

Demographic context and forecasting

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Chapter 10. Demographic context and forecasting

10.1 Summary

- Cambridge City will see the largest population increase in the 30-59 age group and the greatest percentage of in migration.
- Huntingdonshire will see a decrease in the 30-59, 0-15 and the 16-19 age groups.
- Every district except Cambridge City will see an increase in the most vulnerable households i.e. the elderly. The largest increase of this type in Cambridgeshire is in South Cambridgeshire East Cambridgeshire and Huntingdonshire.
- Everywhere will see an increase in single person households.

10.2 Introduction – the land-use planning context

As has been explained in Chapter 9, *Economic context and forecasting* outlining the economic and labour market context to the housing market assessment, the main driver for future population and household growth in the Cambridge sub-region is the 2003 Cambridgeshire & Peterborough Structure Plan. The policies of the Structure Plan aim to accommodate substantial growth in the immediate Cambridge area, significantly above that generated by 'natural change'. Following a sequential approach, housing development is proposed at a number of locations on the edge of Cambridge City, at a new settlement north-west of Cambridge (Northstowe) and at market towns. Other village development is guided by measures of 'sustainability', linked to the range of services provided, such as schools.

In the case of the five Cambridgeshire districts, the growth agenda is effectively 'dwellings-led'. In order to ensure compatibility with expected economic change, the forecast labour supply related to the Structure Plan's proposed new house-building programme was compared with the forecast increase in jobs, or labour demand. A general alignment was forecast. This continues the broad balance of employment and resident labour force which has been recorded since 1991. However, within the county there is a shift in terms of the location of new dwellings, concentrating these closer to Cambridge to reduce the need for commuting and to promote the use of public transport.

The policies of the Cambridgeshire Structure Plan have been adopted as part of the East of England Plan. Together with policies approved by Suffolk District and County Councils for Forest Heath and St Edmundsbury, they form the basis of the expected development in the seven-district Cambridge housing sub-region over the period 2001 to 2021.

The sections which follow firstly provide a summary of change in population and households occurring between 1991 and 2001. They then outline the latest population forecasts which are essentially 'dwellings-led'. For Cambridgeshire, the forecasts have been produced by Cambridgeshire County Council's Research Group, incorporating not only 2001 Census analysis but also the latest national analysis of fertility and mortality rates as well as household formation. In the case of the two Suffolk districts, the forecasts have been produced by Anglia Ruskin University using the Chelmer population forecasting model.

It is possible to provide a wide range of population forecasts using different assumptions about future growth, such as past migration trends. However, because the Cambridge area is expected to manage a significant increase in the rate of house building it is considered more appropriate to work to the 'dwellings-led' variant.

Alongside population and household forecasts, this paper attempts to provide detailed information on the types of household by district across Cambridgeshire. An analysis of population change by age group is also provided. This helps identify issues relating to housing for elderly people. Finally, this chapter shows clearly the broad breakdown of population and household growth for each decade according to that which can be attributed to 'natural change' and that arising from net migration.

10.3 From 1991 to 2001

There are two sources of information on population change between 1991 and 2001. The first is the national Census and the second is the mid-year population estimates series produced by the Office for National Statistics (ONS).

Table 1 compares Census data on the population living in the districts in the housing sub-region for 1991 and 2001. It should be noted that the 2001 data aimed to provide a 'One Number' estimate of the total resident population, grossing up to account for non-response. The 1991 Census made some allowances by imputation to account for households who were known to exist, but who failed to return a Census form, or returned a partially completed form. The consequence is that the 1991 Census under-recorded the population in some areas. This also means that the change 1991 to 2001 is likely to be over-estimated. The 1991 Census operated differently to the 2001 Census, as students were counted at their home, rather than their term-time address. So although students were counted, they do not appear in the same way they appear in the 2001 Census.

Table 1: Resident Population 1991 and 2001

	1991	2001	Change 1991 to 2001	% change	% of 2001 population
Cambridge City	101,643	108,863	7,220	7.1	15.4
East Cambridgeshire	59,477	73,214	13,737	23.1	10.4
Fenland	73,217	83,519	10,302	14.1	11.8
Huntingdonshire	141,008	156,954	15,946	11.3	22.2
South Cambridgeshire	118,692	130,108	11,416	9.6	18.4
Forest Heath	54,834	55,510	676	1.2	7.9
St Edmundsbury	91,731	98,193	6,462	7.0	13.9
Cambridge sub-region	640,602	706,361	65,759	10.3	100.0

Source: Census 1991 and 2001

Table 1 covers the entire population, including people living in communal establishments such as university halls of residence, barracks and prisons. To this extent it is considerably higher than the 'private household population', especially in Cambridge City.

The Census results suggest that the sub-region's population increased by almost 65,800 or 10%. Huntingdonshire experienced the highest growth in terms of numbers, with an additional 16,000 people recorded in 2001 as compared with 1991. East Cambridgeshire also experienced very high population growth of over 13,700 – although there is some concern here that the 2001 Census calculations actually over-estimate the true numbers. The mid year population estimates subsequently produced by ONS for 1991 and 2001 have resulted in a somewhat different profile, as Table 2 shows.

Table 2 suggests that the 'true' 1991 population was more likely to be around 661,000, some 20,000 higher than the Census estimate. Together with a small uplift for the 2001 figures to 709,400, this shows population growth over the decade to be around 48,500. The 'uplift' to the 1991 Census count primarily affected Cambridge City, Huntingdonshire, South Cambridgeshire and Forest Heath – all districts with significant numbers of people living in communal establishments or on armed forces bases. Consequently there is a revised pattern of growth.

Table 2: Mid Year Population Estimates for 1991 & 2001, '000

	1991	2001	Change 1991 to 2001	% change
Cambridge City	106.7	110.1	3.4	3.2
East Cambridgeshire	60.9	73.4	12.5	20.5
Fenland	75.1	83.7	8.6	11.5
Huntingdonshire	146.1	157.2	11.1	7.6
South Cambridgeshire	121.9	130.5	8.6	7.1
Forest Heath	57.7	56.2	- 1.5	- 2.6
St Edmundsbury	92.5	98.3	5.8	6.3
Cambridge sub-region	660.9	709.4	48.5	7.3

Source: ONS

Table 3 shows the Census results for private households and indicates an increase of around 35,700 households in the sub-region as a whole, equivalent to 14.2% of the 1991 stock. However, as explained above, this is likely to be an overestimate of total growth as the 1991 Census under-recorded population and, to a lesser extent, numbers of households. The Table shows that East Cambridgeshire recorded the highest rate of increase, at 24%. Five of the seven districts recorded increases of 5,000 or more households over the decade, with just Cambridge City and Forest Heath experiencing significantly lower growth.

