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Chichester District LHRS: Appendix A - Demographic Scenarios Working Paper

Chichester District Council & South Downs National Park Authority

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Contents

1. Demographic Scenarios

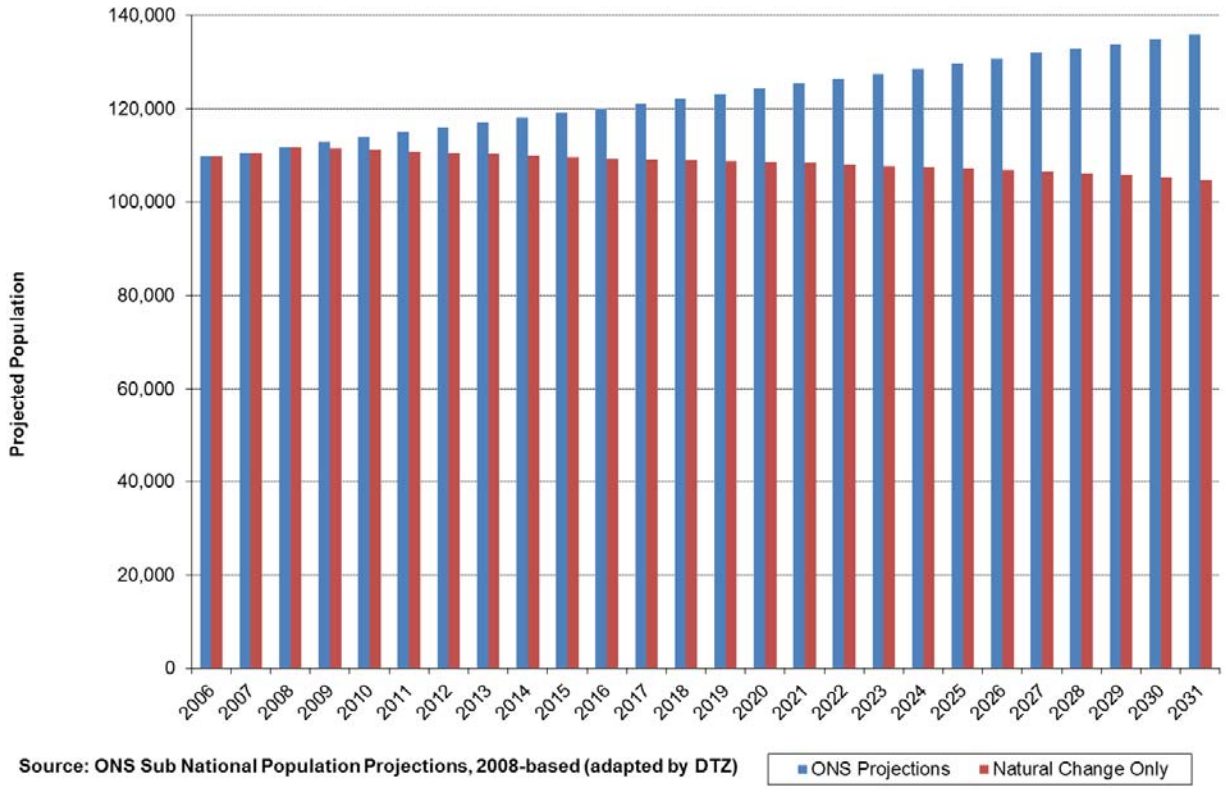
Introduction

The purpose of the demographic scenarios is to examine in broad terms how it is anticipated that the number of people who live in Chichester District will change over the period to 2031 and how the number of households will change over the same period. The starting point for scenario development is the latest Government projections for population and households. The baseline scenario therefore uses the ONS 2008 based population projections published in 2010 and the CLG household projections also published in 2010. This section provides further detail on the population projections, with the next section looking at household numbers and headship rates.

Baseline Scenario – Population

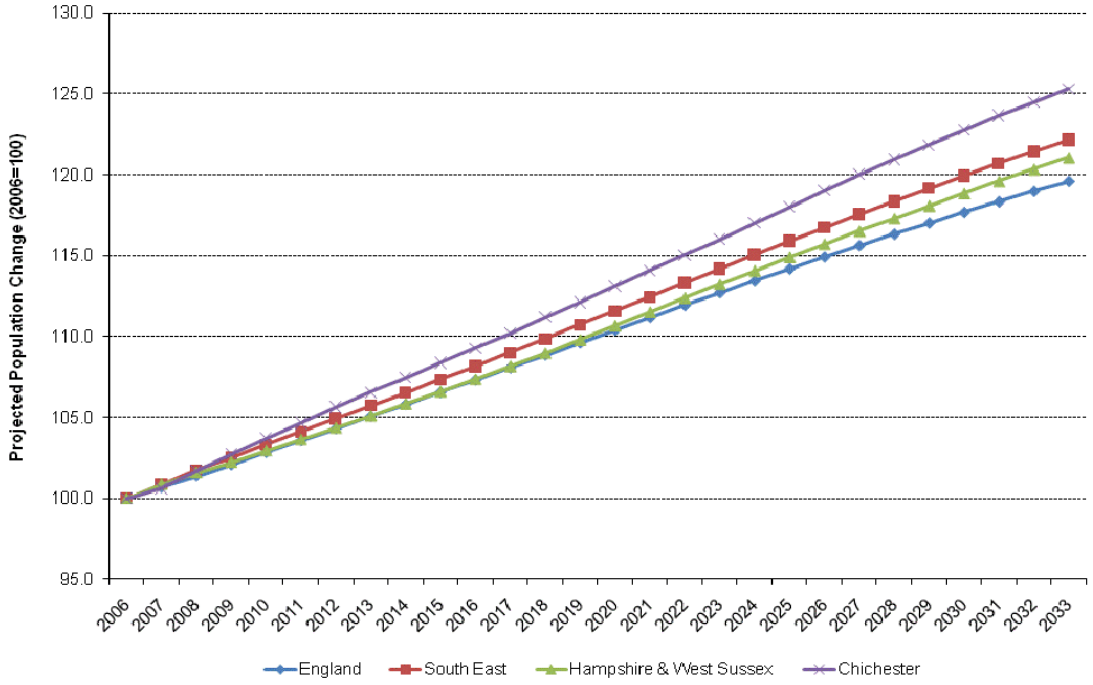
The ONS 2008 based population projections anticipate that the total population of Chichester District is expected to grow significantly (see Figure 1) – from just under 110,000 in 2006 to nearly 136,000 in 2031, an increase of 26,000 over the period 2006-31 or 20,900 over the period 2011-31 (increases of 24% and 18% respectively). This represents, on average, growth in the population of the District of around 1,000 people per annum (pa) over the period 2006-31. Figure 1 also highlights the impact of assessing how natural change impacts on the projected population (i.e. removing any net in-migration to Chichester District). This is discussed in further detail below under the heading of Natural Growth. As shown in Figure 2 the population of Chichester is expected to grow quicker than Hampshire and West Sussex as a whole, the South East region and England.

Figure 1: ONS Population Projections and Natural Growth Projections for Chichester District 2006-31



Source: ONS Sub National Population Projections, 2008-based (adapted by DTZ)

Figure 2: Indexed Population Growth for Chichester District, Hampshire & West Sussex, South East England and England (2006=100)



Source: ONS Sub National Population Projections, 2008-based

Examining the anticipated growth in population in Chichester District, the ONS 2008 projections show that growth is associated with a substantial rise in the number of retired people (aged 65 and over in the District). By 2031 this age cohort is expected to account for approaching one third (approximately 43,000) of Chichester District's total population.

Natural Growth and Migration in the Baseline Scenario

In terms of the components of the population growth associated with the baseline scenario (the ONS population projections) it is helpful at the outset to identify the extent to which growth is attributed to natural population growth (the excess of births over deaths) and migration. Figure 1 shows the projected change in Chichester District's population if only natural change is assumed, i.e. there is no net-in migration. In brief:

- Natural population growth in Chichester District is actually negative. That is, deaths exceed births. In the baseline scenario, the absence of any migration (i.e. population is influenced by natural change only) would lead to a decline in the population of 5,000 for the period 2006-31, equivalent to a fall of around 200 per year.

- It is therefore net in-migration that accounts for the entirety of population growth in Chichester District in the ONS projections. Some in-migration is required just to keep the population at its current level (circa 200 people per annum). In the ONS projections it is anticipated that there will be net in-migration of more than 30,000 people over the period 2006-31, equivalent to an increase in population of around 1,200 per annum.

- If one stripped out that element of net in-migration necessary to keep the population static (i.e. 5,000 people, taking into account the first bullet point above) then the additional element of in-migration

that leads to population growth is more than 25,000 people over the period 2006-31, equivalent to an increase in population of around 1,000 people per annum.

Population Scenarios

A number of scenarios have been run, based on changing key variables that underpin the ONS population projections. Each scenario is useful in assessing how sensitive the baseline projections are to certain key components in the projection methodology. The variables tested are listed below:

- Alternative levels of net in-migration flows
- Alternative levels of fertility (birth) rates
- Alternative levels of mortality (death) rates
- Alternative levels of household formation.

For population numbers, seven scenarios have been developed and these are summarised below:

Alternative levels of net in-migration flows

Future levels of net migration in Chichester District will have a significant impact on the projections for future population and households in the area. Migration is driven by a range of factors, including employment opportunities and the District's quality of life offer.

The Baseline ONS projections are based on net in-migration of around 1,200 people pa 2006-31. This level of in-migration looks potentially unrealistic (too high) in the light of the levels of migration recorded in recent years; and a number of factors that are likely to affect international migration patterns. These issues are as follows:

- Lower job growth nationally and locally, which is likely to characterise the next 10 years at least, is likely to reduce employment led migration
- The UK has become a less attractive place to work for EU migrants who want to remit money to the eurozone or to save for a return to live in the eurozone because of the devaluation of the pound
- A number of EU countries, notably Germany and France, now have to open their labour markets to citizens of the A8 countries having maintained controls on immigration from these nations.
- The economic performance of certain key countries like Poland is anticipated to be relatively strong compared to the UK, which reduces the desire to work elsewhere in the EU.
- There is therefore an expectation that net migration inflows from eastern Europe will fall significantly. The current government is clearly not seeking to replace such falls in migration with increased migration from outside the EU.
- The possibility must exist however that EU citizens from countries within the EU facing even tougher challenges than the UK – Ireland, Spain, Greece, and Portugal – may look for work in the UK.

- However Oxford Economics, one of the UK's leading forecasting houses has indicated that it expects net in-migration to the UK to settle at 90,000 per annum from 2015, compared to official projections of 180,000[1], a halving of immigration at the national level.

In the light of these considerations DTZ has examined a variety of scenarios involving lower levels of net in-migration to Chichester District than assumed in the ONS projections.

Variant 1 Scenario – Migration A: Trend-based migration since 2006/2007

If net migration estimates are taken for 2006/2007, 2007/2008 and 2008/2009, the average for these three periods is for net growth in the region of 1,000 people. The Variant 1 scenario tests the impact of net migration of 1,000 people per annum to 2031 (rather than around 1,200 per year in ONS projections). It is based on the hypothesis that if job growth is less than anticipated in future and the housing market is more subdued, net migration will also be lower.

Variant 2 Scenario – Migration B: Trend-based migration since 2006/2007 then returning to ONS projections

In order to test a scenario between the baseline ONS projections and the lower migration levels of Variant 1, this scenario assumes that migration is reduced to 1,000 per year (in line with Variant 1) up to 2020, but then returns to ONS projected levels thereafter (in line with the base case). It tests a situation in line with the Government objectives for longer term economic recovery.

Variant 3 Scenario – Migration C: Trend-based migration since 2008/2009

The Variant 3 scenario looks at the possibility that net migration would be significantly lower than either that embedded in the Base Scenario (ONS) or the Variant 1 scenario. It assumes that net migration remains at the 2008/2009 level of 600 people per year – reflecting lower levels of job growth and fewer elderly people being able to afford moving to the area when they retire because of the recession. After 2020, it is assumed annual levels increase to 1,000 (in line with Variant the 1 scenario), because of a recovery in job growth.

Alternative levels of Natural Population Growth

As noted previously, without migration the population of Chichester District would be expected to decline. While birth and death rates do not generally change rapidly, it is worth exploring if modest changes in either as a consequence of the decade of austerity would materially affect the population and household projections. DTZ has therefore modelled two scenarios for both birth rates and death rates.

With regards to birth rates the most likely alternative scenario to ONS projections is that birth rates might fall slightly. The rationale for this is that with constrained household budgets and people moving into owner occupation at a later age, couples delay becoming parents and/or have fewer children. It is difficult to predict future fertility rates because they tend to vary year on year at a District level.

However, ONS has noted that at a national level there was a small decline in fertility across England and Wales from 2008-2009. Fertility for older mothers (aged 35 and over) actually increased, indicating that people are delaying having children. In 2009 there were just over 1,100 live births in Chichester and the ONS population projections generally use this figure up until 2031.

With regards to death rates, the general trend over the past decade is the national projections have under-predicted the increase in longevity; that is, while projections have assumed that people will on average live

[1] The UK Long-Term Economic Outlook, Oxford Economics, April 2010

longer, in fact people have been living longer than anticipated. In view of this we examine two scenarios that are based on people living longer than assumed in the ONS projections.

Variant 4 Scenario – Fertility A: Lower Birth Rates

In order to test the sensitivity of fertility levels and their impact on overall population numbers, the Variant 4 scenario assesses the impact of a 5% drop in fertility.

Variant 5 Scenario – Fertility B: Lower Birth Rates

The second reduced fertility scenario is based on a 10% fall in births, which would reflect more people delaying having children until a later age.

Variant 6 Scenario – Mortality A: Increased Longevity

This scenario assumes that life expectancy increases in the long term, in line with recent trends across England and the South East. Due to the relatively high number of deaths in the ONS population projections, the level of natural change in Chichester District is actually negative – i.e. there are more deaths than births. This scenario looks at what would be the implication if deaths matched births, so there is zero natural change, through reduced death rates – the level of decline varies up to 2031, but is significant in each year and ranges from 15% to more than 30%.

Variant 7 Scenario – Mortality B: Increased Longevity

The seventh variant looks at a second increased longevity scenario based on a 10% fall in deaths, reducing the rate of decline as a result of negative natural change.

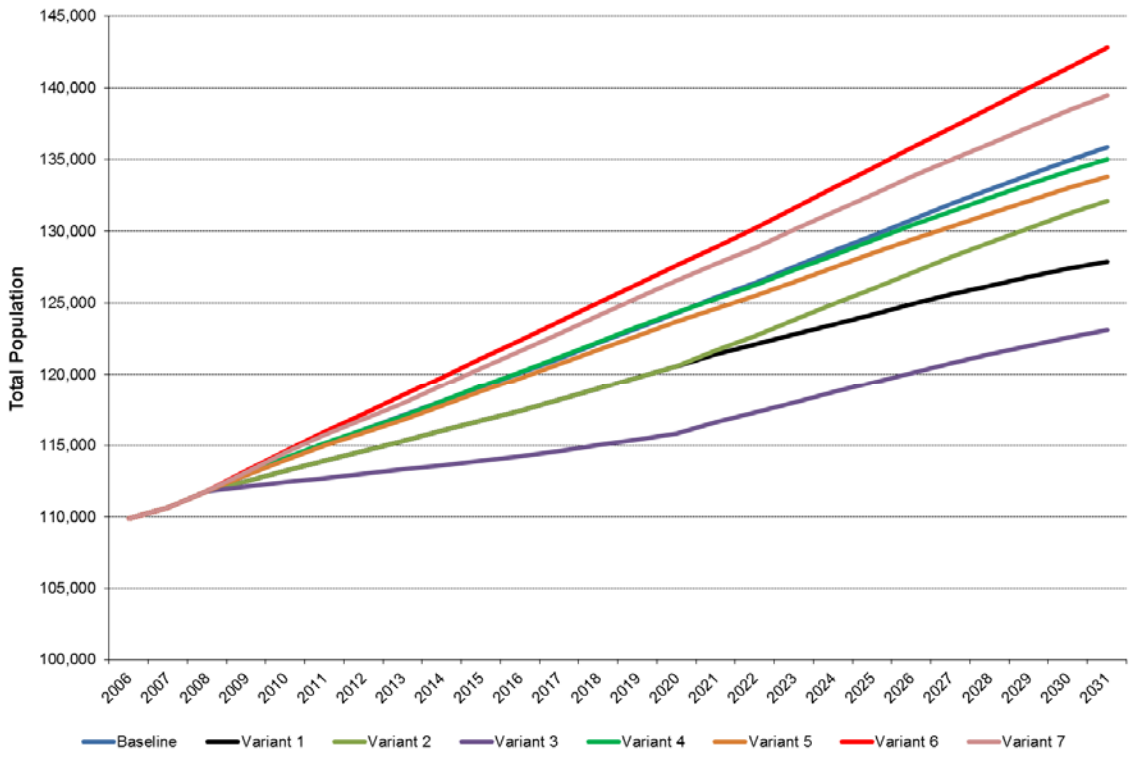
Outcomes from the Population Projections Scenarios

Figure 3 summarises the projected population change from 2006-2031 under each of the scenarios, including the baseline scenario for comparison purposes. Figure 4 then highlights the projections year on year.

Figure 3: Projected Population Change in Chichester District, 2006-2031

Scenario	Description	Population		Change	
		2006	2031	No.	%
Baseline	ONS projections	109,900	135,900	26,000	23.7%
Variant 1	Net migration at 1,000 per year	109,900	127,900	18,000	16.4%
Variant 2	Net migration of 1,000 per year up to 2020, ONS projections thereafter	109,900	132,100	22,200	20.2%
Variant 3	Net migration of 600 per year up to 2020, rising to 1,000 per year thereafter	109,900	123,100	13,200	12.0%
Variant 4	5% drop in fertility	109,900	135,000	25,100	22.8%
Variant 5	10% drop in fertility	109,900	133,800	23,900	21.7%
Variant 6	Deaths in line with births (zero natural change)	109,900	142,800	32,900	29.9%
Variant 7	10% drop in deaths	109,900	139,500	29,600	26.9%

Figure 4: Projected Year on Year Population Change in Chichester District, 2006-2031



Analysing Figures 2 and 3, the projected change in Chichester District's population from 2006-2031 varies from an increase of 13,200 (Variant 3, Net migration of 600 per year up to 2020, rising to 1,000 per year thereafter) to a rise of more than 30,000 (Variant 6, zero natural change), giving a projected population of nearly 143,000 in 2031. This would give 6,900 more people (5% higher) than the baseline scenario.

Modelling Demographics to the Sub-District Level

In order to model the projections down to a sub-district level, the population shares of the North and South of the District have been estimated up to 2031 by assuming a linear trend in levels of change. Full details on this methodology are provided in Appendix 1, together with a map showing how North of the District and South of the District have been defined. The main point to note is that the method expects the past pattern of housing provision in the North of the District and South of the District to continue into the future, so the proportion of the population and households living in the South can be expected to continue to increase in the long term.

It is important to be aware, however, that the distribution of the population of the District between North and South will in part be a reflection of decisions about where new housing is developed. The division of anticipated household growth between the North and South is therefore only indicative of what will happen if past trends of housing provision are continued. Policy makers may choose to move away from past patterns of new housing provision across the District and this would still meet requirements at the District level.

Figure 5 summarises the projected population change in the North and South of Chichester District from 2006-2031 under each of the scenarios, based on the projected shares highlighted above. Figure 6 then highlights projected levels of change between the North and South of the District for comparison purposes.

