwellings per annum).

Figure 17: Low Housing Requirement Summary

Considerations	Summary (e.g. Scenarios 2 and 5)
6. Demographic	• Unlikely to meet the 'internal' East Herts housing requirements
7. Dwelling	• Significantly below the average annual rate of completions
8. Affordable Housing	• Does not meet Council's affordable housing target of 200 affordable homes per annum
	• Would result in a totally unviable affordable housing percentage requirement
9. Migration	• Would not meet the 'external' East Herts housing requirements
10. Economic	• Would not meet forecast level of economic growth
11. Other	• Lowest land-take
	• Lowest amount of New Homes Bonus Monies generated

12.5 As can be seen, a low housing requirement is more likely to generate negative housing consequences for East Herts district.

12.6   Figure 18 summarises the key implications for East Herts should it seek a lower-middle housing requirement (e.g. approximately between 500 and 700 dwellings per annum).

Figure 18: Lower-Middle Housing Requirement Summary

Topic Considerations	Summary (e.g. Scenarios 1, 4, 6 and 7)
6. Demographic	• Would meet the 'internal' East Herts housing requirements
7. Dwelling	• Slightly above the average annual rate of completions
8. Affordable Housing	• Depending on affordable housing percentage and thresholds, could achieve Council's affordable housing target of 200 affordable homes per annum
	• Affordable housing percentage requirement likely to be slightly unviable
9. Migration	• Would not meet the 'external' East Herts housing requirements
10. Economic	• Depending of actual level of growth, could potentially meet forecast level of economic growth
11. Other	• Medium land-take
	• Medium amount of New Homes Bonus Monies generated

12.7   As can be seen, a lower-middle housing requirement is likely to generate a mix of effects, including effects that have both positive and negative housing consequences.

12.8   Figure 19 summarises the key implications for East Herts should it seek an upper-middle housing requirement (e.g. approximately between 750 and 850 dwellings per annum).

Figure 19: Upper-Middle Housing Requirement Summary

Topic Considerations	Summary (e.g. Scenarios 3, 9 and 11)
6. Demographic	• Would meet the 'internal' East Herts housing requirements
7. Dwelling	• Above the average annual rate of completions although high levels have been reached in specific years
8. Affordable Housing	• Likely to achieve Council's affordable housing target of 200 affordable homes per annum
	• Potential to achieve a viable affordable housing percentage requirement
9. Migration	• Would meet the 'external' East Herts housing requirements
10. Economic	• Exceeds forecast level of economic growth
11. Other	• Medium land-take
	• Medium amount of New Homes Bonus Monies generated

12.9   As can be seen, an upper-middle housing requirement is likely to generate mostly positive housing consequences.

12.10 Figure 20 summarises the key implications for East Herts should it seek a high housing requirement (e.g. approximately above 1,100 dwellings per annum).

Figure 20: High Housing Requirement Summary

Topic Considerations	Summary (e.g. Scenarios 8 and 10)
6. Demographic	• Would meet the 'internal' East Herts housing requirements
7. Dwelling	• Significantly above the average annual rate of completions and exceeding the highest annual rate
8. Affordable Housing	• Will achieve Council's affordable housing target of 200 affordable homes per annum
	• Will achieve a viable affordable housing percentage requirement
9. Migration	• Would meet the 'external' East Herts housing requirements
10. Economic	• Significantly exceeds forecast level of economic growth
11. Other	• Highest land-take
	• Highest amount of New Homes Bonus Monies generated

12.11 As can be seen, a high housing requirement is likely to generate positive housing consequences, although there could be concerns in respect of sustaining the high rate of delivery.

13. Appraisal of Housing Growth

13.1 The above summaries should not be read in isolation and present only part of the picture. Other issues such as the impact of development on the environment, resources, services and facilities also need to be considered. This can only effectively be done when the spatial distribution or geographic locations are known and this work is being undertaken as part of the plan-making process in preparing the LDF.

13.2 Notwithstanding this, some general conclusions about the likely effects of housing growth can be considered and these are set out in Figure 21 (over-page). It applies the topics used in the East Herts Sustainability Appraisal undertaken for the East Herts Core Strategy[xliv]. An explanation of these topics is included in Appendix 1.

13.3 As can be seen, there are both positive and negative effects, although in some instances the effects are dependent upon the location. Indeed, the detailed effects including any cumulative impacts can only be fully understood when the geographic implications are known.