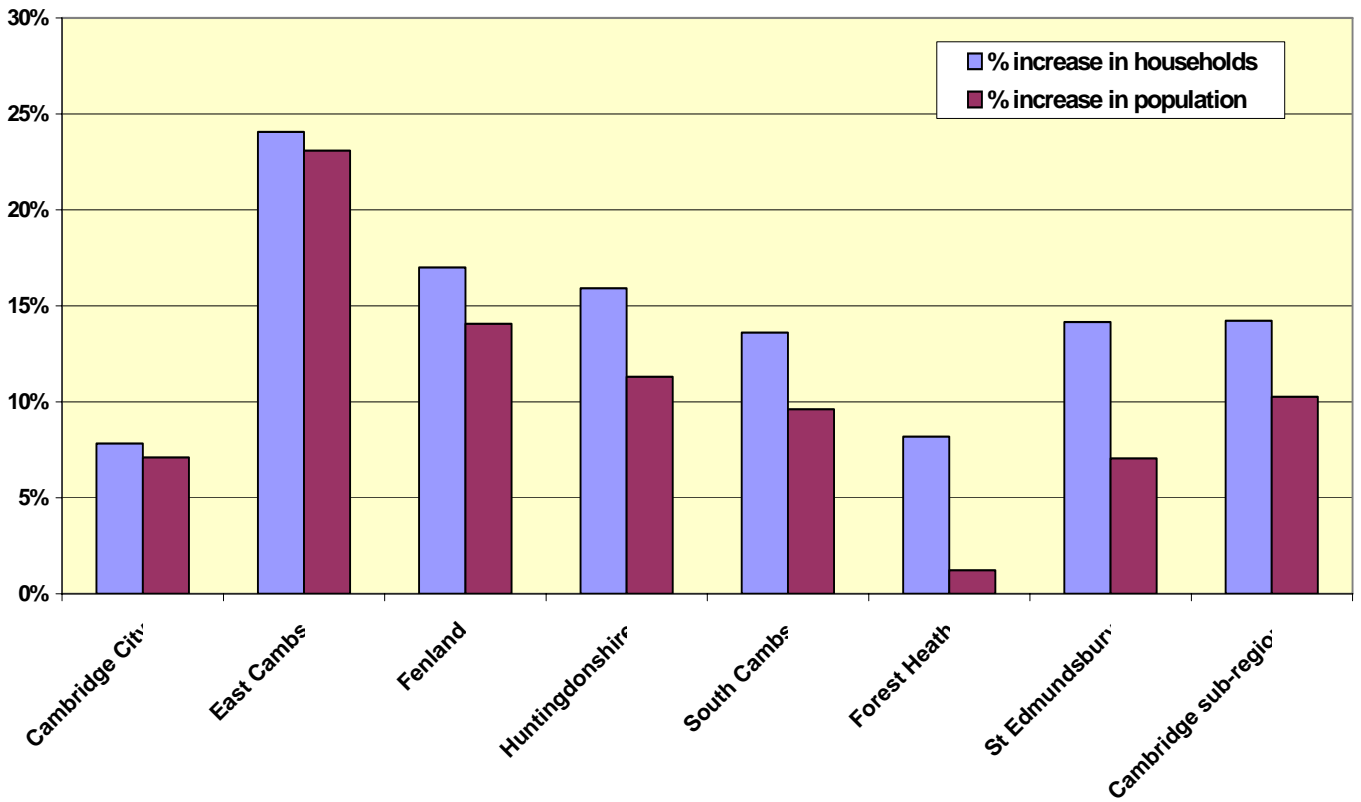
Table 3: Private Households, 1991 and 2001

	1991	2001	Change 1991 to 2001	% change	% of 2001 households
Cambridge City	39,561	42,658	3,097	7.8	14.9
East Cambridgeshire	24,004	29,780	5,776	24.1	10.4
Fenland	30,077	35,192	5,115	17.0	12.3
Huntingdonshire	54,404	63,062	8,658	15.9	22.0
South Cambridgeshire	45,934	52,181	6,247	13.6	18.2
Forest Heath	21,274	23,018	1,744	8.2	8.0
St Edmundsbury	35,532	40,560	5,028	14.2	14.2
Cambridge sub-region	250,786	286,451	35,665	14.2	100.0

Source: Census 1991 and 2001

The rates of growth are shown in Figure 1 below.

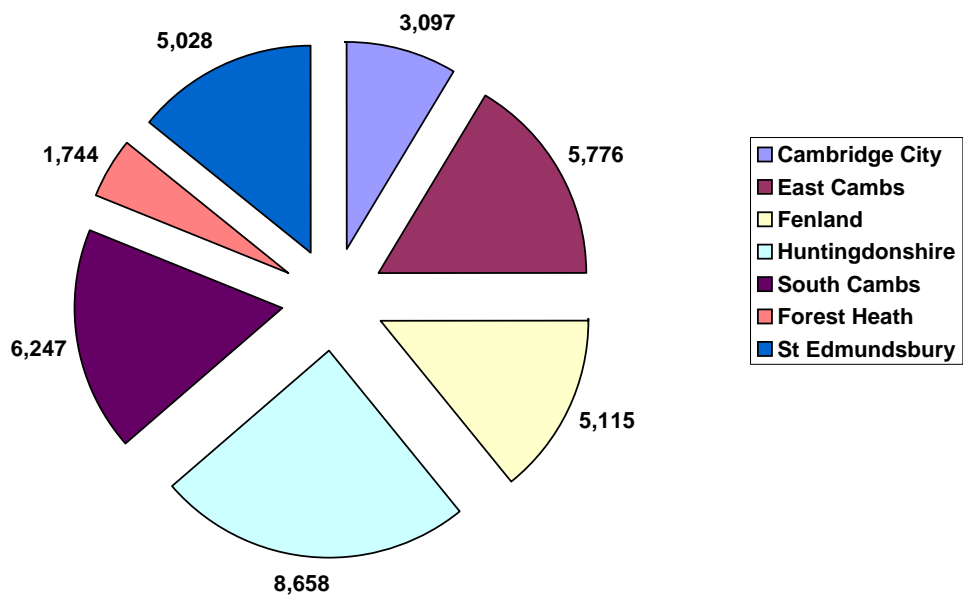
Fig 1: % increase in population and households, 1991 to 2001



Source: Census 1991 and 2001

Figure 2 below shows the increase in the numbers of households by district, 1991 to 2001.

Fig 2: Increase in households, 1991 to 2001



Source: Census 1991 and 2001

Table 4 looks at changes in the main types of household over the period 1991 to 2001 by district. It breaks households down into three types – (i) single people, (ii) couples (without children) and (iii) others, such as couples and lone parents with children, several adults and more than two generations living together as a household.

Table 4 shows that the number of couples (all without children), decreased in virtually every district apart from those experiencing high rates of household growth overall. The numbers of households composed of single people increased by over 28,000 over the decade in the sub-region as a whole. There was also growth in the number of 'other' households, increasing by just over 14,000. This category includes single parent households, couples with children and other households, both with and without children.

Table 4: Change in Household Types, 1991 to 2001

	Singles	Couples	Others	Total change
Cambridge City	2,699	- 3,298	3,696	3,097
East Cambridgeshire	2,451	254	3,071	5,776
Fenland	3,376	- 1,595	3,334	5,115
Huntingdonshire	5,363	419	2,876	8,658
South Cambridgeshire	5,448	- 573	1,372	6,247
Forest Heath	2,205	- 1,344	883	1,744
St Edmundsbury	6,790	- 567	- 1,195	5,028
Cambridge sub-region	28,332	- 6,704	14,037	35,665

Source: Census 1991 and 2001

10.4 Looking Forward: 2001 to 2021 – Population & Households

In the preparation of the Regional Spatial Strategy a considerable number of population and household forecasts have been produced for the constituent districts of the Cambridge housing sub-region, including the Office for National Statistics (ONS), Anglia Ruskin University (ARU) (under contract to EERA) and by Cambridgeshire County Council's Research Group, (Cambridgeshire districts only). The ONS forecasts have effectively been projections, looking at the continuation of past migration trends. In contrast both ARU and CCCRG have sought to forecast population and households arising from particular programmes of house building. The 'reality' checks here have considered the feasibility of achieving different rates of building in terms of infrastructure provision, planning etc, and have also reviewed the likely labour supply and future provision of employment. This exercise aimed to satisfy the planning authorities about the sustainability of the new dwelling proposals, in terms of providing a balance of employed residents and local jobs.