Figure 5: Projected Population Change in North of the District and South of the District, 2006-2031

	North of the District				South of the District			
	Population		Change		Population		Change	
Scenario	2006	2031	No.	%	2006	2031	No.	%
Baseline	39,800	43,800	4,000	10.0%	70,100	92,100	22,000	31.4%
Variant 1	39,800	41,200	1,400	3.5%	70,100	86,700	16,600	23.7%
Variant 2	39,800	42,500	2,700	6.8%	70,100	89,600	19,500	27.8%
Variant 3	39,800	39,600	-200	-0.5%	70,100	83,500	13,400	19.1%
Variant 4	39,800	43,500	3,700	9.3%	70,100	91,600	21,500	30.7%
Variant 5	39,800	43,100	3,300	8.3%	70,100	90,700	20,600	29.4%
Variant 6	39,800	46,000	6,200	15.6%	70,100	96,800	26,700	38.1%
Variant 7	39,800	44,900	5,100	12.8%	70,100	94,500	24,400	34.8%

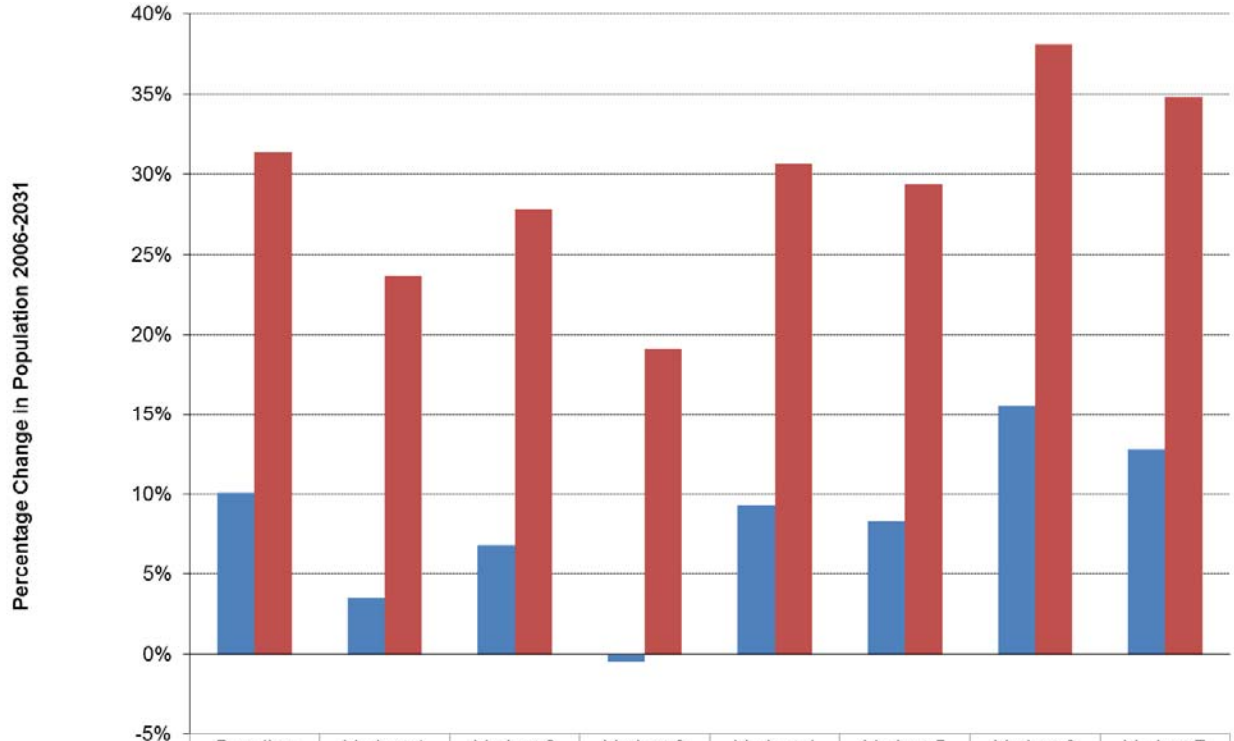
It is important to highlight that under Variant 3 (net migration of 600 per year up to 2020 and 1,000 per year thereafter), even though Chichester District as a whole experiences growth, the North of the District is actually projected to see a slight drop in population (200 people, or a decline of 0.5%). There are two key reasons for this:

1. Firstly, the North of the District's share of the District's total population is forecast to go down from 36.2% in 2006 to 32.2% in 2031, which obviously impacts on total numbers in the sub-district (see Appendix 1 for further details on the method used to forecast future population shares in North of the District and South of the District).

2. Secondly, Variant 3 assumes lower levels of migration than Variants 1 and 2 and these levels of in-migration are not enough to offset the declining share of the North of the District's population.

Given the increasing share of population in the southern part of the District, the South of the District actually experiences growth under each of the scenarios. The projected population change in the South of the District between 2006 and 2031 ranges from an increase of 19.1% (13,400 people under Variant 3 – net migration of 600 per year up to 2020 and 1,000 per year thereafter) right up to growth of more than 38.1% (26,700 people under Variant 6 – zero natural change).

Figure 6: Estimated Change in Population, North and South of the District – 2006-2031



	Baseline	Variant 1	Variant 2	Variant 3	Variant 4	Variant 5	Variant 6	Variant 7
North Chichester	10.0%	3.5%	6.8%	-0.5%	9.3%	8.3%	15.6%	12.8%
South Chichester	31.4%	23.7%	27.8%	19.1%	30.7%	29.4%	38.1%	34.8%

Outcomes from Running Multiple Variants

Figure 3 only shows the outcome of running each variant individually. Figure 7 presents the findings from running more than one variable at a time. It can be seen that the baseline scenario is towards the upper end of the scale in terms of long term population growth. The highest increase of 30% (nearly 33,000 people) comes when there is zero natural change (variants 4 & 6, 5 & 6 and 6).

Figure 7: Projected Population Change in Chichester District, 2006-2031 – Multiple Variants

	Population		Change	
Scenario(s)	**2006**	**2031**	**No.**	**%**
Variants 4 & 6	109,900	142,800	32,900	30%
Variants 5 & 6	109,900	142,800	32,900	30%
Variant 6	109,900	142,800	32,900	30%
Variant 7	109,900	139,460	29,560	27%
Variants 2 & 6	109,900	139,000	29,100	26%
Variants 2, 4 & 6	109,900	139,000	29,100	26%
Variants 2, 5 & 6	109,900	139,000	29,100	26%
Variants 4 & 7	109,900	138,205	28,305	26%
Variants 5 & 7	109,900	136,950	27,050	25%
Baseline	**109,900**	**135,900**	**26,000**	**24%**
Variants 2 & 7	109,900	135,660	25,760	23%
Variant 4	109,900	135,045	25,145	23%
Variants 1 & 6	109,900	134,800	24,900	23%
Variants 1, 4 & 6	109,900	134,800	24,900	23%
Variants 1, 5 & 6	109,900	134,800	24,900	23%
Variants 2, 4 & 7	109,900	134,405	24,505	22%
Variant 5	109,900	133,790	23,890	22%
Variants 2, 5 & 7	109,900	133,150	23,250	21%
Variant 2	109,900	132,100	22,200	20%
Variants 1 & 7	109,900	131,460	21,560	20%
Variants 2 & 4	109,900	131,245	21,345	19%
Variants 1, 4 & 7	109,900	130,205	20,305	18%
Variants 3 & 6	109,900	130,000	20,100	18%
Variants 3, 4 & 6	109,900	130,000	20,100	18%
Variants 3, 5 & 6	109,900	130,000	20,100	18%
Variants 2 & 5	109,900	129,990	20,090	18%
Variants 1, 5 & 7	109,900	128,950	19,050	17%
Variant 1	109,900	127,900	18,000	16%
Variants 1 & 4	109,900	127,045	17,145	16%
Variants 3 & 7	109,900	126,660	16,760	15%
Variants 1 & 5	109,900	125,790	15,890	14%
Variants 3, 4 & 7	109,900	125,405	15,505	14%
Variants 3, 5 & 7	109,900	124,150	14,250	13%
Variant 3	109,900	123,100	13,200	12%
Variants 3 & 4	109,900	122,245	12,345	11%
Variants 3 & 5	109,900	120,990	11,090	10%

2. Household Projections and Headship Rates

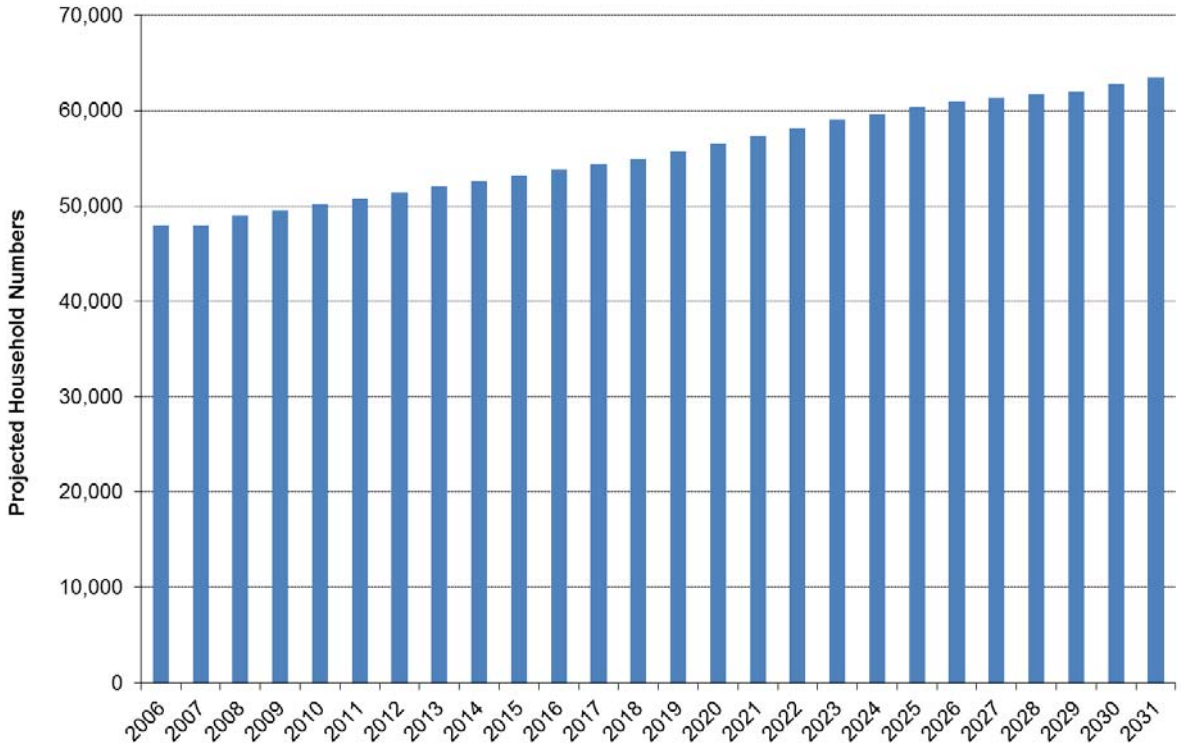
Introduction

Having estimated the size of Chichester District's population under a number of different scenarios, the next step is to take the information and convert it into estimates of the number of households in the District. Prior to this, the CLG projections for household numbers in Chichester District are analysed.

CLG projections

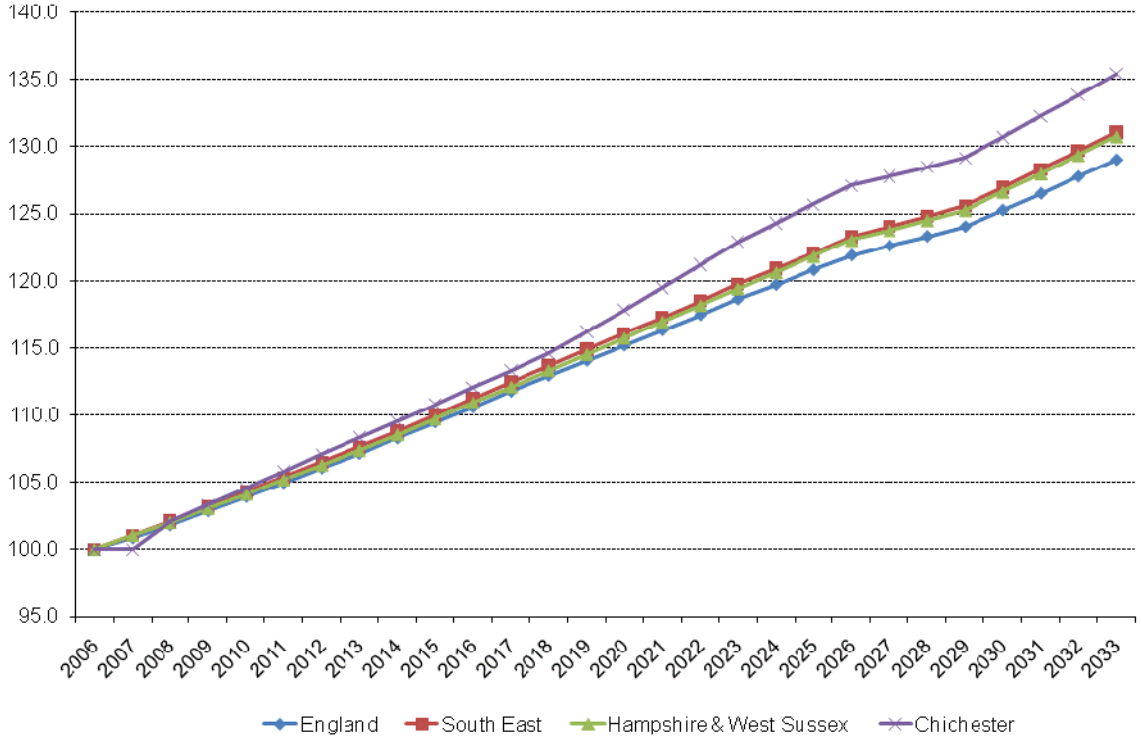
The CLG household projections anticipate a substantial percentage growth in households in Chichester District, increasing by 15,500 over the period 2006-31 (+32%) or 12,700 over the period 2011-31(+25%), meaning that over the period 2006 to 2031, the number of households will have increased from approximately 48,000 to 63,500 (see Figure 8). Over the entire period 2006-31 this implies an average annual increase of 620 households across the District. This level of growth expressed in percentage terms is higher than in Hampshire and West Sussex as a whole, the South East region and England (see Figure 9).

Figure 8: CLG Household Projections for Chichester District, 2006-31



Source: CLG, Household Projections by District - 1991-2033

Figure 9: Indexed Household Growth for Chichester District, Hampshire & West Sussex, South East England and England (2006=100)



Source: CLG, Household Projections by District - 1991-2033

Population Projections Scenarios Translated into Household Numbers

The population projections are translated into estimated household numbers by looking at headship rates (the number of people who are counted as heads of households, or alternatively the Household Reference Person – HRP). Figure 10 shows headships rates in Chichester District based on data from the 2001 Census and it can be seen that they increase from age 25 onwards up to age 59, before a slight drop between the ages of 60 and 64. Thereafter, they fluctuate between 50.0% and 78.0%, with the overall headship rate in Chichester District standing at 43.0%). This means that 43% of the population are heads of households or that the average household size is 2.33 persons per dwelling.

Figure 10: Headships Rates in Chichester District, 2001

Age Group	Population	HRPs	Headship Rate
19 and under	23,713	121	0.5%
20 to 24	5,083	945	18.6%
25 to 29	4,825	1,853	38.4%
30 to 34	5,923	2,869	48.4%
35 to 39	7,179	3,795	52.9%
40 to 44	7,011	3,844	54.8%
45 to 49	6,864	3,948	57.5%
50 to 54	7,918	4,550	57.5%
55 to 59	7,129	4,275	60.0%
60 to 64	6,290	3,688	58.6%
65 to 69	6,233	3,806	61.1%
70 to 74	5,944	4,618	77.7%
75 to 79	5,156	2,636	51.1%
80 to 84	3,657	2,573	70.4%
85 to 89	2,287	1,602	70.0%
90 and over	1,234	682	55.3%
Total	**106,446**	**45,805**	**43.0%**

Source: 2001 Census

Household Numbers – Baseline Scenario

Applying the headship rate of 43.0% in 2001 to Chichester District's population in 2006 of 109,900 gives an estimated number of households of 47,300. This is below the 2006 estimate from the CLG household projections of around 48,000. This indicates that headship rates since 2001 have been increasing and in 2006 they were 43.7%. Taking the ONS population projections (the baseline scenario discussed in the previous section) and the CLG household projections, approximate headship rates can be estimated year-on-year from 2006-2031 to arrive at a baseline estimate for household numbers and Figure 11 highlights these. It shows a trend towards increasing headship rates in the long term.

Figure 11: Headships Rates in Chichester District, 2006-2031

Year	Population (Baseline Scenario)	CLG – Projected Household Numbers	Headship Rate
2006	109,900	48,000	43.7%
2007	110,600	48,000	43.4%
2008	111,800	49,000	43.8%
2009	112,900	49,600	43.9%
2010	114,000	50,200	44.0%
2011	115,000	50,800	44.2%
2012	116,100	51,400	44.3%
2013	117,100	52,000	44.4%
2014	118,100	52,600	44.5%
2015	119,100	53,200	44.7%
2016	120,100	53,800	44.8%
2017	121,100	54,400	44.9%
2018	122,200	55,000	45.0%
2019	123,200	55,800	45.3%
2020	124,300	56,600	45.5%
2021	125,400	57,400	45.7%
2022	126,400	58,200	46.0%
2023	127,500	59,000	46.3%
2024	128,600	59,700	46.4%
2025	129,700	60,300	46.5%
2026	130,800	61,000	46.6%
2027	131,900	61,300	46.5%
2028	132,900	61,700	46.4%
2029	133,900	62,000	46.3%
2030	134,900	62,700	46.5%
2031	135,900	63,500	46.7%

Source: ONS Population Projections and CLG Household Projections, adapted by DTZ

Figure 12 summarises the projected change in household numbers from 2006-2031 for the whole of Chichester District, based on the headship rates outlined in Figure 11. Figure 13 then provides the data broken down into the North of the District and Figure 14 shows the data for the South of the District.

Figure 12: Estimated Change in Household Numbers in Chichester District – Baseline Scenario, 2006-2031

Population Scenario	Households, 2006	Households, 2031	Change, 2006-2031		Average Annual Change, 2006-2031	
			No.	%	No.	%
Baseline	48,000	63,500	15,500	32.3%	620	1.1%
Variant 1	48,000	59,700	11,700	24.4%	468	0.9%
Variant 2	48,000	61,700	13,700	28.5%	548	1.0%
Variant 3	48,000	57,500	9,500	19.8%	380	0.7%
Variant 4	48,000	63,100	15,100	31.5%	604	1.1%
Variant 5	48,000	62,500	14,500	30.2%	580	1.1%
Variant 6	48,000	66,700	18,700	39.0%	748	1.3%
Variant 7	48,000	65,100	17,100	35.6%	684	1.2%

Figure 13: Estimated Change in Household Numbers in North of the District– Baseline Scenario, 2006-2031

Population Scenario	Households, 2006	Households, 2031	Change, 2006-2031		Average Annual Change, 2006-2031	
			No.	%	No.	%
Baseline	17,400	20,400	3,000	17.2%	120	0.6%
Variant 1	17,400	19,200	1,800	10.3%	72	0.4%
Variant 2	17,400	19,900	2,500	14.4%	100	0.5%
Variant 3	17,400	18,500	1,100	6.3%	44	0.2%
Variant 4	17,400	20,300	2,900	16.7%	116	0.6%
Variant 5	17,400	20,100	2,700	15.5%	108	0.6%
Variant 6	17,400	21,500	4,100	23.6%	164	0.8%
Variant 7	17,400	21,000	3,600	20.7%	144	0.8%

Figure 14: Estimated Change in Household Numbers in South of the District – Baseline Scenario, 2006-2031

Population Scenario	Households, 2006	Households, 2031	Change, 2006-2031		Average Annual Change, 2006-2031	
			No.	%	No.	%
Baseline	30,600	43,000	12,400	40.5%	496	1.4%
Variant 1	30,600	40,500	9,900	32.4%	396	1.1%
Variant 2	30,600	41,800	11,200	36.6%	448	1.3%
Variant 3	30,600	39,000	8,400	27.5%	336	1.0%
Variant 4	30,600	42,800	12,200	39.9%	488	1.4%
Variant 5	30,600	42,400	11,800	38.6%	472	1.3%
Variant 6	30,600	45,200	14,600	47.7%	584	1.6%
Variant 7	30,600	44,200	13,600	44.4%	544	1.5%

Summary points to note from Figures 12-14 are:

- The estimated change in household numbers for Chichester District as a whole from 2006-2031 under the baseline household scenario varies from an increase of 9,500 (Variant 3, net migration of 600 per year up to 2020 and 1,000 per year thereafter) right up to an increase of just under 19,000 (Variant 6,

zero natural change). In average annual terms this is an increase of between 380 and 750 households pa.

- Baseline household projections prepared by CLG and linked to the ONS population projections indicate an increase in the number of households between 2006 and 2031 of 15,500, or an average of 620 households pa.

- The estimated change in household numbers from 2006-2031 in the South of the District varies from just under 8,500 up to a high of over 14,500. In average annual terms this is an increase of between 340 and 585 households pa.

- Household growth in the North of the District is lower, which can be accounted for by its declining share of the overall District population. The lowest change sees a projected increase of 1,100 in the number of households, while the highest would see more than 4,000 new households created up to 2031. In average annual terms this is an increase of between 45 and 165 households pa.

Household Numbers – Variant Scenarios

It is worth noting that the 2008 based household projections assume that the rates of decline in average household size in England have been lower than anticipated in the 2006 based household projections. It might be a reasonable assumption that, while over the long term average household size will continue to fall, the pace of decline may fall; or that the economic challenges of the next decade may halt the decline in average household size (rise in headship rates).