13.4 In general terms, a higher housing target will have a greater impact on existing (finite) resources, services and facilities because of the increasing pressure and demands caused by a larger population. However, as can be seen, a higher housing target also has the potential to deliver enhanced services to satisfy the demands of the increased population.

Figure 21: Appraisal of Housing Growth

	Positive Effects	Neutral or No Effects / Effects Uncertain	Negative Effects	Comment / Mitigation
Air Quality	Dependent on location - reducing the need to travel reduces emissions	Impact on AQMAs dependent upon location	Likely to decrease air quality owing to increased emissions	Technological solutions can help reduce / mitigate effects of pollution
Biodiversity and Green Infrastructure	Creation of new / enhancement of existing green spaces increases biodiversity	Loss of countryside land dependent on type of land lost	Likely impact on designated wildlife sites and habitats owing to increased human and pet populations	Mono-tenure agricultural land considered to be of poor biodiversity value
Climate Change	Potential to fund flood alleviation and carbon capture schemes	Impact on risk of flooding dependent upon location	Increase in emissions (construction, buildings, transport) Increase in water demand and usage	Technological solutions can help reduce / mitigate negative effects
Community and Wellbeing	Potential to fund increased provision of healthcare services and community facilities to meet increasing care needs	Provision of additional services to maintain current standards to meet increased demand	Increasing pressure on existing services if additional provision to meet increased needs not met	

	Positive Effects	Neutral or No Effects / Effects Uncertain	Negative Effects	Comment / Mitigation
Economy and Employment	Increase levels of investment and employment growth Support for existing town centres New employment opportunities	Increased levels of out-commuting Increased competition	Additional employment opportunities not met within district	
Historic Environment	Opportunity to further archaeological excavations and historical knowledge Potential enabling development to fund restoration of historic assets	Impact on historic assets dependent on location	Increased pressure on character More likely potential loss of non-designated historic assets	
Housing	Increased provision of affordable housing More likely to meet housing needs Meet more of the housing demand			

	Positive Effects	Neutral or No Effects / Effects Uncertain	Negative Effects	Comment / Mitigation
	Meet the housing needs of an ageing and disabled population Improved affordability Greater mix of size and types provided to meet requirements			
Land	Potential to fund remediation of contaminated land	Impacts on contaminated land dependent on location	More likely to lead to contamination of major aquifer	Technological solutions can help reduce / mitigate negative effects
Landscape	Potential to fund landscape / countryside improvements	Change to existing landscape character	More likely potential loss of landscape assets Change from rural to urban landscape	
Transport	Dependent on location - reducing the need to travel and facilitating modal shift away from car Fund improved bus		Increased traffic congestion Increased congestion on train and buses	Negative effects can be mitigated to some extent by positive effects

	Positive Effects	Neutral or No Effects / Effects Uncertain	Negative Effects	Comment / Mitigation
	services / transport facilities			
Water	Fund improvements to waste-water infrastructure to cater for increasing demand		Continuing over-abstraction and water scarcity	Technological solutions can help reduce / mitigate per capita water consumption

14. Concluding Remarks

14.1 The purpose of this topic paper has been to set out and then consider the issues in respect of housing growth to help inform decisions about the most appropriate housing requirement or target for East Herts district.

14.2 It should be remembered that this work is based on the analysis of trends which provide a picture of change over time. Whilst they do not provide a detailed representation of reality they are the accepted and most robust way of providing such information. The outputs of the scenario testing are also preliminary and further testing of more up-to-date figures is still to be undertaken.

14.3 It should also be remembered that the UK is a free society with a free housing market. Individuals can live wherever they choose and own as many homes as they wish. East Herts Council cannot control who lives in the district. Neither does the UK have a population register and as such, demographic modelling is based on assumptions about the composition of households. Again, this approach is both widely accepted and robust.

14.4 As can be seen, whilst additional development has impacts on existing services and facilities, it also brings benefits as well as providing much needed housing for current and future generations. As the local planning authority, East Herts Council is obliged to prepare a plan that meets objectively assessed development needs. This includes having a clear understanding of the housing requirements of East Herts.

14.5 As stated above, East Herts is not an island and plan-making must take account of wider sub-regional issues that cross administrative boundaries. Housing is one such issue, and in East Herts in particular, housing markets are not contiguous with the district boundary (see Figure 10 above).