It is important to be aware that the initial proposals for new housing in the draft East of England Plan followed the Cambridgeshire & Peterborough Structure Plan review faithfully. However, both the Panel inspectors and the Secretary of State, after examining the evidence and argument, proposed some increase in dwelling provision, particularly in Cambridge City. The published version of the East of England Plan includes the increase in dwelling provision in Cambridge City. The tables which follow incorporate the most up-to date analyses of fertility, mortality, migrant age and sex structure and household formation. The forecasts for the five Cambridgeshire districts have been prepared by CCCRG and the forecasts for the two Suffolk districts have been prepared by ARU. Table 5 shows forecast population growth by district.

Table 5: Forecast Population Growth, 2001 to 2021, '000s

	2001	2021	Change 2001-2021	Population % change	% of 2021 population
Cambridge City	109.9	151.2	41.3	37.6	18
East Cambridgeshire	70.9	79.9	9	12.7	9.6
Fenland	83.7	99.4	15.7	18.8	11.8
Huntingdonshire	157.2	164.5	7.3	4.6	19.6
South Cambridgeshire	130.6	169.8	39.2	30	20.2
Forest Heath	55.9	66.1	10.2	18.2	7.9
St Edmundsbury	98.4	108.8	10.4	10.6	13
Cambridge sub-region	706.6	839.7	133.1	18.8	100.0

Sources: % Cambridgeshire Districts: Cambridgeshire County Council Research Group; Suffolk Districts: Anglia Ruskin University

It should be noted that this forecast incorporates the proposed dwelling targets outlined by the East of England Plan. The forecast increase in population of over 133,000 in twenty years requires a faster rate of growth than experienced in the past. It is equivalent to a 19% increase as compared with the 2001 'baseline' population. In line with the Cambridgeshire & Peterborough Structure Plan and now the East of England Plan, it can be seen that this growth is heavily concentrated in Cambridge City and South Cambridgeshire – taking around 80,500, or two-thirds of the total increase forecast. Significant increases are also forecast for Forest Heath and Fenland, equivalent to 18% or more over twenty years. The lowest rate of increase is forecast for Huntingdonshire, which experienced very rapid rates of growth in the period 1970 to 2001.

Table 6 shows the related forecast of households for each district in the Cambridge sub-region over the period 2001 to 2021. In total an increase of 87,300 additional households is forecast, a very high growth rate of over 30% over the twenty year period. As with population, it is Cambridge City and South Cambridgeshire which are expected to undergo the highest rates of household growth.

Table 6: Forecast Household Growth, 2001 to 2021, '000s

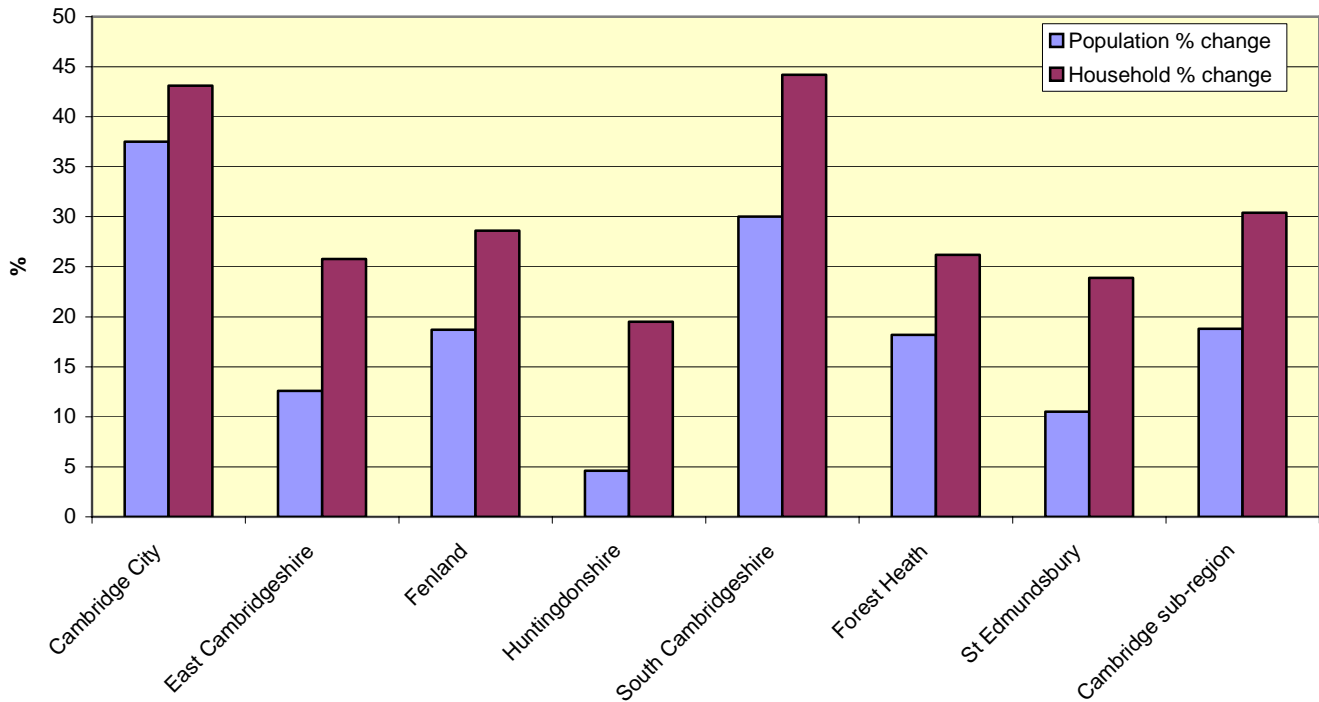
	2001	2021	Change 2001-2021	Household % change	% of 2021 households
Cambridge City	42.7	61.1	18.4	43.1	16.3
East Cambridgeshire	29.9	37.6	7.7	25.8	10.1
Fenland	35.3	45.4	10.1	28.6	12.1
Huntingdonshire	63.1	75.4	12.3	19.5	20.2
South Cambridgeshire	52.3	75.4	23.1	44.2	20.2
Forest Heath	22.9	28.9	6.0	26.2	7.7
St Edmundsbury	40.6	50.3	9.7	23.9	13.4
Cambridge sub-region	286.8	374.1	87.3	30.4	100.0

Sources: % Cambridgeshire Districts: Cambridgeshire County Council Research Group; Suffolk Districts: Anglia Ruskin University

South Cambridgeshire is expected to experience an increase of over 23,000 households, equivalent to 44% of the 2001 baseline. A similar rate of growth is forecast for Cambridge

City, providing for an additional 43% of households in twenty years. Even in the district with the lowest rate of growth, Huntingdonshire, an additional 20% of households are forecast by 2021. Figure 3 compares the rates of forecast population and household growth across all seven districts.

Fig 3: % forecast growth in population and households, 2001 to 2021



Source: ARU, CCRG

The dwelling figures supporting the forecast increases in population and households are shown in Table 7. This indicates the housing completions achieved by the end of March 2007.

