

Population Projections and the Core Strategy

Background information note

September 2011

1.0 Introduction

- 1.1** Population projections and forecasts are an important indicator for planning for the future of the borough. They, together with household projections, are used to plan for the appropriate level of provision of infrastructure, services and facilities.
- 1.2** The Council does not produce its own population forecasts. However, many other bodies do produce forecasts that we can use to inform our Core Strategy and other planning policy. The forecasts use different inputs and methodologies and as a result can vary widely. It is important for the Council to consider the merits of the different forecasts and to use a consistent set of population forecasts to inform the Core Strategy and its technical evidence.
- 1.3** The Council must also set a housing target for the plan period, which must balance the need for more housing with environmental, economic and infrastructural constraints. It is important to consider the housing target when using the population forecasts as housing supply is an influential factor on the size of the population. The appropriate housing target is considered further in the Background to Core Strategy Housing Option Paper (September 2011). The potential for supply of new housing is considered in the Housing Land Availability Paper (July 2011).

2.0 Demographic Inputs

- 2.1** The two most important components of population forecasts are 'natural change' and 'migration' levels. These are discussed below.
- 2.2** The natural change within a population is the change that occurs as a result of births and deaths. Population forecasts use birth rates and death rates to predict how the size and age structure of populations will change over time. Information from the Office for National Statistics (ONS) shows that during the period 2002-2010 the annual result of the natural changes to the population in Dacorum varied from an additional 300 - 700 people.
- 2.3** Populations are never static; there are always people moving into and out of an area and population forecasts take account of the net effect of this migration. Information from the ONS shows that during the period 2002-2010 the annual result of net migration in Dacorum varied from an additional 1,100 people to a reduction of 700 people. Figure 1 shows how the level of natural change and net migration over the period 2002-2010.

Figure 1: Components of population change in Dacorum, 2002-2010



Source: ONS mid-year population estimates: components of population change for Local Authorities in the UK. Available at <http://www.statistics.gov.uk>

- 2.4** Figure 1 illustrates the variation in net migration levels over the period shown. From 2002 to 2006 net migration was consistently negative as more people left than moved into the borough. However, from 2007-2010 net migration was consistently positive as more people moved into than left the borough.

2.5 As population projections are often based on trends observed during a relatively short timeframe it is important to understand how such trends relate to longer term trends. However, due to the volatility of net migration, and the many factors that can influence it, the results of population projections must be treated with caution.

3.0 Existing population projections

3.1 Table 1 shows the various population projections considered by the Council. Text in paragraphs 3.2-3.6 of this section explains the organisations responsible for the projections and the assumptions used.

Table 1: Population projections for Dacorum Borough

Source of Projection	2006	2011	2021	2031	Change 2006-31
ONS (2010)	137,800	141,500	149,300	157,800	20,000
Chelmer Standard '09	138,300	139,500	141,000	141,800	3,500
Chelmer ZNM '09	138,300	140,930	145,577	149,891	11,591
Chelmer Standard '11	137,500	141,731	149,882	159,250	21,750
Chelmer ZNM '11	137,500	140,734	146,533	153,248	15,748
EEFM	137,800	144,400	154,900	163,400	25,600
HCC low*	139,500	140,900	145,800	142,500	3,000
HCC high*	139,500	144,000	153,500	163,900	24,400

**Figures are rounded to the nearest hundred*

3.2 The **ONS (2010)** are taken from the ONS 2008-based Sub-national Population Projections which were produced by the Office for National Statistics (ONS) in May 2010 and are based on ONS's revised Mid Year Population Estimates 2008. However, as this set of projections start from 2008, the ONS mid-year population estimates for 2006 and 2007 have been used so that the whole plan period (2006-2031) can be observed. The projections are trend-based and do not take account of the future implications of local, regional or national policy. They make assumptions about future levels of fertility, mortality and migration based levels observed during the period 2004-2008. The projections are broken down into their component parts of natural change and migration. Taken over the period 2011 to 2031, natural change is forecast to lead to an additional 11,600 people and net migration to an additional 4,700 people. This suggests that over the period approximately 70% of the change in population will be down to natural changes and 30% will be due to migration into and out of the borough. It should be noted that these figures should be interpreted as indicative only.