14.6 Whilst local planning authorities can only plan for their own area, it is right that consideration is given, as far as possible using available information, of cross-boundary housing issues since these can have knock-on effects on planning in adjacent districts. For example, failure to meet genuine housing requirements does not make the requirement disappear: it simply has the potential to increase demand for housing in

other districts. This is also true for those districts with a tight administrative boundary that cannot realistically meet their own requirements.

14.7   However, the distinction must be made between the housing *requirements* and the housing *aspirations* of a particular district. The latter is purely a policy decision and only one interpretation of the demographic evidence. An example of this is where the dwelling-based scenarios (which are policy based) exceed the migration-based and economic-based scenarios.

14.8   East Herts Council is also undertaking Population and Household forecasting work at the sub-district level. This work will test the outputs of the district work to understand what are the household requirements of each town in East Herts. Along with all other evidence, this information will help inform the development strategy for East Herts to 2031. However, any development strategy should not be based on "local needs" alone since housing growth is self fulfilling (i.e. on the whole, a high level of growth in the past generates high level of growth in the future) and there may be other planning reasons (site suitability, accessibility etc) for a particular development strategy.

14.9   The demographic work highlights the intrinsic relationship between population and households and, importantly for East Herts, the fact that population growth generates an <u>increasing</u> household requirement. This is because the trends of an ageing population and smaller household sizes are set to continue. Both of these lead to a lower 'recycling' rate of existing houses.

14.10 It should also be remembered that a declining or static population does not immediately cause house building to cease (for the reasons mentioned above). If the objective was to not build any additional homes, the question is how far does the population need to fall before additional homes no longer need to be built? Such an approach is not considered realistic or appropriate and ultimately a lack of population growth would result in natural decline, which in turn would lead to empty homes and economic decline.

14.11 House building brings economic prosperity, not just in terms of the construction but through the economic benefits generated by additional

households living and spending money in the district. It also has the potential to create additional jobs. However, as set out above, the relationship between homes and jobs although a simple idea in theory, in practice is not straightforward. For example, between 2001 and 2007, the number of jobs in East Herts increased by 4,300. However, by 2009, (most likely due to the recession) the number of jobs had decreased by 3,500 resulting in an increase of only 800 jobs over the eight year period 2001-2009[xlv]. Compare this with the increase in the number of houses of 3,982 over the same period.

14.12 Whilst this Topic Paper considers the issues around housing growth in order to identify the most appropriate housing requirement for East Herts and fully understand the implications, the spatial or geographic effects of any such requirement need to be tested and appraised through the plan-making process. Demographic information alone cannot and does not provide the final answer: it is only one part of the plan-making evidence base, just as housing is only one part of achieving sustainable communities.

14.13 Indeed, as the foreword to the Population and Household Forecasts technical work states: *'it is not the intention of this project to produce a recommended of preferred demographic forecast for any area. Rather, the approach is to encourage the examination of the demography of each area from different perspectives. Hopefully this will allow appreciation of how the demography of an authority can be influenced by local circumstances and local policy choices. It will be for each local planning authority to determine its use of the forecasts and other outputs from this project to inform its future spatial policy development*[xlvi].

14.14 Rather, the rationale for undertaking household and population forecasting technical work is the Government's reforms to the planning system and the requirement in the Draft NPPF that *objectively assessed development needs should be met.*[xlvii]

14.15 This paper recommends that a **housing requirement range is subject to further investigation, to test the feasibility and implications of such a district housing requirement, in housing terms, as well as against the physical and environmental capacity of the district.**

15. Key Conclusions

15.1 This section sets out the key conclusions that can be drawn from the Household and Population technical work.

15.2 As set out under the **Demographic Considerations** (Section 6), even to maintain the existing population, additional dwellings are needed, due to the continuing trend of increasing rates of household formation and smaller household size.

15.3 In terms of **Affordable Housing Considerations** (Section 8), based on recent trends on all sites, to achieve the Council's target of delivering 200 affordable homes per annum on average over a five year period, would require a total dwelling requirement for the district of at least 833 additional homes per annum. However, should the Council seek to principally meet its housing requirement from 'larger sites', a housing requirement of at least 500 dwellings per annum would facilitate 200 of these being provided as affordable.

15.4 When looking at the **Migration Considerations** (Section 9), it was found that a lower housing target which limits supply unreasonably, would increasingly out-price local people from purchasing in the district. Unaffordability would increase, with local people being forced to move outside the district to cheaper areas, away from family, social and community networks.