The specific reasons why the trend of rising headship rates/falling household size could be arrested or stalled for a while include:

- Slow economic growth, falling real household incomes or slow growth in household incomes, may encourage people to economise on housing costs by greater sharing.
- Rising student fees and lack of employment for young people, graduates and non graduates, combined with rising costs of renting may encourage increasing numbers of young adults to stay in the family home.
- There is growing reliance on the private rented sector as a consequence of difficulty in accessing mortgages, and this may encourage people to stay in shared accommodation for longer than they would otherwise have done.
- Likewise Housing Benefit changes which cap benefits according to the number of people living in a property, may encourage those low income households that want to continue to live in larger properties to persuade family members to live at home.
- Housing Benefit changes for those aged 25-35 are also likely to encourage greater use of shared accommodation.

Therefore in addition to the baseline trend in headship rates picked up in the CLG household projections, which have been applied to the range of different population projections (Variants 1-7), two additional scenarios have been examined:

- **Headship Rate Variant 1:** This assumes that headship rates stabilise at 43.7% and remain steady up to 2031.

- **Headship Rate Variant 2:** Headship rates remain at 43.7% until 2020. They then revert back to the trends in the CLG household projections. However, rather than pick up the CLG data from 2021 the

headship rate from 2011 onwards is used as a starting point in order to provide a more gradual change in the headship rate.

Figures 15 and 16 summarise the projected change in household numbers from 2006-2031 for each headship rate scenario for the whole of Chichester District. Figures 17 and 18 provide the data broken down for the North of the District, while Figures 19 and 20 show the corresponding data for the South of the District.

Figure 15: Estimated Change in Household Numbers in Chichester District with Headship Variants 1 and 2, 2006-2031

		Headship Rate Variant 1			Headship Rate Variant 2		
Population Scenario	Households, 2006	Households, 2031	Change, 2006-2031 No.	Change, 2006-2031 %	Households, 2031	Change, 2006-2031 No.	Change, 2006-2031 %
Baseline	48,000	59,400	11,400	23.8%	62,200	14,200	29.6%
Variant 1	48,000	55,900	7,900	16.5%	58,500	10,500	21.9%
Variant 2	48,000	57,700	9,700	20.2%	60,400	12,400	25.8%
Variant 3	48,000	53,800	5,800	12.1%	56,300	8,300	17.3%
Variant 4	48,000	59,000	11,000	22.9%	61,800	13,800	28.8%
Variant 5	48,000	58,400	10,400	21.7%	61,200	13,200	27.5%
Variant 6	48,000	62,400	14,400	30.0%	65,300	17,300	36.0%
Variant 7	48,000	60,900	12,900	26.9%	63,800	15,800	32.9%

Figure 16: Estimated Average Annual Change in Household Numbers in Chichester District with Headship Variants 1 and 2, 2006-2031

		Headship Rate Variant 1			Headship Rate Variant 2		
Population Scenario	Households, 2006	Households, 2031	Average Annual Change, 2006-2031 No.	Average Annual Change, 2006-2031 %	Households, 2031	Average Annual Change, 2006-2031 No.	Average Annual Change, 2006-2031 %
Baseline	48,000	59,400	456	0.9%	62,200	568	1.0%
Variant 1	48,000	55,900	316	0.6%	58,500	420	0.8%
Variant 2	48,000	57,700	388	0.7%	60,400	496	0.9%
Variant 3	48,000	53,800	232	0.5%	56,300	332	0.6%
Variant 4	48,000	59,000	440	0.8%	61,800	552	1.0%
Variant 5	48,000	58,400	416	0.8%	61,200	528	1.0%
Variant 6	48,000	62,400	576	1.1%	65,300	692	1.2%
Variant 7	48,000	60,900	516	1.0%	63,800	632	1.1%

Figure 17: Estimated Change in Household Numbers in the North of the District with Headship Variants 1 and 2, 2006-2031

		Headship Rate Variant 1			Headship Rate Variant 2		
Population Scenario	Households, 2006	Households, 2031	Change, 2006-2031 No.	Change, 2006-2031 %	Households, 2031	Change, 2006-2031 No.	Change, 2006-2031 %
Baseline	17,400	19,100	1,700	9.8%	20,000	2,600	14.9%
Variant 1	17,400	18,000	600	3.4%	18,800	1,400	8.0%
Variant 2	17,400	18,600	1,200	6.9%	19,400	2,000	11.5%
Variant 3	17,400	17,300	-100	-0.6%	18,100	700	4.0%
Variant 4	17,400	19,000	1,600	9.2%	19,900	2,500	14.4%
Variant 5	17,400	18,800	1,400	8.0%	19,700	2,300	13.2%
Variant 6	17,400	20,100	2,700	15.5%	21,000	3,600	20.7%
Variant 7	17,400	19,600	2,200	12.6%	20,500	3,100	17.8%

Figure 18: Estimated Average Annual Change in Household Numbers in the North of the District with Headship Variants 1 and 2, 2006-2031

Population Scenario	Households, 2006	Headship Rate Variant 1 Households, 2031	Average Annual Change, 2006-2031 No.	%	Headship Rate Variant 2 Households, 2031	Average Annual Change, 2006-2031 No.	%
Baseline	17,400	19,100	68	0.4%	20,000	104	0.6%
Variant 1	17,400	18,000	24	0.1%	18,800	56	0.3%
Variant 2	17,400	18,600	48	0.3%	19,400	84	0.5%
Variant 3	17,400	17,300	-4	0.0%	18,100	28	0.2%
Variant 4	17,400	19,000	64	0.4%	19,900	100	0.5%
Variant 5	17,400	18,800	56	0.3%	19,700	92	0.5%
Variant 6	17,400	20,100	108	0.6%	21,000	144	0.8%
Variant 7	17,400	19,600	88	0.5%	20,500	124	0.7%

Figure 19: Estimated Change in Household Numbers in the South of the District with Headship Variants 1 and 2, 2006-2031

Population Scenario	Households, 2006	Headship Rate Variant 1 Households, 2031	Change, 2006-2031 No.	%	Headship Rate Variant 2 Households, 2031	Change, 2006-2031 No.	%
Baseline	30,600	40,200	9,600	31.4%	42,100	11,500	37.6%
Variant 1	30,600	37,900	7,300	23.9%	39,700	9,100	29.7%
Variant 2	30,600	39,100	8,500	27.8%	41,000	10,400	34.0%
Variant 3	30,600	36,500	5,900	19.3%	38,200	7,600	24.8%
Variant 4	30,600	40,000	9,400	30.7%	41,900	11,300	36.9%
Variant 5	30,600	39,600	9,000	29.4%	41,500	10,900	35.6%
Variant 6	30,600	42,300	11,700	38.2%	44,300	13,700	44.8%
Variant 7	30,600	41,300	10,700	35.0%	43,200	12,600	41.2%

Figure 20: Estimated Average Annual Change in Household Numbers in the South of the District with Headship Variants 1 and 2, 2006-2031

Population Scenario	Households, 2006	Headship Rate Variant 1 Households, 2031	Average Annual Change, 2006-2031 No.	%	Headship Rate Variant 2 Households, 2031	Average Annual Change, 2006-2031 No.	%
Baseline	30,600	40,200	384	1.1%	42,100	460	1.3%
Variant 1	30,600	37,900	292	0.9%	39,700	364	1.0%
Variant 2	30,600	39,100	340	1.0%	41,000	416	1.2%
Variant 3	30,600	36,500	236	0.7%	38,200	304	0.9%
Variant 4	30,600	40,000	376	1.1%	41,900	452	1.3%
Variant 5	30,600	39,600	360	1.0%	41,500	436	1.2%
Variant 6	30,600	42,300	468	1.3%	44,300	548	1.5%
Variant 7	30,600	41,300	428	1.2%	43,200	508	1.4%

Taking into account the lower headship rates assumed under Variants 1 and 2, the resulting household projections are also lower when compared to the baseline scenario. Summary points to note from Figures 15-20 are:

- Under the headship rate Variant 1 scenario (rates remain steady at 43.7%), the estimated change in household numbers for Chichester District as a whole from 2006-2031 varies from an increase of 5,800 (Variant 3, net migration of 600 per year up to 2020 and 1,000 per year thereafter) right up to an increase

of over 14,000 (Variant 6, zero natural change). In average annual terms this is an increase of between 230 and 575 households pa.

- For the headship rate Variant 2 scenario (rates increase post 2020) the estimated change in household numbers for Chichester District as a whole from 2006-2031 varies from an increase of 8,300 (Variant 3, net migration of 600 per year up to 2020 and 1,000 per year thereafter) right up to an increase of more than 17,000 (Variant 6, zero natural change). In average annual terms this is an increase of between 330 and 690 households pa.

- Under the headship rate Variant 1 scenario, estimated change in household numbers for the South of the District from 2006-2031 varies from an increase of around 5,900 (Variant 3, net migration of 600 per year up to 2020 and 1,000 per year thereafter) right up to an increase of just under 12,000 (Variant 6, zero natural change). In average annual terms this is an increase of between 235 and 470 households pa.

- For the headship rate Variant 2 scenario (rates increase post 2020) the estimated change in household numbers for the South of the District varies from an increase of 7,600 (Variant 3) right up to an increase of 13,700 (Variant 6). In average annual terms this represents an increase of between 305 and 550 households pa.

- Reflecting its declining share of population, household growth in the North of the District is not as strong. Under the headship Variant 1 scenario, the estimated change in household numbers varies from remaining virtually static (Variant 3) up to an increase of around 2,700 (Variant 6). The latter outcome would represent an average annual increase of just under 110 households pa.

- For the headship rate Variant 2 scenario (rates increase post 2020) the estimated change in household numbers for the North of the District varies from an increase of 700 (Variant 3) right up to an increase of more than 3,600 (Variant 6). In average annual terms this represents an increase of between 30 and 145 households pa.

3. Summary and Conclusions

Summary

This working paper presents analysis of a range of demographic scenarios and their potential implications for the need for provision of new housing to match anticipated household growth within Chichester District over the period 2006-31.

Baseline household projections prepared by CLG and linked to the ONS population projections indicate an increase in the number of households between 2006 and 2031 of 15,500, or 620 households pa.

However DTZ has examined a range of alternative scenarios for population growth and household growth. A total of seven population scenarios have been examined, along with an analysis of a net zero migration scenario; and linked to these two scenarios in addition to the baseline have been examined for household formation rates.

In summary the different population scenarios examined are:

- Three scenarios examining lower levels of net in-migration than contained in the baseline ONS projections
- Two scenarios examining the impact of lower birth rates
- Two scenarios examining the impact of increased longevity (lower death rates)

With respect to household formation, the CLG rates of household formation (headship rates) have been applied to all the different population scenarios; and then two alternative scenarios involving a slowing in the trend or a halt in the trend of declining household sizes have been considered.

Policy Implications

Having examined and considered the outputs of the modelling presented in this paper, our assessment of the overall patterns are as follows:

- We believe that the ONS population projections can be regarded as very much the upper limit of what is likely to happen in Chichester District in terms of population growth, and we regard it as reasonable that population growth will be less than projected.
- The main reason for this is that we anticipate that net in-migration will be lower than assumed in the ONS projections. There are a host of reasons why this is likely largely due to the expectation that the economy will grow more slowly and due to a sluggish housing market.
- The alternative scenarios considered with regard to birth rates are tentative. There is a case that can be made that birth rates will fall, but there is little evidence of this to date. Equally the case that longevity will increase more than that assumed in ONS projections is unproven.
- We are inclined therefore to exclude from consideration Population Scenario Variants 4, 5, 6 and 7. But we consider that population growth in the District is most likely to fall within the range between Variant 3 and Variant 2. We believe that the population of Chichester District over the period 2006-2031 is likely to grow in the range 13,200 to 22,200 compared with the ONS baseline of 26,000 pa. Variant 1 presents a middle position within this range anticipating population growth of 18,000.
- DTZ take the view there is some likelihood that the economic crisis and an era of lower growth in employment, and real household earnings will slow the pace of declining average household size. But this is not yet proven. In view of this DTZ would recommend the most robust basis for forward planning in terms of anticipated

household numbers will be provided by the Baseline Household Scenario (applied as indicated above to Population Variants 1,2 and 3), and Household Scenario Variant 2.

- With this in mind, Figure 21 shows the range of household growth figures over the period 2006-31 and on an annualised basis, based on these three different migration based population scenarios applied to the baseline headship rate assumption and the Variant 2 headship rates assumptions. This would indicate that the required level of housing based on demographic projections in the District as a whole, is likely to be found in the range 330 dwellings pa to 550 dwellings pa (8,300 to 13,700 additional dwellings).

Figure 21: Total 2006-31 and Annualised Additional Household under Preferred Scenario mix

	Population Scenarios			
	V3	V1	V2	ONS/CLG
2006-31				
Population Increase	13,200	18,000	22,200	26,000
HH Growth - Baseline	9,500	11,700	13,700	15,500
HH Growth - V2	8,300	10,500	12,400	na
Annualised				
Population Increase	528	720	888	1,040
HH Growth - Baseline	380	468	548	620
HH Growth - V2	332	420	496	n/a

- In terms of policy making DTZ believe that the planning authorities should plan for population growth of 18,000-22,000 – subject to consideration of capacity and deliverability constraints (Variant 1 and 2 population scenarios).

- DTZ take the view that there is a reasonable possibility that the headship rate assumption within the CLG household projections may imply a faster decline in average household size than will actually materialise in the next decade. The scale of such a change is uncertain. So DTZ suggest some recognition is given to this in establishing the range of expected household growth, but not to the full extent indicated by the Household Growth Scenario V2.
- Thus, based solely on the demographic projections, DTZ believe that for CDC and the SDNPA, the starting point for planning additional housing provision should be based on an expectation of household growth in the District of between 450 and 550 additional households pa (an increase 2006-31 of between 11,250 -13,700 households).

Appendix 1

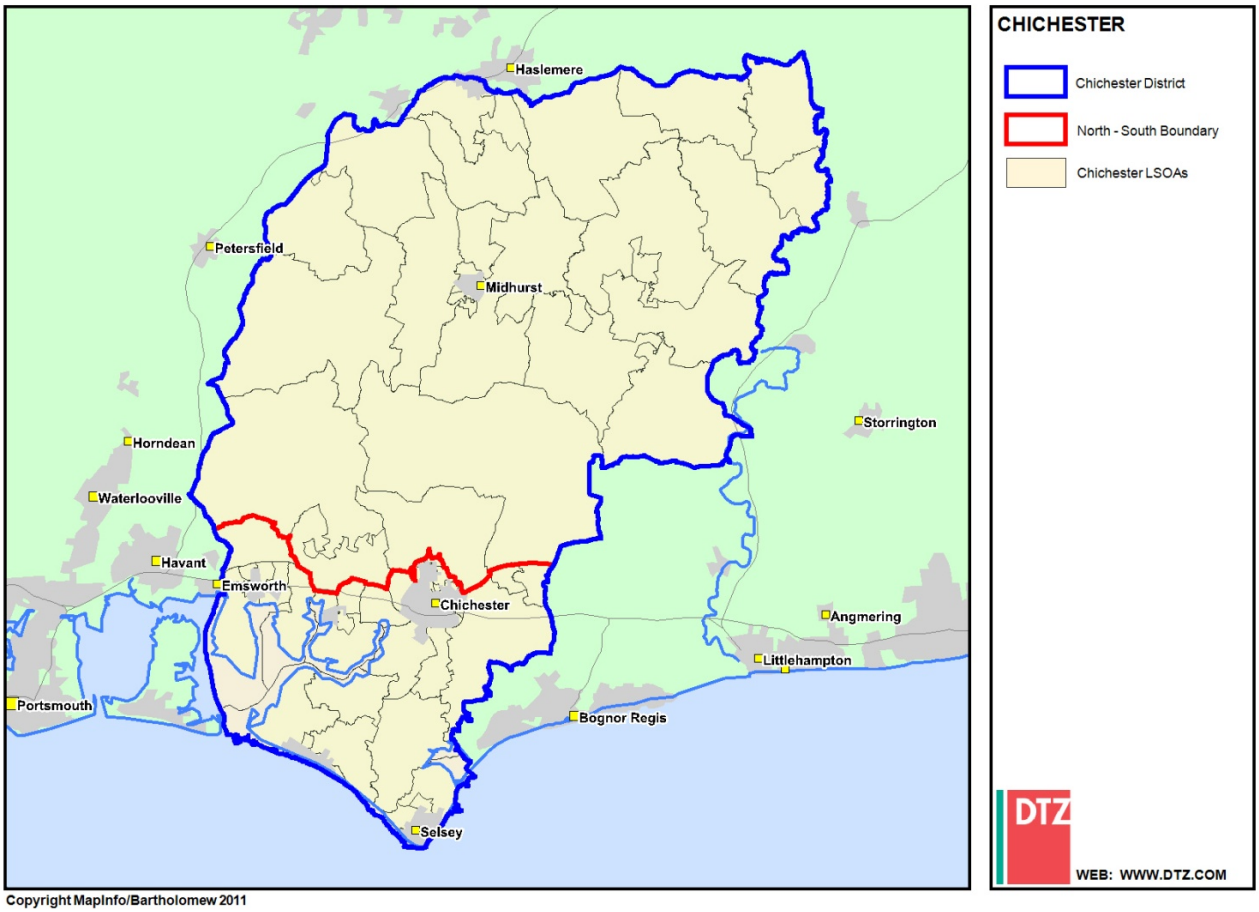
Modelling Demographics to the Sub-District Level

The study brief requires population and household projections to be developed for both the North and South of the District. It is important to realise that sub-district projections will be less robust than the district based projections, and there is considerable scope for short distance household migration within the District to have a material influence on the projections for the North and South of the District.

Key sources of information for the sub-district monitoring are the Super Output Area Mid Year Population Estimates produced by the Office for National Statistics, from which estimates of population for the North and South of the District can be assessed over time.

Figure A1 shows the pattern of LSOAs across the District. The LSOA boundaries that best fit to the southern edge of the National Park boundary have been aligned to identify the boundary between the North and South of Chichester District for analytical purposes. The LSOAs are closely aligned to parish boundaries, though they are not identical, and this is particularly notable in the area to the east of Chichester city.

Figure A1: Chichester District North and South Study Areas



Based on the definition above, Table A1 shows the estimated population in North and South Chichester from 2001-2009. Table A2 then goes on to show how the respective shares in population between the two areas have changed over the same period.

Table A1: Population Change in North and South Chichester, 2001-2009

	2001	2002	2003	2004	2005	2006	2007	2008	2009
North	39,500	39,600	39,500	39,500	39,600	39,800	39,900	40,200	40,300
South	67,000	67,300	67,900	69,200	69,500	70,100	70,700	71,500	72,300
Total	**106,500**	**106,900**	**107,400**	**108,800**	**109,100**	**109,900**	**110,600**	**111,800**	**112,600**

Source: ONS Mid Year Population Estimates, Lower Super Output Area Level

Table A2: Population Shares in North and South Chichester, 2001-2009

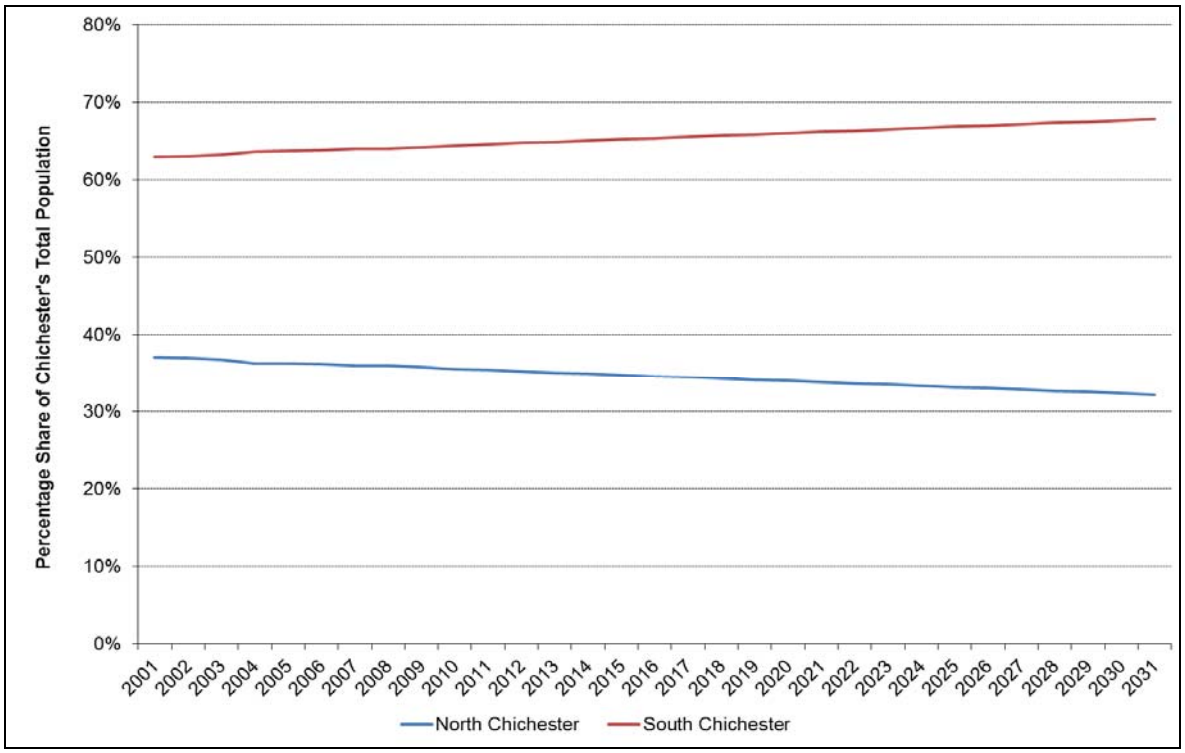
	2001	2002	2003	2004	2005	2006	2007	2008	2009
North	37.1%	37.0%	36.8%	36.3%	36.3%	36.2%	36.1%	36.0%	35.8%
South	62.9%	63.0%	63.2%	63.7%	63.7%	63.8%	63.9%	64.0%	64.2%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: ONS Mid Year Population Estimates, Lower Super Output Area Level

The data show that the percentage of Chichester's population living in the South of the District has been increasing year on year, reflecting differences in the pattern of housing provision in the North and the South and differences in household structure.