3.3 The **two Chelmer '09** sets of projections were produced by the East of England Regional Assembly (EERA) in December 2009 to inform the review of the East of England Plan. Both projections are trend based, and therefore do not take the future implications of local, regional or national policy into account. The **Chelmer Standard '09** projection illustrates how the size of the population would change if demographic trends observed

during the period 2001-2006 continue. The **Chelmer ZNM '09 (zero net migration)** projection provides an indication of how the size of the population would change if there was a balance between the number of in-migrants and the number of out-migrants.

- 3.4** The Council notes that the results of the two sets of Chelmer '09 projections are very different, and that the results of the standard set appear unrealistically low. It also seems odd that the zero net migration projection is significantly lower than the standard projection as information from Oxford Economics (see paragraph 3.8) suggests historically net migration has been fairly volatile and relatively low. It is important to note that Oxford Economics questioned the credibility of the Chelmer '09 projections in their 2008 model run. As EERA has now been disbanded the Council has not been able to gather information about the assumptions used in the models.
- 3.5** The two sets of **Chelmer '11** projections were provided to the Council by consultancy Barton Wilmore in anticipation of this background note. The projections are derived from the Chelmer Population and Housing Model, which can be used to show the projected impact of different scenarios on future population. The **Chelmer Standard '11** projection illustrates how the size of the population would change if short-term migration trends observed during the period 2004-2009 continue. The **Chelmer ZNM '11 (zero net migration)** projection provides an indication of how the size of the population would change if there was a balance between the number of in-migrants and out-migrants.
- 3.6** The **Chelmer Standard '11** projection makes an assumption that net migration will continue to be positive at 200 people per annum. However, this is taken from a short-term trend observed during 2004-09 which is significantly above that observed during the 10 year period 1999-2009. Although net migration levels are relatively volatile, the average of +200 per annum is skewed by two years of relatively high levels of net in-migration in the years 2007-09.
- 3.7** Historic data shows that net migration levels are volatile and vary between being positive and negative. Although a scenario of zero net migration is unlikely to hold true in any one year, it probably gives a more realistic indication of future population levels than assuming a constant positive or negative value for net migration.
- 3.8** The **East of England Forecasting Model (EEFM)** projections were produced by Oxford Economics in 2010. The forecasts are based on past trends, and are economic, as well as demographic forecasts. The overall model structure captures the interdependence of the economy, demographic change and housing at a local level. The migration

component of population change is given, and by implication natural change can be calculated. Taken over the period 2011 to 2031, natural change is forecast to lead to an additional 12,100 people and net migration to an additional 6,900 people. This suggests that over the period approximately 64% of the change in population will be down to natural changes and 36% will be due to migration into and out of the borough. It should be noted that these figures should be interpreted as indicative only.

3.9 The two HCC sets of projections were produced by Hertfordshire County Council and are based on two different housing trajectories produced by DBC. The projections are based on projected demographic trends and the anticipated level of housing. The low scenario is based on a housing trajectory of approximately 9,000 new dwellings over the period 2009-2031 whilst the high scenario is based on a housing trajectory of approximately 16,000 new dwellings over the same period.

4.0 Links to dwellings projections

4.1 Most sets of population projections have an associated set of dwellings projections; those associated with the population projections in Table 1 are shown in Table 3. Dwelling projections differ from household projections as they allow for a proportion of dwellings to be vacant at any one time. This is a natural occurrence in all housing markets and it is thought that empty dwellings account for approximately 2% of the overall dwelling stock in Dacorumⁱ.

Table 3: Dwellings Projections for Dacorum Borough Council

Source of Projection	2006	2011	2021	2031	Change 2006-31
CLG ¹	58,112	60,966	66,064	71,569	13,457
Chelmer Standard '09 ²	58,831	60,768	64,439	66,784	7,953
Chelmer ZNM '09	58,799	61,322	66,329	70,194	11,395
Chelmer Standard '11	58,261	60,622	67,057	72,740	14,479
Chelmer ZNM '11	58,261	60,241	65,714	70,309	12,048
EEFM ³	58,881	60,752	66,856	72,334	13,453
HCC Low ⁴	60,000	60,900	66,300	68,900	8,900
HCC High ⁴	60,000	60,900	68,800	75,700	15,700

NB. Errors in this table were corrected 07/02/2012

1: CLG household projections converted to dwellings by multiplying by 1.0195 because the latest info from ONS/CLG (2001) relating to dwelling stock and household spaces showed a difference of 1.95%

2: Chelmer household projections converted to dwellings by multiplying by 1.0196 because that is the difference between households and dwellings in the Chelmer znm model