The total dwellings outlined to be built in the East of England Plan amount to 89,700 in the Cambridge housing sub-region. By early 2007 some 22,630 dwellings had been completed, or 25.2% of the total. This means that, in order to meet the target by 2021, the rate of new building must speed up in the remaining 15 years of the Plan period.

Table 7 shows that in some districts development is running ahead of schedule, with East Cambridgeshire having achieved around 45% of the total requirement in just 6 years. Fenland has also experienced relatively high rates of new building, with 37% of the total Plan programme already completed.

In contrast it is some of the districts that are expected to deliver most of the new growth where progress has been relatively slow, including Cambridge City and South Cambridgeshire. However, gearing up to high rates of new building requires a long lead-in and it is now anticipated that higher rates of new build will be achieved to meet the target. It was originally anticipated that higher rates would be achieved from 2007 onwards, but that view has had to be reconsidered in the light of the economic downturn starting in spring 2008.

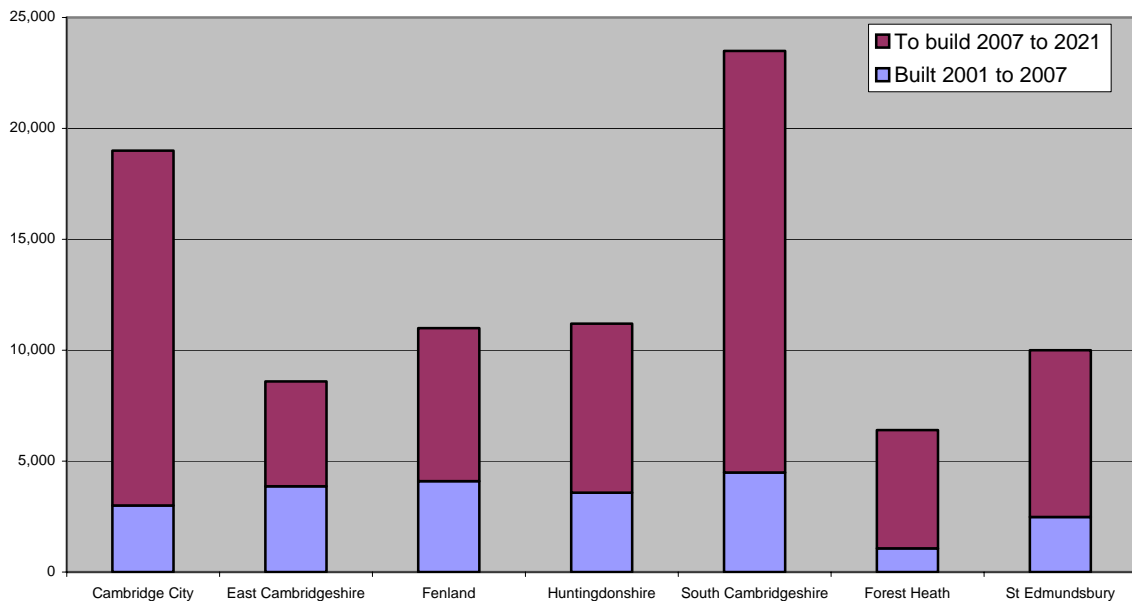
Table 7: Forecast Dwelling Completions 2001- 2021

	Built 2001 to 2007	To build 2007 to 2021	Total 2001 to 2021	% built 2001 to 2007
Cambridge City	3,000	16,000	19,000	15.7
East Cambridgeshire	3,880	4,720	8,600	45.1
Fenland	4,110	6,890	11,000	37.3
Huntingdonshire	3,580	7,620	11,200	31.9
South Cambridgeshire	4,500	19,000	23,500	19.1
Forest Heath	1,070	5,330	6,400	12.7
St Edmundsbury	2,490	7,510	10,000	19.8
Cambridge sub-region	22,630	67,070	89,700	25.2

Source: Cambridgeshire County Council Net Housing Completions at March 2007; EERA

Figure 4 shows progress with respect to the target for each district in the housing sub-region as at March 2007.

Fig 4: New dwellings built 2001 to 2007 and forecast to build 2007 to 2021



Source: Cambridgeshire County Council Net Housing Completions at March 2007; EERA

10.5 Forecast Population by Age

In order to inform future building programmes and to provide an input to issues concerning people with disability and infirmity, it is important to consider the future age profile of the forecast population. There is particular interest in the population aged 75 and over, as this group is likely to have special requirements in terms of mobility housing and services to maintain independence – as well as placing demands on institutional and ‘special needs/supported’ housing and support services.

Tables 8, 9 and 10 provide a broad age breakdown of population for each district for the years 2001 and 2021 and the overall change occurring 2001/21. Although this provides a snap shot at the start and end dates of the current East of England Plan it should be appreciated that some age groups will have reached higher numbers in intervening years; we cannot assume a steady 'trend' year on year change for every age group over the 20 year period. Cambridgeshire County Council Research Group produced the forecasts for the five Cambridgeshire districts and Anglia Ruskin University the Suffolk District data.

Figure 5 shows the changes for each district by broad age groups.

Table 8: Population by Broad Age Group, 2001¹

	0-15	16-19	20-29	30-59	60-74	75+	Total
Cambridge City	16,100	7,700	28,200	39,600	10,900	7,500	109,900
East Cambridgeshire	14,300	3,100	7,600	31,000	9,700	5,400	71,000
Fenland	16,400	3,500	8,600	34,700	13,200	7,400	83,700
Huntingdonshire	34,000	7,100	17,100	71,100	18,600	9,400	157,200
South Cambridgeshire	26,300	6,300	13,7050	58,800	16,400	9,200	130,600
Forest Heath	11,600	2,400	8,600	22,700	6,700	3,900	55,900
St Edmundsbury	19,000	4,300	11,600	42,200	13,700	7,700	98,400
Cambridge sub-region	137,700	34,400	95,200	300,000	89,200	50,500	706,700

Source: Cambridgeshire County Council Research Group; Anglia Ruskin University

Table 9: Forecast Population by Broad Age Group, 2021¹

	0-15	16-19	20-29	30-59	60-74	75+	Total
Cambridge City	26,500	9,400	32,300	56,800	17,600	8,600	151,200
East Cambridgeshire	13,700	3,400	7,000	30,800	15,500	9,600	79,900
Fenland	16,400	4,100	11,000	36,200	20,400	11,300	99,400
Huntingdonshire	26,600	6,200	17,700	66,300	30,700	16,900	164,500
South Cambridgeshire	30,900	7,200	15,500	65,100	31,900	19,100	169,800
Forest Heath	13,400	1,600	9,600	28,100	8,200	5,300	66,100
St Edmundsbury	17,800	4,400	11,100	43,300	19,200	13,100	108,800
Cambridge sub-region	145,300	36,600	104,200	326,600	143,500	83,900	839,700

