



# **Population: Background Note for the Core Strategy**

**April 2009**

## Population: Background Note for the Core Strategy

As part of the preparation of our Emerging Strategies paper we have had to consider how the population of our Borough will change and grow over the next 22 years to 2031. We have looked at the Borough as a whole, each settlement individually and the countryside. The very nature of population projections, and the size of some of the settlements has meant that this work is, in places inexact, and as such it is meant to be indicative rather than prescriptive.

This paper outlines the data sources and methods we have used for our population calculations, and it shows how we arrived at the optimal level of additional housing provision for each settlement from 2006-2031.

We have used the 2001 Census Demographic Profiles produced by Herts County Council<sup>1</sup> for the borough and its settlements as a data source for population. As Table 1 shows, there is a difference between Resident Population and Resident Household Population due to some people living in residential institutions rather than households such as elderly care homes and the prison in Bovingdon.

**Table 1: Population, 2001 Census**

Area	Population 2001	
	Resident Population	Resident household population
<b>Dacorum</b>	137,800	135,788
<b>Hemel Hempstead</b>	82,074	81,368
<b>Berkhamsted</b>	18,524	18,367
<b>Tring</b>	11,635	11,424
<b>Kings Langley*</b>	4,942	4,912
<b>Bovingdon</b>	4,611	3,903
<b>Markyate</b>	2,749	2,749
<b>Countryside**</b>	13,265	13,065

\*The population figure for Kings Langley includes those residents living in Three Rivers District, the population of the Dacorum part of Kings Langley is 3,976. We have carried out the calculations outlined below for both the whole of Kings Langley and the Dacorum part only.

\*\* The population of the countryside is calculated by subtracting the population of all the settlements from the Borough total.

We have produced a set of four population and dwellings projections to 2031 for each settlement in order to consider the appropriate level of housing development for each town and large village up to 2031. We have used the resident household population as the baseline because we are examining the appropriate number of additional residential dwellings for each place. We

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<sup>1</sup> Accessed online from <http://www.hertsdirect.org/yrccouncil/hcc/env/factsfigs/population/census/cenresults/keystatall/cendemprof/> (August 2008)

have taken 2006 as the base year because our housing requirement in the East of England Plan has been calculated from 2006 to 2031.

The sets of projections are calculated according to two different scenarios and using two different data sources. The two scenarios are:

- (a) Zero-net migration:** this reproduces the population change that would occur if total migration into and out of an area was in balance and is based on projections from EERA<sup>2</sup>. It is possible for differences in age/gender structure of in-migrants and out-migrants to have some effect on the projected population. (NB this scenario has also been referred to as natural growth or natural change in some of the Spatial Strategies)
- (b) Maintain population:** this represents what would happen to the number of dwellings if the population of a settlement was to remain at 2001 levels, given the predicted fall in household size.

The different data sources used are two separate forecasts of average household size, in which size is predicted to continue falling. This has a significant impact on dwelling forecasts because more dwellings will be required to accommodate the same level of population in future years. The two data sources are:

- (a) CLG (Communities and Local Government) 2004 based Household Projections<sup>3</sup>:** this gives a projected average household size for Dacorum up to 2029, and follows a linear trend.
- (b) HCC (Hertfordshire County Council) internal work:** this gives a projected average household size for the borough up to 2031, and follows an exponential trend.

Because the prediction of future population and dwelling levels is difficult to do with much accuracy, especially for small settlements, we have produced four sets of forecasts for each settlement, with the aim of producing a sensible range of projections to work with.

The calculations used in the 'zero-net migration' scenario are as follows:

- **Population projection:** The yearly rate of population growth for the borough is calculated as  $1/20^{\text{th}}$  of the percentage growth in population from 2001-2021 for the Borough. The projections for each settlement are calculated by multiplying the 2001 settlement population by  $((1 + \text{yearly rate}) \times (\text{no. of years from 2001}))$ .
- **Dwellings projection:** This was calculated by dividing the projected population (as calculated above) by the projected average household size.

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<sup>2</sup> EERA, 2003 Population and Household Growth in the East of England, 2001-2021 Appendix B. Accessed online from <http://www.eera.gov.uk/GetAsset.aspx?id=fAAyADIAMQA0AHwAfABGAGEAbABzAGUAFAB8ADAAfAA1> on 26/08/08.

<sup>3</sup> CLG 2004 based Household Projections (revised February 2008) England and Regions, Hertfordshire and districts 2004 – 2029. Factsheet 8<sup>th</sup> April 2008. Accessed online from <http://www.hertsdirect.org/infobase/docs/pdfstore/housproj04rev.pdf> on 25/08/08

The calculations used in the 'maintain population' scenario are as follows:

- **Population projection:** The population was held constant at the 2001 level for each settlement.
- **Dwellings projection:** This was calculated by dividing the population (constant) by the average household size (falling).