3: This is demand for dwellings which estimates what stock is needed to maintain occupation ratios in the context of a higher population

4: Figures are rounded to the nearest hundred

4.2 The dwellings projections in Table 2 are associated with the population projections in Table 1. The list below shows where further information about the different sets of projections can be found:

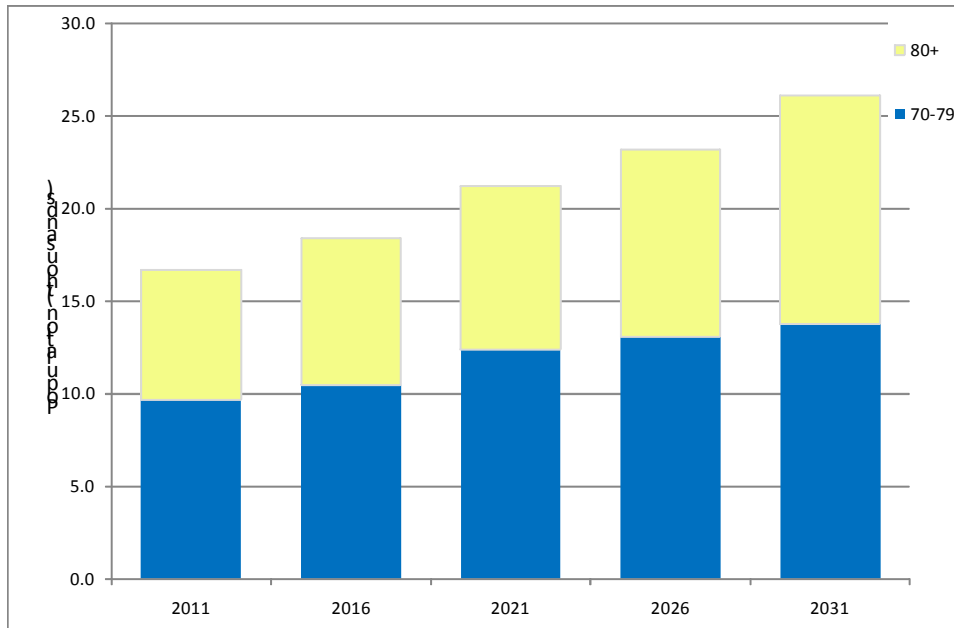
- ONS population projections: <http://www.statistics.gov.uk/statbase/Product.asp?vlnk=997>
- CLG dwelling projections: <http://www.communities.gov.uk/publications/corporate/statistics/2033household1110>
- Chelmer '09 projections: <http://www.eera.gov.uk/publications-and-resources/studies/topic-based-studies/projections/population-and-household-forecasts/>

- Chelmer '11 projections: presented to the Council by Barton Wilmore on behalf of Cala Homes. Copies available upon request.
- EEFM: <http://www.insighteast.org.uk/viewArticle.aspx?id=17083>
- HCC population projections: provided to the Council by HCC for use in infrastructure planning. Available in the Dacorum Strategic Infrastructure Study:
http://www.dacorum.gov.uk/default.aspx?page=1884#Infrastructure_Study

5.0 The increasing elderly population

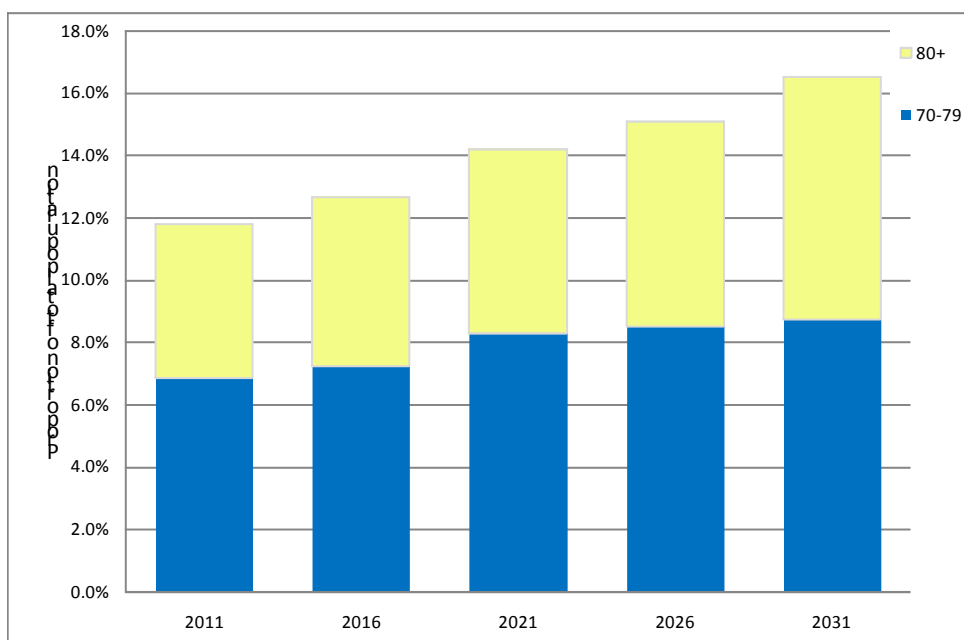
5.1 It is well documented that the UK is experiencing an ageing population, and that this is forecast to continue and become more pronounced. The ONS population projections are calculated for 5-year age bands. The projections indicate that the size of population over 70 is due to increase both in number and as a proportion of the rest of the population as shown by Figures 2 and 3.