Source: Cambridgeshire County Council Research Group; Anglia Ruskin University

Table 10: Change in Population by Broad Age Groups, 2001 to 2021¹

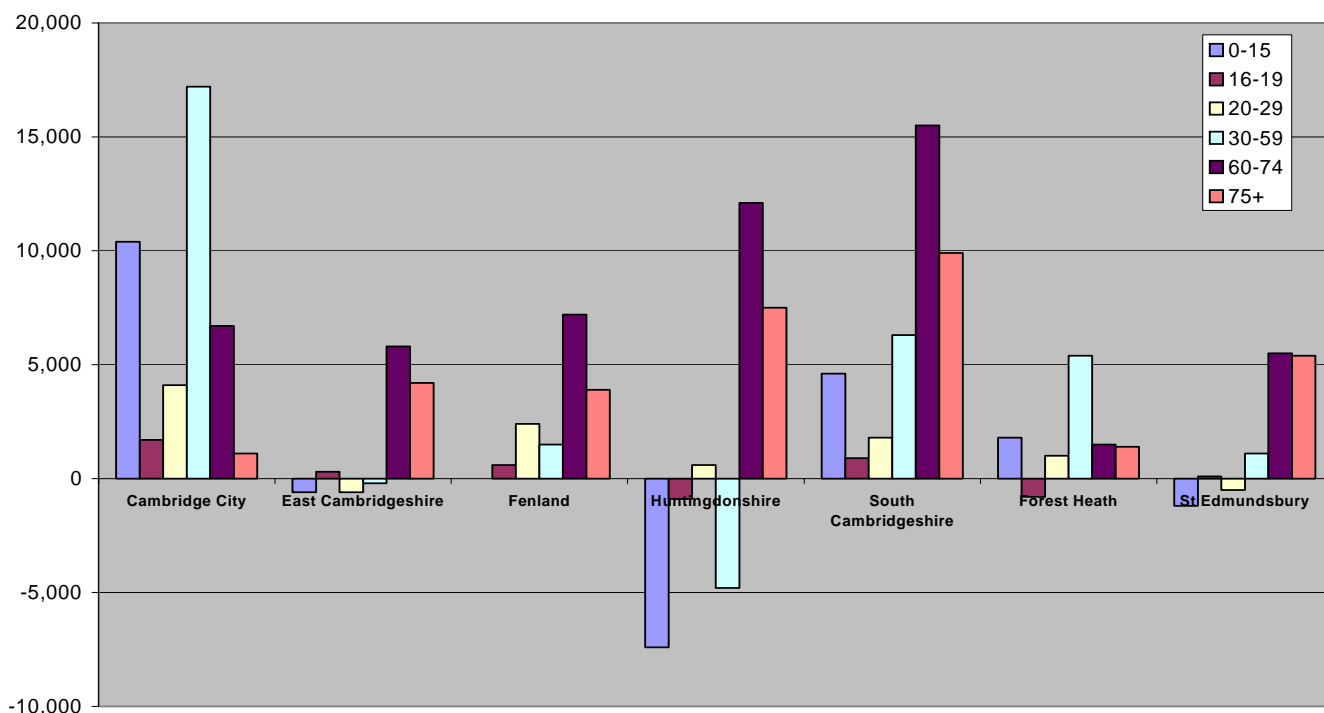
	0-15	16-19	20-29	30-59	60-74	75+	Total
Cambridge City	10,400	1,700	4,100	17,200	6,700	1,100	41,300
East Cambridgeshire	-600	300	- 600	-200	5,800	4,200	8,900
Fenland	0	600	2,400	1,500	7,200	3,900	15,700
Huntingdonshire	- 6,800	- 900	700	- 4,200	11,900	7,750	8,450

¹ Rounded to the nearest 100. Totals may not add due to rounding.

	0-15	16-19	20-29	30-59	60-74	75+	Total
South Cambridgeshire	4,600	900	1,800	6,300	15,500	9,900	39,200
Forest Heath	1,800	- 800	1,000	5,400	1,500	1,400	10,200
St Edmundsbury	- 1,200	100	- 500	1,100	5,500	5,400	10,400
Cambridge sub-region	7,600	1,900	8,800	26,500	54,300	33,400	133,000
% increase	5.5%	5.5%	9.2%	8.8%	60.8%	66.1%	18.8%

Source: Cambridgeshire County Council Research Group; Anglia Ruskin University

Fig 5: Forecast population change by broad age groups, 2001 to 2021²



Source: Cambridgeshire County Council Research Group; Anglia Ruskin University

It is clear that the age groups forecast to show the biggest increase overall are older people. The age group 60 to 74 is expected to increase by over 54,000, growing from 89,200 to 143,500 or around 61% in just twenty years. This reflects the 'Post War bulge' entering retirement.

In percentage terms there is an even bigger increase in the numbers of residents aged 75 and over. This age group is expected to increase from 50,500 in 2001 to over 83,900 by 2021, a rise of around 33,400 or 66%. In contrast, despite the overall population increase, the number of children aged 0 to 15 is only expected to increase by 7,600, just 5.5% more than the 2001 baseline. In many districts this age group is expected to decline.

The reduction in the rate of housebuilding in Huntingdonshire (as compared with the recent past) means there is likely to be a reduction in numbers in most age groups apart from the elderly. In order to gauge the requirements for services for the very elderly, Table 11 shows the forecast population aged 85 and over.

² Rounded to the nearest 100. Totals may not add due to rounding.

The age group likely to require most support, either to retain independent living or in an institutional community, is the over 85s. The sub-region can anticipate an increase of over 10,100 residents of this age, a 76% increase on the numbers in 2001. The increases are forecast to be particularly high in St Edmundsbury (doubling the 2001 numbers) as well as in East Cambridgeshire, Fenland, Huntingdonshire and South Cambridgeshire. All four districts can anticipate increases of 80% or more. The exceptions are Cambridge City and Forest Heath. Past trends suggest there is net out-migration of the elderly from the City. The changes in population by age clearly pose challenges for supported housing, in particular.

Table 11: Forecast Population aged 85+, 2001 to 2021³

	2001	2021	Change 2001-2021	% change
Cambridge City	2,180	2,400	220	10
East Cambridgeshire	1,420	2,810	1,390	97.8
Fenland	1,850	3,670	1,820	98.3
Huntingdonshire	2,360	4,220	1,860	78.8
South Cambridgeshire	2,520	5,000	2,480	98.4
Forest Heath	1,000	1,400	400	40.0
St Edmundsbury	1,900	3,850	1,950	102.6
Cambridge sub-region	13,230	23,350	10,120	76.4

Sources: Cambridgeshire County Council Research Group; Anglia Ruskin University

10.6 Household Type – 2001 to 2021

At the time of writing a detailed breakdown of forecast household numbers by type is only available for the five Cambridgeshire Districts. Broad estimates for Forest Heath and St Edmundsbury are included, but should be treated with caution. The analysis does not attempt to model households according to the number of children in each as it effectively makes assumptions about the extent to which adults are 'household representatives', similar to the previous notion of a 'head of household'. The analysis which follows in Tables 12 to 14 identifies couples (both married and cohabiting), lone parents, single people and other multi person households.

Table 12: Breakdown of Households by Type, 2001⁴

	Couples	Lone parents	Single person	Other multi-adult	Total
Cambridge City	17,100	3,400	17,100	5,200	42,500
East Cambridgeshire	16,800	2,100	9,100	2,000	30,000
Fenland	18,500	3,000	11,800	2,000	35,300
Huntingdonshire	35,500	5,200	19,000	3,400	63,100
South Cambridgeshire	24,300	3,200	19,500	5,300	52,300
Cambridgeshire	112,200	16,900	76,500	17,900	223,500
% of all	50.2%	7.6%	34.2%	8%	100.0%

Source: Cambridgeshire County Council Research Group

³ Rounded to the nearest 10. Totals may not add due to rounding.