The four different sets of population and dwelling projections are shown below in tables 2-8 below:

**Table 2: Hemel Hempstead Dwellings Projections**

<b>Forecast set</b>	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>Change 2006-2031</b>
<b>Zero-net migration, CLG household size projection</b>	33,397	34,759	36,243	37,806	39,276	40,626	41,443	<b>6,684</b>
<b>Zero-net migration, HCC household size projection</b>	33,397	34,938	36,089	37,278	38,506	39,774	41,085	<b>6,147</b>
<b>Maintain population, CLG household size projection</b>	33,397	34,188	35,072	36,004	36,818	37,497	37,497	<b>3,309</b>
<b>Maintain population, HCC household size projection</b>	33,397	34,364	34,914	35,472	36,039	36,615	37,200	<b>2,836</b>

**Table 3: Berkhamsted, including Northchurch, Dwellings Projections**

<b>Forecast set</b>	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>Change 2006-2031</b>
<b>Zero-net migration, CLG household size projection</b>	7,790	7,846	8,181	8,534	8,866	9,170	9,355	<b>1,509</b>
<b>Zero-net migration, HCC household size projection</b>	7,790	7,886	8,144	8,408	8,678	8,955	9,238	<b>1,352</b>
<b>Maintain population, CLG household size projection</b>	7,790	7,717	7,917	8,127	8,311	8,464	8,464	<b>747</b>
<b>Maintain population, HCC household size projection</b>	7,790	7,757	7,881	8,007	8,135	8,265	8,397	<b>640</b>

**Table 4: Tring Dwellings projections**

<b>Forecast set</b>	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>Change 2006-2031</b>
<b>Zero-net migration, CLG household size projection</b>	4,694	4,880	5,089	5,308	5,514	5,704	5,819	<b>938</b>
<b>Zero-net migration, HCC household size projection</b>	4,694	4,905	5,065	5,230	5,398	5,570	5,746	<b>841</b>
<b>Maintain population, CLG household size projection</b>	4,694	4,800	4,924	5,055	5,169	5,265	5,265	<b>465</b>
<b>Maintain population, HCC household size projection</b>	4,694	4,825	4,902	4,980	5,060	5,141	5,223	<b>398</b>

**Table 5: Kings Langley Dwellings Projections (Dacorum part only)**

<b>Forecast set</b>	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>Change 2006-2031</b>
<b>Zero-net migration, CLG household size projection</b>	1,691	1,698	1,771	1,847	1,919	1,985	2,025	<b>327</b>
<b>Zero-net migration, HCC household size projection</b>	1,691	1,707	1,763	1,820	1,879	1,938	2,000	<b>293</b>
<b>Maintain population, CLG household size projection</b>	1,691	1,671	1,714	1,759	1,799	1,832	1,841	<b>170</b>
<b>Maintain population, HCC household size projection</b>	1,691	1,679	1,706	1,733	1,761	1,789	1,818	<b>139</b>

**Table 6: Kings Langley Dwellings Projections (whole settlement)**

<b>Forecast set</b>	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>Change 2006-2031</b>
<b>Zero-net migration, CLG household size projection</b>	2,092	2,098	2,188	2,282	2,371	2,453	2,502	<b>403</b>
<b>Zero-net migration, HCC household size projection</b>	2,092	2,109	2,178	2,249	2,321	2,395	2,471	<b>361</b>
<b>Maintain population, CLG household size projection</b>	2,092	2,064	2,117	2,173	2,223	2,264	2,274	<b>210</b>
<b>Maintain population, HCC household size projection</b>	2,092	2,074	2,108	2,141	2,176	2,210	2,246	<b>171</b>

**Table 7: Bovington Dwellings Projections**

<b>Forecast set</b>	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>Change 2006-2031</b>
<b>Zero-net migration, CLG household size projection</b>	1,621	1,667	1,738	1,813	1,884	1,949	1,988	<b>321</b>
<b>Zero-net migration, HCC household size projection</b>	1,621	1,676	1,731	1,787	1,844	1,903	1,963	<b>287</b>
<b>Maintain population, CLG household size projection</b>	1,621	1,640	1,682	1,727	1,766	1,799	1,799	<b>159</b>
<b>Maintain population, HCC household size projection</b>	1,621	1,648	1,675	1,701	1,729	1,756	1,784	<b>136</b>