Taking the trend change in the population share of the North and South of the District, future shares up to 2031 have been estimated by assuming a linear trend in levels of change. This is shown in Figure A2. By 2031, this trend indicates a split of 32.2% in the North of the District and 67.8% in the South of the District. The main point to make here is that this method expects the past pattern of housing provision in the North and South of the District to continue into the future, so the proportion of the population and households living in the South can be expected to continue to increase in the future.

Figure A2: Estimated Future Change in Population Shares – North and South Chichester



DTZ

Bringing You the Power of One™

Chichester District LHRS: Appendix B - Employment Scenarios Working Paper

Chichester District Council & South Downs National Park Authority

July 2011

1116WC00

Contents

Introduction

This working paper is one of a series of papers that provide input to the Chichester District Local Housing Requirements Study. This paper focuses on the potential implications for housing requirements across the District given different scenarios for employment growth. Contained within this paper are a summary of the approach adopted and the results of analysis. A technical annex provides further detail on the method and assumptions underpinning the analysis.

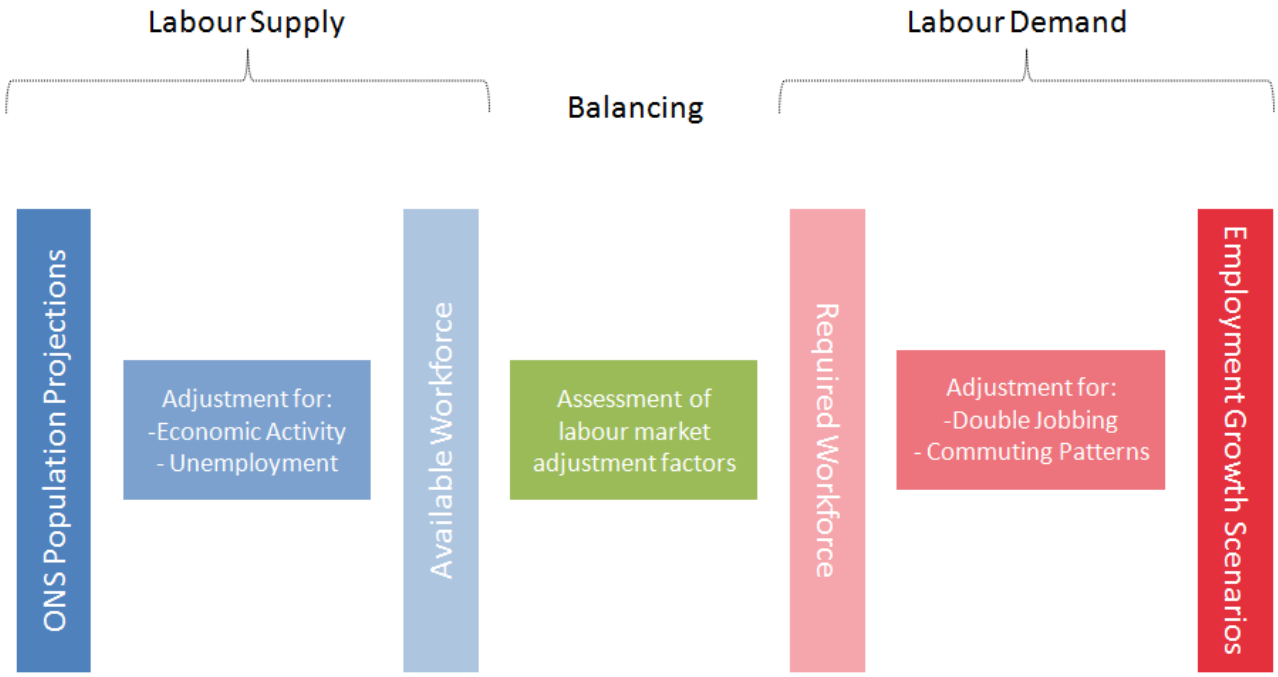
Purpose

A separate paper (Appendix A) considers the implications of a range of demographic scenarios and the associated housing implications. In assessing housing requirements, it is important to consider the relationship between both employment prospects and demographic scenarios, as this allows consideration of matters relating to the future likelihood of a balanced labour market in the District. Strong job growth is also a major driver of in-migration and, conversely weak job growth can suppress migration or foster out-migration of economically active people.

Approach

The analysis presented in this paper brings together analysis of both labour supply and labour demand. Where disconnects between supply and demand are identified, an assessment of the potential adjustment to labour market balance factors is made. The results presented can then be used to make informed decisions on which demographic based scenarios are both more realistic and desirable. The diagram below summarises the modelling process, further details are provided within the technical annex.

Figure 1: Labour Supply and Demand Modelling Process



It should be noted that this analysis is based on the modelling of scenarios and assumptions. It is not therefore a forecast, but an illustrative analysis for the purpose of informing and shaping policy decisions. All scenarios and assumptions are evidence based and outlined within the technical annex.

Labour Supply

A baseline workforce projection has been developed in line with the baseline scenario used within the Demographic Scenarios Working Paper (Appendix A). Therefore, the starting point for the baseline is the ONS Population Projections for Chichester District. Projected economic activity rates[1] are applied, along with a constant assumed unemployment rate. Two scenarios for economic activity rates are adopted on the basis of the available evidence[2]. Figure 2 shows how these different economic activity rates would translate into projected employment growth.

Based on the two economic activity reviews, the analysis suggests an increase in the resident employed workforce in the range 7,700 – 9,100 over the period 2006-31 within the Chichester District. Of note, is the fact that only 30-35% of the 26,000 projected increase in the overall population across the District is anticipated to be among the resident employed workforce. The reason for this is the rapid growth in population in the 65 years and above age group, as shown in Figure 3. Within this age group, the most rapid rates of increase are among those 80 years and above.

Figure 2: Labour Supply Projections

Economic Activity Scenario	Projected Change in Total Population	Projected Change in Resident Employed Workforce	Share of Change in Total Population
Low	26,000	7,700	30%
High	26,000	9,100	35%

Figure 3: Projected Population Change by Age Group

Age Group	2006	2031	Change	% Change
0-15	19,000	21,400	2,400	13%
16-24	10,400	12,000	1,600	16%
25-49	32,400	33,400	1,000	3%
50-64	22,800	25,700	2,900	13%
65+	25,500	43,100	17,600	69%
Total	**110,100**	**135,600**	**25,500**	**23%**

Totals for 2006 and 2031 may not equate to other papers due to rounding within age cohorts as part of the ONS presentation of data.

[1] This takes account of changing state pension age and other factors which are expected to influence economic activity rates within the analysis period.

[2] For the majority of age cohorts, application of the ONS Economic Activity rate projections is straightforward. However, for the 50-64 age group it is less clear. The ONS projections assume a starting point of around 66% in 2010. Whilst this aligns to the Chichester position in 2006, there has been a rapid rise to in excess of 80% by 2009. As a result two scenarios were considered in order to understand the potential implications. The first scenario (Low Economic Activity), based on ONS Economic Activity rate projections, assumes economic activity among the 50-64 age group rises from 66% in 2010 to 72% in 2020 and continues to rise to 81% by 2031. This therefore considers the APS data for the period 2007-2009 to be a statistical anomaly. Under the second scenario (High Economic Activity) economic activity rates for this age group rise from 80% in 2010 to 85% in 2020 and are assumed to plateau at this level. This therefore takes account of the projected rise in activity rates within this age group but avoids a situation whereby activity rates go beyond what is reasonable to assume.

Labour Demand

Five employment scenarios have been modelled, assuming differing growth rates. These are summarised in Figure 4. It is worth noting that the latest forecasts for Chichester District anticipate very modest job growth over the period to 2031, and significantly below the level that had been anticipated in the Employment Land Review for Chichester District prepared in 2008/9.

Figure 4: Employment Scenarios

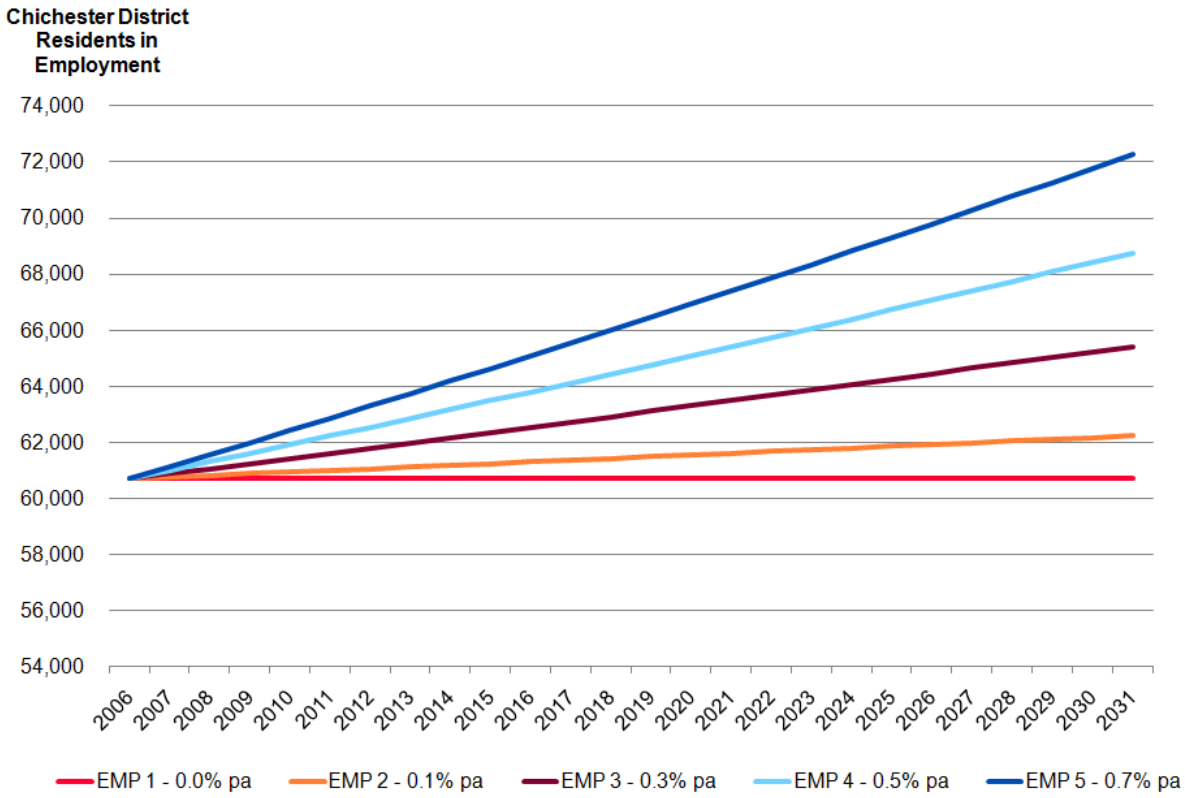
Employment Scenario	Basis	Average Annual Growth Rate
EMP 1	**Historic medium term average employment change/no employment growth** ABI data for Chichester District over the period 1998-2008 is subject to some complexities and anomalies. Depending on interpretation, average annual employment growth rates vary from -0.1%pa to +0.1%pa. On this basis, and with a desire to test the population implications of a zero level of net employment growth, scenario 1 is based on 0% pa employment growth over the analysis period.	0.0%
EMP 2	**OEF Chichester baseline projected employment change** DTZ has rebased Oxford Economics Forecasting (OEF) forecasts for West Sussex to the Chichester District on the basis of average employment shares. On the basis of the existing sectoral composition of the Chichester District economy, and the future projections for sectoral employment performance the average annual level of employment growth over the analysis period is 0.1% pa. This is the basis of our second employment scenario.	0.1%
EMP 3	**OEF West Sussex average growth** OEF forecasts for West Sussex as a whole suggest average annual employment growth of 0.3% pa. Whilst historic evidence suggests Chichester has experienced lower levels of growth to West Sussex, and the composition of employment may not pre-dispose Chichester District to an equivalent level of growth, it is important to consider a scenario on the basis of more even patterns of growth across West Sussex.	0.3%
EMP 4	**UK long run trend employment growth** This scenario is based on an assumption that UK economic performance out performs current forecast levels. Traditionally, a rule of thumb applied to UK long run growth is for 2.5% per annum average output growth, comprised of 2.0% productivity growth and 0.5% employment growth. On this basis we have set a higher growth parameter in line with this long run trend to illustrate the potential implications of a much higher level of employment growth.	0.5%
EMP 5	**Chichester ELR aligned growth rate** The Chichester Employment Land Review draws on employment forecasts prepared by Experian for SEEDA and provided to the District Council to support preparation of the LDF. Over the period 2006-26 (for which data is provided), the average annual growth rate is 0.7% pa. This has been adopted as the highest growth option.	0.7%

These growth rates have been applied to the level of employment in the base year (2006) and adjustments made for double jobbing and both in and out commuting (all assumed to remain constant in relative terms). The result of these adjustments is an estimate of the required resident working population under each of the five scenarios. The results are set out in Figures 5 and 6. The five scenarios allow for consideration of a range of different outcomes, with required resident workforce changes of between 0 to 10,300 – assuming no change in net commuting.

Figure 5: Employment Led Resident Workforce Scenarios 2006-31

Employment Scenario	Required Workforce Change
EMP 1	0
EMP 2	1,400
EMP 3	4,200
EMP 4	7,200
EMP 5	10,300

Figure 6: Employment Led Resident Workforce Scenarios 2006-31



N.B. The assumed average annual employment growth rates have been applied to derive linear employment projections. Whilst reality will be more volatile, the purpose of these scenarios is to inform long term policy decisions and long term trends, rather than short term patterns of changes.

Balancing Labour Supply and Demand

The purpose of the preceding analysis is to allow an assessment of potential imbalances in the labour market across the various scenarios. Figure 7 sets out the results of this assessment, showing the potential shortfall or oversupply of labour under each scenario. In all but the highest employment growth scenario, the analysis suggests a potential oversupply of labour in the District under the baseline (ONS) demographic scenario; that is there are too many workers for the available jobs in the District. The imbalance is greater if economic activity rates are higher than if they are lower;

Figure 7: Labour Market Balancing Factors 2006-31

Employment Scenario	Economic Activity - Low	Economic Activity - High
EMP 1	-7,700	-9,100
EMP 2	-6,300	-7,700
EMP 3	-3,500	-4,900
EMP 4	-500	-1,900
EMP 5	2,600	1,200

Where there is a projected over-supply of labour, the labour market can adapt in a number of different ways.

- Changes in the numbers of unemployed people
- Changes to the level of net commuting
- Changes in migration patterns that reduce the level of population growth

In practice the labour market is likely to adjust to excess labour supply through each of these processes. We discuss each in turn to highlight the policy implications

Adjustments to Unemployment Rate

The baseline unemployment rate assumed within this analysis is 3.8%, based on 2004-09 averages from the Annual Population Survey/Labour Force Survey. If migration is held at the level assumed within the baseline demographic scenario, and relative net commuting is fixed at current levels, unemployment (and potentially economic inactivity) would adjust to balance the labour market. Figure 8 summarises the change in unemployment rate under each scenario.

Under scenarios EMP1–4 there is a significant rise in the unemployment rate – if this was taking the full impact of the oversupply. The rise is particularly notable for scenarios EMP1-3 (to between 10% and 20%). In practice this would not happen – either people would move away from Chichester District in search of work or travel to work outside the area, or the lack of jobs would halt in-migration to the district by people who are economically active.

Under the EMP 5 scenario (deemed very unlikely) the unemployment rate would fall to a low level, with the low economic activity scenario indicating a negative level of unemployment. Clearly this is impossible and in practice if this level of job growth was achieved then net commuting would increase, economic activity rates would rise, or more economically active people would move to Chichester District.

Figure 8: Potential Unemployment Rates in 2031

Employment Scenario	Economic Activity - Low	Economic Activity - High
EMP 1	18%	20%
EMP 2	15%	18%
EMP 3	10%	13%
EMP 4	5%	7%
EMP 5	-1%	2%

*2004-09 average unemployment rate = 3.8%

Adjustments to Net Commuting Levels

Whilst the data at a local level can fluctuate, the evidence suggests Chichester District is a net importer of workers; that is to say, more people travel into the District to work, than travel out of the District to work. Therefore, the resident working population is smaller than the number of employment opportunities in the District. In purely quantitative terms, the resident working population of Chichester is some 96%[3] of the total level of employment. The average net inflow of workers is around 2,250. Figure 9 indicates the levels of net commuting (all other things being equal[4]) under each of the modelled scenarios. A positive number indicates Chichester is a net in commuter of labour (as is currently the case), a negative figure indicates a net outflow of labour from Chichester to other work locations.

If changes in net commuting levels solely accounted for the adjustments to labour oversupply then, under scenarios EMP 1-2 Chichester District would switch from being a net importer of labour to a net exporter of labour, with net out-commuting levels exceeding the current levels of net in-commuting. Under scenario EMP 3 Chichester District would also switch from having net in-commuting to net out-commuting, with the level of net out-commuting being similar to the current level of net in-commuting. Under scenario EMP 4 Chichester would continue to be characterised by net in-commuting at slightly lower levels to those at present. Under EMP 5 Chichester District would need to increase the level of net in-commuting to meet employment requirements.

It is worth noting that because Chichester District has more jobs than resident employees, the slow growth in jobs which is anticipated under EMP 1-3 scenarios has significant implications for adjacent areas where those who work in the District live. Those areas may also be forecast to experience increases in their population and workforce – and this has implications for the balance of jobs and population within the Sussex Coastal housing market area as a whole.

Figure 9: Potential Net Commuting Levels in 2031

Employment Scenario	Economic Activity - Low	Economic Activity - High
EMP 1	-5,450	-6,850
EMP 2	-4,150	-5,550
EMP 3	-1,250	-2,650
EMP 4	1,750	350
EMP 5	4,850	3,450

*Recent average net commuting level = 2,250

[3] Average data from Annual Population Survey/Labour Force Survey
[4] This assumes jobs and workers can be matched

Adjustments to Net Migration Levels

While unemployment may increase, and net in-commuting to Chichester District fall, it is very likely that part of the process of adjustment to the surplus labour implied by the ONS population scenarios will be through changes in net migration levels.

The baseline demographic change scenario (see the Demographic Scenarios Working Paper) is founded on ONS population projections and an inherent assumption of net migration of circa 1,200 persons per annum into the Chichester District. With insufficient work opportunities in the local area there will be a lesser incentive for potential in migrants to relocate to the District, and an incentive for some existing residents to move farther afield for work. With an under supply of labour, the reverse incentives are likely to be true. It should be remembered, however, that much of the net in-migration of people to Chichester District may be made up of retired people, moving to the area for quality of life reasons.

Assuming that the identified imbalances are entirely resolved through adjustments in the level of net migration, and allowing for trailing dependents[5] to migrate alongside economic migrants, Figure 10 presents the total and average annual adjustments to the levels of net migration likely under each scenario compared to the ONS baseline. Under scenarios EMP 1-3 the levels of net migration could fall by some 200-500 persons per annum. Under scenarios EMP 4-5 levels of migration are broadly consistent with the baseline projection, with a potential requirement for additional labour under the highest employment growth and lowest economic activity scenario.

On the basis of current evidence, scenarios EMP 1-3 are closer to expectations of employment growth.