⁴ Rounded to the nearest 100. Totals may not add due to rounding.

Table 12 shows that just over half of all households in Cambridgeshire in 2001 were composed of couples, either married or cohabiting, although the share was lower in Cambridge City (40%) and higher in South Cambridgeshire, East Cambridgeshire and in Huntingdonshire, (all above 45%). Unconcealed lone parents constituted 7.6% of all households in the county. Single person households accounted for just over a third of the total and other 'multi adult' households contributed a further 8%.

Table 13: Breakdown of Households by Type, 2021⁵

	Couples	Lone parents	Single person	Other multi-adult	Total
Cambridge City	21,800	5,800	26,100	7,300	61,000
East Cambridgeshire	18,900	2,200	13,500	3,000	37,600
Fenland	21,200	3,500	17,900	2,700	45,300
Huntingdonshire	36,100	5,200	29,700	4,300	75,300
South Cambridgeshire	28,900	4,500	34,300	7,700	75,400
Cambridgeshire	126,900	21,200	121,500	25,000	294,600
% of all	43%	7.1%	41.2%	8.4%	100.0%

Source: Cambridgeshire County Council Research Group

Table 13 shows that the major change in household composition forecast over the period 2001 to 2021 is an increase in single person households – up from 34.2% of the total to 41.2%. The share of households accounted for by couples is forecast to reduce to 43% in the county overall by 2021. In Cambridge City the share accounted for by couples falls to 35.7% and the share attributed to single people rises to 42.7%, from 40% in 2001. Shares of households accounted for by unconcealed lone parent households and other multi-person households are little changed from 2001.

Table 14: Change in Forecast Households by Type, 2002-2021⁵

	Couples	Lone parents	Single person	Other multi-adult	Total
Cambridge City	4,700	2,400	9,000	2,100	18,500
East Cambridgeshire	2,100	100	4,400	1,000	7,600
Fenland	2,700	500	6,100	700	10,000
Huntingdonshire	600	0	10,700	900	12,200
South Cambridgeshire	4,600	1,300	14,800	2,400	23,100
Cambridgeshire	14,700	4,300	45,000	7,100	71,100
% of all	20.6	6	63.2	10	100.0
% change over 2001	13.1	25.4	58.8	39.6	31.8

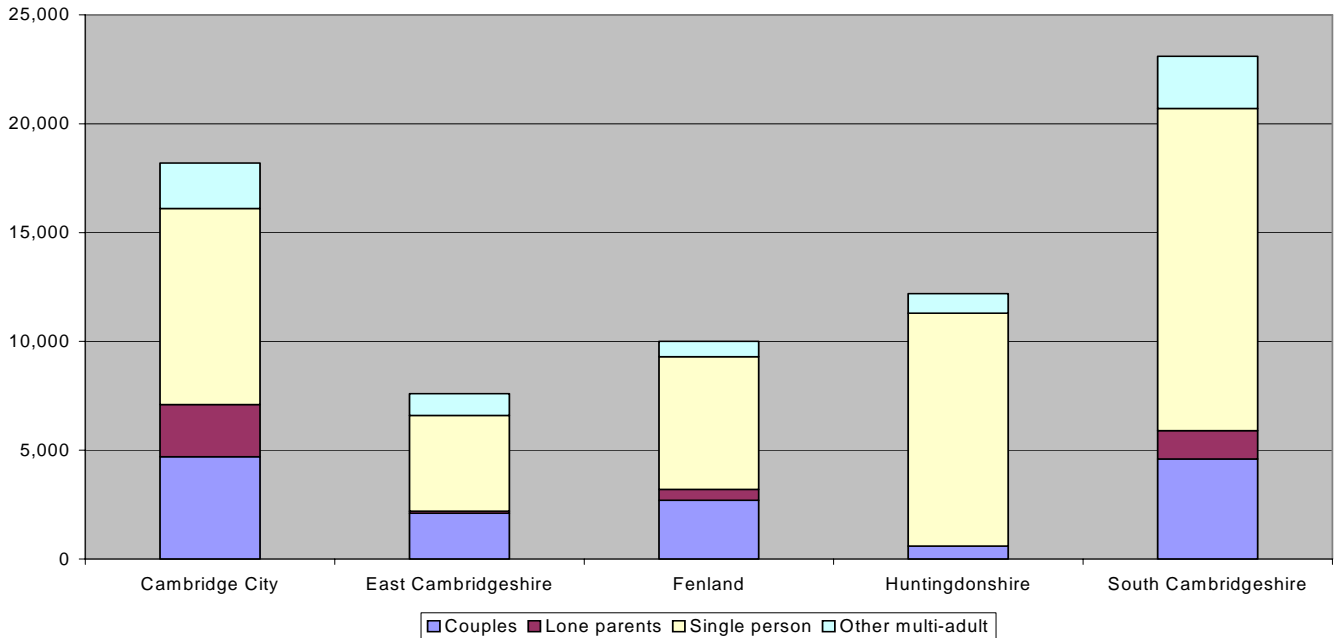
Source: Cambridgeshire County Council Research Group

Overall, the number of households in Cambridgeshire is forecast to increase by 71,000 over 20 years, accounting for 32% of the 2001 baseline. The increase in single person households is forecast to be 45,000, around 59% increase in just 20 years.

⁵ Rounded to the nearest 100. Totals may not add due to rounding.

Multi person household numbers are expected to increase by around 7,100, or 40%, with lone parent households increasing by 25%. The number of 'couple' households is forecast to increase by almost 14,700, just over 13%. Figure 6 shows the forecast change for each Cambridgeshire district.

Fig 6: Breakdown of household forecasts, 2001 to 2021 by type



Source: Cambridgeshire County Council Research Group

This analysis spells out clearly that there will be a considerable increase in smaller households. However, it should be noted that although single people may be counted as 'needing' only one bedroom accommodation, in practice the active demand is for at least two bedrooms.

10.7 Extending the principles from Cambridgeshire to the housing sub-region

Applying the Cambridgeshire factors to the sub-region household forecast of 87,480 would give an extra 18,090 couples, an additional 5,290 lone parents, an extra 55,370 single persons and an extra 8,740 multi-person households, 2001 to 2021.

Table 15 shows the range of figures produced by applying the Cambridgeshire factors for the whole County and for just the rural districts to the two Suffolk districts.

It is important to stress that these figures should be treated with caution as they are based on applying the Cambridgeshire percentages to the Suffolk districts.

Applying the factors including Cambridge City produces higher forecasts for every group except for single person households. If the forecasts based on the rural districts alone are the more accurate of the two then this can be explained by an increase in older households, perhaps alongside changes in household composition, that is, more single person households across the age groups.

Table 15: Est. increase in households by type, Forest Heath and St Edmundsbury, 2001-2021⁶

	Couples	Lone parents	Single person	Other multi-adult	Total
Figures based on the 4 rural districts of Cambridgeshire (excludes Cambridge City)					
Forest Heath	1,100	200	4,100	600	6,000
St Edmundsbury	1,800	300	6,600	900	9,700
Figures based on the whole of Cambridgeshire (all 5 districts)					
Forest Heath	1,200	400	3,800	600	6,000
St Edmundsbury	2,000	600	6,200	1,000	9,700
Cambridge housing sub-region	18,090	5,290	55,370	8,740	87,480

Source: CCCRG, ARU

10.8 Elderly Households

The preceding section has identified that the number of residents aged 75 and over – and especially 85 plus – is forecast to increase at a faster rate than the population overall. By making assumptions about the likelihood each person has of ‘heading’ a household, it is possible to make a broad assessment of what this increase will mean in terms of different types of household. Table 16 looks at what might be considered the most vulnerable households in terms of requiring support to live independently – couples and single people.

