Population, Housing and Employment Forecasts

Technical Report

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Research and Performance
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A report by the Cambridgeshire County Council Research and Performance Team to support spatial strategy development in Cambridgeshire and Peterborough

1. Summary

1.1.1. To assist in developing a robust and consistent approach to understanding future levels of jobs and dwellings, this report presents the available population, jobs and dwellings projections over the period of current local plan reviews, 2011 to 2031 (2036 for Huntingdonshire). These relate principally to Cambridgeshire and Peterborough but data are also included for the wider Housing Market Area (HMA), which includes Forest Heath and St Edmundsbury Council areas. The report was written to complement and add value to the work on local plan reviews already undertaken by the Cambridgeshire authorities and to aid progress towards preferred options and final draft plans.

1.1.2. The report addresses a wide range of national, sub-national and local data to provide an overview of population change and economic performance over the next twenty or so years. A central update that the report provides is to include the 2011 Census population and dwellings figures, published towards the end of 2012, and to consider the implications of these for numbers of new jobs and homes.

1.1.3. In order to give an indication of development needs in 2031, an indicative population figure is determined for Cambridgeshire and Peterborough and each individual district, reflecting the broad convergence of the various population projections and forecasts. These forecasts, adjusted to take account of the 2011 Census, converge, in broad terms, around the level of 189,000 more people being in the historic county of Cambridgeshire and Peterborough by 2031 than there were in 2011. Indicative jobs and dwellings figures are then determined for each district, based on the indicative population figures.

1.1.4. There is no national guidance available on assessing development needs in accordance with the National Planning Policy Framework (NPPF) requirements and, therefore, this report considers a logical but broad approach to undertaking this challenging task. Accurately assessing population change even in the short term is difficult. It is important, therefore, that figures derived from looking ahead over a twenty year timeframe are treated with some caution and the necessary caveats are applied to both these population figures and their translation into indicative figures for additional houses and jobs. The indicative dwellings figures for the Housing Market Area will be considered further through the "all homes" chapter of the Strategic Housing Market Assessment.

1.1.5. Table 1 provides a summary of the indicative change in population, jobs and dwellings numbers over the next twenty years across the Housing Market Area. Peterborough is outside the Cambridge HMA, but is projected to see a population increase in the region of 45,000 people between 2011 and 2031, and employment growth of around 23,000 jobs.

Table 1: Indicative population, jobs and dwellings change from 2011 to 2031/2036* by district for Cambridge Housing Market Area (HMA)

District	Population	Jobs	Dwellings	Ratio of new jobs to new dwellings
Cambridge	27,000	22,000	14,000	1.6
East Cambridgeshire	26,000	7,000	13,000	0.5
Fenland	22,000	5,000	12,000	0.4
Huntingdonshire	31,000/39,000*	15,000/19,000*	17,000/21,000*	0.9
South Cambridgeshire	38,000	22,000	19,000	1.2
Forest Heath	13,000	3,000	7,000	0.4
St Edmundsbury	19,000	7,000	11,000	0.6
Cambridge HMA	**176,000**	**81,000**	**93,000**	**0.9**

2. Introduction

2.1.1. In preparing local plans, authorities are required by the National Planning Policy Framework (NPPF) to assess objectively the development needs for their area and plan for these needs. Without an overarching county or regional strategy, this is the first time that districts have been wholly responsible for setting their own housing and jobs targets. However, in setting these targets, districts must do so in the context of a collaborative approach and a Duty to Co-operate as set out in the NPPF.

2.1.2. The available population, jobs and dwellings projections relating to Cambridgeshire and Peterborough provide a range of projections and forecasts based upon different input data, assumptions and methodologies. To assist in developing a robust and consistent approach to local jobs and dwellings the Cambridgeshire & Peterborough Joint Strategic Planning Unit (JSPU) and Chief Planning Officers commissioned Cambridgeshire County Council Research and Performance Team (CCC) to produce this technical report to add value and provide guidance and support in developing homes and jobs targets in future stages of local plans.

2.1.3. The first section of the technical report (**official statistics**) presents the latest data on the population of Cambridgeshire and Peterborough from the Office for National Statistics (ONS) and the Department for Communities and Local Government (DCLG). This section considers the official population projections published in recent years and makes comparisons with the 2011 Census. The official population projections are essentially continuations of past population trends, and involve no local forecasting, however these projections are subject to national migration and natural change assumptions, and the accuracy of our local projections is determined by the ability of the national methodology to predict the population change locally. CCC and Cambridge City Council, for example, recently challenged the credibility of a change in the ONS methodology, which produces a much lower population projection for Cambridge City. In one way or another, the official statistics provide the starting point for all of the other data sources. These statistics also provide the starting point for our understanding of our local population and our local housing needs.

2.1.4. The second section of the report (**local data**) presents the latest figures on housing completions and commitments within Cambridgeshire and Peterborough from CCC's Research and Monitoring Team. This section also considers CCC's own population forecasts, which are methodologically different from the official ONS projections. The starting point for the latest CCC forecasts is the 2001 Census, which provides a 2001 dwelling stock figure, to which is added the number of dwellings completed each year to 2010, and the number of dwellings forecast for completion each year from 2011, from the district housing trajectories. From the number of dwellings forecast for each district, CCC's forecasting model forecasts the population of each district, a forecast which is consistent with the district's housing trajectory. Rather than forecasting housing need, this model predicts the likely population for a given dwelling stock, although the model can be used to test different population assumptions, such as no net migration (natural change only), as well as different dwelling stock scenarios, such as no house building. While the official statistics provide the starting point for our understanding of our local population, our use of local data not only adds to our understanding, but also allows us to challenge the official statistics.

2.1.5. The third section of this report (**sub-national models**) presents the latest forecasts from two economic forecasting models – the East of England Forecasting Model (EEFM) and the Local Economy Forecasting Model (LEFM). The starting point for both models is the outlook for the national economy. Both models are characterised by a professional assessment of the economic climate at the time of the baseline

forecasts. Local economic growth determines employment growth, and both models forecast local economic growth based on observed past trends, albeit with potentially different growth assumptions for the different industry sectors. Another difference between the models is the way in which they determine population growth. The East of England Forecasting Model was designed to facilitate the setting of consistent housing and jobs targets, by providing a consistent set of employment, population and "demand for dwellings" forecasts. The EEFM bases the current population on the latest ONS mid-year estimate (the original mid-2010 estimate for the Spring 2012 forecasts). The EEFM then forecasts population growth in line with employment growth, and uses the level of net commuting to maintain the relationship between jobs and employed residents, providing a forecast for the total population, of all ages. So if the number of jobs increases, the population (and the demand for dwellings) increases, rather than the level of net in-commuting. The LEFM is different from the EEFM in this respect. The LEFM uses the latest ONS population projection as its population forecast (the 2008-based population projection modified to be consistent with the original mid-2010 estimate), and maintains the same population growth (and the same demand for dwellings) regardless of the growth in employment. The use of sub-national models provides a source of employment forecasts, not available from official sources, and further adds to our understanding of our local economy and, from the EEFM, our local housing needs. The use of more than one forecasting model adds to our confidence that, in the absence of development constraints, economic growth will fall within the range of scenarios considered.

2.1.6. Section four (**district outlooks**) compares the different data sources considered in this report. For each district, a chart contrasts the various ONS, CCC, LEFM and EEFM forecasts. Population forecasts are chosen for their availability across all sources. CCC's population forecasts are the only policy-led forecasts considered. The comparison of these forecasts, especially the CCC "housing targets" forecasts, with the unconstrained ONS, LEFM and EEFM forecasts identifies the areas where local policy appears to be constraining population growth. While at a local level, the ONS, LEFM and EEFM forecasts are based on past trends, and are not constrained by policy regimes, at the same time these trend-based forecasts are also not "policy-free". Insofar as the policies from the past are reflected in the observed past trends, these past policies are implicitly assumed to continue into the future, so any past constraints that are reflected in the available data will be reflected in the future, however any policy changes that have not yet impacted on the available data will not be reflected in the forecasts. Despite being the only policy-led forecasts, CCC's population forecasts are not entirely independent of the EEFM forecasts, which from a previous run of the model were used to inform the regional, and hence local, housing targets, so a degree of circularity exists between these forecasts. The district outlooks consider whether the various forecasts appear high or low in the light of the Census. A simple upwards or downwards shift of each forecast as appropriate is considered, as is a simple continuation to 2031 of the "Census trend" from 2001 to 2011. Taking these shifts and the Census trend into account, an indicative population figure for 2031 is determined, reflecting the region around which it would appear that the various projections and forecasts tend to converge. Indicative jobs and dwellings figures are then determined for each district, based on the indicative population figure, in order to give a broad indication of development needs in 2031.

2.1.7. Throughout the technical report, projection and forecast figures are presented for each Cambridgeshire district plus Peterborough UA. Given the relationship with Forest Heath and St Edmundsbury districts in the Housing Market Area (HMA), figures for these two districts are also provided, where possible. Where relevant, figures for the Local Enterprise Partnership (LEP) area are included, plus regional and national totals for context.

3. Official Statistics

3.1. ONS population estimates

3.1.1. The Office for National Statistics (ONS) produces annual estimates of the resident population of England and Wales as at the mid-year (30 June). These are broken down by age, sex and local authority. Table 2 shows recent and proposed releases of estimates by ONS.

3.1.2. The census, which takes place every ten years in England and Wales, is used as a base for the population estimates as it is the most robust source of population data. The most recent set of estimates was based on the 2011 Census. Previous estimates were based on the 2001 Census, with the census "population base" updated annually (using various data sources). The estimates for 2002-2010 will be revised in light of the 2011 Census figures in order to provide a consistent series of population estimates over time.

3.1.3. The mid-year estimates (MYE) refer to the usually resident population of an area on 30 June each year. The usually resident population includes people who reside in the area for a period of at least twelve months, regardless of their nationality. Students are taken to be resident at their term-time address.

3.1.4. The resident population is not always the same as the number of people actually found in an area at a particular time of day or year. For example, the daytime population of towns and cities will normally be larger than their usual resident population.

3.1.5. National and local authority population estimates and projections are produced using a well established demographic approach called the cohort component method. This is a standard demographic method. It involves combining information from a number of data sources and administrative registers to measure the components of population change for the years following the census.

Table 2: **Timetable for recent and future sets of ONS estimates**

Date of release	Set of mid-year estimates	Code in Table 4
June 2011	Mid-2010	B
November 2011	Indicative mid-2006 to mid-2010 based on a new methodology for measuring international immigration	C
July 2012	March 2011 census day	
July 2012	March 2011 rolled forward based on 2010 indicative estimates	
September 2012	Mid-2011 based on census estimates	D
April 2013	Mid-2002 to mid-2010 revised	

Table 3: **Explanation of the cohort component method**

| Population (year x)	(population at the beginning of the year)
+ Births (between yrs x and y)	(plus births in year)
– Deaths (between yrs x and y)	(minus deaths in year)
+ Net-Migrants (between yrs x and y)	(plus or minus adjustment for migrants)
= Population (year y)	(gives population at the end of the year)

3.1.6. Births and deaths are taken from Registrar General's office. Internal migration flows are based on General Practitioner (GP) patient records.

3.1.7. ONS has recently introduced a new methodology for measuring international immigration. Previous estimates were largely based on the intentions of people entering the UK revealed by the International Passenger Survey (IPS). The new methodology splits the data from the IPS into different streams. Workers are distributed using National Insurance (NINo) data; students are mainly distributed using Higher Education Statistics Agency (HESA) data, while children and some other migrants are distributed using 'Flag 4' data from the GP patient register.

3.1.8. This methodology was used in the indicative estimates published in November 2011 and will be used for future sets of population estimates and projections.

3.1.9. For the mid-2011 population estimates published in September 2012, the population was aged-on by the period of time between the census on 27 March 2011 and the mid-year reference point of 30 June. Similarly the components of population change only account for change during this shorter period.

3.1.10. The new methodology made relatively little difference to local district estimates, with the significant exception of Cambridge City. The new methodology produced a reduction in the 2010 estimate for the city's population of approximately 20,000. The new methodology gives lower levels of in-migration into the city, but the levels of out-migration have not been adjusted, resulting in a net loss to the city's population in recent years. This appears to be implausible when compared with other local data sources, such as the local electoral and school roll and NHS records.

3.1.11. Table 4 allows comparison between the two sets of 2010 base estimates and the 2011 estimates based on the 2011 Census. The estimates based on the 2011 Census are likely to be more robust and close to the actual resident population. The table shows that the original ONS estimates were more accurate for Cambridgeshire. The original estimates were 6,000 (1%) below the 2011 estimate, whereas the indicative estimate was 20,900 (3.5%) below. At a district level, for most districts, both sets of 2010 estimates were within about 3% of the 2011 Census estimates.

3.1.12. The main exceptions to this in the indicative 2010 base estimates were St Edmundsbury and Peterborough, which were 6.8% and 5.2% respectively lower than the 2011 Census estimates, and Cambridge City where the 2010 indicative estimate was some 17,200 (16.3%) lower than the 2011 estimate.

Table 4: Recent ONS population estimates

Local Authority	A 2001	B Original 2010	C Indicative 2010	D Census based 2011	% Difference between A and D	between B and D	between C and D
Cambridgeshire	**554,900**	**616,300**	**601,400**	**622,300**	**12.1%**	**1.0%**	**3.5%**
Cambridge	110,100	125,700	105,500	122,700	11.4%	-2.4%	16.3%
East Cambridgeshire	73,400	84,900	86,400	84,200	14.7%	-0.8%	-2.5%
Fenland	83,700	91,900	94,500	95,500	14.1%	3.9%	1.1%
Huntingdonshire	157,200	167,300	167,600	170,000	8.1%	1.6%	1.4%
South Cambridgeshire	130,500	146,400	147,300	149,800	14.8%	2.3%	1.7%
Cambridge HMA	**709,400**	**785,100**	**767,100**	**793,700**	**11.9%**	**1.1%**	**3.5%**
Forest Heath	56,200	64,300	61,400	60,000	6.8%	-6.7%	-2.3%
St Edmundsbury	98,300	104,500	104,300	111,400	13.3%	6.6%	6.8%
Cambridgeshire & Peterborough	**712,500**	**789,700**	**776,800**	**806,800**	**13.2%**	**2.2%**	**3.9%**
Peterborough	157,600	173,400	175,400	184,500	17.1%	6.4%	5.2%
GCGP LEP Area	**1,223,300**	**1,344,000**	**1,329,200**	**1,371,200**	**12.1%**	**2.0%**	**3.2%**
East of England	**5,401,300**	**5,831,800**	**5,770,800**	**5,862,400**	**8.5%**	**0.5%**	**1.6%**
England	**49,369,500**	**52,234,000**	**52,213,400**	**53,107,200**	**7.6%**	**1.7%**	**1.7%**

Source:
A = ONS Mid-2001 Revised Population Estimates, B = ONS Mid-2010 Original Population Estimates,
C = ONS Mid-2010 Indicative Population Estimates, D = ONS Mid-2011 Population Estimates

Figure 1: Change in population 2001-2011
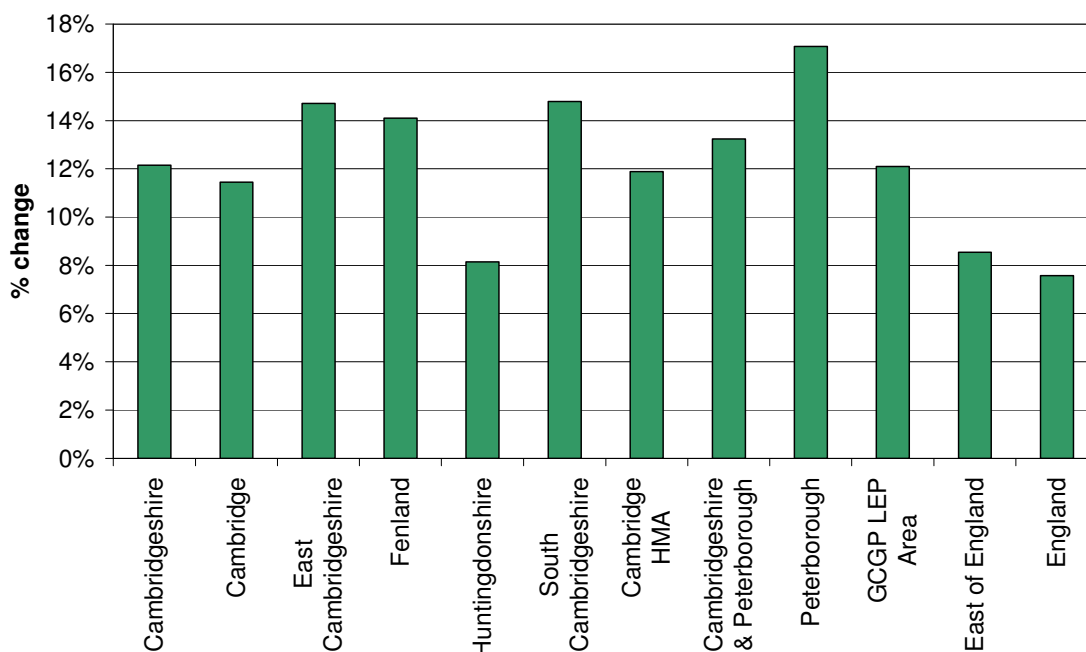
Source: ONS Population Estimates

3.1.13. Figure 1 shows that population growth in all the local authorities has exceeded that of England between 2001 and 2011. Peterborough, South Cambridgeshire, East Cambridgeshire and Fenland have experienced the highest percentage rates of growth locally with rates of 17.1%, 14.8%, 14.7% and 14.1% respectively. The lowest growth in population was seen in Forest Heath at 6.8% and Huntingdonshire at 8.1%.

3.1.14. Figure 2 shows the age structure of each district in 2001 and 2011. It shows that Cambridge City has a relatively high proportion of its population in the 16-29 age group compared to other districts. This is linked to the student and young professional population in the city.   The age structures of the other districts in Cambridgeshire are broadly similar.

3.1.15. Most districts have experienced an increase in the proportion of the population aged over 45 and a decrease in the proportion aged under 30, demonstrating the aging population across this area.