Figure 10: Potential Net Migration Adjustment Factors

	Economic Activity – Low		Economic Activity - High	
Employment Scenario	**Total 2006-31**	**Average Annual**	**Total 2006-31**	**Average Annual**
EMP 1	-11,600	-460	-13,700	-550
EMP 2	-9,600	-380	-11,700	-470
EMP 3	-5,300	-210	-7,400	-300
EMP 4	-800	30	-2,900	-120
EMP 5	3,900	160	1,800	70

[5] Trailing dependents are non working family members who migrate with an economic migrant. The analysis has taken account of the potential for multiple workers in households.

Summary and Conclusions

Summary

This working paper presents analysis of a range of employment scenarios and their potential implications for labour market balance within Chichester District over the period 2006-31.

Baseline demographic projections, prepared by ONS, suggest a potential increase in the resident working age population of 7,700 – 9,100 persons.

Five employment scenarios have been developed, illustrating the impact of a range of employment growth rates. Comparing these to the labour supply baseline suggests that under the majority of scenarios, there will be an oversupply of labour within the District – that is the number of residents seeking employment will exceed the supply of jobs in the District. The exception is the highest growth employment scenario, which on the basis of current evidence is unlikely to be achieved. This is of note to Chichester District Council as the 2009 Employment Land Review for the District is predicated on this level of employment growth.

There are three major variables which could adjust to bring the labour market into balance:

- Unemployment
- Net migration
- Commuting

In reality, all three variables are likely to adjust to some degree, to respond to the market position. However, each variable has been considered in isolation to illustrate the potential implications.

Focusing on the more likely employment scenarios:

- Net migration levels could fall by up to 550 persons per annum from the baseline scenario;
- Net commuting levels could adjust, with the district switching from having net in-commuting flows to having net out-commuting flows. Overall the level of commuting could increase substantially, though this depends on jobs being available elsewhere within reasonable commuting distance; or
- Unemployment levels could rise, potentially to very high levels with wider undesirable consequences.

Policy Implications

The policy implications to be drawn from this analysis are:

- DTZ regard both the EMP5 and the EMP4 scenarios as to be an unrealistic basis for forward planning, and even realisation of the EMP3 scenario currently looks optimistic. On current information it would be sensible to plan for an increase in workforce requirements over the period 2006-31 of 1,000-4,000 people.
- This would suggest an oversupply of around 3,500 to 8,000 people wanting to work, were the population of the District to grow in accordance with the ONS population projections for the District.
- Some of this over-supply might be taken up by higher levels of unemployment (likely for the next 5 years), but it should not be the aim of planning policy to grow the population of those places where there are not enough jobs for those who want to work.
- More likely were this level of population growth to happen in Chichester District, then the District would turn from being a location characterised by net in-commuting, to a location characterised by net out-commuting.

- The extent to which the growing workforce in Chichester District implied by the ONS projections could in fact find work within reasonable commuting distance of their home is a moot issue. It is probable that job growth will be more robust in the South Hampshire area, around the Gatwick Diamond and in London, than in Chichester District so there is probably greater scope for Chichester District residents to find work outside the District than they do at the moment.
- However the implied level of net out-commuting associated with the anticipated level of employment growth would raise issues regarding the sustainability of fostering such patterns of commuting (not withstanding growth of home working) and could have implications in terms of transport capacity.
- In DTZ's view, it is more probable that, rather than the full impact of the over-supply of people wanting to work being taken up by net out-commuting, it is likely that the level of in-migration implicit in the ONS projections will not take place because of the relative paucity of jobs and cost of travel to locations with jobs; though it is important to bear in mind that in-migration in the District is also associated with those who are retired or not active in the labour market.
- A final note of relevance is that in DTZ's view the employment projections in the Employment Land Review now look very optimistic. If this has informed land allocation decisions, it may be worth revisiting those allocations since it may be that significantly less employment land is required in future than has been assumed based on the ELR analysis.

Technical Annex

This technical annex sets out further detail on the methodology and assumptions undertaken in developing the employment scenarios and assessing their implications. This annex is structured around the same headings as the main working paper.

Labour Supply

A headline set of population based workforce projections was developed to compare against employment led scenarios. The adopted process was as follows:

- Collation of population data and projections by age cohort 2006-2031. Mid year estimates for 2006 and 2007 were coupled with 2008 based population projections. All data were taken from ONS figures. The following age cohorts were used.
  - 0-15
  - 16-24
  - 25-49
  - 50-64
  - 65+
- Economic activity rate projections for each age cohort (excluding 0-15) were developed. The following process was used.
  - 0-15 – no economic activity assumed
  - 16-24 – assumed constant rate of 63% (based on latest data). ONS Economic Activity projections[6] show complex picture for this age cohort depending on participation within education.
  - 25-49 – rising rate to 85% and then plateau in line with national projections.
  - 50-64 – two alternative scenarios were prepared to account for recent changes in data.
    - Econ Activity 1 - 2006 data for Chichester indicates activity rate of circa 66%. This is broadly consistent with assumptions in national projections, with a rising rate to 72% by 2020. A linear interpolation of this trend was applied, with extrapolation of the 2010-2020 trend applied to the period 2021-2031. With rates rising to 81% by 2031.
    - Econ Activity 2 - APS data for Chichester for 2007 – 2009 shows a substantial increase in activity rates in this age cohort to a level in excess of 80%. A second scenario modelled a gradual increase to 85% and then plateau.
  - 65+ - rates remain constant at around 6.5%. There has been a recent leap in Chichester in one year, but this may be a data anomaly. National projections show fluctuation around 6.5%-7%. Whilst increased retirement ages will have some impact at the lower end of this age cohort, the increasing proportion of older age people will have a dampening effect on rates. The growth rate of 80+ years is much greater than the younger age group.
- Unemployment is held constant at 3.8% of the economically active population of working age. This is in line with the 2004-09 average.

[6] UK Labour Force Projections, 2006-20, Vassilis Madouros, ONS found at: http://www.statistics.gov.uk/statbase/Product.asp?vlnk=1945

Labour Demand

Five employment scenarios were developed, with summary descriptions provided within the main body of the report. The following detailed processes were adopted:

- 2006 ABI employment for Chichester District stood at 52,500. Average self employment in Chichester over the period 2004-2009 is 8,200. This was been added to employee based employment. The total of 60,700 was used as a base assumption within the model. Growth rates for each scenario were applied to the base year figure to derive linear employment projections.
- Data from the Business Register and Employment Survey (BRES, ONS) provide figures for the number of employee jobs and employees in an area. Data for Chichester for 2008 suggested a 7% reduction to total employee jobs to take account of double jobbing.
- Annual Population Survey data, 2004-10, for resident workers and workplace employment was used to determine rates of net commuting. This was cross checked against 2001 Census of Population.

Figure A1: Net Commuting Data

	Oct 2004-Sep 2005	Oct 2005-Sep 2006	Oct 2006-Sep 2007	Oct 2007-Sep 2008	Oct 2008-Sep 2009	Oct 2009-Sep 2010	Average
Resident Employment	49,800	47,600	47,100	49,800	52,900	55,300	
Workplace Employment	55,200	50,700	50,200	49,700	52,300	57,900	
Commuting Ratio	90%	94%	94%	100%	101%	96%	96%
Net Commuting	5,400	3,100	3,100	-100	-600	2,600	2,250

Source: Annual Population Survey, ONS

Balancing Labour Supply and Demand

In order to calculate the level of migration associated with adjusted resident workforce levels the following assumptions were adopted:

- Data from *Effects of taxes and benefits on household income, ONS, 2008/09* for non retired household size, the number of economically active persons in the household and associated dependents was used to determine the likely level of associated migration. Analysis excluded the bottom quintile households by income.
  - Average household size – 2.6 persons
  - Average economically active persons per household – 1.74 persons
  - Average dependents per worker – 0.5 persons
- It is therefore assumed that for every migrant worker an additional 0.5 persons migrate.

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Chichester District LHRS: Appendix C – Delivery Assessment Working Paper

Chichester District Council & South Downs National Park Authority

July 2011

1116WC00

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Contents

Introduction

This working paper is one of a series of papers that forms the Chichester District Local Housing Requirements Study. This paper provides context for the discussion of what magnitude of housing provision would be appropriate in Chichester District in the years to come by providing a broad brush review of the sorts of constraints on the volume of new housing that can be built within the plan period (in this case from 2011-28). The paper assesses in broad terms the nature of constraints in Chichester District i.e. whether they arise from environmental designations, infrastructure constraints, market conditions, or industry capacity. However, a detailed assessment of capacity has not been undertaken, nor have site specific issues been considered. But any discussion of appropriate housing targets for Chichester District would be incomplete without some broad discussion of the practicality of delivery of a certain level of housing.

In examining the practicality of housing delivery this paper is divided into four main components:

- Assessment of historic patterns of housing delivery (including affordable housing delivery)
- Assessment of constraints associated with development land / redevelopment opportunities including environmental designations and infrastructure constraints
- Assessment of market or funding imposed constraints, for example on the capacity of the housebuilding sector, access to development finance, funding for affordable housing, mortgage finance
- Review of the potential for policy innovation or flexibility to enhance housing delivery

Historic Patterns of Housing Delivery

This section presents an analysis of historic housing delivery within Chichester District. Using completions data from West Sussex County Council (WSCC) and CDC, it seeks to draw out patterns of delivery over time and between the North of the District (within and outside the National Park), Chichester City, and the rest of the South of the District. Housing delivery is considered specifically in terms of:

- The historic delivery for the District as a whole
- How different areas of Chichester District have contributed to recent housing delivery
- The split between the development of market housing and affordable housing
- How delivery has been focused on different types of development site i.e. allocated and windfall housing sites, brownfield and greenfield sites.
- The sales rates of homes over the past few years, including the previous period when cheap credit was readily available.
- The demand for affordable homes, compared to delivery over the past few years

Past Patterns of Housing Delivery

This section analyses past delivery across the whole of Chichester District in order to provide a picture of delivery stability and how past patterns may translate to future delivery. Total annual housing delivery figures for Chichester District are set out below in Figure 1. This indicates that between 2001-02 and 2009-10, average delivery per annum has been 496 homes (gross) and 423 (net). Over the last decade gross delivery rates have fluctuated between just under 300 homes per annum to over 600 homes per annum. Net delivery rates have ranged from 260 homes per annum to almost 600 homes per annum.

Figure 1: Historic District-wide Gross and Net Completions

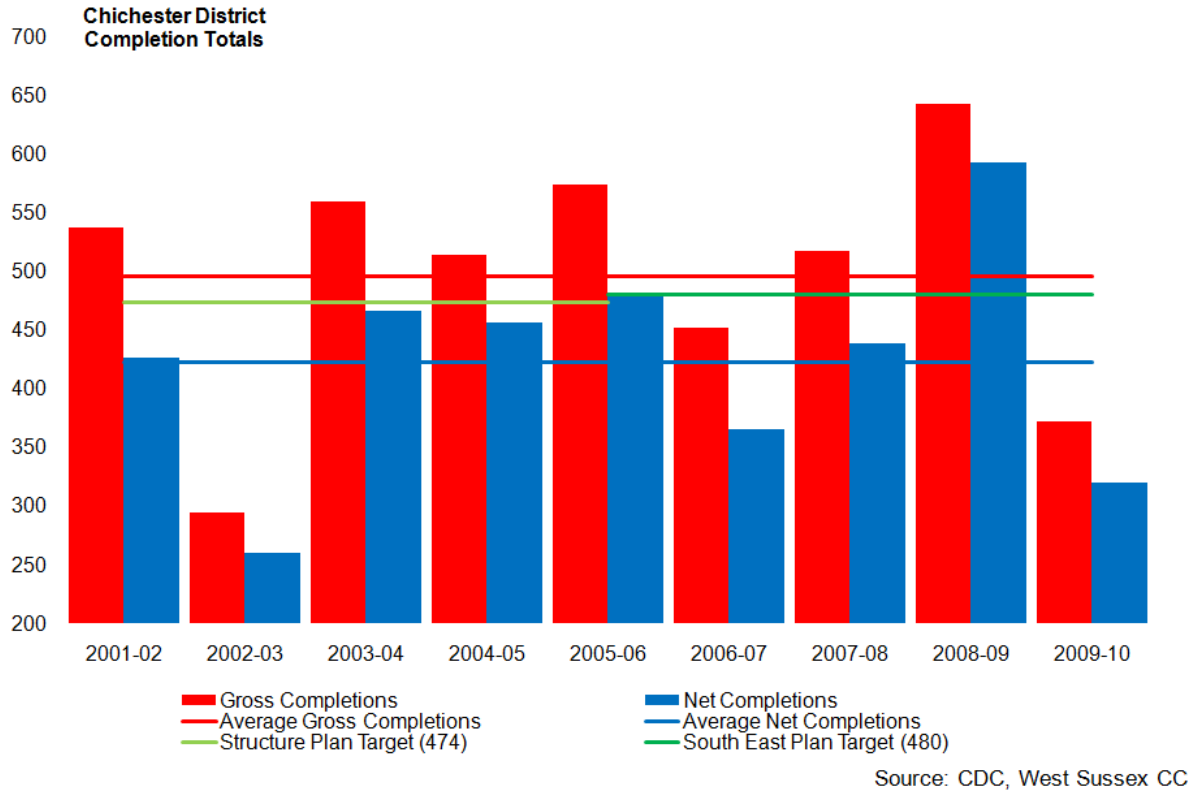
Year	Gross Completions	Net Completions
2001-02	538	427
2002-03	295	260
2003-04	560	467
2004-05	514	457
2005-06	574	482
2006-07	452	366
2007-08	518	439
2008-09	643	593
2009-10	372	320
Average	**496**	**423**

Source: CDC, West Sussex County Council

Figure 2 provides a clearer picture of the actual annual fluctuations. This indicates that following 2002-03 – where only 295 homes (gross) and 260 homes (net) were delivered (the smallest level of delivery over the

past decade) – the following three years saw very stable levels of delivery with an average annual delivery rate of 550 homes (gross) and 470 homes (net). 2006-07 saw a reduction from this level to around 450 homes (gross) and 370 homes (net), but the following two years saw increases up to nearly 650 homes per annum (gross) and 600 homes per annum (net). However, 2009-10 witnessed a sharp decline from this, at only 370 homes (gross) and 320 homes (net). This is likely to be due to the recessionary conditions starting to impact on completion levels through a sharp reduction in new schemes starting. This is discussed in more detail in the following sections.

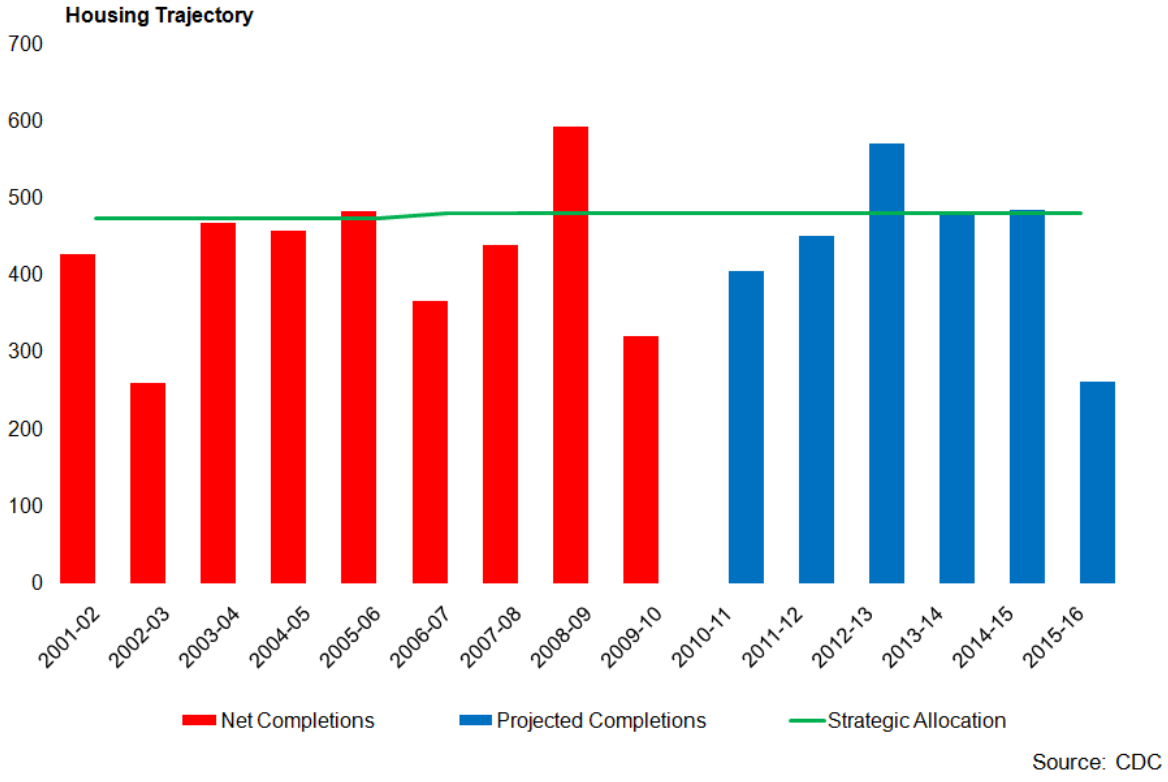
Figure 2: Historic District-wide Gross and Net Completions



Source: CDC, West Sussex CC

In order to put the completion levels seen above into context, Figure 3 below sets out the historic net completions in comparison with Chichester District's strategic annualised allocation (this was previously 474 net dwellings per annum in the West Sussex Structure Plan, rising to 480 net dwellings set out in the South East Plan). This demonstrates that the District met its target in 2005-06 and 2008-09, but delivered below this level in the other years displayed. In 2009-10, the level of completions was at two-thirds of the target level. Figure 3 also sets out CDC's current projected housing completions to 2015-2016 (based on existing planning permissions and identified SHLAA sites within existing settlement boundaries), which shows rising delivery in 2010-11 and 2011-12, and a delivery level above target in 2012-13. The following sections of this working paper provide insight as to whether this remains realistic given wider economic demand and financing conditions.

Figure 3: Housing Completions and CDC Projections against Annualised Allocation



Source: CDC

Given that historic levels of delivery are below the former Structure Plan and current South East Plan target levels, an important issue for debate is whether this has been the result of market constraints or whether the housing completion levels may have been constrained by the planning system. Thus it might be that the development industry has not brought forward new homes equivalent to the target levels because of constrained demand or funding, or because to increase supply would increase risk or reduce returns. Or it might be that the volume of new housing built has fallen short of targets because of a lack of site allocations or other issues such as the need for infrastructure investment before land can be released. Obviously the shortfall against current targets could arise from some combination of these two factors.

Housing Delivery at Sub-District Level

Having examined delivery volumes at the District level, it is important to consider how different areas of the District have contributed to housing delivery over recent years. Figures 4 and 5 set out the net annual housing completion figures from 2006-07 onwards for the areas of; Chichester City, North of the District (split into the areas inside and outside the National Park) and the South of the District (outside of Chichester City).

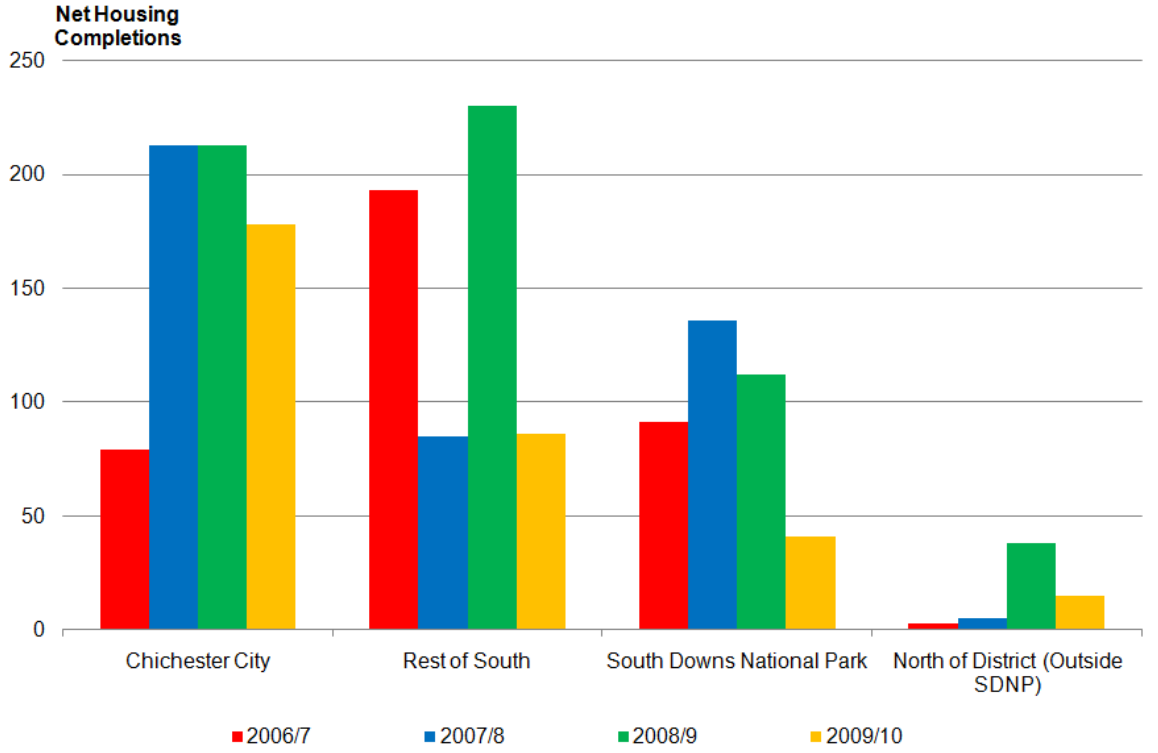
This indicates that Chichester City has been the most important and reliable contributor to delivery – with high and fairly stable completion rates since 2007-08, and an average delivery rate from 2006-07 to 2009-10 of around 170 homes per annum (net). The South of the District has also been an important contributor in recent years, with an average delivery rate of around 150 homes per annum (net) – although delivery levels have seen large year-on year fluctuations. The North of the District has averaged a lower figure of around 110 homes per annum (net), of which an average of 95 homes per annum have been delivered within the National Park and 15 homes per annum outside the Park.