15.5 Finally, in terms of **Economic Considerations** (Section 10), the economic consequences of a lower housing target can be seen to lead to a shrinking of the East Herts local economy over time. Not only would the economy become smaller, but as a result, it would have the effect of increasing the number of commuters as a proportion of the workforce. This then has knock-on economic consequences. To ensure the economy of the district continues to grow, a dwelling requirement of at least 688 homes per annum would be required.

15.6 Given the findings set out in this topic paper, a housing requirement range based on the **low scenario grouping** (Scenarios 2 and 5), which would generate a housing figure below 300 dwellings per annum, is not considered realistic because it would be likely to cause negative

consequences in terms of demographics, affordable housing, migration and the local economy.

15.8 Equally, it is considered that a housing requirement range based on the **high scenario grouping** (Scenarios 8 and 10), which would generate a housing figure over 1,100 dwellings per annum, is not considered realistic because it would be likely to be undeliverable and result in an unacceptable level of land-take.

15.9 Thus, it is considered that the **lower-middle scenario grouping** (scenarios 1, 4, 6 and 7) and the **upper-middle scenario grouping** (Scenarios 3, 9 and 11), which would generate a housing figure between 500 and 850 dwellings per annum is considered realistic because it would be likely to produce positive consequences in terms of demographics, affordable housing, migration and the local economy, whilst at the same time result in an acceptable level of land-take.

15.10 It is, therefore, recommended that the range of **500 to 850 dwellings per annum** (i.e. 10,000 to 17,000 for the period 2011 to 2031) be subject to further investigation through the plan-making process, to test the feasibility and implications of such a district housing requirement, against national planning policy requirements and the physical and environmental capacity of the district.

Appendix 1: Sustainability Topic Areas and Key Issues

From East Herts Council Core Strategy Issues and Options Sustainability appraisal Report 2010 prepared by Scott Wilson Consultants
http://www.eastherts.gov.uk/index.jsp?articleid=15576

Air quality	• The need to improve air quality in AQMAs and other areas exceeding air quality objective levels • The need to ensure that inappropriate levels of development or activities which contribute towards lower levels of air quality are not located within inappropriate proximity to where air quality objectives have been exceeded or are approaching objective limits • The need to ensure that future development does not lead to residents likely to be in an AQMA or subject to levels near to the air quality objective levels
Biodiversity and green infrastructure	• The need to ensure that development does not negatively impact upon designated nature conservation sites including key biodiversity areas, habitats and species (informed by the Hertfordshire BAP) and other recognised sites of nature conservation importance, including Wildlife Sites • The need to protect and enhance sites of importance for wildlife; both statutory and non-statutory • In areas of substantial development (e.g. north of Harlow) there is careful consideration for the incorporation of green infrastructure features • Consideration is given to multi-functional green spaces which transcend the administrative boundaries of East Herts.
Climate change (mitigation and adaptation)	• The need to lower GHG emissions • The need to increase the amount of energy generated by decentralised or renewable sources • The impact of development on surface water flooding • Development within the areas at risk of flooding • The need to promote water efficiency as well as energy efficiency due to the anticipated increased

	water demand from people and the environment • The need to take the findings of the SFRA into account in preparing policies and allocating sites for development.
Community and wellbeing	• The need to ensure that the equality, health and social care needs of a growing and ageing population are met • The need to ensure that opportunities to capitalise on the benefits which may emerge through the expansion of Stansted Airport • The need to ensure that the needs of the disabled population in the District are met • The need to reduce inequalities experienced in female life expectancy • The need to ensure that the high levels of VCS activity continues • The need to consider and minimise the impacts of air quality on health
Economy and employment	• The need to ensure that jobs are created in an appropriate manner and scale across all parts of the District • The need to ensure that opportunities to capitalise on the benefits which may emerge through the expansion of Stansted Airport • The need to ensure that job creation is matched by the provision of appropriate facilities and infrastructure • The need to ensure that policies will help to encourage greater rates of GVA growth.
Historic environment	• The need to protect the District's historic environmental assets (both designated and non-designated) from inappropriate development • The need to appreciate and capitalise on the potential that historic assets have to contribute towards place-shaping through their distinctive character and inspiration for design of further development • The need to be aware of the potential for unknown historic sites as a potential material constraint on development