Figure 2: **Age structure by district 2001 and 2011**
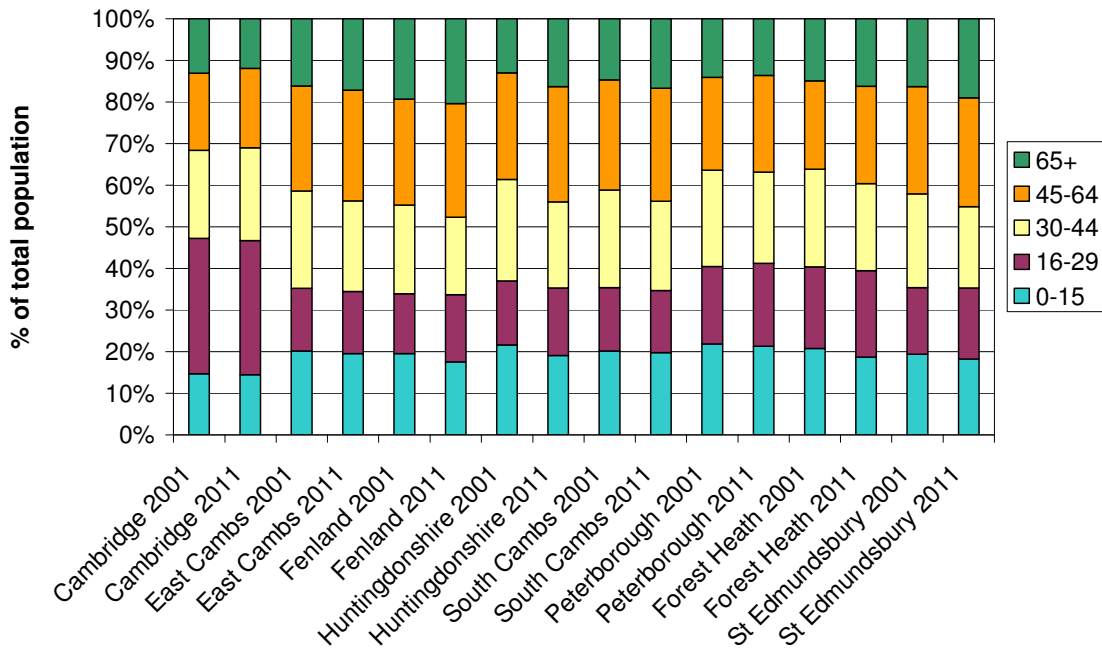
Source: ONS 2001 and 2011 Censuses

3.2. ONS population projections

3.2.1.   ONS produces sub-national population projections normally every two years.   The timetable for recent and future sets of projections is shown in Table 5. Tables 6 and 7 show the 2010-base and the interim 2011-base projections.   The 2011-base projections are interim because they have been produced ahead of the usual schedule of releases to meet specific requirements for projections based on data from the 2011 Census as the next set of projections will not be produced until Spring 2014. They have been produced before all the data usually required to update trends in the projection model are available.

3.2.2.   ONS projections are trend-based, which means assumptions for future levels of births, deaths and migration are based on observed levels. The 2005 to 2010 period is used as the basis for the 2010 and 2011 base projections. Hence, any underlying trends evident in this period, such as low or high rates of annual house-building, will influence the future projections up to 2031.

Table 5: **Timetable for recent and future sets of ONS projections**

Date of release	Set of mid-year projections
May 2010	Mid-2008 base
March 2012	Mid-2010 base
September 2012	Interim mid-2011 base
Spring 2014	Mid-2012 base

3.2.3.   The projections take the local authority mid-year population estimates as their starting point. The projections for each year are calculated by first removing the population of armed forces. This group is treated as a 'static population' whose size and age-sex structure does not change over the projection period. The population from the previous year is then aged-on, local fertility and mortality rates are applied to calculate projected numbers of births and deaths, and the population is adjusted for internal, cross-border, and international migration. It should be noted that students are not included as a static population in the ONS methodology. The movement of students into and out of the county is projected using the ONS internal migration methodology.

3.2.4.   ONS population projections are not forecasts and, as such, do not attempt to predict the impact that government policies, development aims, changing economic circumstances or other factors might have on demographic behaviour.   For example, any future expansion of universities in the county will not be accounted for in the ONS projections.

3.2.5.   If any recent changes have not yet affected the population estimates, or trend data upon which the projections are based, then those changes will not affect the projections. They simply provide the population size and age and sex structure that would result if the underlying assumptions about future fertility, mortality and migration were to be realised.

3.2.6.   Both the 2010 and 2011 base ONS projections are shown in Tables 6 and 7. The difference between the two sets of projections is largely related to the difference between the 2010 base estimates and the 2011 census-based estimates discussed in the previous section.   For example, the Cambridge City projection for 2021 has increased from 102,100 in the 2010 base projection to 120,900 in the 2011 base one. On this basis, the 2011-base projections are likely to be the more robust of the two, but unfortunately they only go to 2021.

3.2.7.   Figure 3 shows the projected population change. Both the projections for Cambridge City show a slight decline in numbers over the next ten years, whereas the population in all other districts is expected to increase. Again this is largely the result of the assumptions on international migration that were discussed in section 3.1 which tend to give annual, net losses in the population of the city. Our view is that the ONS projections for Cambridge City are not credible because the 2011 Census data confirmed an increase in the population of the city between 2001 and 2011.   It should be noted that both the LEFM and EEFM forecasts are derived from the higher original 2010-base population estimate for Cambridge City.

Table 6: ONS 2010-base sub-national population projections

| Local Authority	2011	2016	2021	2026	2031 *2036 Proj
Cambridgeshire	**607,200**	**637,900**	**667,100**	**695,700**	**721,100**
Cambridge	105,000	103,100	102,100	103,700	106,300
East Cambridgeshire	88,000	96,200	103,500	109,700	115,000
Fenland	95,700	102,500	109,000	115,200	120,700
Huntingdonshire	168,800	175,800	182,900	189,600	195,500/ 202,200*
South Cambridgeshire	149,600	160,400	169,600	177,400	183,500
Cambridge HMA	**774,600**	**813,400**	**850,100**	**885,300**	**916,700**
Forest Heath	62,300	66,500	70,200	73,300	76,100
St Edmundsbury	105,100	109,000	112,800	116,300	119,500
Cambridgeshire & Peterborough	**785,000**	**829,500**	**870,900**	**909,900**	**944,100**
Peterborough	177,800	191,600	203,800	214,200	223,000
GCGP LEP Area	**1,342,400**	**1,415,000**	**1,485,200**	**1,550,700**	**1,608,200**
East of England	**5,826,400**	**6,120,800**	**6,411,700**	**6,688,400**	**6,939,200**
England	**52,655,400**	**54,909,800**	**57,020,400**	**58,982,800**	**60,751,100**

Source: ONS based on Mid-2010 Indicative Population Estimates

Table 7: ONS interim 2011-base sub-national population projections

Local Authority	2011	2016	2021	Difference between projections for 2021
Cambridgeshire	**622,300**	**656,300**	**687,700**	**3.1%**
Cambridge	122,700	122,100	120,900	18.4%
East Cambridgeshire	84,200	93,300	101,500	-1.9%
Fenland	95,500	102,600	109,300	0.3%
Huntingdonshire	170,000	176,900	184,200	0.7%
South Cambridgeshire	149,800	161,500	171,900	1.4%
Cambridge HMA	**793,700**	**834,700**	**873,000**	**2.7%**
Forest Heath	60,000	64,500	68,400	-2.6%
St Edmundsbury	111,400	113,900	116,900	3.6%
Cambridgeshire & Peterborough	**806,800**	**853,100**	**895,600**	**2.8%**
Peterborough	184,500	196,800	207,900	2.0%
GCGP LEP Area	**1,371,200**	**1,444,900**	**1,516,600**	**2.1%**
East of England	**5,862,400**	**6,160,300**	**6,457,800**	**0.7%**
England	**53,107,200**	**55,486,600**	**57,687,800**	**1.2%**

Source: ONS based on Mid-2011 Census-based Population Estimates
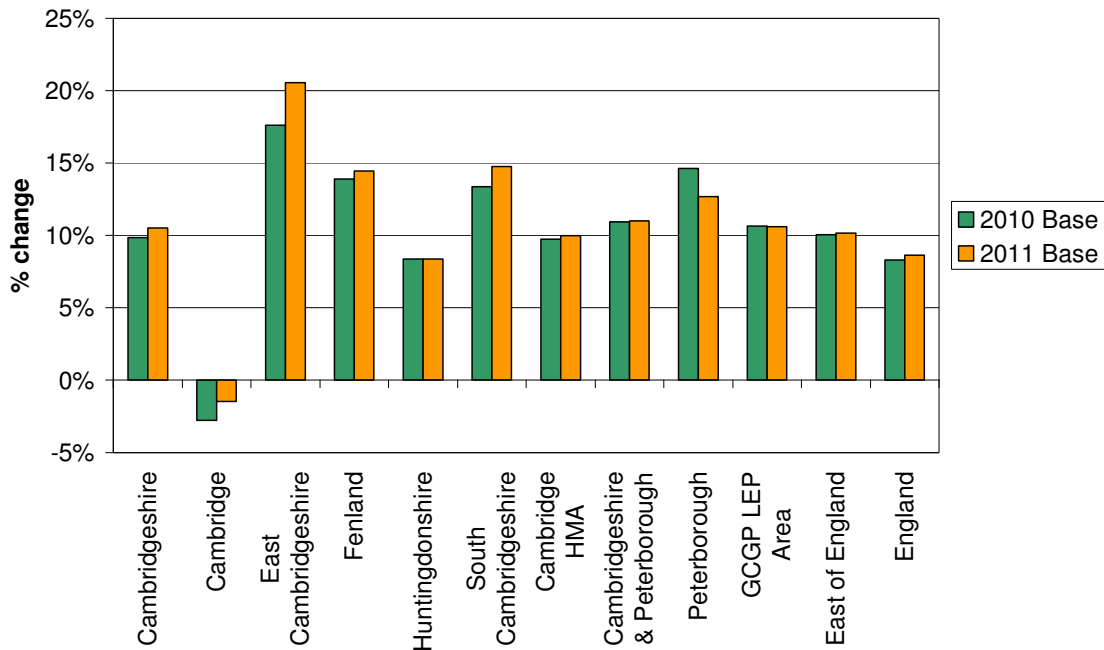
Source: ONS Sub-National Population Projections

3.3. DCLG dwelling stock estimates

3.3.1. The Department for Communities and Local Government (DCLG) produces annual estimates of the number of dwellings in England, in each English region and in each local authority district area in England as at 31 March each year.

3.3.2. The estimates of the total stock are produced by using the dwelling count from the 2001 Census as a baseline. This count is then projected forward using information on net annual changes to the housing stock, which is collected by DCLG. A number of sources are used to compile the data including local authority returns and annual surveys.

3.3.3. Table 8 shows that the number of dwellings has increased by some 30,700 in Cambridgeshire between 2001 and 2011. All local districts have experienced a percentage increase in the number of dwellings, which has been greater than that experienced both nationally and in the Eastern Region. East Cambridgeshire, Fenland and Peterborough experienced the biggest percentage increase in the number of dwellings between 2001 and 2011, while St Edmundsbury, Huntingdonshire and Cambridge City saw the lowest percentage increase in the area.

Table 8: DCLG dwelling stock estimates 2001-2011

Local Authority	2001	2010	2011	Change 2001-2011
Cambridgeshire	**228,900**	**257,100**	**259,600**	**13.4%**
Cambridge	43,500	47,700	48,100	10.6%
East Cambridgeshire	30,600	35,900	36,300	18.6%
Fenland	36,300	41,900	42,200	16.3%
Huntingdonshire	65,000	71,000	71,800	10.5%
South Cambridgeshire	53,600	60,600	61,200	14.2%
Cambridge HMA	**295,300**	**329,600**	**332,800**	**12.7%**
Forest Heath	24,300	26,600	27,000	11.1%
St Edmundsbury	42,100	45,900	46,200	9.7%
Cambridgeshire & Peterborough	**295,200**	**333,400**	**336,600**	**14.0%**
Peterborough	66,300	76,300	77,000	16.1%
GCGP LEP Area	**517,300**	**577,600**	**582,900**	**12.7%**
East of England	**2,308,000**	**2,502,600**	**2,519,700**	**9.2%**
England	**21,207,200**	**22,963,000**	**22,814,000**	**7.6%**

Source: DCLG Dwelling Stock Estimates

3.4. DCLG household projections

3.4.1.   DCLG produces sub-national household projections based on the ONS population projections. Tables 9 and 10 show the 2008-base and the interim 2011-base projections. The 2008-based household projections were released in November 2010. They were based on the 2008-base population projections and project numbers up to 2033.   The interim 2011-based household projections were released in April 2013. They are interim because they were based on the interim 2011-based population projections and only go to 2021.

3.4.2.   The household projections are produced by applying projected household formation rates to the population projections published by ONS. The assumptions underlying national household and population projections are demographic trend based. As they are based on the ONS population projections, they do not attempt to predict the impact that future government policies, changing economic circumstances or other factors might have on demographic behaviour. They provide the household levels and structures that would result if the assumptions based on previous demographic trends in the population and household formation rates were to happen in the future.

3.4.3.   The projections in Table 9 show that the number of households in Cambridgeshire is expected to increase by some 85,000 between 2008 and 2033 – an increase of close to 35%. All of the local districts, apart from Cambridge City are projected to experience a bigger percentage increase in the number of households than the national average of 27%. The largest projected increases are in East Cambridgeshire and Fenland, where percentage growth is close to 45%.

3.4.4.   The 2011-base set of household projections shown in Table 10 gives an increase in the number of households in the county of 31,000 between 2011 and 2021 – an increase of 12.3%. The projections for Cambridge City show a decline in the number of households. As stated in section 3.2, our view is that the population projections that these household projections are based on are not credible; hence this figure is

also implausible. Apart from Forest Heath and St Edmundsbury, all other districts are expected to experience an increase in the number of households either at or above the national average.

3.4.5. The 2011-base projections generally show a lower level of growth in households between 2011 and 2021 than the 2008-base ones. However, in East Cambridgeshire, Forest Heath and Peterborough, the level of growth is projected to be higher in the 2011-base projections.

Table 9: DCLG 2008-base household projections

Local Authority	2008	2013	2018	2023	2028	2033 *2036 Proj
Cambridgeshire	**245,000**	**262,000**	**280,000**	**298,000**	**315,000**	**330,000**
Cambridge	45,000	47,000	49,000	51,000	54,000	56,000
East Cambridgeshire	34,000	37,000	40,000	43,000	46,000	49,000
Fenland	39,000	43,000	46,000	50,000	53,000	56,000
Huntingdonshire	69,000	73,000	77,000	81,000	85,000	88,000/ 90,300*
South Cambridgeshire	58,000	63,000	67,000	72,000	77,000	80,000
Cambridge HMA	**314,000**	**335,000**	**357,000**	**380,000**	**402,000**	**421,000**
Forest Heath	25,000	27,000	28,000	30,000	32,000	34,000
St Edmundsbury	44,000	46,000	49,000	52,000	55,000	57,000
Cambridgeshire & Peterborough	**317,000**	**339,000**	**362,000**	**384,000**	**405,000**	**424,000**
Peterborough	72,000	77,000	82,000	86,000	90,000	94,000
GCGP LEP Area	**546,000**	**581,000**	**618,000**	**655,000**	**691,000**	**725,000**
East of England	**2,406,000**	**2,565,000**	**2,736,000**	**2,903,000**	**3,063,000**	**3,212,000**
England	**21,731,000**	**22,868,000**	**24,108,000**	**25,320,000**	**26,472,000**	**27,536,000**

Source: DCLG Household Projections

Figure 4: Change in households 2008-2033

Source: DCLG Household Projections

14
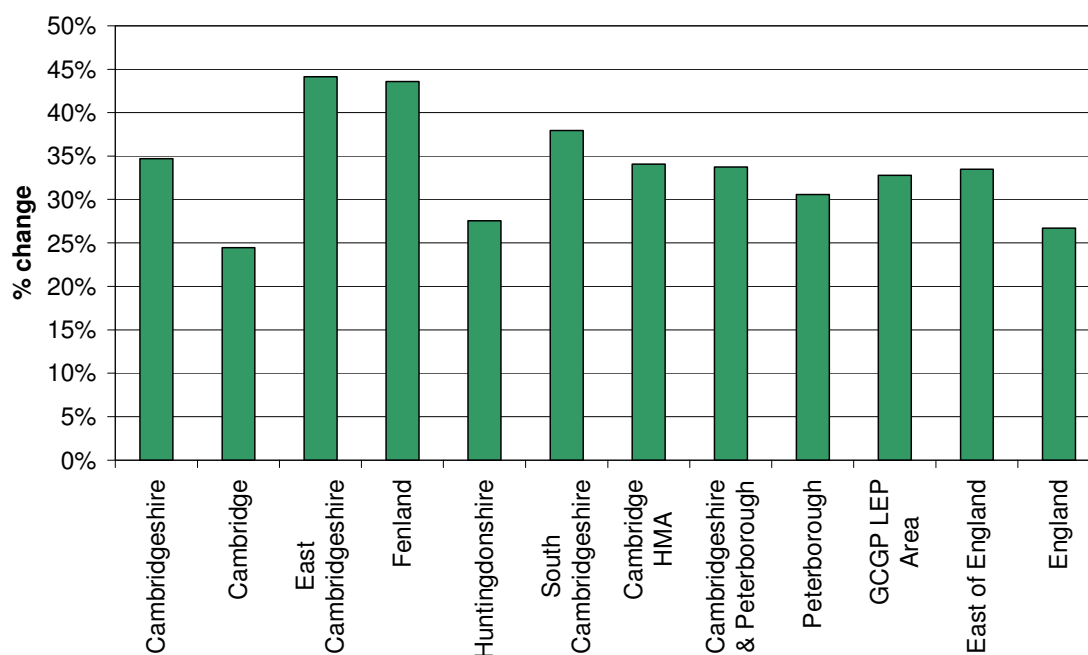
Table 10: DCLG interim 2011-base household projections

Local Authority	2011	2018	2021	Change 2011-2021	% Change 2011-2021
Cambridgeshire	**252,000**	**274,000**	**283,000**	**31,000**	**12.3%**
Cambridge	47,000	45,000	45,000	-2,000	-4.3%
East Cambridgeshire	35,000	40,000	43,000	8,000	22.9%
Fenland	41,000	46,000	48,000	7,000	17.1%
Huntingdonshire	70,000	75,000	77,000	7,000	10.0%
South Cambridgeshire	60,000	67,000	70,000	10,000	16.7%
Cambridge HMA	**324,000**	**350,000**	**361,000**	**37,000**	**11.4%**
Forest Heath	26,000	27,000	28,000	2,000	7.7%
St Edmundsbury	46,000	48,000	49,000	3,000	6.5%
Cambridgeshire & Peterborough	**326,000**	**355,000**	**367,000**	**41,000**	**12.6%**
Peterborough	74,000	81,000	84,000	10,000	13.5%
GCGP LEP Area	**562,000**	**607,000**	**627,000**	**65,000**	**11.6%**
East of England	**2,429,000**	**2,626,000**	**2,710,000**	**281,000**	**11.6%**
England	**22,102,000**	**23,655,000**	**24,307,000**	**2,205,000**	**10.0%**

Source: DCLG Household Projections

3.5. Average household size

3.5.1. Table 11 shows average household size recorded by the 2001 and 2011 Censuses. There has been little change in average household size between 2001 and 2011 and there is little difference between districts in the local area. It was thought that average household size might have fallen in the last decade because of the likely increase in the number of single person households. However, average household size has increased in both Cambridge City and Peterborough. This explains the notable difference in average household size in 2021 in the two sets of DCLG household projections. The 2011-base projections took into account the higher than expected figures in the 2011 Census. On this basis it appears unlikely that average household size will fall as much as DCLG projects for 2031.