**Table 8: Markyate Dwellings Projections**

<b>Forecast set</b>	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>Change 2006-2031</b>
<b>Zero-net migration, CLG household size projection</b>	1,178	1,174	1,224	1,277	1,327	1,373	1,400	<b>226</b>
<b>Zero-net migration, HCC household size projection</b>	1,178	1,180	1,219	1,258	1,299	1,340	1,383	<b>202</b>
<b>Maintain population, CLG household size projection</b>	1,178	1,155	1,185	1,216	1,244	1,267	1,267	<b>112</b>
<b>Maintain population, HCC household size projection</b>	1,178	1,161	1,180	1,198	1,218	1,237	1,257	<b>96</b>

**Table 9: Countryside Dwellings Projections**

<b>Forecast set</b>	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>Change 2006-2031</b>
<b>Zero-net migration, CLG household size projection</b>	5,128	5,667	5,909	6,163	6,403	6,623	6,756	<b>1,090</b>
<b>Zero-net migration, HCC household size projection</b>	5,128	5,696	5,882	6,072	6,267	6,467	6,672	<b>976</b>
<b>Maintain population, CLG household size projection</b>	5,128	5,574	5,718	5,869	6,002	6,113	6,141	<b>568</b>
<b>Maintain population, HCC household size projection</b>	5,128	5,602	5,692	5,783	5,875	5,969	6,065	<b>462</b>



It should be noted that the above dwellings projections for 2006 differ from the actual number of dwellings in each settlement as measured by adding the Council's dwelling completion data 2001/2-2006/7 to the 2001 census dwellings figure. Such discrepancy is normal. Table 10 shows the number of dwellings in each settlement in 2006, calculated this way:

**Table 10: Actual dwelling numbers by settlement: 2006**

<b>Area</b>	<b>Dwellings 2001</b>	<b>Dwellings 2006</b>
<b>Dacorum</b>	55,908	58,066
<b>Hemel Hempstead</b>	33,397	34,785
<b>Berkhamsted</b>	7,790	8,078
<b>Tring</b>	4,694	4,899
<b>Kings Langley<sup>1</sup></b>	2,092	2,267
<b>Kings Langley<sup>2</sup></b>	1,691	1,710
<b>Bovingdon</b>	1,621	1,654
<b>Markyate</b>	1,178	1,238
<b>Countryside</b>	5,128	5,366

<sup>1</sup> Refers to whole settlement of Kings Langley, including some residents in Three Rivers District, and uses data supplied by Three Rivers District referring to completion rates.

<sup>2</sup> Refers to the Dacorum part of Kings Langley only.

The above range of dwelling forecasts has helped us to consider the optimal level of additional housing for each settlement up to 2031.

This discussion is contained in the Emerging Strategy Consultation paper and can be found within the Spatial Strategy for each settlement. The considerations involve examining a number of other factors, including the capacity of the local infrastructure, the character of the settlement, the availability of suitable sites for development, historic change and whether there were any physical constraints to development.

Evidence from the Strategic Housing Land Availability Assessment (SHLAA), the existing Local Plan and outstanding planning permissions, together with a small allowance for windfall (undefined) sites, told us the level of additional housing that can be accommodated within the urban area (urban capacity sites). This was deducted from the optimal level of housing development to give the amount of housing on greenfield sites we should plan for at each settlement.

Table 11 shows the optimal level of dwellings that have been derived for each settlement and how much of it would need to be accommodated on urban capacity sites, and how much on greenfield sites.

**Table 11: Optimal level of additional housing for selected settlements:**

Settlement	Optimal level of housing 2006 to 2031	Urban capacity	Greenfield sites
Berkhamsted*	1,200	940	110
Tring	460	310	150
Kings Langley	170	70	100
Bovingdon	150	80	70
Markyate	200	142	58

\* The amount of dwellings to be accommodated on greenfield sites and on urban capacity sites do not sum to give the optimal level of housing in Berkhamsted because 150 dwellings were built over the period 2006-2008.

The optimal levels of housing for Tring, Kings Langley and Bovingdon are based on maintaining the population level, using the CLG household size forecasts. The optimal level of housing for Markyate is based on the zero-net migration forecasts using the HCC household projection as this level of growth was deemed necessary for the provision of additional services and facilities required in the village. In the case of Berkhamsted, has been set midway between the two sets of projections. This reflects the fact that it is the second largest town in the borough and is able to accommodate reasonable levels of development, but is also constrained by schooling and its valley and market town character.

We have not conducted this exercise for Hemel Hempstead or the Countryside. The reason for this is that the bulk of the Borough's housing requirement from the East of England Plan for 17,000 dwellings from 2006 to 2031 will be accommodated at Hemel Hempstead. For further details of growth options at Hemel Hempstead please see the Growth at Hemel Hempstead: Emerging Growth Options document.

We have not planned for a specific level of growth in the Countryside because it is an area of development restraint. However, we do expect some small scale local housing at some villages.