Figure 4: Net Housing Completions by Sub-District area 2006-07 to 2009-10

	Chichester City	Rest of South	South Downs National Park	North of District (Outside SDNP)	Chichester District
2006/7	79	193	91	3	366
2007/8	213	85	136	5	439
2008/9	213	230	112	38	593
2009/10	178	86	41	15	320
Total 2006-2010	**683**	**594**	**380**	**61**	1,718
Average	**171**	**149**	**95**	**15**	**430**

Source: CDC

Figure 5: Graph showing Net Housing Completions by Sub-District area 2006-07 to 2009-10



Source: CDC

Figures 6 and 7 display how each of the past four years of completions is split proportionally between the different areas of the District. This highlights the importance of Chichester City to delivering completions in recent years, which accounts for an average of 40% of annual District completions over the period 2006-07 to 2009-10. Over this period the South of the District (outside Chichester City) has provided around 35% of completions, whilst the North of the District (both within and outside the National Park) has contributed around 25% of completions. The level of housing in the North of the District has previously been constrained, as much of the area fell within the Sussex Downs AONB. Whether this balance will continue is partly dependent on the future policies of the South Downs National Park Authority.

The importance of Chichester City is likely to continue given two major schemes that are currently being implemented. Graylingwell Park will provide 750 new and converted homes on the former Graylingwell Hospital site, through collaboration between Linden Homes, Affinity Sutton and the HCA. The first phase of 110 dwellings is nearing completion. Reserved matters have been approved for a second phase of 245 dwellings which is expected to commence before the end of 2011. The site is a mile north of Chichester City centre and falls within the Chichester City sub-district area. 40% of the new homes will be affordable. A resolution to grant planning permission for a further 43 units on the adjacent Kingsmead Avenue site has been given subject to the completion of a Section 106 agreement.

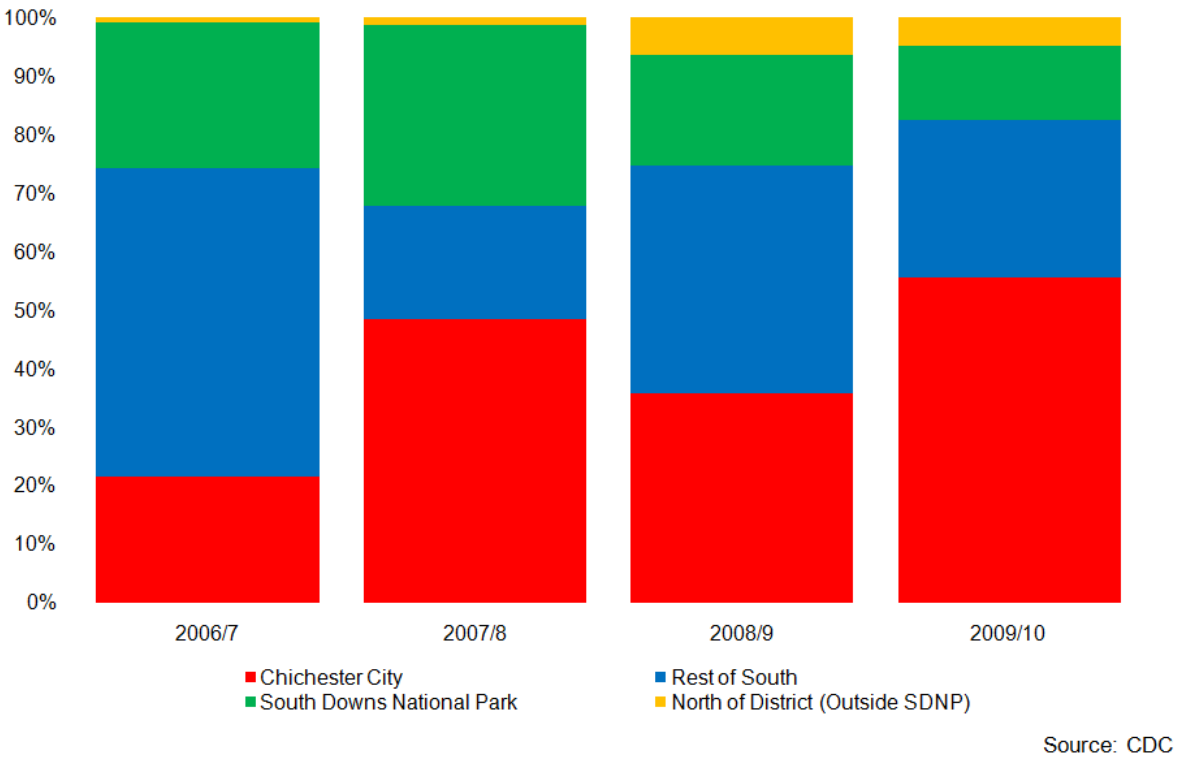
The former Roussillon Barracks, close to Graylingwell Park and also within the Chichester City sub-district area is being developed by Zero C in conjunction with the HCA. This gained planning permission early in 2011 for 252 homes (40% of which will be affordable). The first phase is expected to be completed in 2011-12. Given current financial constraints on developers and housebuilding, these two sites are likely to be major contributors to Chichester District's housing completions over the next few years.

Figure 6: Completion Proportions by Sub-District area 2006-07 to 2009-10

	Chichester City	Rest of South	South Downs National Park	North of District (Outside SDNP)
2006/7	22%	53%	25%	1%
2007/8	49%	19%	31%	1%
2008/9	36%	39%	19%	6%
2009/10	56%	27%	13%	5%
Average	40%	35%	22%	3%

Source: CDC

Figure 7: Graph showing Completion Proportions by Sub-District area 2006-07 to 2009-10



Source: CDC

The Pattern of Market and Affordable Housing Delivery

In addition to considering the geographical distribution of completions across the District over time, it is also important to consider the type of housing being delivered within the District in terms of the split between private market and affordable housing. Figure 8 below sets out the historic pattern from 2001-02 to 2009-10 and indicates that over the period three out of four homes that were completed were for the private market, with affordable housing accounting for one in every four homes being built. 2008-09 was a particularly good year for affordable housing delivery with 211 gross units delivered. However, this rate has not been continued with a sharp decline in overall delivery seen in 2009-10. It should be noted that the affordable completion figures are those that are a result of planning policy.

Figure 8: Private and Affordable Gross Completions 2001-02 to 2009-10 (including Rural Exception Sites)

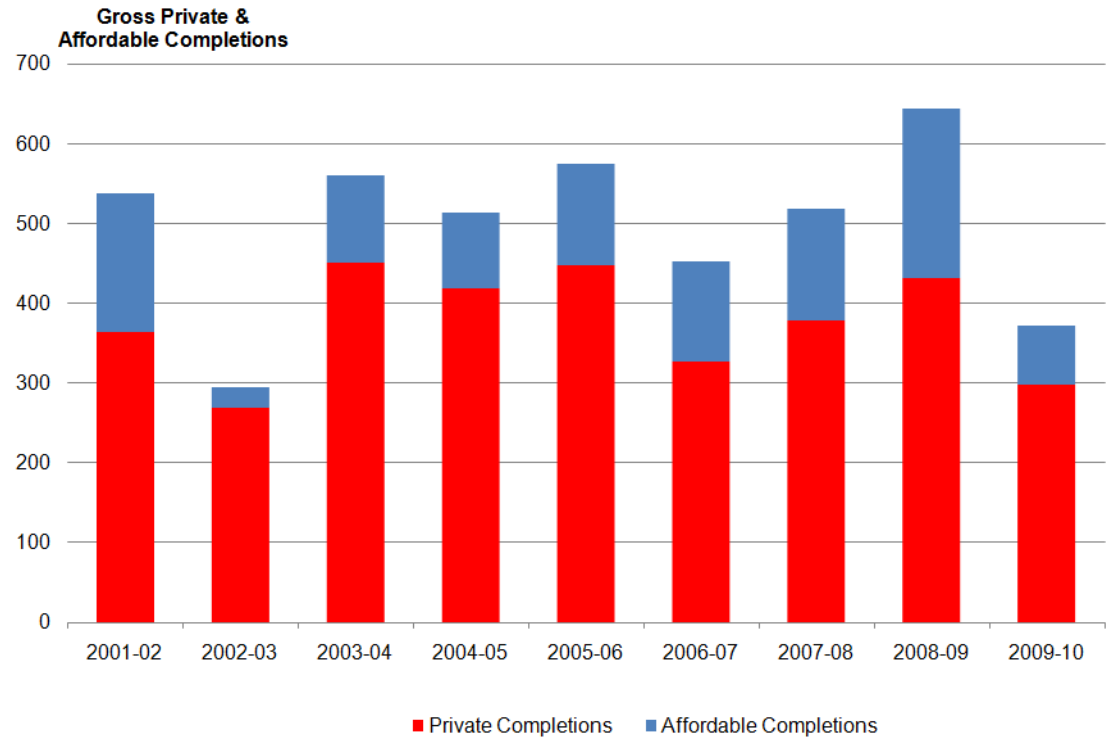
Year	Private Completions	Affordable Completions[1]	Total Completions	Affordable as % of Total Completions
2001-02	364	174	538	32%
2002-03	268	27	295	9%
2003-04	450	110	560	20%
2004-05	419	95	514	18%
2005-06	448	126	574	22%
2006-07	326	126	452	28%
2007-08	378	140	518	27%
2008-09	432	211	643	33%
2009-10	297	75	372	20%
Average	**376**	**120**	**496**	**24%**

Source: West Sussex CC, CDC

[1] Note: The figures in the table above are taken from the West Sussex CC annual housing development monitoring survey and record the year in which affordable housing was built, rather than when individual affordable housing units are available for occupation.

Figure 9 below displays this private and affordable completion levels graphically. This highlights the degree to which affordable housing completions are tied to private market completions, with correlating years of low private market and affordable delivery.

Figure 9: Graph of Private and Affordable Gross Completions 2001-02 to 2009-10



Source: CDC

Delivery by Development Site Type

It is also useful to briefly examine the type of sites where housing delivery has occurred – both in terms of whether this has been on greenfield and brownfield sites, and how much has been on policy-allocated sites. Figures 10 and 11 present the gross completion split between brownfield and greenfield sites. Over the last ten years the average split of gross completions has been 28% on Greenfield sites and 72% on brownfield – representing an average of 140 completions per annum on Greenfield sites and 356 on Brownfield sites.

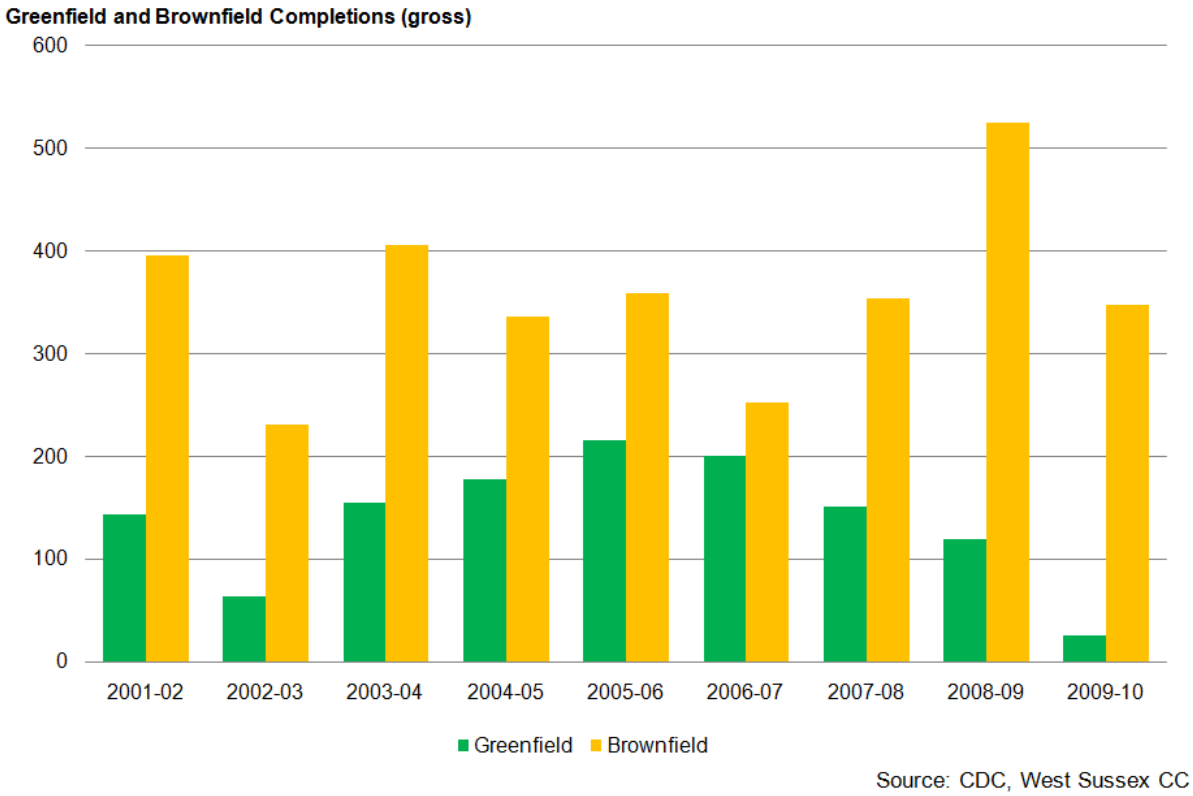
However, this masks the declining proportion of greenfield completions over the past five years. This is both in terms of absolute numbers (from 215 gross completions in 2005-2006 to 25 in 2009-10) and proportionally (with over 90% of completions classed as brownfield in 2009-10). This trend is likely to be partly reflective of the recent and growing importance of Chichester City to housing completions. But it is likely also to reflect the declining stock over time of allocated sites, a reflection that most sites identified in the most recent adopted development plan (the 1999 Chichester District Local Plan) have been built out and new sites have yet to be allocated through the LDF process.

Figure 10: Gross Completions on Brownfield and Greenfield sites

Year	Greenfield	Brownfield
2001-02	143	395
2002-03	64	231
2003-04	154	406
2004-05	178	336
2005-06	215	359
2006-07	200	252
2007-08	164	354
2008-09	119	524
2009-10	25	347
Average	**140**	**356**

Source: West Sussex CC, CDC

Figure 11: Graph showing Gross Completions on Brownfield and Greenfield sites



Source: CDC, West Sussex CC

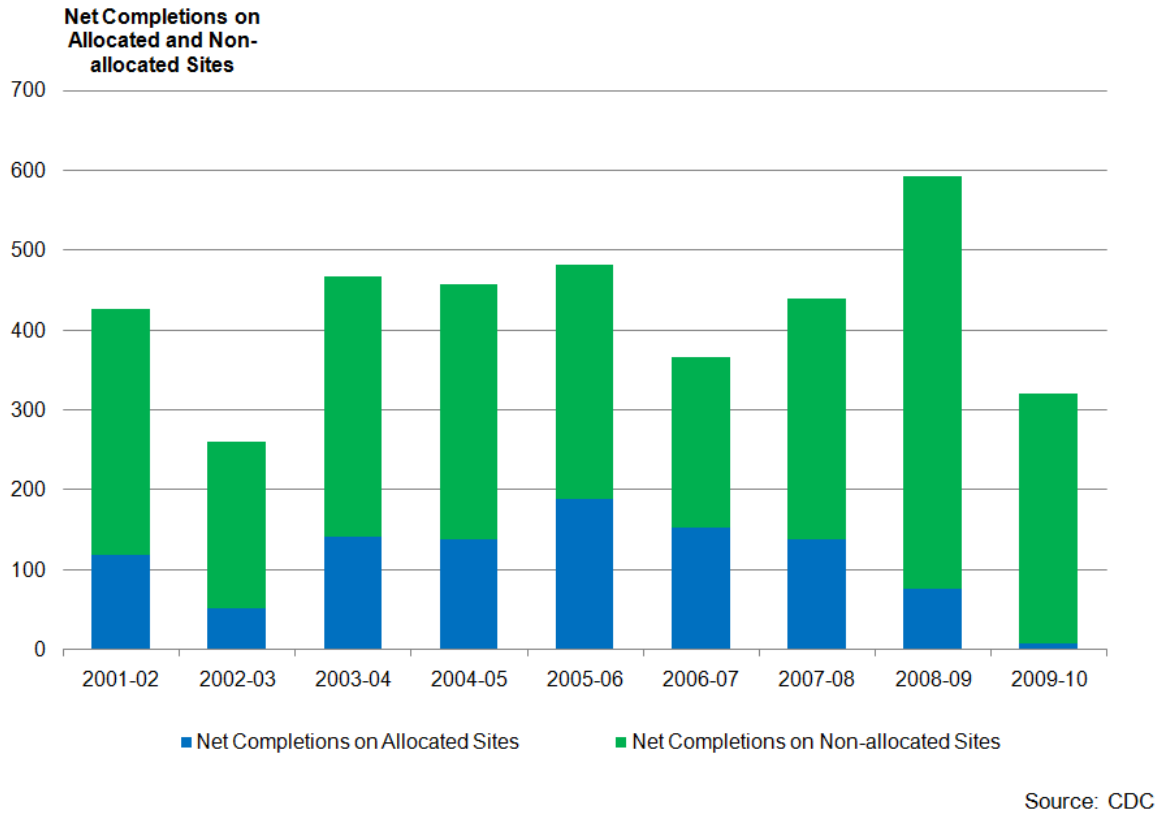
As Figures 12 and 13 demonstrate, since 2001-02 net completions have seen an average split between 27% on allocated sites and 73% on non-allocated sites – representing an average of 112 completions per annum on allocated sites and 311 on non-allocated sites. However, the proportion of completions on allocated sites has declined in recent years as housing sites identified in the 1999 Local Plan have been built out and new sites have yet to be allocated through the LDF process. In 2008-09 and 2009-10, allocated site completions fell to only 13% and 3% of total net completions within the District respectively.