Table 11: Average household size

Local Authority	2001 Census 2001	2011 Census 2011	2021 DCLG 2008 base	2021 DCLG 2011 base	2031 DCLG 2008 base
Cambridgeshire	**2.39**	**2.38**	**2.26**	**2.35**	**2.19**
Cambridge	2.23	2.30	2.27	2.33	2.22
East Cambridgeshire	2.43	2.40	2.33	2.35	2.25
Fenland	2.34	2.31	2.16	2.26	2.09
Huntingdonshire	2.46	2.41	2.22	2.35	2.15
South Cambridgeshire	2.45	2.45	2.31	2.42	2.24
Cambridge HMA	**2.38**	**2.37**	**2.25**	**2.34**	**2.18**
Forest Heath	2.34	2.29	2.34	2.36	2.27
St Edmundsbury	2.35	2.36	2.17	2.30	2.10
Cambridgeshire & Peterborough	**2.38**	**2.40**	**2.26**	**2.37**	**2.19**
Peterborough	2.37	2.46	2.26	2.45	2.20
GCGP LEP Area	**2.37**	**2.38**	**2.25**	**2.36**	**2.18**
East of England	**2.37**	**2.37**	**2.24**	**2.34**	**2.18**
England	**2.36**	**2.36**	**2.22**	**2.33**	**2.16**

Source: ONS 2001 and 2011 Censuses and DCLG 2008 Base and 2011 Base Household Projections
(Detailed Data for Modelling and Analytical Purposes)

3.6. 2011 Census population, households and dwellings

3.6.1. As the report has been written, ONS has released results from the 2011 Census. A summary of 2011 Census results is in Table 12. These figures and data from coming releases will form the basis of future forecasts and projections.

Table 12: 2011 Census population, households and dwellings

Local Authority	Population	Households	Dwellings
Cambridgeshire	**621,210**	**251,241**	**259,245**
Cambridge	123,867	46,714	48,288
East Cambridgeshire	83,818	34,614	35,747
Fenland	95,262	40,620	42,087
Huntingdonshire	169,508	69,333	71,399
South Cambridgeshire	148,755	59,960	61,724
Cambridge HMA	**791,966**	**322,419**	**333,931**
Forest Heath	59,748	25,376	27,547
St Edmundsbury	111,008	45,802	47,139
Cambridgeshire & Peterborough	**804,841**	**325,264**	**336,005**
Peterborough	183,631	74,023	76,760

Source: ONS 2011 Census

3.6.2. Table 13 shows the Census-based ONS mid-2011 population estimate and a Census-based mid-2011 dwelling stock estimate for each district. This table also shows each district's occupancy (persons per dwelling) ratio in mid-2011.

Table 13: Census-based mid-2011 occupancy ratios by district

Local Authority	Population	Dwellings	Occupancy Ratio
Cambridgeshire	**622,200**	**259,800**	**2.39**
Cambridge	122,700	48,400	2.54
East Cambridgeshire	84,200	35,800	2.35
Fenland	95,500	42,100	2.27
Huntingdonshire	170,000	71,600	2.37
South Cambridgeshire	149,800	61,900	2.42
Cambridge HMA	**793,600**	**334,600**	**2.37**
Forest Heath	60,000	27,600	2.17
St Edmundsbury	111,400	47,200	2.36
Cambridgeshire & Peterborough	**806,700**	**336,700**	**2.40**
Peterborough	184,500	76,900	2.40

Source: ONS 2011 Census and CCC Research & Performance Team

3.6.3. The occupancy ratio for Cambridge City is higher than in other districts. This is because the city has a relatively large population in communal establishments, mainly student accommodation. Both universities have plans to expand over the next few years, hence we assume that the population in communal establishments in the city will grow in line with the household population and thus the proportion of the population in communal establishments will remain at its current level. Inclusion of the communal establishment population, therefore, has a neutral impact on future occupancy rates.

4. Local Data

4.1. CCC annual dwelling completions

4.1.1. Local data on net housing completions is produced by Cambridgeshire County Council's Research & Monitoring Team. The team carries out an annual survey of development sites in the county with the support of colleagues in district planning teams. Net housing completions are a result of calculating annual dwellings gains and subtracting housing losses, such as demolitions.

4.1.2. As shown in Table 14, the annual number of dwellings completed in the county peaked at 4,202 in 2007/08. Since then, annual completions have averaged approximately 2,500. Annual completions in most districts followed a similar pattern, although completions in Peterborough Unitary Authority remained relatively high in 2008/09 and 2009/10, before falling back in 2010/11 and Huntingdonshire has experienced a relatively high level of completions in the last three years.

Table 14: Dwelling completions

Local Authority	2001 /02	2002 /03	2003 /04	2004 /05	2005 /06	2006 /07	2007 /08	2008 /09	2009 /10	2010 /11
Cambridgeshire	**2,319**	**2,806**	**3,402**	**2,906**	**3,927**	**3,647**	**4,202**	**2,787**	**2,130**	**2,504**
Cambridge	159	287	505	601	731	629	521	588	288	390
East Cambridgeshire	801	591	608	401	796	687	757	466	204	368
Fenland	500	697	734	635	781	757	922	308	245	296
Huntingdonshire	334	578	576	698	742	650	728	815	798	795
South Cambridgeshire	525	653	979	571	877	924	1274	610	595	655
Cambridge HMA	**2,804**	**3,336**	**4,081**	**3,277**	**4,628**	**4,448**	**5,297**	**3,448**	**2,946**	**3,139**
Forest Heath	147	62	67	201	334	265	549	310	454	368
St Edmundsbury	338	468	612	170	367	536	546	351	362	267
Cambridgeshire & Peterborough	**2,956**	**3,531**	**3,985**	**3,793**	**4,789**	**4,892**	**5,188**	**3,829**	**3,241**	**3,209**
Peterborough	637	725	583	887	862	1,245	986	1,042	1,111	705

Source: CCC Research & Monitoring Team

4.1.3. Housing completions to date have not fully met planned requirements for a range of reasons, including the recession and the challenges of delivering large sites. Many of the undeveloped allocations will be carried forward into the updated plans.

4.2. CCC dwelling stock forecasts

4.2.1. Cambridgeshire County Council's Research & Performance Team (CCC) produces annual dwelling stock forecasts as one of the outputs of its population model.

4.2.2. The 2001 figures are the CCC census-based estimates, which allow for the perceived under-enumeration of dwellings in the 2001 Census. They are higher than the raw census figures, which are used in the DCLG projections. The figures for 2010 are based on the Research and Monitoring Team's estimates of completions between 2001 and 2010.

4.2.3. For the 2010-base forecasts produced in 2011, dwelling stock assumptions were based on the draft East of England Plan targets for the period 2011-2031. Overall, more than 70,000 additional dwellings were assumed to be completed between 2010 and 2031. These include the proposed Cambridge Fringe developments and the new town of Northstowe, but not the proposed major development at Alconbury Weald. It should be noted that these housing figures have no formal status in terms of planning policy, but were based on the best evidence available when the forecasts were produced in 2011. They should be treated with some degree of caution in this respect and are subject to revision once district council housing targets are finalised.

4.2.4. Table 15 shows a summary of dwelling completions used in the dwelling stock forecasts. These are based on the trajectories produced annually by district councils, which were used to guide the distribution of house-building between five-year time-bands. Table 16 shows the dwelling stock forecasts based on these completions. For all local districts, the increase in the number of dwellings is forecast to exceed 15%.

Table 15: Summary of dwelling information used in 2010-base population forecasts

Local Authority	Dwelling Stock 2001	Actual Completions 2001-10	Forecast Completions 2010-11	Housing Provision 2011-31	Total 2001-31	Total 2010-31
Cambridgeshire	**232,000**	**28,100**	**2,450**	**68,000**	**98,500**	**70,450**
Cambridge City	44,500	4,350	450	14,000	18,800	14,450
East Cambridgeshire	30,900	5,400	250	11,000	16,650	11,250
Fenland	36,700	5,550	250	11,000	16,800	11,250
Huntingdonshire	65,700	5,900	750	11,000	17,650	11,750
South Cambridgeshire	54,200	6,900	750	21,000	28,650	21,750
Cambridgeshire & Peterborough	**302,300**	**36,200**	**3,150**	**96,000**	**135,300**	**99,150**
Peterborough	70,300	8,100	700	28,000	36,800	28,700

Source: CCC Research & Performance Team Population Forecasting Model 2010 Base

Table 16: CCC dwelling stock forecasts

Local Authority	2010	2011	2016	2021	2026	2031/2036*
Cambridgeshire	**260,200**	**262,650**	**284,700**	**303,850**	**316,150**	**330,650**
Cambridge City	48,900	49,350	56,400	61,150	62,250	63,350
East Cambridgeshire	36,200	36,450	38,650	40,700	42,750	47,450
Fenland	42,400	42,650	45,650	48,600	51,300	53,650
Huntingdonshire	71,600	72,350	77,000	81,150	82,500	83,350/88,000*
South Cambridgeshire	61,100	61,850	67,000	72,250	77,350	88,850
Cambridgeshire & Peterborough	**338,550**	**341,700**	**372,050**	**400,700**	**420,050**	**437,700**
Peterborough	78,350	79,050	87,350	96,850	103,900	107,050

Source: CCC Research & Performance Team Population Forecasting Model 2010 Base

4.3. CCC household forecasts

4.3.1. CCC is able to use its model to produce household forecasts. In Cambridgeshire, the number of households is less than the number of dwellings due to the number of vacant dwellings, second homes and other factors. The number of dwellings is converted into households by applying a dwelling: household ratio. The ratios used in the forecasts are shown in Table 17.

4.3.2. The ratio for the base year of 2001 was calculated from the census-based mid-year population. The ratio was adjusted over time to take into account target ratios set nationally or locally and in order to fit calculated households into known totals of dwellings.

Table 17: Dwellings: household ratio

Local Authority	2001	2010	Ratio used for projections
Cambridge City	1.04	1.06	1.06
East Cambridgeshire	1.04	1.04	1.04
Fenland	1.04	1.05	1.05
Huntingdonshire	1.04	1.03	1.02
South Cambridgeshire	1.04	1.01	1.025
Peterborough	1.06	1.02	1.025-1.04

Source: CCC Research & Performance Team Population Forecasting Model 2010 Base

4.3.3. The household forecasts are shown in Table 18. The pattern of growth is similar to that in the dwelling stock forecasts in Table 16.

4.3.4. Figure 5 shows the percentage change in households shown by the CCC forecasts. It shows that the number of households in Cambridgeshire is expected to increase by some 67,800 (27%) between 2010 and 2031. Peterborough and South Cambridgeshire are forecast to experience the highest rate of growth in percentage terms.

Table 18: CCC household forecasts

Local Authority	2010	2011	2016	2021	2026	2031/2036*
Cambridgeshire	**251,800**	**254,300**	**275,100**	**293,500**	**305,600**	**319,600**
Cambridge City	46,200	46,700	53,300	57,800	58,900	59,900
East Cambridgeshire	35,000	35,300	37,400	39,300	41,400	45,900
Fenland	40,400	40,700	43,500	46,300	48,900	51,100
Huntingdonshire	69,800	70,600	75,500	79,600	80,900	81,800/86,300*
South Cambridgeshire	60,400	61,000	65,400	70,500	75,500	80,900
Cambridgeshire & Peterborough	**328,300**	**331,500**	**360,400**	**387,000**	**405,200**	**424,000**
Peterborough	76,500	77,200	85,300	93,500	99,600	104,400

Source: CCC Research & Performance Team Population Forecasting Model 2010 Base
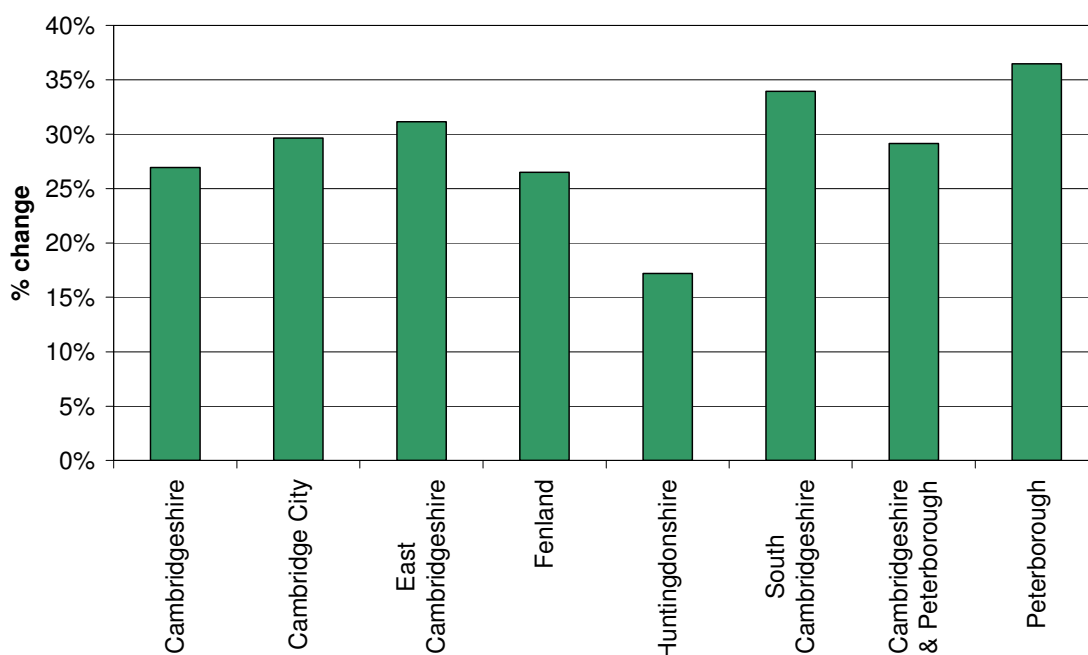
Source: CCC Research & Performance Team Population Forecasting Model 2010 Base

4.4. Comparison with DCLG household projections

4.4.1.   Table 19 shows the difference between the 2008-base DCLG projections and the CCC forecasts for 2011 and the actual household figures recorded by the 2011 Census. Both DCLG and CCC have over-forecast the number of households in 2011 by some 1-1.5%.

Table 19: Comparison of DCLG and CCC household forecasts and the 2011 Census

Local Authority	2011			Difference	
	DCLG 2008 base	CCC 2010 base	Census	DCLG to Census	CCC to Census
Cambridgeshire	**254,900**	**254,300**	**251,200**	**1.5%**	**1.2%**
Cambridge City	46,000	46,700	46,700	-1.5%	0.0%
East Cambridgeshire	35,600	35,300	34,600	2.8%	2.0%
Fenland	41,500	40,700	40,600	2.2%	0.2%
Huntingdonshire	71,000	70,600	69,300	2.4%	1.8%
South Cambridgeshire	60,800	61,000	60,000	1.3%	1.6%
Cambridgeshire & Peterborough	**329,800**	**331,500**	**325,200**	**1.4%**	**1.9%**
Peterborough	75,000	77,200	74,000	1.3%	4.1%

Source: DCLG Household Projections 2008 Base, CCC Research & Performance Team Population Forecasting Model 2010 Base and ONS Census 2011

4.4.2. The 2011-base DCLG household projections only go to 2021. Table 20 shows a comparison between both the DCLG projections and the CCC forecasts for 2021. For most districts, the 2011-base DCLG projections are lower presumably largely due to assumptions about average household size. The exception to this is East Cambridgeshire where the 2011-base projection is the highest of the three.

Table 20: Comparison of DCLG and CCC household forecasts for 2021

Local Authority	2021		
	DCLG 2008 base	DCLG 2011 base	CCC 2010 base
Cambridgeshire	**290,900**	**282,800**	**293,500**
Cambridge City	50,400	45,200	57,800
East Cambridgeshire	42,100	42,700	39,300
Fenland	48,400	47,600	46,300
Huntingdonshire	79,800	77,200	79,600
South Cambridgeshire	70,300	70,100	70,500
Cambridgeshire & Peterborough	**375,200**	**366,800**	**387,000**
Peterborough	84,300	84,000	93,500

Source: DCLG Household Projections 2008 Base and 2011 Base and CCC Research & Performance Team Population Forecasting Model 2010 Base

4.4.3. Table 21 shows the comparison between the 2008-base DCLG projections for 2033 and the CCC forecasts for 2031. The DCLG projections have been adjusted to 2031 based on the difference between the 2028 and 2033 projections. On this basis, there is comparatively little difference at a county level. However, of note is that the number of households in the DCLG projections is lower for both Cambridge City and Peterborough. On the other hand, the DCLG projections show a higher number of households for Fenland and Huntingdonshire.