Table 16: Forecast Couples & Single Households with a ‘head’ aged 75+, 2001 & 2021⁷

	Couples				Singles			
	2001	2021	2001-21 change	% change	2001	2021	2001-21 change	% change
Cambridge City	1,090	1,320	230	21%	3,480	3,580	100	3%
East Cambridgeshire	850	2,010	1,160	136.4%	2,330	3,440	1,110	48%
Fenland	1,140	2,150	1,010	88.6%	3,010	4,050	1,040	35%
Huntingdonshire	1,450	2,810	1,360	94%	3,810	6,040	2,230	59%
South Cambridgeshire	1,380	3,150	1,770	128%	3,830	7,110	3,280	86%
Cambridgeshire	5,910	11,440	5,530	94%	16,460	24,220	7,760	47%

Source: Cambridgeshire County Council Research Group

Table 16 shows an increase of 94% in the number of ‘couple’ households in Cambridgeshire where the ‘head’ is aged 75 and over in the period 2001 to 2021. This is a growth of 5,530 in the county as a whole. The relatively high rise in the number of couples reflects increasing life expectancy of men as compared with the past. The increase in numbers of single person households is greater numerically, at around 7,760, but this is equivalent to a somewhat

⁶ Rounded to the nearest 100. Totals may not add due to rounding.

⁷ Rounded to the nearest 10. Totals may not add due to rounding.

lower 47% growth rate. Cambridge City will not be affected as much as other districts if past patterns continue in terms of the age structure of migrants. Cambridge City has experienced net out-migration of older people whereas other districts have experienced net in-migration – including some movement from the City.

Again, applying the Cambridgeshire rates to the sub-region as a whole would indicate an additional 6,740 couple households with a 'head' aged 75 or more and an extra 9,540 single person households.

Applying two Cambridgeshire rates based on the whole of Cambridgeshire and on the 4 rural districts in Cambridgeshire excluding Cambridge City to the individual Suffolk districts provides some indicative forecasts for the additional numbers of households with heads aged 75 or over. These indicate in the region of 400 to 500 additional couple households and 600 to 700 additional single households in Forest Heath, and 700 to 900 additional couple households and 1,000 to 1,200 additional single households in St Edmundsbury. These figures should be treated with caution.

10.9 Natural Increase & Migration – the Components of Population Change

The Cambridge sub-region has in recent years sustained relatively high rates of population growth, significantly above the rates associated with 'natural change' – i.e. the births and deaths occurring to the baseline population. Such a role has been very much driven by the prosperous local economy and hence employment growth. As explained in chapter 9, *Economic context and forecasting*, there has been a general 'balance' between employment and employed residents for well over a decade, with most 'migrant' growth linked to job opportunities within the area. There has been relatively little growth generated by people moving to the county as a 'home' base but then commuting to work elsewhere. There is one exception to this model of 'employment led' growth. This relates to some growth in Fenland which is primarily driven by people retiring to the area.

Cambridgeshire County Council's Research Group has analysed the Cambridgeshire past and forecast population and household growth into 'natural change' and 'migration' blocks, each covering 10 year periods. It is important to appreciate that this is merely illustrative. The 'natural change' model assumes nil net migration which assumes that net migration for every age group is zero. (An alternative approach could assume that net migration sums to zero, but could include net out-migration of 20-24 year olds, for example, exactly counterbalanced by net in-migration of 60 to 64 year olds; this would give a very different profile of change).

The 'natural change' model run includes assumptions about changing headship rates etc and so enables a forecast to be produced of households (and hence household change) associated with nil net migration.

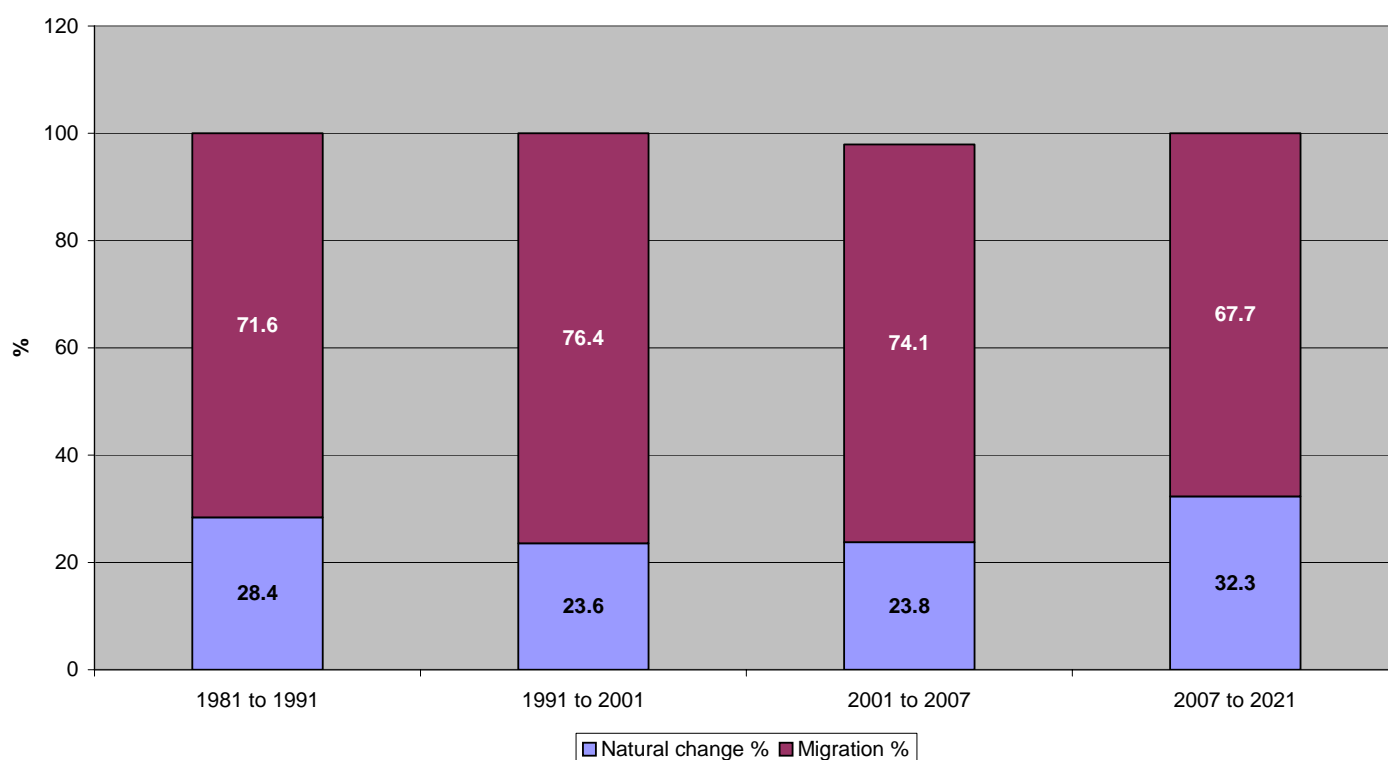
It should be noted that the 'migration' element of the model, constrained to the dwelling forecasts indicated by the East of England Plan, will also include any births and deaths occurring to the 'migrant' population once they have moved into Cambridgeshire. This assumption is held for ten years; at that point the total population (local plus migrant) becomes the new baseline – on which 'natural increase' is calculated for the following ten years. Table 17 and Figure 7 show the recent past and future forecast breakdown.