Figure 12: Net Completions on Allocated and Non-allocated Sites

Year	Allocated Sites	Non-Allocated Sites
2001-02	119	308
2002-03	51	209
2003-04	141	326
2004-05	137	320
2005-06	188	294
2006-07	153	213
2007-08	138	301
2008-09	76	517
2009-10	8	312
Average	**112**	**311**

Source: CDC

Figure 13: Graph showing Net Completions on Allocated and Non-allocated Sites

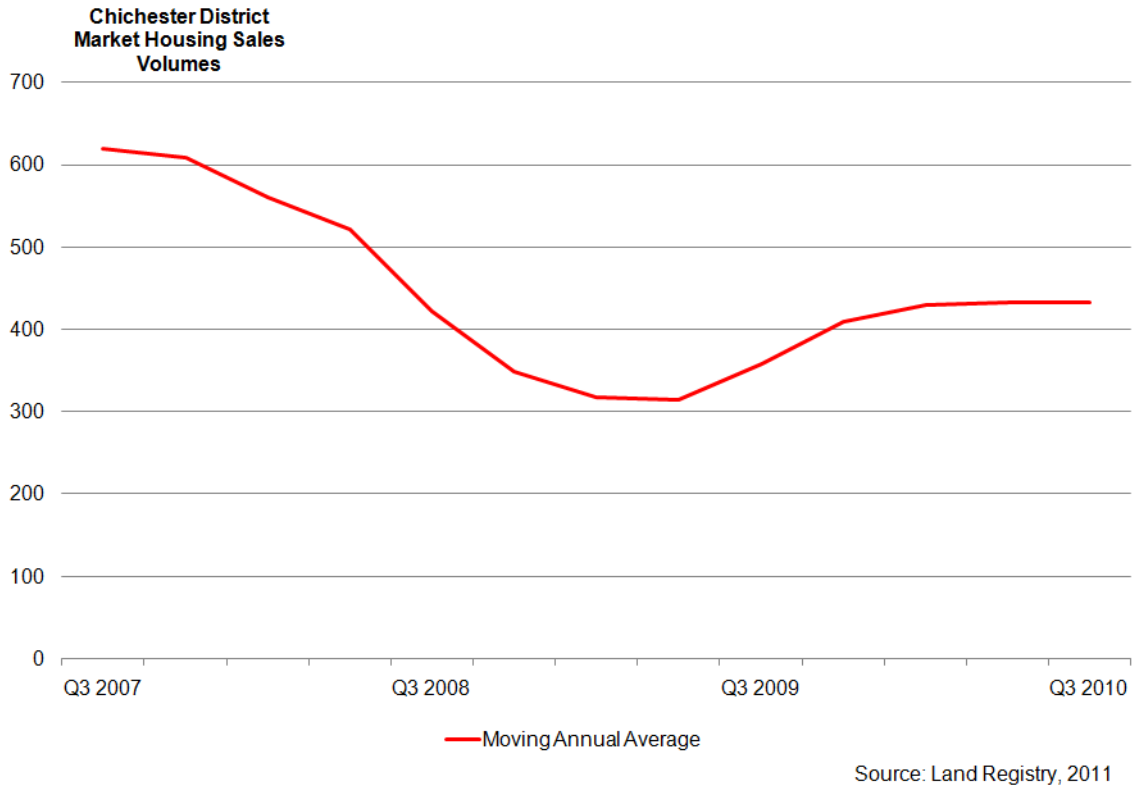


Source: CDC

Sales Rates of Homes

Examining Land Registry data on the rate of overall homes sales within Chichester District over the last few years indicates that sales volumes have dipped from late 2007 (i.e. pre-credit crunch) levels to a low in mid-2009. As Figure 14 indicates, sales volumes have seen a slight recovery since then but effectively flattening off since late 2009 to a low and steady level at between 60 and 70% of the volumes seen in 2007. Although these figures represent all homes sales (as opposed to just newly completed homes), the same trend is expected to be apparent in new home sales rates due to tighter lending criteria and a reduction in housing starts (as discussed in the following section).

Figure 14: Chichester Market Housing Sales Volumes Q3 2007 - Q3 2010



Source: Land Registry, 2011

Summary

The historic pattern of housing completions across Chichester District can be summarised as follows:

- Housing delivery (net figures) have been below housing provision targets in the Structure Plan and South East Plan for the majority of the past nine years, and have seen a sharp fall in 2009-2010. However, net completions over the last nine years have averaged 423 dwellings per year and since 2006 have averaged 430 net dwelling per year. It is quite probable that the level of completions will continue at a depressed level into the future

- Chichester City has been the most important sub-district area in terms of completion levels, accounting for an average of 40% of annual completions (2006-07 – 2009-10). Over this period the South of the District (outside Chichester City) has provided around 35% of completions, whilst the North of the District (both within and outside the National Park) has contributed around 25% of completions.

- On average since 2001-02, three out of four homes completed have been for the private market, with affordable housing accounting for one in every four homes built. Completion figures indicate a close correlation (as expected) between delivery rates for affordable and market housing.

- Recent years have seen a declining proportion of greenfield completions, with 97% classed as brownfield in 2009-10 – in part reflective of the importance of Chichester City to completions, and in part due to the declining level of available allocated sites.

- Sales volumes have seen a reduction to levels 60-70% of those seen before the credit crunch level. Although there has been a slight increase in transactions since mid-2009, these remain at a flat and subdued level.

Potential Constraints on New Housing Development

This section aims to summarise the key land supply constraints that will influence the deliverability of planned housing delivery into the future. While it is recognised that detailed work has been undertaken by Chichester District Council to establish its ongoing short term future supply of housing land, the intention of this section is to highlight the potential broader constraints across the District as a whole over the longer term. Drawing upon existing analysis and information from the emerging Core Strategy and CDC evidence base studies, it focuses on the following key potential constraints to delivery:

- National Park designation
- Environmentally Sensitive Areas
- Flooding and flood risk
- Highway Capacity issues
- Waste Water Treatment Facility constraints
- Other Constraints

National Park designation

The newly designated South Downs National Park covers a large proportion of the District. It includes a number of medium-sized settlements i.e. the towns of Midhurst and Petworth, which have specific needs in terms of local housing and employment growth. The level of housing development in the North of the District has previously been constrained, as much of the area fell within the Sussex Downs AONB. The South Downs National Park is now governed by the two Purposes of conserving and enhancing the natural beauty, wildlife and cultural heritage of the area, and promoting the understanding of and enjoyment of the Park's special qualities, and in the pursuit of the two Purposes there is a Duty to seek to foster the economic and social well-being of the communities within the National Park. If there is ever conflict between the two Purposes, the first Purpose takes precedence.

The English National Parks and the Broads UK Government Vision and Circular 2010, states that National Park Authorities "have an important role to play as planning authorities in the delivery of affordable housing. Through their Local Development Frameworks they should include policies that pro-actively respond to local housing needs. The Government recognises that the Parks are not suitable locations for unrestricted housing and does not therefore provide general housing targets for them. The expectation is that new housing will be focused on meeting affordable housing requirements, supporting local employment opportunities and key services". In the light of this, the National Park designation is likely to result in restrictions on the location and scale of future development.

Environmentally Sensitive Areas

In addition to the National Park there are a number of areas in the South of the District that have special protection status under national and EU regulations. These include Chichester Harbour Area of Outstanding Natural Beauty, Chichester and Langstone Harbour Special Protection Area / Special Area of Conservation (SPA/SAC) and the Pagham Harbour Special Protection Area (SPA). The sensitive nature of these areas

means that any future development in nearby locations is likely to impact them – particularly in terms of the potential recreational disturbance.

In September 2010, the District Council adopted an Interim Policy Statement on "Development & Disturbance of Birds in Chichester and Langstone Harbours Special Protection Area". This followed evidence from the Solent Disturbance and Mitigation Project indicating that human recreational pressures are potentially having an adverse impact on over-wintering birds at Chichester Harbour. The interim guidance defines a “zone of influence” surrounding the Chichester & Langstone Harbours SPA/SAC site that extends to 7km from the foreshore (which effectively covers most of the South of the District). Within this area, all proposals involving developments of 6 or more dwellings may be made subject to Appropriate Assessment to assess any potential impacts arising from the recreational activities of occupiers of the new housing. Planning permission will be granted only where it is demonstrated that harm arising from development can be avoided or mitigated. This may involve implementation of identified avoidance and/or mitigation measures secured through legal agreements. The Council will review the Interim Policy Statement following the outcomes of the Solent Disturbance and Mitigation Project expected in 2011 and again in 2012.

These constraints are likely to continue to result in restrictions on the location and scale of future housing development in the south of the District. Where housing development is considered to be appropriate, this will need to be at an appropriate scale and designed to minimise the impact on protected sites and environmental sensitive habitats.

Flooding and flood risk

Another major limitation on the supply of suitable land for housing development in the District is flooding and flood risk. This is mainly an issue in the South of the District, much of which is affected by both tidal and fluvial flooding. Environment Agency maps indicate that a range of areas across the south (stretching to the outskirts of Chichester City) are within fluvial flood warning areas or are at risk from tidal flooding. Areas at risk from tidal flooding (i.e. falling within Flood Zones 2 or 3) affect a number of settlements including Chichester, Selsey, East Wittering / Bracklesham, West Wittering, Hermitage, Southbourne (Prinsted), Bosham, Broadbridge, and Fishbourne. Areas at risk of fluvial flooding include parts of Chichester, Midhurst, Lavant, Hunston, Wisborough Green, and Loxwood.

With flood risk likely to increase in the future due to climate change and resulting rising sea levels, sites suitable for housing development are likely to be restricted within these areas. Where new development is allowed, it is likely to need appropriate flood alleviation measures. Overall therefore, the need to have regard to current and future flood risk in the District, will limit the amount of land available for future housing development to meet Chichester District’s future requirements.

Highway Capacity issues

The A27, which is the key trunk road running east to west across the District and which forms the Chichester Bypass, suffers from extensive congestion and capacity issues, particularly around key junctions on the Bypass. The problems are particularly acute during peak travel periods, and this is causing knock-on effects in terms of delays and diversion onto other unsuitable roads, and road safety issues. The A27 also acts as a barrier to movement between the City centre and its hinterland to the south. If this issue is not resolved, this will not only have the potential to negatively affect the economy of Chichester but is also likely to have an impact on the delivery of housing in the southern part of the District due to additional unsustainable pressure on the road infrastructure.

The District Council has previously commissioned transport modelling to assess the likely impact of new development on the existing road network (MVA, 2006). Further detailed studies have been undertaken by

the Highways Agency and West Sussex County Council to assess the requirement for improvements to the junctions on the A27 Chichester Bypass, with the aim of identifying an integrated package of transport improvements for the A27 and wider Chichester area. The work to date has indicated that that the most severe capacity constraints are along the A27 to the south and west of the City. There is however greater capacity to the east of the City on the A27.

A proposed transport package involving junction improvements on the Bypass and linked improvements to public transport, parking etc in and around the City was subject to public consultation in 2006. Following this, £137 million was allocated in the Regional Funding Allocation for the period 2014-2017 In October 2010, following the incoming Government's Spending Review, the Department for Transport publication 'Investment in Highways Transport Schemes' placed the A27 at Chichester in a list of schemes to be prepared for construction in future spending review periods. This indicates the Government's continuing commitment to progress the A27 improvements in the future, subject to the outcome of statutory processes. However, effectively it means that any work on the A27 improvements is now unlikely to commence until after 2015. The Highways Agency will now consider how the scheme will be taken forward, subject to a rigorous appraisal of costs, to assess the scope for greater efficiency to be designed into the scheme.

Overall therefore, the capacity of the A27 may act as a constraint on the timing and phasing of development which will need to demonstrate ability to mitigate any potential traffic impacts. This is especially true for developments in the Chichester City area.

Waste Water Treatment Facility Constraints

The final major constraint on housing development is waste water capacity within the District, particularly in relation to the Apuldram Waste Water Treatment Works (WwTW), which serves the City of Chichester, Fishbourne and surrounding areas. The treatment plant is currently operating at near consented capacity and is discharging into the environmentally sensitive Chichester Harbour, and there is a risk of deteriorating water quality in the Harbour in the future. Consequently, the Environment Agency has advised the District Council to refuse permission for new residential development if it results in a significant increase in the net flow to the sewer network discharging to Apuldram WwTW. Joint work undertaken by the Council, together with the Environment Agency and Southern Water, has indicated that other Waste Water Treatment Plants in the District are also reaching capacity (e.g. South Ambersham). Current 'headroom' at Apuldram is 700 additional dwellings and 400 dwellings at Tangmere.

The District Council has been working with the Environment Agency to investigate future additional capacity in order to overcome this constraint to future housing development. The 'Strategic Growth Study – Wastewater Treatment Options' study, commissioned by the District Council in 2010, assessed the wastewater capacity issues affecting development in and around Chichester City and Tangmere, and considered a range of solutions to overcome the constraints at the Apuldram WwTW. Future housing development will need to be planned and phased to take account of the delivery of new infrastructure, and uncertainties remain in relation to the planning, financing and upgrading of wastewater treatment facilities Consequently, the lack of spare Waste Water Treatment capacity in the District is likely to act as a continuing constraint on the delivery of new housing over the next decade.

Other Constraints

The constraints specified above represent the most significant identified constraints that are likely to restrict the scale and location of future house building in the District. It should be noted that potential housing delivery may be affected by a range of other more localised constraints, relating to factors such as landscape sensitivity, the historic environment (e.g. Scheduled Ancient Monuments, Listed buildings, Conservation Areas etc), and the character of existing settlements. In addition, the availability and capacity of local

infrastructure and key services (e.g. schools, health facilities, shops and employment) will also be a factor in planning housing development in different locations.

Summary

There are a number of issues that are likely to pose a risk to housing delivery by restricting the location and scale of housing development across Chichester District over the next 20 years. These include the potential impact of the newly designated South Downs National Park covering a large proportion of the North of the District. Development opportunities in the South of the District may also be limited by a number of factors - the most important of which include; wastewater treatment capacity constraints (particularly those affecting the Apuldram WwTW), traffic congestion on the A27 Chichester Bypass, the cumulative impact of recreational pressures on Chichester Harbour, and problems of increasing flood risk. These constraints reduce the overall capacity to deliver housing in the District, but will also affect the future planning and phasing of housing development, which will need to be closely tied to the funding and delivery of key infrastructure improvements.

Industry Capacity, Market Demand and Affordable Housing Funding

It is important to recognise that the scope for provision of new homes may be constrained not only by land supply. Market conditions may limit the pace of new market development, while the provision of affordable housing has historically been greatly influenced by the amount of public funding made available for affordable housing development. It is important therefore to examine what influences other than the provision of land may influence the pace of delivery.

The Delivery of Market Housing

Nationally the level of completion of new homes in England whether by new build or conversion has fallen dramatically over the past three years (see Figure 18). This has been the result of a number of interlinked factors.

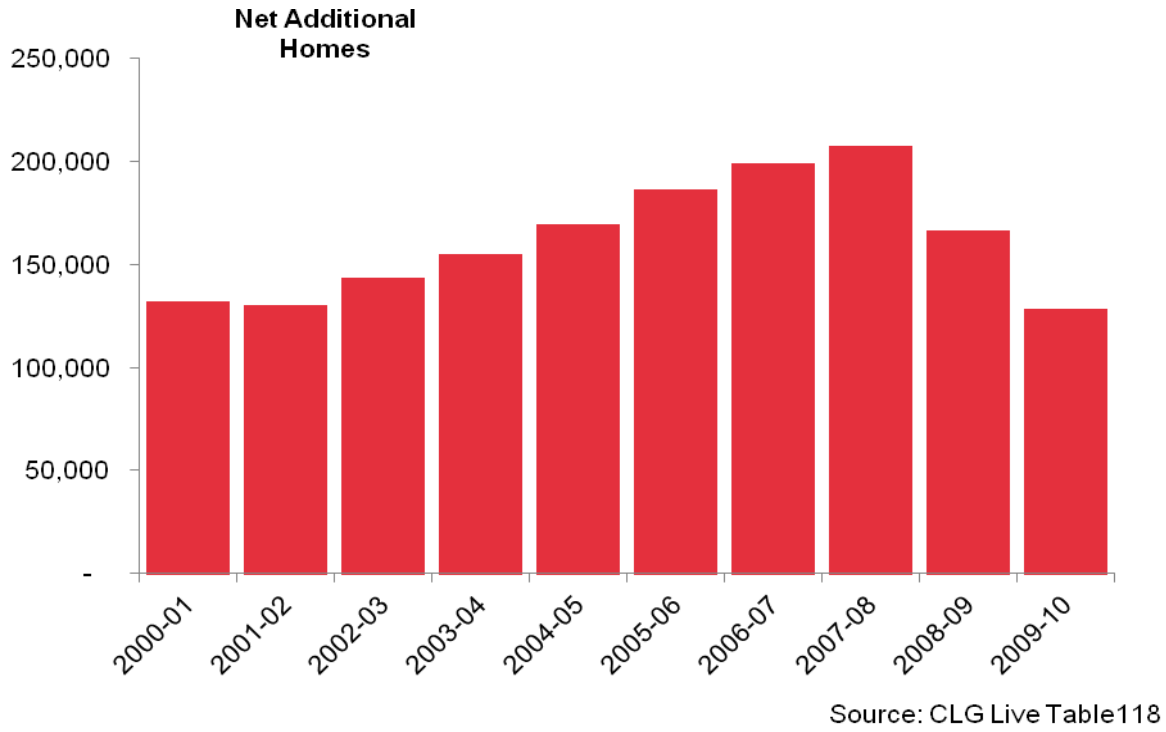
- The emerging sub-prime crisis in the USA, resulted in the dislocation of the wholesale finance market for residential mortgage lending, and the market started to turn, with prices falling in 2008 with significant falls in house prices across most of the country.

- The collapse of Lehman Brothers in September 2008, engendered near seizure in international finance markets and it was this that directly brought on the economic downturn and the most severe recession in the UK since the 1930s.

- House prices started to recover in London and the South East in 2009, but overall transaction levels remained low. Low sales volumes reflected lack of mortgage lending and lack of buyer confidence.

- Falling prices, low levels of sales transactions, and a sudden squeeze on development funding, hit all of the UKs volume housebuilders and smaller housebuilders hard, with many facing severe cash flow problems, and being taken into intensive care by their banks and some going out of business.

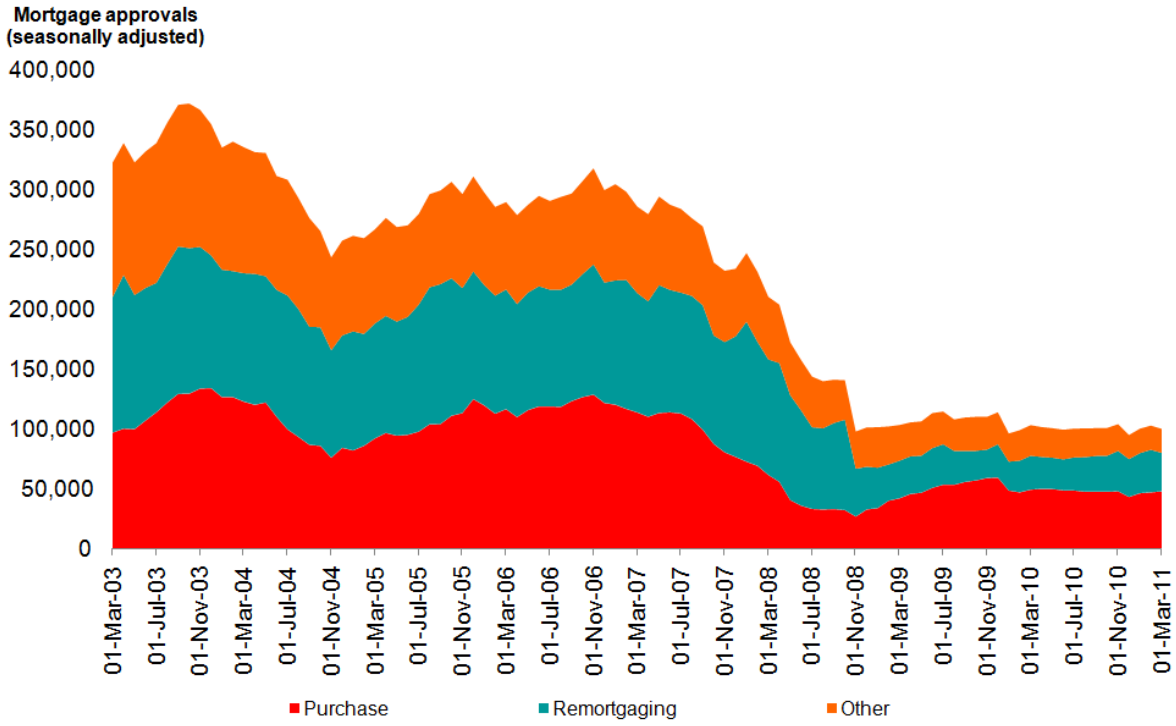
Figure 18: Net Additional Homes Completed in England 2001-10



Housing starts have begun to rise from a low base, but DTZ's expectation is that overall levels of housebuilding in the UK will remain depressed for many years compared to the period 2000-07. This reflects a number of considerations:

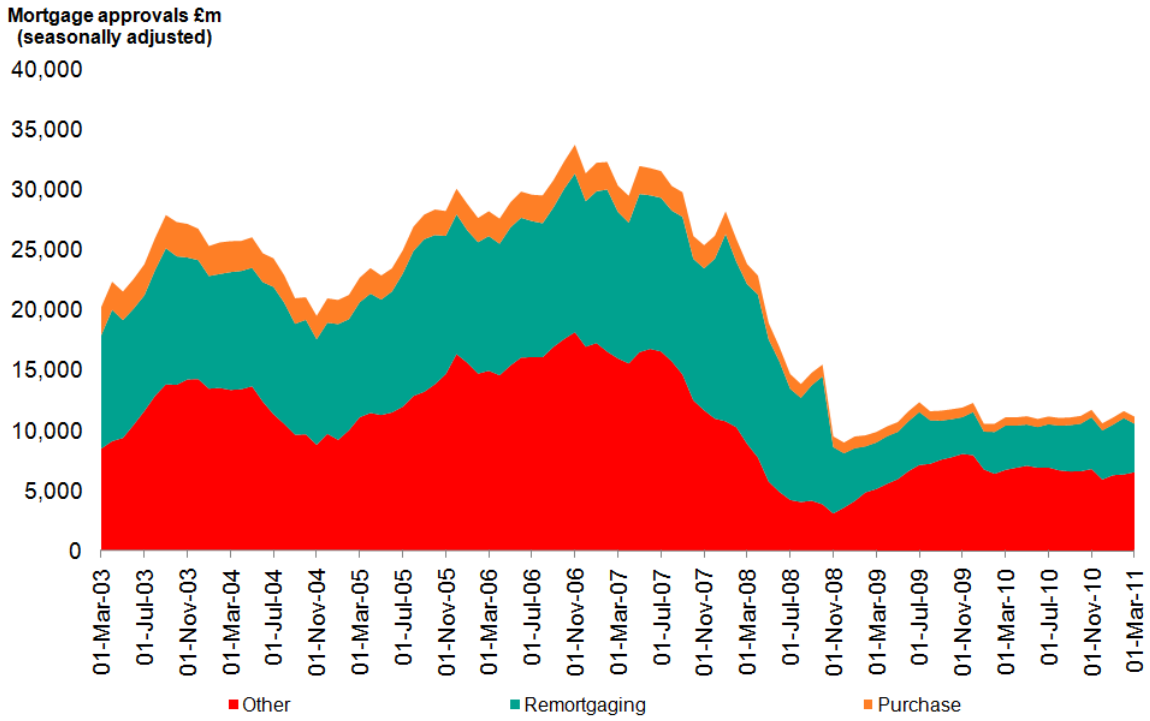
- Transaction levels remain low – typically around 60% of historic norms; this means that typical sales rates on new developments are lower than historically and this adversely affects cash flow, and particularly affects any developments that require significant up front capital investment.
- Low transactions rates reflect in part lack of mortgage lending (see Figures 19 and 20). Mortgage lending for purchase of homes continues to run at around half of the level recorded in the decade to 2007. This is a consequence of both supply and demand factors.
- Thus mortgage lenders are adopting more cautious lending practices, typically requiring deposits of 20-25% from prospective purchasers; and there are fewer mortgage lenders active in the market, and new regulation is fostering a more cautious approach to lending.
- At the same time, the demand for mortgages has fallen. Potential borrowers are concerned about job security. Household budgets are under strain from inflation and zero or low pay increases; and many first time buyers cannot raise a deposit of the size currently being required.