Table 21: Comparison of DCLG and CCC household forecasts for 2031

Local Authority	DCLG 2031 adj	CCC 2031	Difference
Cambridgeshire	**324,000**	**319,600**	**1.4%**
Cambridge City	55,200	59,900	-8.5%
East Cambridgeshire	47,800	45,900	4.0%
Fenland	54,800	51,100	6.8%
Huntingdonshire	86,800	81,800	5.8%
South Cambridgeshire	78,800	80,900	-2.7%
Cambridgeshire & Peterborough	**416,400**	**424,000**	**-1.8%**
Peterborough	92,400	104,400	-13.0%

Source: DCLG Household Projections 2008 Base and CCC Research & Performance Team Population Forecasting Model 2010 Base
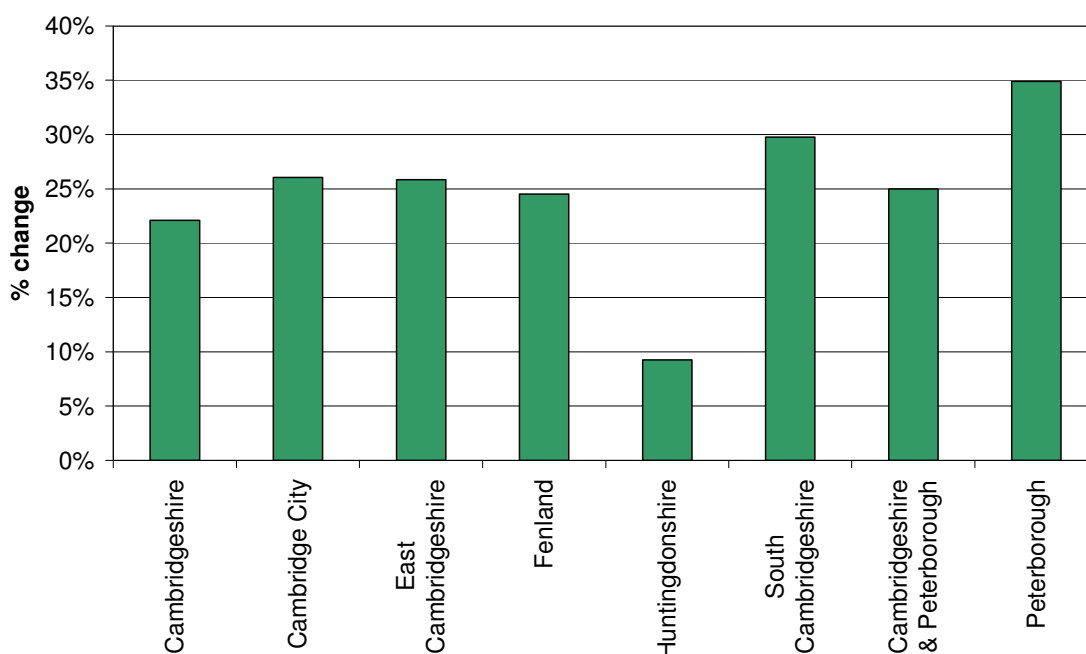
4.5. CCC population forecasts

4.5.1.   CCC produces annual 'policy-led' population and dwelling stock forecasts for the county, districts and wards.

4.5.2.   While the forecasts are based on local policies as far as possible, the location and phasing of housing development, and the resulting forecasts, do not themselves represent county or district council policy. Rather, the forecasts indicate the possible population implications of planned and assumed housing development and other demographic change. All forecasts are based on a series of assumptions and would change in the light of new information.   As stated in paragraph 4.2.3, the 2010-base forecasts were based on the draft East of England Plan figures, which have no formal status in terms of planning policy, hence, should be treated with some degree of caution.

4.5.3.   The CCC forecasts are different from the projections produced by ONS. As discussed in section 3.2, the ONS projections are trend-based, meaning that they assume that recent trends will continue in the future.

4.5.4.   The main CCC population forecasts are produced by taking the population by sex and single year of age and ageing it forward from a base date, year by year.

4.5.5.   The base year for the population used in the latest forecasts is 2010. The base populations are derived from the team's population model, run forward from an original base year of 2001 to give annual mid-year population estimates for each year since 2001. The original 2001 base is derived from the 2001 Census. The next set of forecasts, the 2011 base ones, will use the 2011 Census as their origin.

4.5.6.   Population change is forecast by allowing for the main components of population change: births and deaths (which together give natural change), and migration, using the standard cohort component method used by ONS.

4.5.7.   Population is divided into two main groups: firstly, the resident or local population and, secondly, the transient population. The transient population contains a number of groups of significant size that have different characteristics from the rest of the usually resident, or local, population. They do not age forward with the local population through the forecast period, but instead are regularly replaced by new people with similar demographic characteristics.   People in the transient category include members of the armed forces living in barracks, students living in colleges and boarding schools, and people living in places of detention. Because of this, the numbers of people in this transient sub-group are forecast separately and then added to the figures for the resident population produced by the main population forecasts to give overall population totals. The transient population is forecast to remain fairly stable, hence, the forecast will not take account of any future changes in student or armed forces populations. Recent information from the universities in Cambridge suggests that the student population is expected to increase in future, hence, this assumption in future forecasts is likely to be adjusted.

4.5.8.   The forecasts in Table 22 show that the county population is expected to increase by some 133,700 (22%) between 2010 and 2031. With the exception of Huntingdonshire, all local districts are expected to experience growth of over 20% with the highest percentage rate of growth in Peterborough and South Cambridgeshire. The relatively low growth in Huntingdonshire is largely because of the cumulative effect of a relatively low recent increase in dwellings between 2001 and 2011 and planned growth between 2011 and 2031.

Local Authority	2010	2011	2016	2021	2026	2031/2036*
Cambridgeshire	**605,300**	**610,000**	**650,300**	**688,200**	**711,800**	**739,000**
Cambridge City	119,800	121,300	137,300	147,400	148,600	151,000
East Cambridgeshire	80,900	81,400	85,000	88,000	92,000	101,800
Fenland	94,200	94,700	100,600	107,500	112,900	117,300
Huntingdonshire	165,200	166,600	174,100	181,000	181,800	180,500/189,200*
South Cambridgeshire	145,200	146,000	153,300	164,300	176,500	188,400
Cambridgeshire & Peterborough	**781,500**	**787,700**	**848,000**	**905,800**	**940,500**	**976,700**
Peterborough	176,200	177,700	197,700	217,600	228,700	237,700

Source: CCC Research & Performance Team Population Forecasting Model 2010 Base

Figure 6: Change in population 2010-2031

Source: CCC Research & Performance Team Population Forecasting Model 2010 Base

4.6. Comparison with ONS population projections

4.6.1.   Table 23 shows the difference between the two recent sets of ONS projections and the latest CCC forecasts for 2021. At a county level the 2010-base ONS projections are some 21,000 (3.2%) lower than the CCC set, however the 2011-base ONS projections are similar – only around 500 lower.

4.6.2.   There are wider differences at a district level.   Notably, the ONS projections for Cambridge City are much lower than the CCC forecasts. This is largely due to the assumptions on international migration that were discussed in section 3.1. ONS projections tend to build-in annual net losses in population. On the other hand, the ONS projections are higher than the CCC ones for East Cambridgeshire. This is mainly because the ONS figures assume the continuation of the high population growth seen in the district in recent years. By contrast, the CCC forecast assumes that house-building will be lower between 2010 and 2021 than in recent years, which will slow the rate of population growth.

Table 23: Comparison of ONS and CCC population forecasts for 2021

Local Authority	2021			Difference	
	ONS 2010 base	ONS 2011 base	CCC 2010 base	2010 ONS and CCC	2011 ONS and CCC
Cambridgeshire	**667,100**	**687,700**	**688,200**	**-3.2%**	**-0.1%**
Cambridge City	102,100	120,900	147,400	-44.4%	-21.9%
East Cambridgeshire	103,500	101,500	88,000	15.0%	13.3%
Fenland	109,000	109,300	107,500	1.4%	1.6%
Huntingdonshire	182,900	184,200	181,000	1.0%	1.7%
South Cambridgeshire	169,600	171,900	164,300	3.1%	4.4%
Cambridgeshire & Peterborough	**870,900**	**895,600**	**905,800**	**-4.0%**	**-1.1%**
Peterborough	203,800	207,900	217,600	-6.8%	-4.7%

Source: ONS Population Projections 2010 Base and 2011 Base and CCC Research & Performance Team Population Forecasting Model 2010 Base

4.6.3.   Table 24 shows the difference between the 2010-base ONS projections and the latest CCC forecasts for 2031. Unfortunately the 2011-base ONS projections only go to 2021. At a county level, the 2010-base ONS projections are some 18,000 (2.5%) lower than the CCC set, which is similar to the difference in 2021.

4.6.4.   Again there are wider differences at a district level, particularly for Cambridge City and East Cambridgeshire.

Table 24: Comparison of ONS and CCC population forecasts for 2031

Local Authority	2010 ONS 2031	CCC 2031	Difference
Cambridgeshire	**721,100**	**739,000**	**-2.5%**
Cambridge City	106,300	151,000	-42.1%*
East Cambridgeshire	115,000	101,800	11.5%
Fenland	120,700	117,300	2.8%
Huntingdonshire	195,500	180,500	7.7%
South Cambridgeshire	183,500	188,400	-2.7%
Cambridgeshire & Peterborough	**944,100**	**976,700**	**-3.5%**
Peterborough	223,000	237,700	-6.6%

*As already mentioned in paragraph 4.6.2 and elsewhere, the credibility of the change in the ONS methodology, which produces such a low projection for Cambridge City, has been challenged locally.
Source: ONS Population Projections 2010 Base and CCC Research & Performance Team Population Forecasting Model 2010 Base

4.7. Changes in the armed forces population

4.7.1. Since the 2011 Census, the armed forces bases in South Cambridgeshire, at Bassingbourn and Waterbeach, have closed. Bassingbourn base currently has no personnel on site and an announcement of its permanent closure is expected shortly. Waterbeach base has closed with the final personnel moving from the base at the end of 2012.

4.7.2. The EEFM reports the armed forces workforce in South Cambridgeshire as 1,670, which is the same as the January 2012 Defence Analytical Services Agency (DASA) return on UK military personnel based in the district.

4.7.3. It is likely that the closure of the two bases in South Cambridgeshire will reduce the population in the district (and that the housing on the two bases will be available for occupation, leading to a proportionate reduction in the demand for new dwellings). This population change will not be picked up in the population forecasts and projections because it has occurred since the census and forecasting methodology does not take account of future changes in the armed forces population.

4.7.4. For this reason, it is likely that population forecasts for South Cambridgeshire are too high. Given that the number of military personnel was 1,670 in January 2012, based on the Research and Performance Team's previous work, one would expect the population of armed forces personnel and their dependants to be approximately 2,700. Even if an allowance is made for some personnel and dependants who may continue to live in the area, it would appear a reasonable assumption, to reduce the South Cambridgeshire population forecast by around 2,000 to allow for this change.

4.7.5. A similar reduction in the jobs forecast of 1,670 (2,000 to the nearest thousand) is also appropriate, and these adjustments are made to South Cambridgeshire's population and jobs figures in the later "district outlooks" section of this report.

5. Sub-national Models

5.1. Methodologies

5.1.1.   The Office for National Statistics (ONS) publishes two sources of employment estimates for local authorities – the Business Register and Employment Survey (BRES) and the Annual Population Survey (APS) – but neither source provides employment forecasts. With no source of official forecasts, employment forecasts for local authorities are provided by economic forecasting models such as the East of England Forecasting Model (EEFM) and the Local Economy Forecasting Model (LEFM). Jointly commissioned by the East of England Development Agency (EEDA) and the East of England Regional Assembly (EERA), the East of England Forecasting Model is now owned by the East of England Local Government Association (EELGA) and maintained by the developers of the model, Oxford Economics. Forecasts from the EEFM are freely available for a wide range of variables. The Local Economy Forecasting Model is owned and maintained by Cambridge Econometrics. Forecasts from the LEFM, commissioned on behalf of the Cambridgeshire and Peterborough authorities, are available for a smaller number of variables.

5.2. East of England Forecasting Model

5.2.1.   The East of England Forecasting Model (EEFM) was designed by Oxford Economics (OE) to provide consistent economic, demographic and housing forecasts for the purpose of aligning the provision of jobs and homes. OE is a leading provider of economic forecasts. The most recent EEFM forecasts are based on OE's Spring 2012 economic outlook and a local continuation of past trends. The economic outlook for the national economy is a variable in the EEFM forecasts. The economic outlook in the baseline forecast reflects OE's interpretation of the latest available data. Consideration of the latest economic output (GDP) and UK migration figures, as well as the latest workforce jobs and other labour market data, and an assessment of the impact on the national economy of global factors such as the eurozone crisis, determines the model's economic and demographic assumptions at a national level. Analysis of the latest available data and past trends determines the allocation of the national economic output and net UK migration to the regions, and the subsequent allocation of the East of England's output (GVA) and migrants to the local authorities in the region.

5.2.2.   In forecasting the overall performance of the national economy, the model forecasts the performance of 31 industry sectors, the total of which gives the overall national total. The outlook for each sector at a local level reflects the national outlook for that sector, so the outlook, and pace of recovery, in each area depends on its sector mix, with the latest forecasts suggesting that in areas with more industry and manufacturing, such as Huntingdonshire, the recovery is likely to be weaker, with more positive outlooks in areas with a bigger professional services sector, such as Cambridge. The outlook for an area's economy determines the proportion of the region's migrants the model allocates to that area, reflecting the relative strength of the area's economy. [It is for this reason that the population of Cambridgeshire grows more in the "lost decade" scenario (see below) than in the baseline, because the county has a stronger economy, relative to other areas, when the national economy is weaker.] A stronger economy, with more jobs, and economic benefits for the whole community, attracts more migrants, and increases demand for dwellings.

5.2.3.   The model uses a series of occupancy ratios for each area to determine each area's "demand for dwellings", with the number of dwellings reflecting the size of the area's

population, which changes as a result of natural change (births and deaths) as well as net (including non-economic) migration. The EEFM therefore provides consistent economic, demographic and housing forecasts, with the number of homes reflecting the number of residents, and the number of residents reflecting the number of jobs.

5.3. Local Economy Forecasting Model

5.3.1. The Local Economy Forecasting Model (LEFM) was developed by Cambridge Econometrics (CE) to provide employment forecasts for local areas. CE is also a leading provider of economic forecasts. As with the EEFM forecasts, the most recent LEFM forecasts are based on CE's Spring 2012 economic outlook and a local continuation of past trends. The economic outlook for the national economy is a variable in the LEFM forecasts, as in the EEFM forecasts, and the economic outlook in the baseline forecast reflects CE's interpretation of the latest available data. In the LEFM forecasts, less aggregation of industry sectors occurs than in the EEFM forecasts, and employment forecasts are provided for 41 industry sectors, the total of which gives the total number of jobs. Whereas in the EEFM forecasts the number of residents reflects the number of jobs, in the LEFM forecasts the size of the population is assumed to be as projected by ONS. The size of the population determines the number of jobs in sectors such as education and health, but unlike in the EEFM forecasts, the size of the population in the LEFM forecasts is assumed to be the same, regardless of the number of jobs in the area.

5.4. Scenarios

5.4.1. The economic outlook for the national economy is a variable in both models. Assuming different economic outlooks produces alternative economic scenarios, such as high growth and low growth scenarios. The EEFM "high migration" scenario is a higher growth scenario, which uses official (ONS) migration assumptions. A higher level of growth attracts more migrants, and the level of growth in the high migration scenario is such that the level of net UK migration is the same as in the ONS 2010-based projections. The EEFM "lost decade" scenario is a lower growth scenario, which assumes five more years of sluggish economic growth. The level of national economic growth in the lost decade scenario over the period 2012-17 is 1.4% per annum, compared with 2.4% per annum in the baseline. The level of net UK migration is assumed to remain relatively high, despite the lower level of economic growth, as observed during the first half of the "lost decade". As such, population growth in the lost decade scenario is comparable with the baseline forecast, but the lower level of employment growth in the scenario means that the unemployment level is higher. The LEFM "high growth" scenario assumes a level of national economic growth 0.5 percentage points faster than in the baseline forecast. The LEFM "low growth" scenario assumes a level of growth 0.5 percentage points slower than the baseline. For both models, the alternative scenarios are high growth and low growth in comparison with the baseline. However, the two "high growth" scenarios and the two "low growth" scenarios are not directly comparable growth scenarios, because the high growth and low growth assumptions which underpin them are different for the two models.