Housing	• To increase the provision of affordable housing • To ensure that the appropriate levels of new dwellings are provided over the plan period • To ensure that national PDL targets are met • To ensure that that the housing needs of an ageing and disabled population are met • The need to provide additional Gypsy and Traveller pitches, and to ensure that new site pitches are located with adequate access to services in line with the East of England Plan
Land	• Ensure that development does not contaminate the major aquifer beneath East Herts • The need to identify, avoid and if appropriate remediate contaminated land in the District • To increase recycling rates which are poor compared to the County average • The need to ensure that waste is minimised at the design stage of a development
Landscape	• The need to protect the District's landscape assets from inappropriate development • Where development proceeds, particularly in greenfield areas, there is a need to ensure that landscape assets, such as hedgerows, are protected and integrated to maximise their potential amenity value
Transport	• The need to ensure that a more sustainable modal shift is facilitated and that levels of private car use for commuting is reduced • The need to ensure that new development does not contribute towards increased levels of traffic congestion • The need to ensure that rural accessibility to bus services does not deteriorate and is improved.
Water	• East Herts is located in an area experiencing water scarcity which is predicted to be exacerbated due to climate change and future growth and development • The need to ensure the distribution and location of development takes the water supply and sewerage infrastructure into account • The need to reduce per capita consumption of water.

Appendix 2: Notes

[i] Planning & Compulsory Purchase Act 2004 (as amended), Chapter 5, Section 13

[ii] Planning & Compulsory Purchase Act 2004 (as amended), Chapter 5, Section 20, Part 5(b)

[iii] Draft National Planning Policy Framework, paragraph 20 (CLG, July 2011)

[iv] Draft National Planning Policy Framework, paragraph 109 (CLG, July 2011)

[v] Prepared by ORS on behalf of Brentwood, Broxbourne, East Herts, Epping Forest, Harlow and Uttlesford Councils and available at www.eastherts.gov.uk/technicalstudies

[vi] Work being undertaken by Edge Analytics Ltd in 2012

[vii] Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils)

[viii] Harlow Area Options Appraisal 2010, prepared on behalf of East Herts Council, Epping Forest District Council, and Harlow District Council by Scott Wilson Consultants available at www.eastherts.gov.uk/techncialstudies.

[ix] Updated population data from the 2011 Census is anticipated for publication in early 2012

[x] 2008-based Sub-National Population Projections (ONS, 2010)

[xi] CLG Household Projections from Population & Household Forecasts Technical Study, Edge Analytics 2012

[xii] Interrogation of 2008-based Sub-National Population Projections (ONS, 2010)

[xiii] Data for Scenarios 1-5 and 8-11from page 43, Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils). Scenarios 6 & 7 based on initial unpblished data from the draft report (February 2012).

[xiv] Annual rates for Scenarios 1-5 and 8-11from page 43, Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils). Scenarios 6 & 7 based on initial unpblished data from the draft report (February 2012). 20 Year Plan Period figures calculated by multiplying annual rates by 20 years

[xv] Because housing delivery is continuous, the 20 year plan period overlaps by 10 year. However, houses delivered in the overlapping 10 years apply to both plan periods.

[xvi] See paragraphs 5.83-5.98 of the *East of England Plan Examination in Public: Report of the Panel, Volume 1 Report*, June 2006

[xvii] Table 7.1, page 121, *East of England Plan Examination in Public: Report of the Panel, Volume 1 Report*, June 2006

[xviii] See pages 14 and 41 of *the Secreatary of State's Propsoed Changes to the Draft Revision of the Regional Spatial strategy for the East of England and Statement of Reasons*, December 2006

[xix] Information from Appendix B, Table 1 taken from the Annual Monitoring Report 2010/11 available at www.eastherts.gov.uk/amr

[xx] Annual rates for Scenarios 1-5 and 8-11from page 43, Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils). Scenarios 6 & 7 based on initial unpblished data from the draft report (February 2012).

xxi See paragraph 54 of Planning Policy Statement 3 (CLG, November 2007) and paragraph 109 of the Draft National Planning Policy Framework, (CLG, July 2011)

xxii The current site size thresholds are 15 dwellings or 0.5ha in the six Main Settlements and 3 dwellings or 0.09ha in Category 1 and 2 Villages, as set by Policy HSG3 of the Local Plan 2007, available at www.eastherts.gov.uk/localplan

xxiii From the Housing Needs Survey 2004, available at www.eastherts.gov.uk/technicalstudies

xxiv Policy HSG3 of the Local Plan 2007, available at www.eastherts.gov.uk/localplan

xxv Table 12 in the Annual Monitoring Report 2010/11 available at www.eastherts.gov.uk/amr

xxvi Annual rates for Scenarios 1-5 and 8-11from page 43, Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils). Scenarios 6 & 7 based on initial unpblished data from the draft report (February 2012).