Figure 2: Population projection for the over 70's



Source: ONS 2008 based sub-national population projections

Figure 3: Population of the over 70's as a proportion of total population



Source: ONS 2008 based sub-national population projections

- 5.2** Population projections are broken down into the resident population and the population in private households. The difference between these projections is the small proportion of the population who live in communal establishmentsⁱⁱ. The population in communal establishments in Dacorum in 2001 was 1,862 (ONS, Census 2001) of which around a third were residents in care homes or nursing homes.
- 5.3** The POPPIⁱⁱⁱ database forecasts that the number of people aged over 65 living in a care or nursing home will increase substantially over the period 2010 to 2030. It estimates that in 2010 697 people over 65 were living in a care or nursing home, and that this will rise to 1,212 people by 2030. Their analysis is based on applying the percentages of people living in care homes/nursing homes in 2001 to projected population figures. Therefore, any changes to the way older people are cared for from 2001 may change these estimates.

6.0 Planning for changing housing scenarios

- 6.1** During the course of preparing the Core Strategy, the Council has had to adapt to changing housing targets set in various versions of the East of England Plan, which are summarised in Table 4. The deposit draft, published in December 2004, proposed a housing target of 6,300 over the period 2001-2021, which equated to 315 units per year. This target approximated to the estimated capacity of urban areas in Dacorum to accommodate housing. Within its evidence given to the EiP into the deposit draft, Dacorum Borough Council stated that it could provide approximately 7,100 dwellings over the period 2001-2021.
- 6.2** In June 2006 the EiP panel recommended that the housing target for Dacorum during the period 2001-2021 should be 12,000. This recommendation was carried into the adopted plan in May 2008, where, the policy stated that from 2006 to 2021 Dacorum should provide 680 dwellings per year^{iv}. The policy also required that in setting the housing target for the Core Strategy, Dacorum should assume that the average annual rate of provision would be 680 dwellings^v after 2021. As the Core Strategy plans for the period 2006-2031, this equates to a housing target of 17,000 for the period. The target allowed for the expansion of Hemel Hempstead, part of which was expected to be met within St Albans district.
- 6.3** In November 2006 the Council, together with St Albans City and District Council, held a public consultation on the implications of this scale of housing growth. The topics covered by the consultation included the most appropriate sites for release from the Green Belt for urban extensions. The consultation was supported by a Sustainability Appraisal.
- 6.4** In July 2009 a high court decision led to Dacorum's housing target being quashed following a challenge by Hertfordshire County Council and St Albans City and District Council. This left Dacorum in a situation of uncertainty, and a lot of its work was based on two scenarios of future housing growth.
- 6.5** In March 2010 EERA published the draft revision to the East of England Plan which made provision for the region's needs up to 2031. Policy H1: Regional Housing Provision 2011-2031 set a housing target for Dacorum of 6,100 over the period, which equates to 310 dwellings per year. However, the policy noted that the targets did not make an allowance for the outcome of the 'repair' process that was being undertaken following the aforementioned successful legal challenge, and that additional growth at Dacorum was being reconsidered.