5.5. Results

5.5.1. Table 25 shows the results of the EEFM and LEFM baseline and scenario forecasts for the "historic county" of Cambridgeshire and Peterborough. For each model, the estimates for 2010 are the same for the baseline and the scenarios, with 2011 being the first year of the forecasts. Total employment is the sum of employee jobs and self-employment jobs, and includes armed forces. For each model the source of the

employee jobs estimate for 2010 is the original 2010 BRES figure (revised 2010 BRES figures were published with the new 2011 BRES figures in September 2012).
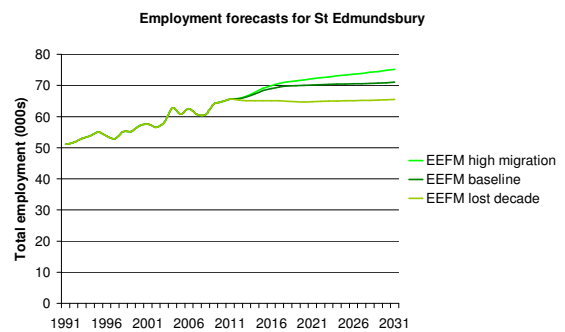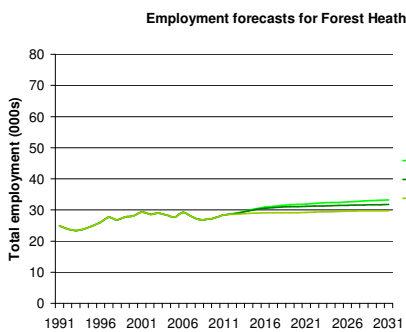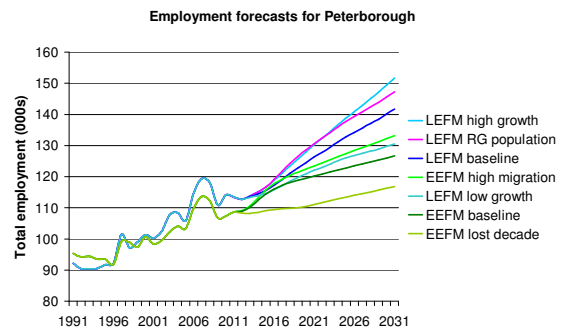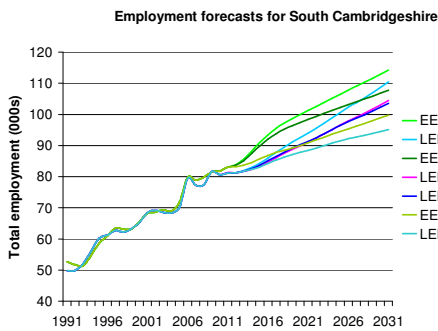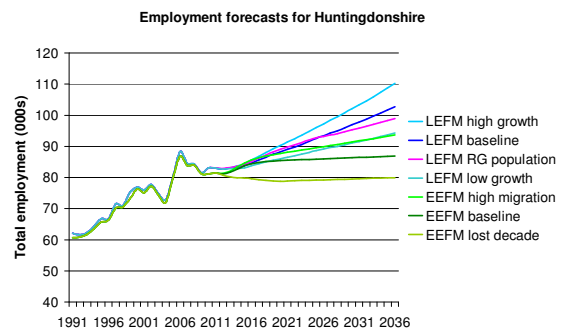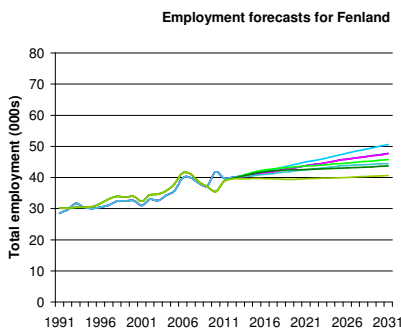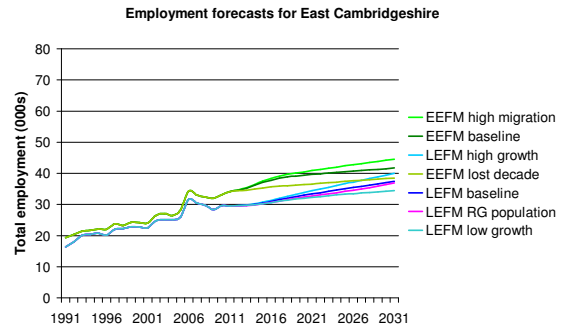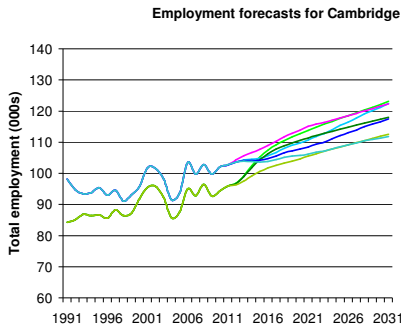
5.5.2. The difference between the total employment estimates for 2010 for the two models reflects the difference in the methodologies for estimating self-employment jobs (see below). For each model the source of the population estimate for 2010 is the original mid-2010 ONS estimate. For the LEFM the source of the population forecasts for 2011 and 2031 is the ONS 2008-based population projection modified to be consistent with the original ONS mid-2010 estimate. The dwellings figures for the LEFM are calculated by applying the EEFM occupancy ratios to the LEFM population figures. All of the other figures are forecasts determined by the models.

Table 25: **Employment forecasts for Cambridgeshire and Peterborough**

	EEFM				LEFM			
	2010	2011	2031	Change 2011 to 2031	2010	2011	2031	Change 2011 to 2031
EEFM baseline & LEFM baseline								
Employment (000s)	433.2	441.9	524.3	82.4	451.2	449.5	545.6	96.1
Population (000s)	789.6	800.7	975.9	175.2	789.9	797.7	947.7	149.7
Occupancy ratio	2.36	2.36	2.26	-0.10	2.36	2.36	2.26	-0.10
Dwellings (000s)	335.0	338.7	431.8	93.1	335.2	337.4	419.1	81.7
Jobs per dwelling	1.29	1.30	1.21	-0.09	1.35	1.33	1.30	-0.03
EEFM lost decade & LEFM low growth								
Employment (000s)	433.2	441.9	488.0	46.1	451.2	449.5	507.9	58.4
Population (000s)	789.6	800.7	976.4	175.8	789.9	797.7	947.4	149.7
Occupancy ratio	2.36	2.36	2.26	-0.10	2.36	2.36	2.26	-0.10
Dwellings (000s)	335.0	338.7	431.9	93.2	335.2	337.4	419.1	81.7
Jobs per dwelling	1.29	1.30	1.13	-0.17	1.35	1.33	1.21	-0.12
EEFM high migration & LEFM high growth								
Employment (000s)	433.2	441.9	552.6	110.7	451.2	449.5	578.4	128.9
Population (000s)	789.6	800.9	1,000.5	199.6	789.9	797.7	947.4	149.7
Occupancy ratio	2.36	2.36	2.26	-0.10	2.36	2.36	2.26	-0.10
Dwellings (000s)	335.0	338.7	442.4	103.7	335.2	337.4	419.1	81.7
Jobs per dwelling	1.29	1.30	1.25	-0.06	1.35	1.33	1.38	+0.05

5.5.3. Figures 7 to 14 show the employment forecasts for each of the districts. The population forecasts for each district are shown in the "district outlooks" section.

Employment forecasts for Cambridge

Employment forecasts for East Cambridgeshire

Employment forecasts for Fenland

Employment forecasts for Huntingdonshire

Employment forecasts for South Cambridgeshire

Employment forecasts for Peterborough

Employment forecasts for Forest Heath

Employment forecasts for St Edmundsbury

Source: East of England (Spring 2012) and Local Economy (Spring 2012) Forecasting Models

5.5.4. An additional scenario "RG population" is available from the LEFM, which reflects CCC's population growth forecast applied to the LEFM baseline. In all of the charts, the "RG population" trend shows some agreement with the LEFM trends, which is a result of applying the "RG population" trend to the LEFM, rather than the EEFM, baseline.

5.5.5. The Cambridgeshire and Peterborough area is forecast to experience employment growth of between 46,100 jobs (EEFM lost decade) and 128,900 jobs (LEFM high growth) from 2011 to 2031, with total jobs in the historic county expected to number between 488,000 (EEFM lost decade) and 578,400 (LEFM high growth) by 2031.

5.5.6. The levels of jobs growth predicted by the two baseline forecasts are very similar, with the EEFM predicting an increase of 82,400 jobs, and the LEFM predicting an only slightly higher increase of 96,100. Despite the similarity in the predicted levels of jobs growth, the LEFM baseline forecast predicts a somewhat higher number of jobs in the area in 2031, with a forecast of 545,600 jobs, 21,300 jobs higher than the EEFM baseline forecast, as a result of a difference in the estimated number of jobs in 2010. This difference reflects the lack of reliable data on total jobs numbers at local authority level.

5.5.7. While a breakdown of total employment into employee jobs and self-employment jobs is available from the EEFM, such a breakdown is not available from the LEFM. However, as the ONS Business Register and Employment Survey (BRES) forms the basis of the employee jobs series for both models, the main difference is assumed to be between the self-employment jobs figures, which – from the EEFM at least – are based on the ONS Annual Population Survey (APS). These two ONS data sources – APS and BRES – are both very volatile, are less accurate for smaller geographies, and are prone to anomalies, discontinuities, and frequent ONS revisions.

Table 26: Employment figures by district

	ONS Total jobs 000s 2011	EEFM baseline Total employment 000s				LEFM baseline Total employment 000s			
		2010 Estimate	2011 Forecast	2031 *2036 Forecast	Change 2011 to 2031/36*	2010 Estimate	2011 Forecast	2031 *2036 Forecast	Change 2011 to 2031/36*
Cambridgeshire	**325.0**	**325.8**	**333.2**	**397.6**	**64.4**	**337.1**	**336.1**	**403.9**	**67.8**
Cambridge	98.0	94.3	95.9	118.0	22.1	102.1	102.7	117.5	14.8
East Cambridgeshire	29.0	33.1	34.1	41.7	7.6	29.6	29.5	37.4	7.9
Fenland	35.0	35.5	38.7	43.7	5.0	41.8	39.7	47.7	8.0
Huntingdonshire	81.0	81.2	81.4	86.4/87.0*	5.0/5.6*	83.1	82.9	97.8/102.7*	14.9/19.8*
South Cambridgeshire	82.0	81.8	83.0	107.8	24.8	80.6	81.2	103.5	22.3
Cambridge HMA	**421.0**	**418.1**	**427.2**	**500.3**	**73.1**	**-**	**-**	**-**	**-**
Forest Heath	28.0	27.5	28.4	31.7	3.3	-	-	-	-
St Edmundsbury	68.0	64.8	65.6	71.0	5.4	-	-	-	-
Cambridgeshire & Peterborough	**429.0**	**433.2**	**441.9**	**524.3**	**82.4**	**451.2**	**449.5**	**545.6**	**96.1**
Peterborough	104.0	107.4	108.7	126.7	18.0	114.1	113.4	141.7	28.3
GCGP LEP Area	**704.0**	**705.2**	**715.3**	**821.1**	**105.8**	**-**	**-**	**-**	**-**
East of England	**2826.0**	**2808.3**	**2844.4**	**3290.2**	**445.8**	**-**	**2849.7**	**3391.4**	**541.7**
UK	**31711.0**	**31291.1**	**31333.5**	**34263.5**	**2930.0**	**-**	**31101.8**	**35015.4**	**3913.6**

5.5.8. Table 26 includes the latest "total jobs" figures, published in April 2013 and based on the ONS data sources described above, which suggest that total employment in the Cambridgeshire and Peterborough area amounted to 429,000 jobs in 2011.

5.6. Jobs data

5.6.1. Table 26 on page 30 shows the levels of jobs growth predicted by the EEFM and LEFM baseline forecasts for the Cambridgeshire and Peterborough area from 2011 to 2031. In the context of so much economic uncertainty, and not very reliable local data, these two long-term forecasts – at the "historic county" level – are very similar.

5.6.2. For each model, the source of the employee jobs estimate for 2010 is the original 2010 BRES figure published in September 2011. The employee jobs and total employment forecasts for 2011 – from the EEFM at least – are based on the ONS Workforce Jobs (WFJ) figures for the East of England. Table 27 shows the regional WFJ figures for 2010 and 2011, published before the EEFM forecasts, and the more recently released WFJ figures for 2012.

Table 27: Seasonally adjusted workforce jobs figures for the East of England

	Total workforce jobs	Employee jobs	Self-employment jobs	Government-supported trainees	HM forces
Annual average 2010	2,814,000	2,343,000	450,000	3,000	19,000
Annual average 2011	2,850,000	2,379,000	452,000	1,000	19,000
March 2012	2,886,000	2,401,000	467,000	0	18,000
June 2012	2,875,000	2,383,000	474,000	0	17,000
September 2012	2,844,000	2,356,000	472,000	0	17,000

5.6.3. The annual average total WFJ figures in Table 27 show the same 1.3% increase from 2010 to 2011 as the EEFM total employment figures for the East of England in Table 26. The EEFM baseline forecast shows a less optimistic outlook for 2012 than for 2011, however, with an increase of 0.3% on 2011 for the East of England, and an increase of 0.6% for Cambridgeshire & Peterborough, while the LEFM baseline forecast shows an increase of just 0.1% for Cambridgeshire & Peterborough in 2012.

5.6.4. Although the East of England total workforce jobs figure for December 2012 has not been published at the time of writing, the average figure for the first three quarters of 2012 shows a 0.6% increase, and even with falling jobs numbers in June and September, the annual average figure for 2012 seems likely to show the 0.3% increase on 2011 shown in the EEFM baseline forecast.

Table 28: Employment and employee jobs figures and revisions for 2010 and 2011

	BRES 2010 Original	BRES 2010 Revised	BRES 2010 Adjusted With working owners adjustment		BRES 2011 Provisional With working owners adjustment	
	Employees	Employees	Employees	Employment	Employees	Employment
East of England	2,345,500	2,344,700	2,400,100	2,497,100	2,401,800	2,514,800
Cambridgeshire & Peterborough	366,600	367,000	375,200	387,300	373,100	387,400

5.6.5. In December 2012, the revised 2010 BRES figures were adjusted to remove a working owners discontinuity that existed between the 2010 and 2011 BRES results. Table 28 shows the adjusted 2010 BRES figures published in December 2012, and the provisional 2011 BRES figures published in September 2012. Unlike the employee jobs figures for the East of England from the WFJ series in Table 27, which show a 1.5% increase from 2010 to 2011, the adjusted BRES figures in Table 28 show an increase of just 0.1%, while the BRES figures for Cambridgeshire & Peterborough show a fall, of 0.6%. The adjusted BRES employment figures, which include

employees and working owners, show a more optimistic increase for the East of England of 0.7%, and the BRES employment figures for Cambridgeshire & Peterborough also show an increase, of 0.03%.

5.6.6. The EEFM and LEFM forecasts will require complete revisions in order to fully reflect the latest jobs figures. However, despite the increase in working owners from 2010 to 2011, the 2011 BRES figures do suggest a less optimistic short-term outlook for the East of England than the WFJ figures in Table 27. Therefore, although the EEFM forecast for the East of England appears likely to be consistent with the WFJ figure for 2012, it is possible that the EEFM's short-term forecast will be revised in Spring 2013. It is difficult, without the fully revised forecasts, to suggest the impact of such a revision, however, the LEFM's less optimistic medium-term forecast for Cambridgeshire & Peterborough suggests 13,000 fewer additional jobs across the historic county from 2011 to 2021.

5.6.7. When the EEFM forecasts are revised, it is possible therefore that the short-term forecasts will be revised and that the predicted short-term jobs growth will be lower. The medium- and long-term forecasts, however, are less likely to be revised, and the similarity between the EEFM and LEFM forecasts over 20 years, despite their short- and medium-term differences, suggests that the long-term forecasts are more reliable, and are therefore useful for informing long-term local plans. Furthermore, the latest Census-based net migration figures for England show high net migration levels for 2009-2010 and 2010-2011, despite high unemployment levels, and suggest that any reduction in jobs growth is unlikely to reduce demand for dwellings, but will instead increase unemployment, as illustrated by the EEFM lost decade scenario.

5.7. Alconbury scenarios

5.7.1. In addition to the "high migration" and "lost decade" scenarios, two further scenarios are also available from the EEFM, which consider the implications of the additional jobs growth in Huntingdonshire, to be generated by the enterprise zone at Alconbury. These scenarios model the assumption that the jobs growth at Alconbury will generate 8,000 additional jobs in the identified "target" industries, with additional associated jobs in the non-target sectors. The scenarios test the possibilities that the additional jobs growth in Huntingdonshire will be (a) added to the baseline jobs growth in the East of England ("additive") and (b) re-allocated to Huntingdonshire from the baseline jobs growth elsewhere in the East of England ("allocative").

5.7.2. The nine "target" industries are chemicals, pharmaceuticals, metals manufacturing, electronics, waste & remediation, telecoms, computer related activity, professional services and research & development. Whether and how to control the allocation of employment land to jobs in the target sectors, as opposed to the non-target sectors, and the ability of the enterprise zone to attract target industry jobs, whether from elsewhere in the region or not, remains to be seen. Nevertheless, these scenarios assume the enterprise zone will attract, and provide space for, sufficient target industry jobs to increase jobs growth in Huntingdonshire by 8,000 jobs in the target industries above the baseline by 2036.

5.7.3. The baseline jobs growth, which continues past trends and therefore does not include the jobs growth at Alconbury, shows declining numbers of jobs in Huntingdonshire from 2011 to 2036 in eight of the nine "target" industries. Professional services – the only target industry to experience increasing jobs numbers in the baseline forecast – is the only target industry that is a local business demand sector. The other eight target industries are all production-type sectors.

5.7.4. In the EEFM Alconbury scenarios, it is necessary only to actively increase jobs numbers in these eight production-type sectors. Jobs numbers in the other non-production sectors, including professional services, automatically increase in proportion to the increase in production sector jobs. Therefore it is these production-type jobs in eight of the nine target industries that the enterprise zone must actively attract to the district. Table 29 shows the results of the EEFM Alconbury scenarios for Huntingdonshire and the Cambridgeshire and Peterborough area.

Table 29: Alconbury scenario forecasts from the East of England Forecasting Model

	Baseline		Alconbury "additive"			Alconbury "allocative"		
	2011	2031 *2036	2031 *2036	Difference from baseline	Change 2011 to 2031/36*	2031 *2036	Difference from baseline	Change 2011 to 2031/36*
Huntingdonshire								
Employment (000s)	81.4	*87.0	*99.8	*12.8	*18.4	*99.7	*12.7	*18.3
Population (000s)	168.7	191.9 *196.7	198.0 *205.8	6.1 *9.1	29.3 *37.1	198.0 *205.7	6.1 *9.0	29.3 *37.0
Occupancy ratio	2.34	*2.21	*2.21	*0.00	*-0.13	*2.21	*0.00	*-0.13
Dwellings (000s)	72.2	*89.1	*93.2	*4.1	*21.0	*93.1	*4.1	*21.0
Jobs per dwelling	1.13	*0.98	*1.07	*0.09	*-0.06	*1.07	*0.09	*-0.06
Cambridgeshire & Peterborough								
Employment (000s)	441.9	524.3	534.5	10.2	92.6	532.4	8.1	90.5
Population (000s)	800.7	975.9	983.0	7.1	182.4	981.7	5.8	181.0
Occupancy ratio	2.36	2.26	2.26	0.00	-0.10	2.26	0.00	-0.10
Dwellings (000s)	338.7	431.8	434.9	3.2	96.3	434.4	2.6	95.7
Jobs per dwelling	1.30	1.21	1.23	0.01	-0.08	1.23	0.01	-0.08

5.7.5. In addition to reducing unemployment within Huntingdonshire, by providing 13,000 jobs in total, both scenarios have the effect of increasing the district's population and demand for dwellings, suggesting a population increase in Huntingdonshire of 6,000 residents above the baseline by 2031. The additive scenario also suggests a further increase of 1,000 residents across the rest of the Cambridgeshire and Peterborough area, while the allocative scenario suggests a population increase of 300 residents below the baseline across the other districts by 2031. As the entirely additive and entirely allocative scenarios model the extreme cases, a population increase somewhere between these two extremes seems likely, suggesting a total increase of less than 1,000 residents above the baseline across the other districts by 2031.

5.7.6. Therefore to include in each district's outlook the implications of the additional jobs growth at Alconbury, an additional population increase of 6,000 residents by 2031 is added to Huntingdonshire's indicative population change, and sufficient target industry jobs are added to increase the number of jobs in the target industries in Huntingdonshire by 8,000 by 2036. However, as the implications for the other districts are relatively small, no adjustments are made to the other districts' population figures, as outlined in the following "district outlooks" section.