xxvii Table 12 in the Annual Monitoring Report 2010/11 available at www.eastherts.gov.uk/amr

xxviii Figure 124, page 126, for the whole Sub-region SHMA (2010, ORS) www.eastherts.gov.uk/technicalstudies

xxix The SHMA model has a base date of 2007 and is currently set for the periods to 2026. To run accurately to 2031, the SHMA needs updating and the Council is currently looking to implement this work as well as to consider the implications of changes to affordable housing products e.g. introduction of affordable rent. Notwithstanding this, the SHMA can still provide a useful indication of how delivering different housing targets can affect the level of affordable housing required. Whilst it is acknowledged that house prices may have fallen in the past five years (although not significantly), the relationship between the various outcome percentages remains valid.

xxx Figures calculated by multiplying annual rates by 20 years. Data for Scenarios 1-5 and 8-11from page 43, Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils). Scenarios 6 & 7 based on initial unpblished data from the draft report (February 2012).

xxxi SHMA Viability Study (Levvel, 2010) prepared for the LCB(East)/M11 Sub-region on beglf of Brentwood, East Herts, Epping Forest, Harlwo and Uttlesford Councils. Recommended that for East Herts, 30% was viable of sites between 5-14 dwellings, and up to 40% viable for sites of 15+ dwellings.

xxxii Information from LCB (East)/M11 Sub-region Strategic Housing Market Assessment (SHMA) 2010 available at www.eastherts.gov.uk/technicalstudies

xxxiii Strategic Housing Market Assessment (SHMA) 2010, Figure 15, page 47available at www.eastherts.gov.uk/technicalstudies

xxxiv Annual rates for Scenarios 1-5 and 8-11from page 43, Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils). Scenarios 6 & 7 based on initial unpblished data from the draft report (February 2012). 20 Year Plan Period figures calculated by multiplying annual rates by 20 years

xxxv Annual rates for Scenarios 1-5 and 8-11from page 43, Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils). Scenarios 6 & 7 based on initial unpblished

data from the draft report (February 2012). 20 Year Plan Period figures calculated by multiplying annual rates by 20 years

xxxvi Annual rates for Scenarios 1-5 and 8-11from page 43, Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils). Scenarios 6 & 7 based on initial unpblished data from the draft report (February 2012).

xxxvii As of 2010, taken from Figure 3.1, page 76 of the East Herts Core Strategy Issues and Options Consultation Document www.eastherts.gov.uk/corestrategy

xxxviii http://www.communities.gov.uk/housing/housingsupply/newhomesbonus/

xxxix Chapter 7, Section 143 Part 4(a) of the Localism Act 2011 refers to local finace considerations which means *'a grant or other financial assistance that has been, or will or could be, provided to a relevant authority by a Minister of the Crown'.* This is understood to refer to the New Homes Bonus.

xl The total amount received before distributing the agreed split to the three local authority tiers

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http://www.communities.gov.uk/housing/housingsupply/newhomesbonus/newhomesbonusquestions/

xlii New Homes Bonus Calculator available at http://www.communities.gov.uk/documents/housing/xls/2079385.xls#'Estimates of Payments'!B5. Calculated February 2012 assuming full housing requirement delivered in Band D and no additional new homes bonus, empty homes or Gypsy and Traveller pitches. Annual rates for Scenarios 1-5 and 8-11from page 43, Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils). Scenarios 6 & 7 based on initial unpblished data from the draft report (February 2012).

xliii Annual rates for Scenarios 1-5 and 8-11from page 43, Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils). Scenarios 6 & 7 based on initial unpblished data from the draft report (February 2012).

xliv East Herts Core Strategy Issues and Options Sustainability Appraisal, undertaken by Scott Wilson Consultants (2010) www.eastherts.gov.uk/corestrategy

xlv Employment data from East Herts Core Strategy issues and Options Consultation 2010 paragraph 3.4.3, p77

xlvi Page 2, Greater Essex Demographic Forecasts - Phase 2: Scenario Development incorporating Phase 1: Model Development (March 2012, Edge Analytics on behalf of the Essex Planning Officers Association (EPOA) and East Herts and Welwyn Hatfield Councils).

xlvii Draft National Planning Policy Framework, paragraph 20 (CLG, July 2011)