- 6.6** The draft Core Strategy (November 2010) consulted on two housing options for the period 2006-2031; 9,835 (option 1) and 11,385 (option 2). The first aimed to optimise the use of land within defined settlements (urban capacity), whilst the second added modest extensions to existing settlements to option 1.^{vi}
- 6.7** The draft Core Strategy referred to a benchmark dwelling provision of 12,400 over the plan period. This level of housing provision is derived from the 2006 based household projections published by CLG, amended to reflect dwellings rather than household by adding 3%^{vii} (and rounding) to allow for vacant units. The 2006 based CLG household projections were the most up-to-date household projections available when the draft Core Strategy was being prepared.
- 6.8** Dacorum's housing target in the Core Strategy takes account of need/demand and potential supply – for further information see the Selection of Core Strategy Housing Target – Explanatory Note (September 2011) and the Housing Land Availability Paper (July 2011).

Table 4: Dacorum's changing housing target

Source of housing target	Average annual provision rate	Total 2001-2021	Notes
Draft revision to the Regional Spatial Strategy (RSS) for the East of England, December 2004	315	6,300	-
East of England Plan EiP Report of the Panel June 2006	530-620: See notes	12,000	Includes expansion into St Albans. The panel report gives 5 year indicative phases of levels of development. For Dacorum these are 2,650 (530) for 2001-06 and 3,100 (620) thereafter (dwellings pa in brackets).
Secretary of State's (SOS) proposed changes to the draft revision to the RSS for the East of England, December 2006	680 (2006-2021) See notes	12,000	Includes expansion into St Albans. The SOS decided to amend the figures for housing provision from 2006-2021 to take account of 2001-2006 completions (1,860) whilst leaving the Panel's recommended total for the 2001-2021 period unchanged.
SOS's proposed changes and further proposed changes to the draft revision to the RSS for the East of England, October 2007	680 (2006-2021)	12,000	Includes expansion into St Albans. The annual provision rate takes into account completions during 2001-2006.
Adopted RSS for the East of England, May 2008	680(2006-2021)	12,000	The policy required Local Planning Authorities, when setting housing targets, to assume that the annual rate of provision after 2021 will be the same as the rates in the policy for 2006 to 2021 or 2001 to 2021, whichever is higher
High Court decision following legal challenge mounted by Hertfordshire County Council and St Albans City & District Council, July 2009	-	-	The decision removed Dacorum's housing target from the RSS for the East of England.

Draft Revision to the RSS for the East of England, March 2010	310	N/A	The housing target for Dacorum over the period 2001-2031 was 6,100.
Core Strategy – Draft for Consultation, November 2010	370 (option 1)	N/A	Housing programme over period 2006-2031: 9,835. The housing programme differs slightly from the sum of the average annual provision rate because of different assumptions about windfall.*
	430 (option 2)	N/A	Housing programme over period 2006-2031: 11,835. The housing programme differs slightly from the sum of the average annual provision rate because of different assumptions about windfall.*

* In setting the annual target for housing, no allowance can be made for windfalls in the first ten years of the plan period, in accordance with Government guidance. However, the housing programme does make an allowance for windfalls later in the plan period.

Endnotes:

ⁱ This approximation is based on information from ONS/CLG relating to the difference between dwelling stock and household spaces.

ⁱⁱ A communal establishment is defined as an establishment providing managed residential accommodation. Managed means full-time or part-time supervision of the accommodation.

ⁱⁱⁱ POPPI (Projecting Older People Population Information Systems) is a database which interprets and forecasts the future needs of older people. It has been developed by the Institute of Public Care (IPC) for the Care Services Efficiency Delivery Programme (CSED).

^{iv} The average annual requirement from 2006 to 2021 is higher than the average annual rate required to provide 12,000 dwellings over the period 2001 to 2021 because it takes account of completions over the period 2001-2006, which totalled 1,860 dwellings.

^v Policy H1 of the East of England Plan required Local Planning Authorities, when setting housing targets, to assume that the annual rate of provision after 2021 will be the same as the rates in the policy for 2006 to 2021 or 2001 to 2021, whichever is higher.

^{vi} The difference between urban capacity figures in option 1 (9,835) and 6,300 (estimate in Deposit Draft RSS – see paragraph 6.1) is around 3,500. The extra capacity derives from:

- (i) The inclusion of Greenfield sites in Dacorum Borough Local Plan 1991-2011;
- (ii) Major initiatives in Hemel Hempstead to increase the supply of housing in the town centre and to set a target for housing within the Maylands Business Park; and
- (iii) Additional urban capacity – redevelopments and conversions – that were identified through further work (particularly the Strategic Housing Land Availability Assessment).

^{vii} The regional average difference between household and dwellings.