6. District Outlooks

6.1. Overview

6.1.1. The purpose of this report, and the aim of this section in particular, is to draw a consistent set of conclusions from the available population, jobs and dwellings projections relating to the Cambridge Housing Market Area. The following pages compare the various population forecasts considered in this report, and each forecast is considered in the light of the 2011 Census. From our observations of the charts in this section, an indicative population figure for each district in 2031 is determined. Indicative jobs and dwellings figures for each district – consistent with the indicative population figure – are also determined, from a run of the EEFM with the population outputs adjusted to the indicative population figures.

6.1.2. The available population, jobs and dwellings projections relating to Cambridgeshire and Peterborough provide a range of projections and forecasts based upon different input data, assumptions and methodologies. The various sources provide a much wider range of forecasts for some areas than for other areas, align much more closely with the Census results in some areas, and in all cases the forecasts are based on numerous assumptions, many of which assume the trends of the past will continue into the future. The individual forecasts are therefore not without limitations and some forecasts – such as the ONS projections for Cambridge City – are clearly outliers from the other available forecasts.

6.1.3. By comparing the various population forecasts considered in this report, the charts in this section indicate not only the outliers, but also the broad convergence of the other available forecasts. By considering all of the forecasts together, an indicative population figure for each district is determined, which reflects the economic and demographic projections, and is influenced by both, but not wholly dependent on either, due to the forecasting uncertainties and limitations associated with both of these methodologies. The indicative population figure is therefore based on past trends, reflects the economic and demographic evidence, and encapsulates, within a single figure, the overall outlook for the district's population in 2031, on the balance of the available forecasts, and in the light of the 2011 Census. The sum of these indicative population figures, determined on a consistent basis, provides a "bottom-up" population forecast for the area as a whole.

6.1.4. Figure 15 shows the various population forecasts for Cambridgeshire.

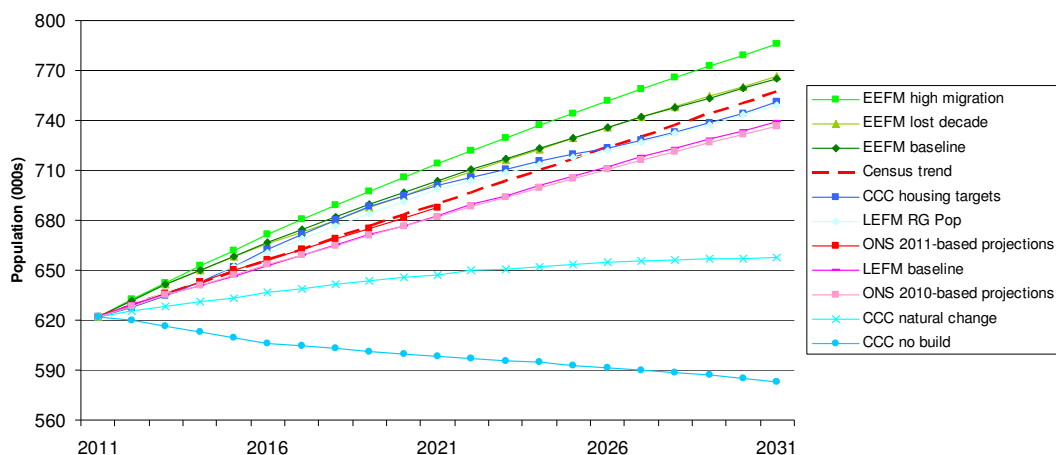**Figure 15: Cambridgeshire population forecasts**
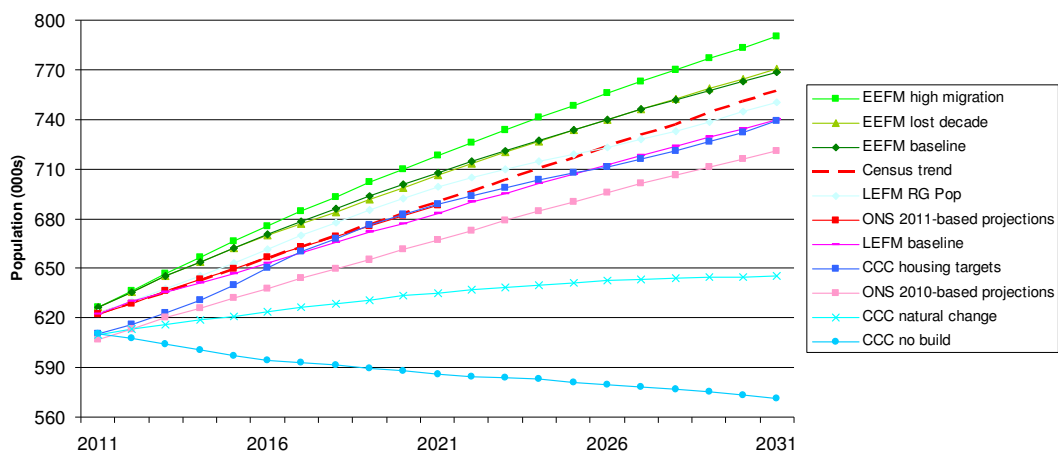
6.1.5. Cambridgeshire's population forecasts for 2031 range between 571,100 (CCC no build) and 790,100 (EEFM high migration). The "Census trend" forecast is a continuation of the population change from mid-2001 to mid-2011. All of the other forecasts, other than the ONS 2011-based projections, were published before the first results from the 2011 Census were released. While the ONS 2011-based projections reflect the Census population in mid-2011, these projections will not fully reflect the inter-Census population change until the non-interim projections are published in 2014. The CCC, EEFM and LEFM forecasts will also require complete revisions in order to fully reflect the Census results.

6.1.6. As the fully revised forecasts are not yet available, this section attempts to suggest the possible impacts of the Census results on the population forecasts for Cambridgeshire, by making simple upwards or downwards revisions to all years of the forecasts to reflect the differences between the forecasts for mid-2011 and the ONS Census-based estimate for mid-2011 of 622,300. So, for example, the EEFM baseline forecast, which used the original ONS estimate of 616,200 for mid-2010, produced a "pre-Census" forecast for mid-2011 of 626,200, and was therefore revised downwards by 3,900 every year from 2011 to 2031.

6.1.7. Figure 16 shows Cambridgeshire's population forecasts revised to reflect the 2011 Census.

Figure 16: Cambridgeshire population forecasts, revised to reflect the 2011 Census

6.1.8. Cambridgeshire's revised population forecasts for 2031 range between 583,200 (CCC no build) and 786,000 (EEFM high migration). Most of the forecasts in Figure 16 – many of which assume a continuation of past trends – appear to converge around a figure in the region of 763,000 for 2031, not including the implications of the additional jobs growth in Huntingdonshire, to be generated by the enterprise zone at Alconbury, or the loss of South Cambridgeshire's armed forces population by 2031.

6.1.9. The forecasts in Figure 16 include the jobs-led population forecasts from the EEFM, the highest of which for 2031 is the EEFM high migration forecast, which is a high growth forecast that uses official (ONS) migration assumptions. The forecasts also include the LEFM baseline and "RG Pop" forecasts, which as noted in section 5.3.1 are not jobs-led population forecasts, but are based on the ONS 2008-based and CCC 2010-based population forecasts respectively, with the LEFM high growth and low growth employment forecasts assuming the same level of population growth as the LEFM baseline forecast.

6.1.10. The figure of 763,000 for 2031 equals not only the middle of the range of the various forecasts for Cambridgeshire – excluding the very low "CCC no build" and "CCC natural change" forecasts and, because of the very low projection for Cambridge City, the low ONS 2010-based population projection for Cambridgeshire – but this figure also equals the sum of the indicative figures for the Cambridgeshire districts (see below), which combine to give a "bottom-up" figure for Cambridgeshire in the region of 763,000 for 2031, which increases to a figure in the region of 767,000 for 2031 when the additional population growth in Huntingdonshire is included, and South Cambridgeshire's armed forces population is excluded.

6.1.11. The district outlooks, which follow this overview, suggest population figures for each of the districts, by making the same simple revisions to the various population forecasts to reflect the 2011 Census, and by considering all of the forecasts together as described above. A population outlook for Peterborough is provided for reference, but the tables in this section, intended to inform the "all homes" chapter of the Strategic Housing Market Assessment, do not include Peterborough. Table 30 shows the indicative population figure for each district in 2031, the ONS mid-2011 population estimate, and the indicative population change from 2011 to 2031.

Table 30: Indicative population figures by district

District	2011	2031/2036*	Change 2011 to 2031/2036*
Cambridge	123,000	150,000	27,000
East Cambridgeshire	84,000	110,000	26,000
Fenland	96,000	118,000	22,000
Huntingdonshire	170,000	201,000/209,000*	31,000/39,000*
South Cambridgeshire	150,000	188,000	38,000
Forest Heath	60,000	73,000	13,000
St Edmundsbury	111,000	130,000	19,000

6.1.12. The indicative population figures provide a basis for determining consistent jobs and "demand for dwellings" figures, by using an economic forecasting model with the population forecasts adjusted to the indicative population figures. Table 31 shows the indicative jobs figure for each district in 2031, the ONS 2011 total jobs estimate, and the indicative jobs change from 2011 to 2031.

Table 31: Indicative jobs figures based on the indicative population figures (above) by district

District	2011	2031/2036*	Change 2011 to 2031/2036*
Cambridge	98,000	120,000	22,000
East Cambridgeshire	29,000	36,000	7,000
Fenland	35,000	40,000	5,000
Huntingdonshire	81,000	96,000/100,000*	15,000/19,000*
South Cambridgeshire	82,000	104,000	22,000
Forest Heath	28,000	31,000	3,000
St Edmundsbury	68,000	75,000	7,000

6.1.13. The indicative employment growth is determined from a run of the EEFM, with the population figures in 2031 adjusted to reflect the indicative population growth, so the scale of the indicative jobs growth reflects that of the indicative population growth. While a similar run of the LEFM is not available, using the LEFM baseline and "RG Pop" forecasts to suggest the likely change in jobs relative to the indicative change in population (see Table 30) gives an indicative change in jobs from 2011 to 2031/2036* for each district as follows: Cambridge 19,000; East Cambridgeshire 8,000; Fenland 7,000; Huntingdonshire 17,000/22,000*; South Cambridgeshire 21,000.

6.1.14. The EEFM is also used to determine the indicative housing growth, and therefore to provide a consistent set of population, jobs and dwellings figures. Table 32 shows the indicative dwellings figure for each district in 2031, a mid-2011 dwelling stock estimate, and the indicative dwellings change from 2011 to 2031.

Table 32: Indicative dwellings figures based on the indicative population figures (above) by district

District	2011		2031/2036*		Change 2011 to 2031/2036*
	Occ ratio	Dwellings	Occ ratio	Dwellings	
Cambridge	2.54	48,000	2.43	62,000	14,000
East Cambridgeshire	2.35	36,000	2.24	49,000	13,000
Fenland	2.27	42,000	2.17	54,000	12,000
Huntingdonshire	2.37	72,000	2.26/2.24*	89,000/93,000*	17,000/21,000*
South Cambridgeshire	2.42	62,000	2.31	81,000	19,000
Forest Heath	2.17	28,000	2.07	35,000	7,000
St Edmundsbury	2.36	47,000	2.25	58,000	11,000

6.1.15. Table 32 uses the Census-based ONS mid-2011 population estimate and a Census-based mid-2011 dwelling stock estimate to determine each district's occupancy ratio in 2011 (see Table 13), and uses the EEFM occupancy ratio assumption that occupancy rates will fall by 4.5% by 2031 (in the absence of development constraints) to determine each district's occupancy ratio in 2031.

6.1.16. The EEFM assumption that each district's occupancy ratio will fall by 4.5% by 2031 is an East of England-wide assumption based on the fall in occupancy rates over the period 1996 to 2007. Most "pre-Census" projections, such as those from DCLG, assume that occupancy ratios will fall in the future because of an aging population and more single person households. The DCLG "pre-Census" (2008-based) projections in particular assume that occupancy ratios will fall at a faster pace over the next twenty years than the EEFM assumes. The Census showed, however, that in general, occupancy ratios did not fall as much between 2001 and 2011 as these projections expected, reflecting high levels of net migration and subdued house-building levels. The EEFM assumption that, with an upturn in house-building, occupancy ratios will fall in the future, but that the fall will not be as strong as the fall suggested by the 2008-based projections, therefore appears to be a reasonable occupancy ratio assumption. The DCLG "post-Census" (2011-based) projections also make such an assumption.

6.1.17. The indicative population figures, taking account of the 2011 Census and including the implications of the additional jobs growth in Huntingdonshire, to be generated by the enterprise zone at Alconbury, converge around the level of 189,000 more people being in the historic county of Cambridgeshire and Peterborough by 2031 than there were in 2011. The sum of the indicative dwellings figures provides an indicative "demand for dwellings" figure for the HMA of 93,000 new homes over the period 2011 to 2031. Table 33 provides a summary of the indicative change in population, jobs and dwellings numbers over the next twenty years across the Housing Market Area.

Table 33: Indicative population, jobs and dwellings change from 2011 to 2031/2036* by district for Cambridge Housing Market Area (HMA)

| District	Population	Jobs	Dwellings	Ratio of new jobs to new dwellings
Cambridge	27,000	22,000	14,000	1.6
East Cambridgeshire	26,000	7,000	13,000	0.5
Fenland	22,000	5,000	12,000	0.4
Huntingdonshire	31,000/39,000*	15,000/19,000*	17,000/21,000*	0.9
South Cambridgeshire	38,000	22,000	19,000	1.2
Forest Heath	13,000	3,000	7,000	0.4
St Edmundsbury	19,000	7,000	11,000	0.6
Cambridge HMA	**176,000**	**81,000**	**93,000**	**0.9**

6.2. Cambridge

6.2.1.   The population estimates shown in Table 34 provide useful context as they form the base of the population forecasts. Figure 15 shows the various population forecasts for Cambridge. Figure 16 shows these population forecasts revised to reflect the 2011 Census. We consider that, when the 2011 Census population figure is taken into account, the population forecasts – excluding the low ONS projections – are best summarised by an indicative population figure for 2031 of around <u>150,000</u>.

Table 34	ONS 2008 based projection*	ONS 2010 original estimate**	ONS 2010 based projection	2011 Census	ONS 2011 based projection	CCC 2010 based forecast
2010	120.9	125.7	105.5	-	-	119.8
2011	122.0	-	105.0	123.9	122.7	121.4
Note: Numbers are presented in thousands. *LEFM scenarios use ONS 2008-based projections made consistent with ONS 2010-based original estimate. **Used by EEFM scenarios.						

Figure 15: Cambridge population forecasts
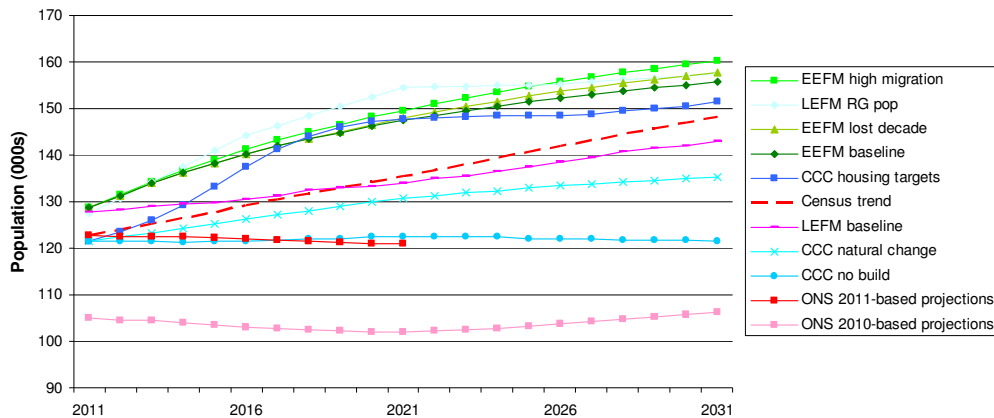
Figure 16: Revised Cambridge population forecasts, to reflect the 2011 Census
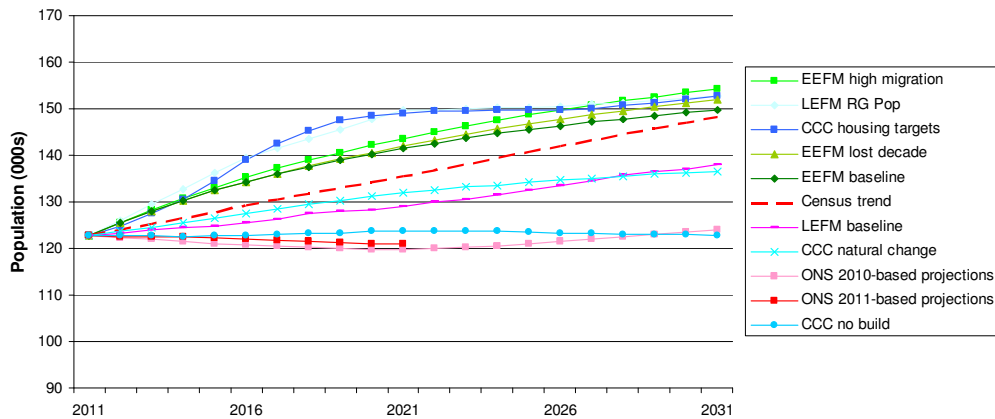
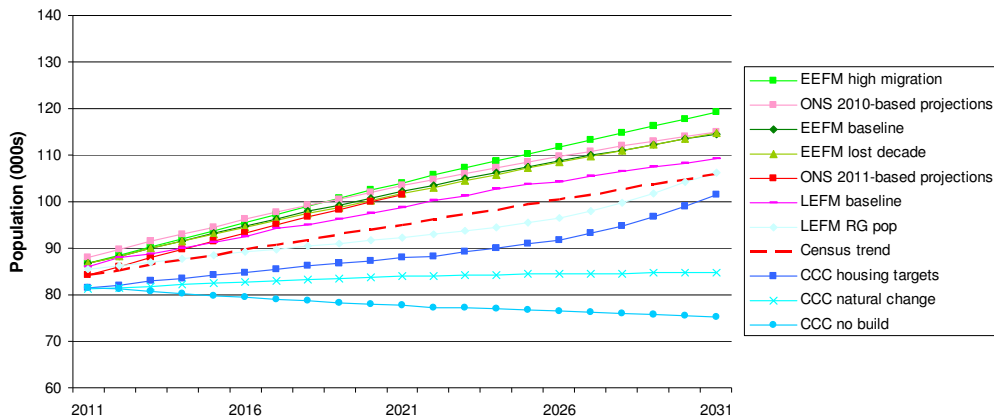| Table 35	Original			Revised		
Forecast (000s)	**2011**	**2031 *2021**	**Change 2011 to 2031**	**2011**	**2031 *2021**	**Change 2011 to 2031**
EEFM high migration	128.7	160.3	31.67	122.7	154.4	31.67
LEFM RG Pop	127.5	157.6	30.06	122.7	152.8	30.06
CCC housing targets	121.4	151.4	30.00	122.7	152.7	30.00
EEFM lost decade	128.6	157.8	29.20	122.7	151.9	29.20
EEFM baseline	128.6	155.7	27.03	122.7	149.8	27.03
Census trend	122.7	148.4	25.65	122.7	148.4	25.65
LEFM baseline	127.7	142.9	15.22	122.7	137.9	15.22
CCC natural change	121.4	135.3	13.90	122.7	136.6	13.90
ONS 2010-based projections	105.0	106.3	1.30	122.7	124.0	1.30
CCC no build	121.4	121.5	0.10	122.7	122.8	0.10
ONS 2011-based projections	122.7	120.9*	-	122.7	120.9*	-

6.3. East Cambridgeshire

6.3.1. The population estimates shown in Table 36 provide useful context as they form the base of the population forecasts. Figure 17 shows the various population forecasts for East Cambridgeshire. Figure 18 shows these population forecasts revised to reflect the 2011 Census. We consider that, when the 2011 Census population figure is taken into account, the population forecasts are best summarised by an indicative population figure for 2031 of around <u>110,000</u>.