Table 17: Population ests & forecasts: 'natural' change & net migration, Cambridgeshire⁸

	Total change	Natural change	Migration	Natural change %	Migration %
1961 to 1971	67,650	31,100	36,550	46.0	54.0
1971 to 1981	45,550	15,350	30,200	33.7	66.3
1981 to 1991	52,000	14,750	37,250	28.4	71.6
1991 to 2001	60,300	14,250	46,050	23.6	76.4
2001 to 2007	33,150	8,560	24,590	23.8	74.1
2007 to 2021	78,030	25,200	52,840	32.3	67.7

Source: Cambridgeshire County Council Research Group

Fig 7: Past and forecast population change for Cambridgeshire, natural change & migration



Source: Cambridgeshire County Research Group

The forecasts indicate that in recent years 'natural change' has on average accounted for an 18,000 increase in the county's population each decade. This rate of growth changes only marginally in the forecast period. The bulk of the county's growth has been due to in-migration, (including any subsequent excess of births over deaths amongst that migrant population). In the 1991 to 2001 period this element is estimated to have amounted to 46,000 people. The population forecasts associated with the East of England Plan indicate that the 'net migration' element will increase to 77,430 between 2001 and 2021. It is possible to produce associated 'natural change' and 'net migrant' household forecasts alongside the population breakdown. This is shown in Table 18 and diagrammatically in Figure 8.

⁸ Rounded to the nearest 50. Totals may not add due to rounding.

Table 18: Forecast Population & Household Change – Natural and net Migration, Cambridgeshire⁹

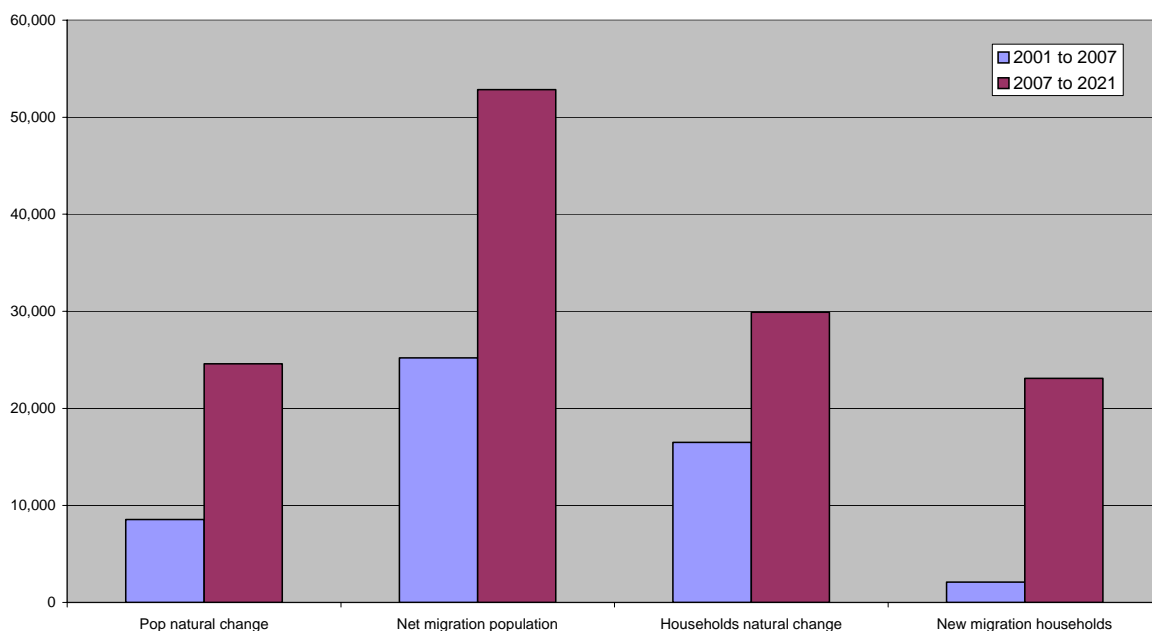
	Pop natural change	Net migration population	Households natural change	New migration households
2001 to 2007	8,560	25,200	16,500	2,100
2007 to 2021	24,590	52,840	29,900	23,100
Total	33,150	78,030	46,400	25,200
% of total	29.8%	70.2%	64.8%	35.2%

Source: Cambridgeshire County Council Research Group

It is immediately noticeable that the 'natural change' households constitute a higher share of the total change than does the 'natural change' population. This is because factors such as increasing 'headship rates' – whereby more small households are formed – are applied to the total population, not just the additional population. Without any population growth we would be forecasting a significant increase in the number of households. To be specific, in terms of households as opposed to population, 'natural change' includes changes to the structure of households within the existing population as well as the increase in the population.

Table 18 shows that whereas population 'natural change' accounts for only 30% of total population growth forecast in Cambridgeshire between 2001 and 2021, household 'natural change' accounts for a much higher 60% of the total forecast increase in the number of households. If this model holds true for the Cambridge sub-region as a whole, of the additional 87,480 households forecast 2001 to 2021, around 56,690 will be required for 'natural change' to accommodate household formation arising from the local population.

Fig 8: Forecast population and households: Components of change 2001 to 2021 – natural increase and net migration, Cambridgeshire only



Source: Cambridgeshire County Council Research Group

⁹ Rounded to the nearest 10. Totals may not add due to rounding.

10.10 Key Issues Arising

- Population growth is primarily generated by the success of the local economy and labour market growth, although there is modest net in-migration of retired people to Fenland.
- The framework for growth has been well-established in Cambridgeshire with the adoption of the Cambridgeshire & Peterborough Structure Plan (review 2003); these policies have been incorporated into the East of England Plan.
- The sub-region has experienced relatively high rates of population and household growth in the past and these rates are forecast to continue or be exceeded.
- 'Natural change' of population has historically been significantly lower than 'migrant change'.
- The growth in number of households has exceeded population growth as average household size has fallen.
- 'Natural change' in households 2001 to 2021 is forecast to account for around 65% of 'extra' households forecast – up to 56,690 in the sub-region.
- The high number of migrant households presents a real challenge in determining what an appropriate strategy should be for providing 'affordable' housing as a share of the total. Historically, migrant households have tended to live in the private sector in the main – as owner-occupiers, private renters or renting from employers.
- There is particularly high growth forecast for single person households – 63%, or 55,370.
- The age group to experience the highest rate of growth is the over 75s at – 66% over 20 years. The over 85 year old age group will increase even more – by a forecast 76% in 20 years.
- A major challenge to be faced is the increase in potentially vulnerable elderly couple and single person households – with a 'household' head aged 75 and over. This could amount to 5,530 additional couple households and 7,760 elderly single person households in Cambridgeshire. It could amount to 6,740 couple households and 9,540 elderly single person households across the sub-region.
- ® This analysis concentrates on private households, although there are key groups living in 'communal establishments', particularly students and especially in Cambridge. More work is required to identify their demand for housing and whether the institutions they attend are providing for such need.