Table 36	ONS 2008 based projection*	ONS 2010 original estimate**	ONS 2010 based projection	2011 Census	ONS 2011 based projection	CCC 2010 based forecast
2010	85.2	84.9	86.4	-	-	80.8
2011	86.6	-	88.0	83.9	84.2	81.2
Note: Numbers are presented in thousands. *LEFM scenarios use ONS 2008-based projections made consistent with ONS 2010-based original estimate. **Used by EEFM scenarios.						

Figure 17: **East Cambridgeshire population forecasts**

Figure 18: **Revised East Cambridgeshire population forecasts, to reflect the 2011 Census**
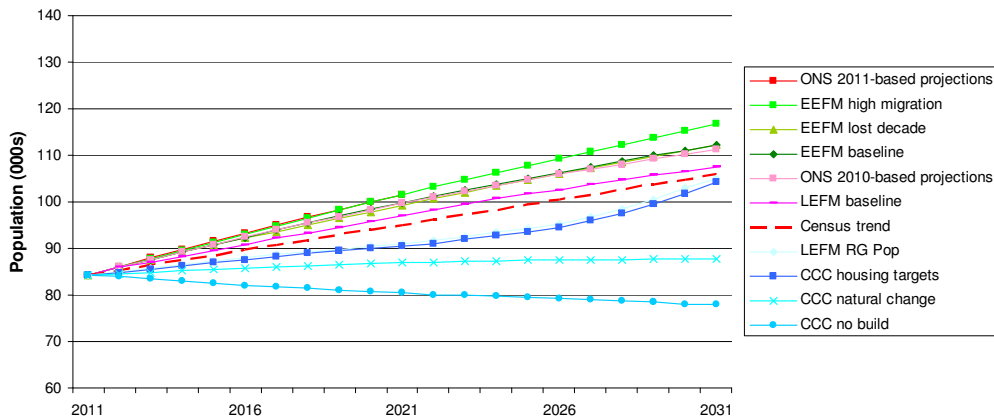
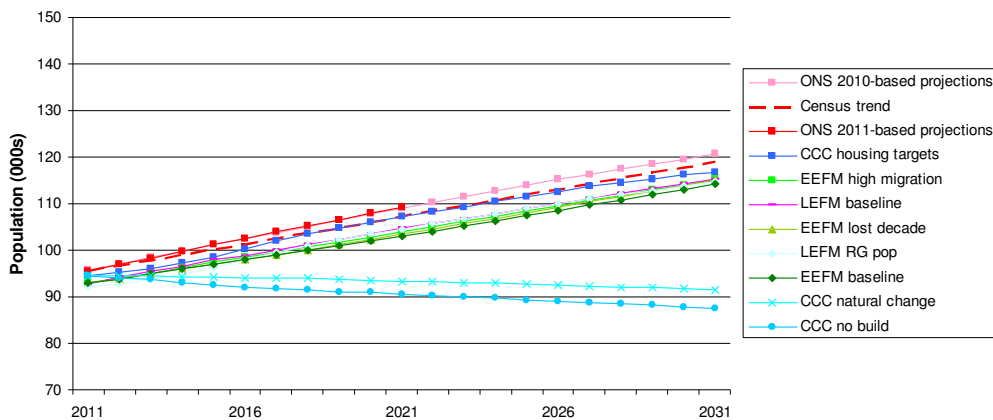| Table 37 | | Original | | | Revised | | |
|---|---|---|---|---|---|---|
| Forecast (000s) | 2011 | 2031 *2021 | Change 2011 to 2031 | 2011 | 2031 *2021 | Change 2011 to 2031 |
| ONS 2011-based projections | 84.2 | 101.5* | - | 84.2 | 101.5* | - |
| EEFM high migration | 86.7 | 119.1 | 32.48 | 84.2 | 116.7 | 32.48 |
| EEFM lost decade | 86.6 | 114.7 | 28.08 | 84.2 | 112.3 | 28.08 |
| EEFM baseline | 86.6 | 114.6 | 27.94 | 84.2 | 112.2 | 27.94 |
| ONS 2010-based projections | 88.0 | 115.0 | 27.00 | 84.2 | 111.2 | 27.00 |
| LEFM baseline | 86.0 | 109.2 | 23.24 | 84.2 | 107.5 | 23.24 |
| Census trend | 84.2 | 105.9 | 21.69 | 84.2 | 105.9 | 21.69 |
| LEFM RG Pop | 85.4 | 106.2 | 20.74 | 84.2 | 105.0 | 20.74 |
| CCC housing targets | 81.5 | 101.6 | 20.10 | 84.2 | 104.3 | 20.10 |
| CCC natural change | 81.2 | 84.8 | 3.60 | 84.2 | 87.8 | 3.60 |
| CCC no build | 81.5 | 75.2 | -6.30 | 84.2 | 77.9 | -6.30 |

6.4. Fenland

6.4.1.   The population estimates shown in Table 38 provide useful context as they form the base of the population forecasts. Figure 19 shows the various population forecasts for Fenland. Figure 20 shows these population forecasts revised to reflect the 2011 Census. We consider that, when the 2011 Census population figure is taken into account, the population forecasts are best summarised by an indicative population figure for 2031 of around <u>118,000</u>.

Table 38	ONS 2008 based projection*	ONS 2010 original estimate**	ONS 2010 based projection	2011 Census	ONS 2011 based projection	CCC 2010 based forecast
2010	93.9	91.9	94.5	-	-	94.2
2011	95.0	-	95.7	95.3	95.5	94.5
Note: Numbers are presented in thousands. *LEFM scenarios use ONS 2008-based projections made consistent with ONS 2010-based original estimate. **Used by EEFM scenarios.						

Figure 19: Fenland population forecasts

Figure 20: Revised Fenland population forecasts, to reflect the 2011 Census
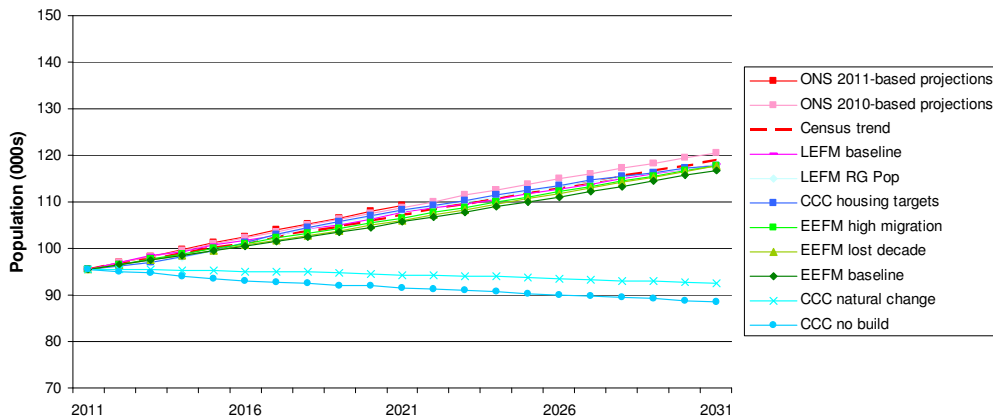
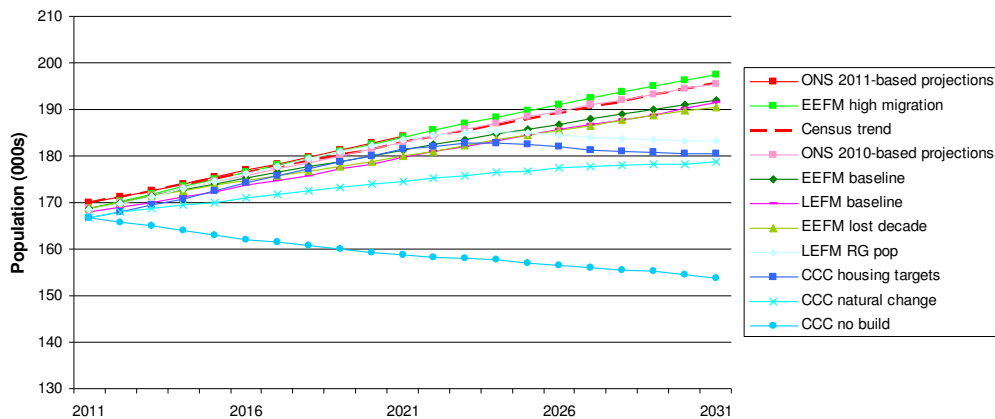| Table 39		Original			Revised	
Forecast (000s)	**2011**	**2031 *2021**	**Change 2011 to 2031**	**2011**	**2031 *2021**	**Change 2011 to 2031**
ONS 2011-based projections	95.5	109.3*	-	95.5	109.3*	-
ONS 2010-based projections	95.7	120.7	25.00	95.5	120.5	25.00
Census trend	95.5	119.0	23.52	95.5	119.0	23.52
LEFM baseline	92.7	115.2	22.54	95.5	118.0	22.54
LEFM RG Pop	92.2	114.7	22.48	95.5	117.9	22.48
CCC housing targets	94.5	116.8	22.30	95.5	117.8	22.30
EEFM high migration	92.9	115.2	22.29	95.5	117.8	22.29
EEFM lost decade	92.9	115.1	22.20	95.5	117.7	22.20
EEFM baseline	92.9	114.2	21.28	95.5	116.7	21.28
CCC natural change	94.5	91.4	-3.10	95.5	92.4	-3.10
CCC no build	94.5	87.4	-7.10	95.5	88.4	-7.10

6.5. Huntingdonshire

6.5.1. The population estimates shown in Table 40 provide useful context as they form the base of the population forecasts. Figure 21 shows the various population forecasts for Huntingdonshire. Figure 22 shows these population forecasts revised to reflect the 2011 Census. We consider that, when the 2011 Census population figure is taken into account, the population forecasts are best summarised by an indicative population figure for 2031 of around 195,000. Taking account of the Alconbury enterprise zone, as described in the "Alconbury scenarios" section, gives a population of 201,000 in 2031, and 209,000 by 2036.

Table 40	ONS 2008 based projection*	ONS 2010 original estimate**	ONS 2010 based projection	2011 Census	ONS 2011 based projection	CCC 2010 based forecast
2010	167.0	167.3	167.6	-	-	165.3
2011	168.0	-	168.8	169.5	170.0	166.7
Note: Numbers are presented in thousands. *LEFM scenarios use ONS 2008-based projections made consistent with ONS 2010-based original estimate. **Used by EEFM scenarios.						

Figure 21: Huntingdonshire population forecasts

Figure 22: Revised Huntingdonshire population forecasts, to reflect the 2011 Census
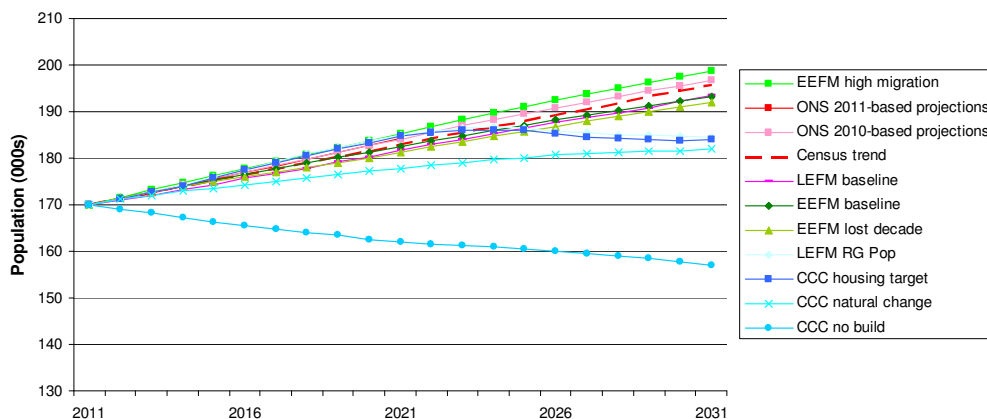
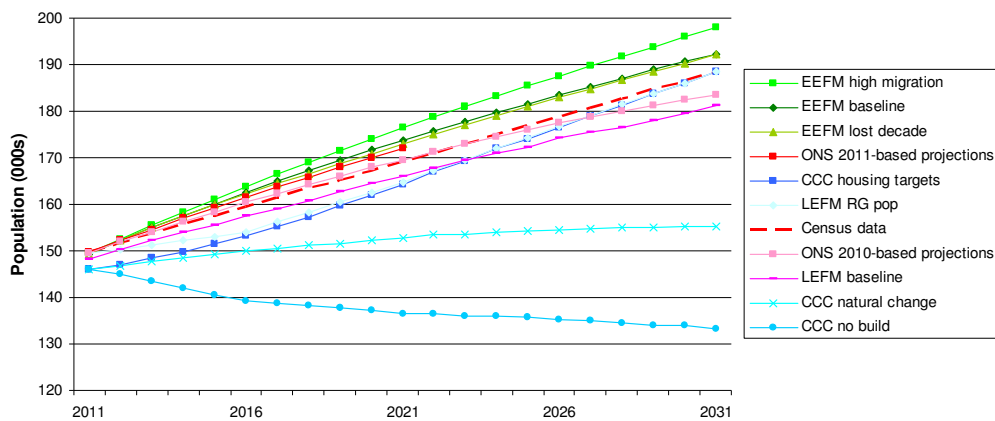| Table 41	Original			Revised		
Forecast (000s)	2011	2031 *2021	Change 2011 to 2031	2011	2031 *2021	Change 2011 to 2031
EEFM high migration	168.7	197.5	28.80	170.0	198.8	28.80
ONS 2011-based projections	170.0	184.2*	-	170.0	184.2*	-
ONS 2010-based projections	168.8	195.5	26.70	170.0	196.7	26.70
Census trend	170.0	195.7	25.68	170.0	195.7	25.68
LEFM baseline	168.0	191.4	23.42	170.0	193.5	23.42
EEFM baseline	168.7	191.9	23.23	170.0	193.3	23.23
EEFM lost decade	168.7	190.6	21.90	170.0	191.9	21.90
LEFM RG Pop	168.6	183.2	14.56	170.0	184.6	14.56
CCC housing targets	166.7	180.6	13.90	170.0	183.9	13.90
CCC natural change	166.7	178.7	12.00	170.0	182.0	12.00
CCC no build	166.7	153.8	-12.90	170.0	157.1	-12.90

6.6. South Cambridgeshire

6.6.1.   The population estimates shown in Table 42 provide useful context as they form the base of the population forecasts. Figure 23 shows the various population forecasts for South Cambridgeshire. Figure 24 shows these population forecasts revised to reflect the 2011 Census. We consider that, when the 2011 Census population figure is taken into account, the population forecasts are best summarised by an indicative population figure for 2031 of around <u>190,000</u>. Taking account of the changes in the armed forces population, as described in the "local data" section, gives an indicative population figure for 2031 of around <u>188,000</u>.

Table 42	ONS 2008 based projection*	ONS 2010 original estimate**	ONS 2010 based projection	2011 Census	ONS 2011 based projection	CCC 2010 based forecast
2010	146.0	146.4	147.3	-	-	145.3
2011	147.8	-	149.6	148.8	149.8	146.1
Note: Numbers are presented in thousands. *LEFM scenarios use ONS 2008-based projections made consistent with ONS 2010-based original estimate. **Used by EEFM scenarios.						

Figure 23: **South Cambridgeshire population forecasts**

Figure 24: **Revised South Cambridgeshire population forecasts, to reflect the 2011 Census**
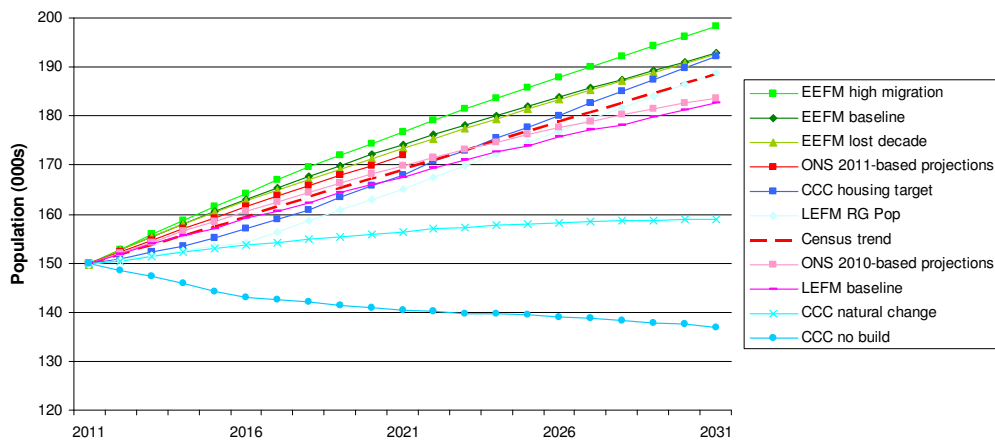
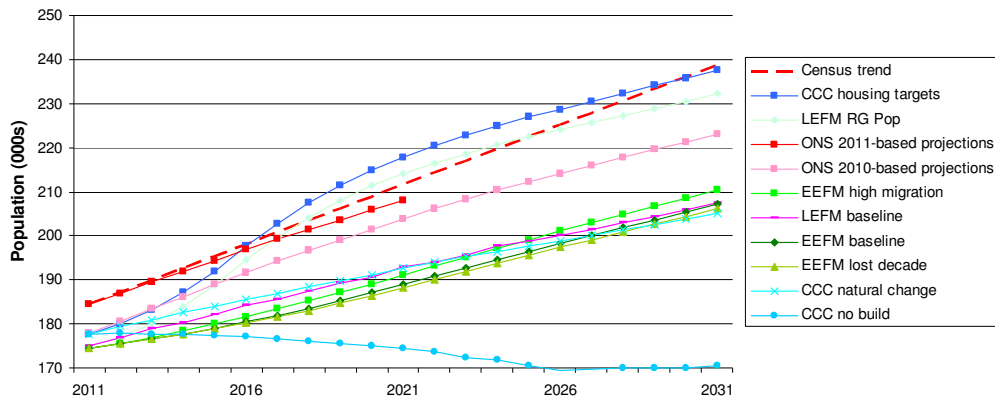| Table 43	Original			Revised		
Forecast (000s)	**2011**	**2031 *2021**	**Change 2011 to 2031**	**2011**	**2031 *2021**	**Change 2011 to 2031**
EEFM high migration	149.4	197.9	48.49	149.8	198.3	48.49
EEFM baseline	149.4	192.4	42.99	149.8	192.8	42.99
EEFM lost decade	149.4	192.1	42.76	149.8	192.6	42.76
ONS 2011-based projections	149.8	171.9*	-	149.8	171.9*	-
CCC housing targets	146.1	188.4	42.30	149.8	192.1	42.30
LEFM RG Pop	149.5	188.6	39.15	149.8	189.0	39.15
Census trend	149.8	188.5	38.68	149.8	188.5	38.68
ONS 2010-based projections	149.6	183.5	33.90	149.8	183.7	33.90
LEFM baseline	148.2	181.2	32.96	149.8	182.8	32.96
CCC natural change	146.1	155.2	9.10	149.8	158.9	9.10
CCC no build	146.1	133.2	-12.90	149.8	136.9	-12.90

6.7. Peterborough

6.7.1. The population estimates shown in Table 44 provide useful context as they form the base of the population forecasts. Figure 25 shows the various population forecasts for Peterborough. Figure 26 shows these population forecasts revised to reflect the 2011 Census. We consider that, when the 2011 Census population figure is taken into account, the population forecasts are best summarised by an indicative population figure for 2031 of around <u>230,000</u>.

Table 44	ONS 2008 based projection*	ONS 2010 original estimate**	ONS 2010 based projection	2011 Census	ONS 2011 based projection	CCC 2010 based forecast
2010	173.1	173.4	175.4	-	-	176.2
2011	174.9	-	177.8	183.6	184.5	177.7
Note: Numbers are presented in thousands. *LEFM scenarios use ONS 2008-based projections made consistent with ONS 2010-based original estimate. **Used by EEFM scenarios.						

Figure 25: Peterborough population forecasts

Figure 26: Revised Peterborough population forecasts, to reflect the 2011 Census
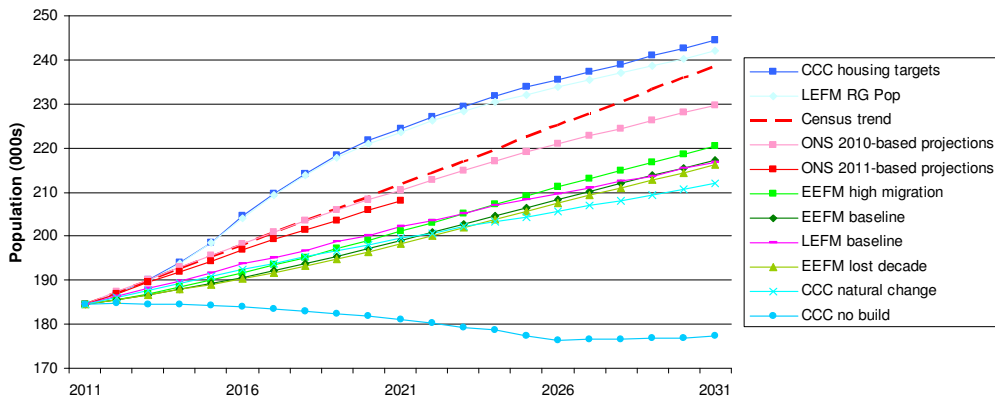
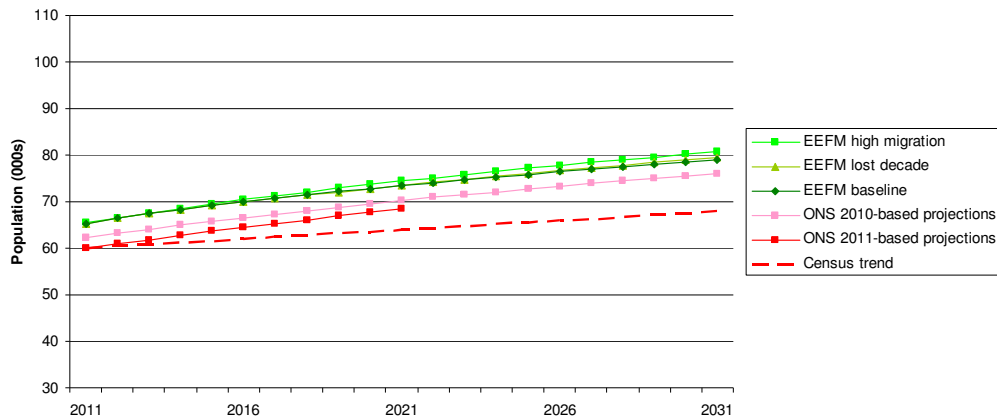| Table 45		Original			Revised	
Forecast (000s)	2011	2031 *2021	Change 2011 to 2031	2011	2031 *2021	Change 2011 to 2031
CCC housing targets	177.7	237.7	60.00	184.5	244.5	60.00
LEFM RG Pop	174.8	232.3	57.51	184.5	242.0	57.51
Census trend	184.5	238.7	54.20	184.5	238.7	54.20
ONS 2010-based projections	177.8	223.0	45.20	184.5	229.7	45.20
ONS 2011-based projections	184.5	207.9*	-	184.5	207.9*	-
EEFM high migration	174.5	210.4	35.89	184.5	220.4	35.89
EEFM baseline	174.4	207.2	32.75	184.5	217.3	32.75
LEFM baseline	175.1	207.4	32.32	184.5	216.8	32.32
EEFM lost decade	174.4	206.1	31.64	184.5	216.1	31.64
CCC natural change	177.7	205.1	27.40	184.5	211.9	27.40
CCC no build	177.7	170.5	-7.20	184.5	177.3	-7.20

6.8. Forest Heath

6.8.1.   The population estimates shown in Table 46 provide useful context as they form the base of the population forecasts. Figure 27 shows the various population forecasts for Forest Heath. Figure 28 shows these population forecasts revised to reflect the 2011 Census. We consider that, when the 2011 Census population figure is taken into account, the population forecasts are best summarised by an indicative population figure for 2031 of around 73,000.

Table 46	ONS 2008 based projection*	ONS 2010 original estimate**	ONS 2010 based projection	2011 Census	ONS 2011 based projection	CCC 2010 based forecast
2010	62.3	64.3	61.4	-	-	~
2011	63.1	-	62.3	59.7	60.0	~
~ data not produced Note: Numbers are presented in thousands. **Used by EEFM scenarios.						

Figure 27: **Forest Heath population forecasts**

Figure 28: **Revised Forest Heath population forecasts, to reflect the 2011 Census**
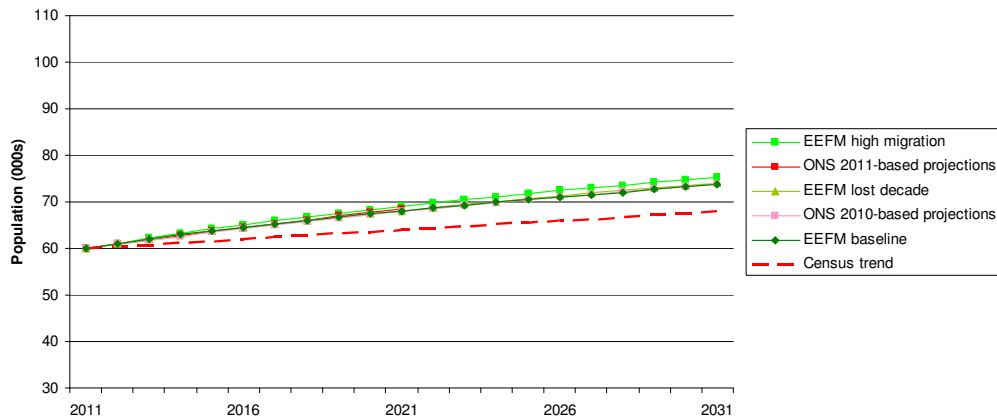
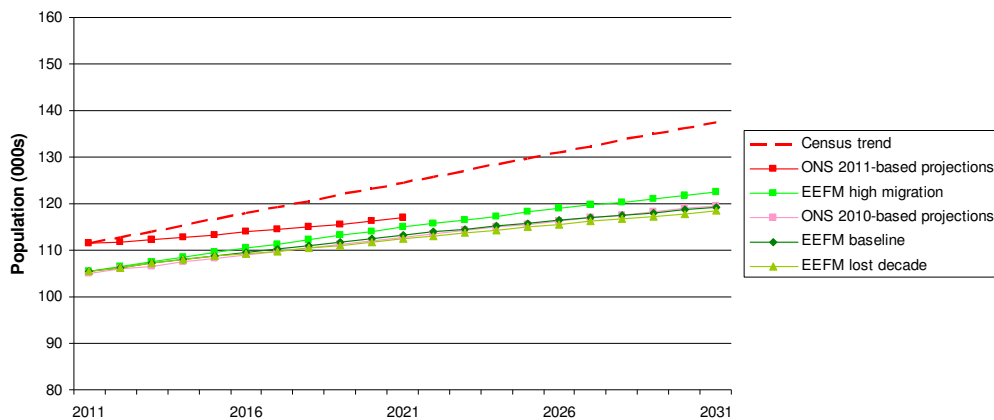| Table 47		Original			Revised		
Forecast (000s)	2011	2031 *2021	Change 2011 to 2031	2011	2031 *2021	Change 2011 to 2031
EEFM high migration	65.4	80.7	15.34	60.0	75.4	15.34
ONS 2011-based projections	60.0	68.4*	-	60.0	68.4*	-
EEFM lost decade	65.4	79.5	14.14	60.0	74.2	14.14
ONS 2010-based projections	62.3	76.1	13.80	60.0	73.8	13.80
EEFM baseline	65.4	79.1	13.68	60.0	73.7	13.68
Census trend	60.0	67.9	7.88	60.0	67.9	7.88

6.9. St Edmundsbury

6.9.1.   The population estimates shown in Table 48 provide useful context as they form the base of the population forecasts. Figure 29 shows the various population forecasts for St Edmundsbury. Figure 30 shows these population forecasts revised to reflect the 2011 Census. We consider that, when the 2011 Census population figure is taken into account, the population forecasts are best summarised by an indicative population figure for 2031 of around <u>130,000</u>.

Table 48	ONS 2008 based projection*	ONS 2010 original estimate**	ONS 2010 based projection	2011 Census	ONS 2011 based projection	CCC 2010 based forecast
2010	104.4	104.5	104.3	-	-	~
2011	105.1	-	105.1	111.0	111.4	~
~ data not produced
Note: Numbers are presented in thousands. **Used by EEFM scenarios.

Figure 29: **St Edmundsbury population forecasts**

Figure 30: **Revised St Edmundsbury population forecasts, to reflect the 2011 Census**
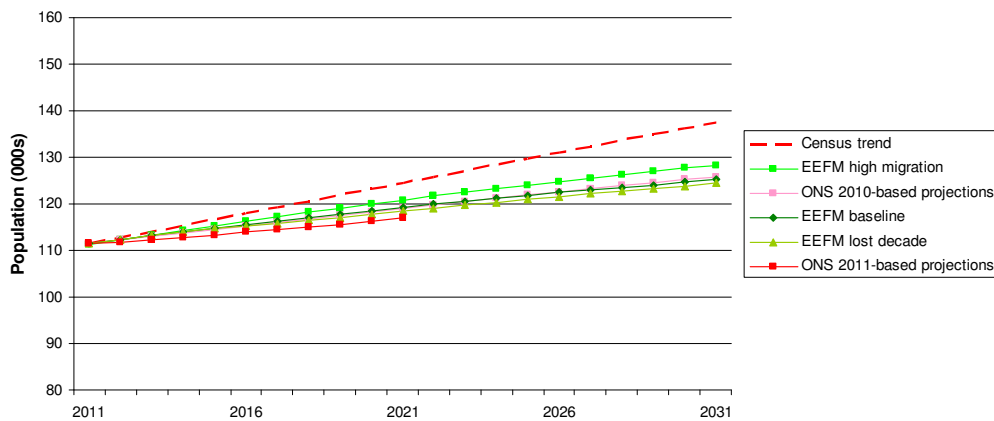
Table 49		Original			Revised	
Forecast (000s)	**2011**	**2031 *2021**	**Change 2011 to 2031**	**2011**	**2031 *2021**	**Change 2011 to 2031**
Census trend	111.4	137.6	26.20	111.4	137.6	26.20
EEFM high migration	105.5	122.5	17.01	111.4	128.4	17.01
ONS 2010-based projections	105.1	119.5	14.40	111.4	125.8	14.40
EEFM baseline	105.4	119.2	13.77	111.4	125.2	13.77
EEFM lost decade	105.4	118.4	12.96	111.4	124.4	12.96
ONS 2011-based projections	111.4	116.9*	-	111.4	116.9*	-

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7. Conclusions

7.1.1. To assist in developing a robust and consistent approach to local jobs and dwellings, this report has presented the available population, jobs and dwellings projections relating to Cambridgeshire and Peterborough, Forest Heath and St Edmundsbury.

7.1.2. The report was written to complement and add value to the progress on early issues and options work and preferred options already undertaken by the Cambridgeshire and Peterborough authorities, and to the EEFM and LEFM forecasts commissioned to inform local plans by the East of England upper-tier authorities and Cambridgeshire and Peterborough authorities respectively.

7.1.3. The report has considered ONS 2008-based, 2010-based and 2011-based population projections, DCLG 2008-based and 2011-based household projections and Census 2011 population and household figures. Also presented were CCC "housing targets", "no build" and "natural change" forecasts, EEFM baseline, lost decade and high migration forecasts, and LEFM baseline, low growth, high growth and "RG population" scenarios.

7.1.4. In order to give a broad indication of development needs in 2031, an indicative population figure was determined for each district, reflecting the region around which it would appear that the various population projections and forecasts tend to converge. Indicative jobs and dwellings figures were then determined for each district, based on the indicative population figure.

7.1.5. Population forecasts for the "historic county" of Cambridgeshire and Peterborough from 2011 to 2031, excluding the CCC "no build" and "natural change" forecasts, range between 149,700 more people (all LEFM forecasts) and 199,600 more people (EEFM high migration scenario). Employment forecasts range between 46,100 more jobs (EEFM lost decade scenario) and 128,900 more jobs (EEFM high migration scenario). That said there is a degree of agreement between the various forecasts at this level. At the district level, however, there is more variation. The ONS and CCC population projections give similar results for most districts. It is Cambridge City, East Cambridgeshire and Peterborough where there appears to be most difference. Cambridge City's population is difficult to estimate because of its dynamic nature, and the same applies to a lesser extent to Peterborough's population. For the EEFM and LEFM employment forecasts, it is Cambridge City and Huntingdonshire where there is most difference. The LEFM's more positive outlook for industry and manufacturing, together with the EEFM's more positive outlook for the professional services sector, gives rise to this difference. It is not surprising that there is less variation at the historic county level, as the statistical uncertainty gets smaller for larger areas. The historic county level appears to be just large enough for this level of agreement, however, suggesting a degree of balance across the Cambridgeshire and Peterborough area.

7.1.6. The indicative population figures considered in this report converge around the level of 189,000 more people being in the historic county of Cambridgeshire and Peterborough by 2031 than there were in 2011. The 2011 Census provides the most up-to-date population figures available and these are reflected in the indicative dwellings figures presented in this report, meaning that there is no additional backlog of demand for housing above and beyond these dwellings figures, which indicate a demand for 93,000 new homes over the next twenty years across the Cambridge Housing Market Area. These dwellings figures will be considered further through the "all homes" chapter of the Strategic Housing Market Assessment.

8. Data Sources

Cambridgeshire County Council Research and Monitoring Team

Annual monitoring data
http://www.cambridgeshire.gov.uk/environment/planning/policies/monitoring/

Cambridgeshire County Council Research and Performance Team

Annual population and dwelling stock estimates and forecasts
http://www.cambridgeshire.gov.uk/business/research/populationresearch/population/

Department for Communities and Local Government

Annual dwelling stock estimates and housing statistics
http://www.communities.gov.uk/housing/housingresearch/housingstatistics/

East of England Forecasting Model

Spring 2012 economic forecasts
http://www.cambridgeshire.gov.uk/business/research/economylab/Economic+forecasts.htm

Local Economy Forecasting Model

Spring 2012 economic forecasts
http://www.cambridgeshire.gov.uk/business/research/economylab/Cambridgeshire+scenarios.htm

Office for National Statistics

Annual population estimates and projections
http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Population

Annual "business register and employment survey" statistics
http://www.ons.gov.uk/ons/rel/bus-register/business-register-employment-survey/index.html

Census 2011 statistics
http://www.ons.gov.uk/ons/guide-method/census/2011/index.html

9. Contact Details

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About the Cambridgeshire County Council Research and Performance Team

The Research and Performance Team is the central research and information section of Cambridgeshire County Council. We use a variety of information about the people and economy of Cambridgeshire to help plan services for the county. The Research and Performance Team also supports a range of other partner agencies and partnerships.

Subjects covered by the Research and Performance Team include:

- Consultations and Surveys
- Crime and Community Safety
- Current Staff Consultations
- Data Visualisation
- Economy and Labour Market
- Health
- Housing
- Mapping and Geographic Information Systems (GIS)
- Population
- Pupil Forecasting

For more details please see our website:

www.cambridgeshire.gov.uk/business/research

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