Figure 19: Volume of Mortgage Approvals for Home Purchases



Source: Bank of England

Figure 20: Value of Mortgage Approvals for Home Purchases



Source: Bank of England

Most of the major housebuilders have been refinanced and are slowly increasing their output of new homes. However they are concentrating on building houses rather than flats, responding to where there is market demand. There is particular difficulty in financing large new apartment developments, in markets outside London where off-plan sales are a thing of the past. This alone implies lower housing completions.

The availability and cost of development finance is also a constraint on expanding output; and is unlikely to change in the near future given banks' considerable lending exposure to the real estate sector and concern about how the housing market may fare during the forecast years of austerity. The housebuilding industry has also lost capacity; a number of housebuilders have gone out of business; and those that survive are leaner and more focused on markets with the best prospects.

Mortgage lending is likely to recover, but only slowly. There are fewer competitors in the market. There remain concerns about the sustainability of house prices in many parts of the country. Mechanisms to sell on mortgage debts through Residential Mortgage Backed Securities (RMBS) are constrained. Regulators are forcing banks to hold more core capital which reduces the scope for leverage. Wholesale funding remains in short supply; and many mortgage lenders will have to re-finance borrowings from the government under the Special Liquidity Scheme and the Credit Guarantee Scheme.

All these considerations point to continuing mortgage drought, throughout the period to 2020. It seems entirely probable that there will be no return to the cheap and readily available mortgages that characterised the decade to 2007. At the moment mortgages are cheap, for those able to obtain one, due to low mortgage interest rates, but this too is likely to change. The Bank of England is likely to start to raise interest rates towards the end of this year.

There are also well informed commentators, such as the McKinsey Global Institute, who anticipate an end to the 'cheap capital' that characterised the decade before the credit crunch, and forecast an era of higher interest rates for borrowers. This is largely due to the demand of the developing economies for investment capital and the likely reduction in savings rates in China, as the population starts to consume more. Such effects have knock on effects that will be reflected in UK mortgage lending volumes and the cost of mortgages.

All these considerations are likely at the national level to constrain new market housing development, unless a significant new source of funding, such as investment in new build rented properties by the major financial institutions, can be found to fund new housing development. Particularly hard hit will be schemes that require large up-front investments such as urban regeneration projects and major urban extensions, particularly in lower value areas.

The Delivery of Affordable Housing

At the same time that the development of market housing at the national level is likely to be constrained by financial considerations, the overall volume of affordable housing developed is likely to fall. The Government's own plans envisage a 25% fall in the output of affordable housing as the Spending Review indicated the intention to deliver 150,000 new affordable homes over the four year spending review (37,500 pa) compared to the 150,000 or so delivered over the previous 3 year spending review period (50,000 pa).

There are also major uncertainties about how the new Affordable Rent model for delivering affordable homes will work. This funding model will form the main element of new affordable housing supply and involves Registered Providers setting out their affordable housing delivery 'offer' in bids for a four year period. The model gives Registered Providers greater flexibility with rents – allowing them to charge tenants up to 80% of market level, in order to increase their borrowing and thereby fund this new affordable housing development.

However, the model involves significantly less grant than previously, with the HCA becoming the 'provider of last resort' and only providing gap funding where it can be demonstrated that this is needed. There are a significant numbers of unknowns regarding how the new programme will work in practice and hence the new programme will be regarded as higher risk by both Registered Providers and their funders. This suggests that volumes may drop as RPs and funders adopt a cautious stance until the new model is fully tested. Indeed, initial indications are that RPs are being very conservative in their bids in the Chichester area for the first four year period.

Thus DTZ believe it likely that the overall output of affordable homes will fall over the next four years; and it may do so by more than the 25% drop anticipated in the Government's spending plans. Almost any major change in the way in which development of new homes is financed will take time to bed down, and for all the partners involved in the delivery process to understand their role in the new model and how they can make it work to deliver their objectives, be that provision of homes for low income groups, or for profit.

Implications for Chichester District

The national trends set out above will have an impact on the delivery of new homes in Chichester District. However to some extent Chichester District is the sort of location where the effect of these high levels changes in the funding of housing development may have less of an impact than in many other parts of the country. Indeed Chichester District is precisely the sort of location that appeals to housebuilders even in the current market.

- The District is located in the wealthiest region in the country outside London. The economy of the South East generally is performing better than every other region other than London.

- The District is relatively well located in relation to London, so that demand is generated, particularly in the north and west of the District from those who will commute into London or wish to live within easy access to London.

- The District has considerable appeal to higher income groups with high quality countryside in the north, and a coastal location in the south, and the appeal of an historic cathedral city. This matches the profile of the types of households that are currently active in the housing market.

- The house builders are at present deliberately targeting the active sections of the housing market, building family homes for those who have significant housing equity; and focusing much less on smaller dwellings for first time buyers, and still less on flats.

- The District is also an attractive retirement destination, particular for those with substantial housing equity. New homes development targeted at this market can be expected to continue to come forward.

In the current market, housebuilders are likely to favour the development of small schemes of family homes, and possibly within Chichester City, small houses. However the appeal of the District within the regional (London and South East) market means that there is likely to continue to be robust demand for market housing development. However the tighter and more expensive development finance is likely to reduce the pace at which development happens in an unconstrained land market compared to what it would have been before 2007.

Chichester District is likely to be a location where the Affordable Rent model is potentially more viable for developers than in many parts of the country. DTZ has not investigated how the Affordable Rent programme

will work in Chichester District, but given the pressure of demand for market rented properties, reflected in local rental levels, there should be scope to finance new development of affordable homes through charging up to 80% of market rents. However, these rental levels are unlikely to be affordable for those who are in the highest priority need of housing, so there is likely to be a continuing need for social rented housing (where rents are tied to levels set through the national rent regime).

DTZ's expectation regarding the development of affordable housing is that over time the overall output of affordable homes may fall from the levels currently being achieved, helped by significant developments in Chichester, largely funded and approved under the old regime. However, it is expected that the fall in output will be less significant that in many other areas because, if the local authorities are supportive, it is an area where RPs will be willing to invest, and the homes built will be regarded as good security by lenders.

Broadly DTZ conclude that demand should not impose a major constraint on the ability to develop new homes in Chichester District; the larger issues are to do with the funding of infrastructure associated with major new developments; and if these schemes have to be funded through developer contributions, how this will impact on the overall viability of development.

However, raising housing delivery rates above long term historic averages could be constrained by market capacity, particularly if development has to bear abnormal costs associated with the need to address flood, waste water or transport infrastructure issues. Larger sites which consistently deliver volume new housing may be particularly affected in terms of development economics if infrastructure investment has to be funded out of development values.

The Impact of Policy on Delivery Volumes

Over the past decade the number of new homes built in Chichester District has fallen short of both Structure Plan and South East Plan targets for the District. For most of this decade up to the end of 2007 the housing market was buoyant. In DTZ's assessment the housing market is likely to remain more difficult in relative terms until at least 2015, and quite possibly to 2020, even in Chichester District which is an attractive place for development.

It has been outside the scope of this study to assess whether the shortfall of new homes built relative to targets in the period before 2008 has been the product of constraints on the effective land supply that could be brought forward for development at an acceptable price; or has been the product of limited demand or profit maximising behaviour by land owners or developer; or a mix of these factors.

What can be concluded from this review, however, is that if similar or higher levels of housing development are to be delivered in the future, then it is likely that the public sector would need to work in a proactive way to encourage housing development. This reflects a more difficult housing market in the next few years at least, the scale of infrastructure and environmental constraints in the District, and the more constrained public sector funding environment.

There are a number of ways that Chichester District Council and the South Downs National Park Authority can influence the pace of development of new market and affordable homes through their own actions. The following paragraphs discuss the scope for the two planning authorities to use Government initiatives to enhance housing delivery – in terms of affordable housing policies, development contributions, and the New Homes Bonus.

- **Affordable Housing Policies.** Under the new affordable housing regime there are likely to be less affordable homes completed (as described above). This will mean that there are less affordable homes completed than are currently required within the District. Compared to other parts of the country, the district is not demand constrained. So, the planning authorities could consider adopting an approach that encourages an increase in the total housing supply, as a means of delivering more affordable housing. The interim policy guidance currently in use in the District sets a target of 40% of all new housing being affordable on sites with 10 additional dwellings or more, and a target of 20% of all new housing being affordable on sites with 5-9 additional dwellings. Encouraging new private housing delivery within the District will, through this policy, also deliver affordable housing as a direct result of permitting private market housing delivery.

- **Development contributions**. The two planning authorities need to consider how to maximise the potential for obtaining development contributions towards the provision of necessary infrastructure. This is likely to be achieved through a combination of planning obligations (Section 106 agreements) which can be used to cover provision of infrastructure directly related to or made necessary by new development, together with the introduction of a Community Infrastructure Levy (CIL) scheme. Under new regulations introduced nationally in 2010, CIL can be used to obtain financial contributions from specified development towards new or upgraded infrastructure, at the sub-regional, district or local neighbourhood level. However, in order to introduce CIL, the planning authorities must prepare and consult on a charging schedule setting out the level of contributions and the purposes for which they will be used. These will need to be clearly related to identified infrastructure and funding requirements, and provide evidence of viability (i.e. that the level of contributions will be generally achievable for development across the District).

- **New Homes Bonus.** The New Homes Bonus commenced in April 2011 and is a mechanism by which the Government match funds the additional council tax raised for new homes. It is intended to provide a means for local authorities to help mitigate the additional pressures on services and infrastructure that new housing (and additional population) brings. It therefore provides additional resources to local authorities that are actively delivering new housing. All new completed homes in Chichester District will qualify for the New Homes Bonus. Therefore, in receiving this, the two planning authorities could consider the benefits of allocating a proportion of the funds from the scheme towards the direct costs of upgrading relevant infrastructure or supporting affordable housing development. This would help ease the additional pressures caused by the new homes. Additionally, the authorities could consider allocating a proportion of the received funds to help enable further housing development, thus generating additional funds and resources through the New Homes Bonus scheme.

DTZ

Bringing You the Power of One™

Chichester District LHRS: Appendix D – Working Paper on Size and Type of Homes Required

Chichester District Council & South Downs National Park Authority

July 2011

1116WC00

Contents

Introduction

This working paper is one of a series of papers that forms the basis for the Chichester District Local Housing Requirements Study (LHRS). One aspect of the study brief has been to provide commentary on what type and size of homes may be required over the period to 2031. This working paper sets out our commentary, presenting information and analysis relating to the following:

- A summary of the housing requirements, as presented in the Main Report and Demographic Scenarios Working Paper (Appendix A)
- An indicative breakdown of the size requirements for new dwellings, were current occupational patterns by type of household to continue unchanged into the future
- A breakdown of current size and type of the housing stock in Chichester District based on 2001 Census data
- Conclusions regarding policy on the size and type of new homes that the Planning Authorities should look to plan for in the period to 2031.

Summary of Total Requirements

The findings of the Demographic Scenarios Working Paper and Main Report recommend that on the basis of the demographic projections the planning authorities in Chichester District should plan for a housing requirement of 450- 525 net additional dwellings per annum.

However the Local Housing Requirements Study has not undertaken a detailed assessment of capacity to deliver this level of housing in terms of identifying land suitable for development and taking into account environmental and infrastructure constraints.

The study brief asks for this indicative housing requirement (before consideration of land supply issues) to be split between the South and the North of the District. Based on the demographic projections for the North and South of the District, this would imply a requirement of 70-95 additional households pa in the North over the plan period, and 380-430 additional households in the South – as shown in Figure 1.

However, these indicative figures are merely based on past trends of development and change in household numbers, and DTZ would recommend that the two planning authorities work together to determine how best the overall District requirement can be met in the light of the capacity of different settlements to absorb additional housing, infrastructure issues and land availability.

Figure 1: Total Net Additional Housing Requirement by District and Sub-area

	Total Requirement 2006-2031	Annualised Requirement
Chichester District	11,250 – 13,125	450 – 525
North of District	1,750 – 2,375	70 – 95
South of District	9,500 – 10,750	380 – 430

Source: DTZ

Current Patterns of Occupation

Often it is suggested that because the number of small (1 and 2 person) households is forecast to increase in the future, this necessarily means that the requirement for small dwellings will increase. However it is very hard to translate projections of particular household types into forecasts of what the market demand will be for particular types of property.

The relationship between household size and property size reflects a complex mix of socio-economic variables. The relatively high proportion of couples without children occupying larger properties may reflect the existence of many 'empty nesters' – those who have had children who have now left the family home, but have not downsized. Equally it may reflect the growing number of dual income households with no children, who have substantial purchasing power.

Research by Professor David King at Anglia University, for example, highlights that dwellings with more than seven rooms are commonly bought and occupied by single or two-person households, and that these households comprise many of those living in such properties.

Although affordability is increasingly an issue for many households in today's housing market (particularly among first time buyers due to access to finance), policy orientated towards building smaller properties for smaller households would fail to understand this added dimension, and therefore the aspirations and needs of households today and in the future.

The assumption that household size and dwelling size are directly correlated in the market sector is therefore misleading. However it is possible to establish the *current* pattern of occupation of dwellings by households of different sizes; and then relate this to anticipated changes in the characteristics of households to derive some estimate of the broad mix of dwellings that may be required in the future.

The first step in this process is to analyse the likely pattern of growth in different household types over the period to 2031. Figure 2 shows the anticipated growth in the period to 2031 in different household types based on the anticipated range of new housing provision. The assumption is that the *proportions* of different households are the same as that contained in the CLG household projections to 2031.

Figure 2 shows that couple households (which includes couples with children) account for 52% of the increase in households over the period 2006-31, while single person households account for 38% of all additional households, and lone parents account for 8%.

Figure 2: Housing Requirements 2006-2031 by Household Type

	Single Person	Couple	Lone Parent	Other	Total
Chichester District	4,280 – 4,990	5,850 – 6,830	900 – 1,050	230 – 260	11,250 – 13,125
North of District	670 – 900	910 – 1,240	140 – 190	40 – 50	1,750 – 2,375
South of District	3,610 – 4,090	4,940 – 5,590	760 – 860	190 – 220	9,500 – 10,750

Source: DTZ, CLG Household Projections 2008. Rows may not sum due to rounding.

The large increase in the number of single person households would at first sight suggest a requirement for a large number of additional small dwellings. However, as explained above, the relationship between household size and dwelling size in the market sector is not straightforward. This can be demonstrated by an analysis of the size of the current homes occupied by households of different sizes. Figure 3 shows the size

of houses occupied by different types of household for the South East region based on analysis from the Survey of English Housing.

Only a third of single person households live in 1 bedroom accommodation and over a third live in 3 bed or larger homes.

Figure 3: Size of Home Occupied by Different Households – South East

	Single Person	Couple	Lone Parent	Other
1 bedroom	32%	5%	1%	1%
2 bedroom	31%	19%	32%	23%
3 bedroom	29%	47%	54%	43%
4 bedroom	7%	22%	10%	25%
5 bedroom	1%	5%	3%	8%
6+ bedroom	0%	1%	0%	1%
Total	100%	99%	100%	100%

Source: Survey of English Housing

If it is assumed that future patterns of occupation mirror these past patterns of occupation, it is possible to generate broad estimates of the breakdown of the size composition of dwellings required in future to meet the anticipated changes in household composition. This is achieved by applying the percentages shown in Figure 3 to the household projections set out in Figure 2. It should be noted that this estimate of future size requirements assumes that past occupation trends continue into the future.

The analysis suggests that 15% of the additional households living in Chichester District are likely to require 1 bedroom properties. This compares to a much higher percentages of single person households. The analysis also suggests that 60% of the growth in households from 2006 to 2031 is likely to result in demand for 3 bedroom or larger properties.

A significant factor in the demand for 3 bed properties and larger is the ageing population. Much of the increase in single person households is associated with the ageing population. Many older people still occupy family sized accommodation and do not move to smaller accommodation. Therefore, as the growing numbers of older people continue to occupy houses of this size, other households who can afford to buy these properties are dependent on the supply of 3 bed and larger properties increasing.

Figure 4 sets out the overall mix of housing that would be required, given anticipated changes in household types (based on CLG projections) and current patterns of occupation in the South East. The analysis suggests a requirement for 20% of new homes to be 4 bed properties or larger, 40% of new homes to be 3 bed; 25% to be 2-bed and 15% to be 1 bed properties. Given the methodology used to calculate this, the proportions required in the North and South of the District are the same as the District average, though the numbers vary (see Figures 5 and 6)

Figure 4: Size of Home Future Households Likely to Occupy – Chichester District

	Indicative Housing Requirement	% of Total
1 bedroom	1,670 – 1,950	15%
2 bedroom	2,780 – 3,240	25%
3 bedroom	4,570 – 5,330	41%
4 bedroom	1,730 – 2,020	15%
5 bedroom	380 – 440	3%
6+ bedroom	120 – 140	1%
Total	11,250 – 13,125	100%

Source: DTZ. Columns may not sum due to rounding

Figure 5: Size of Home Future Households Likely to Occupy – North of District

	Indicative Housing Requirement	% of Total
1 bedroom	260 – 350	15%
2 bedroom	430 – 590	25%
3 bedroom	710 – 970	41%
4 bedroom	270 – 370	15%
5 bedroom	60 – 80	3%
6+ bedroom	20 – 30	1%
Total	1,750 – 2,380	100%

Source: DTZ. Columns may not sum due to rounding

Figure 6: Size of Home Future Households Likely to Occupy – South of District

	Indicative Housing Requirement	% of Total
1 bedroom	1,410 – 1,600	15%
2 bedroom	2,340 – 2,650	25%
3 bedroom	3,860 – 4,370	41%
4 bedroom	1,460 – 1,660	15%
5 bedroom	320 – 360	3%
6+ bedroom	100 – 110	1%
Total	9,500 – 10,750	100%

Source: DTZ. Columns may not sum due to rounding

It is debateable if the current relationship between household size and dwelling size will remain unaltered over the next 20 years or if this is desirable. It is possible that increasing numbers of older couples or single person households may wish to release housing equity and downsize into two bed (or exceptionally one bed) properties, which would free up family accommodation. Policy might wish to encourage this – though it is remarkably difficult in DTZ's view to plan for this.

Equally, it may be that a decade of austerity will slow the increase in single person households. If affordability problems remain severe, one might expect to see an increase in households comprising of unrelated individuals rather than single person households. Older children might continue to live in parental accommodation. Benefit changes are intended to reduce under-occupancy in the social and private rented sector where households are in receipt of benefit.

Housing Stock and Affordability

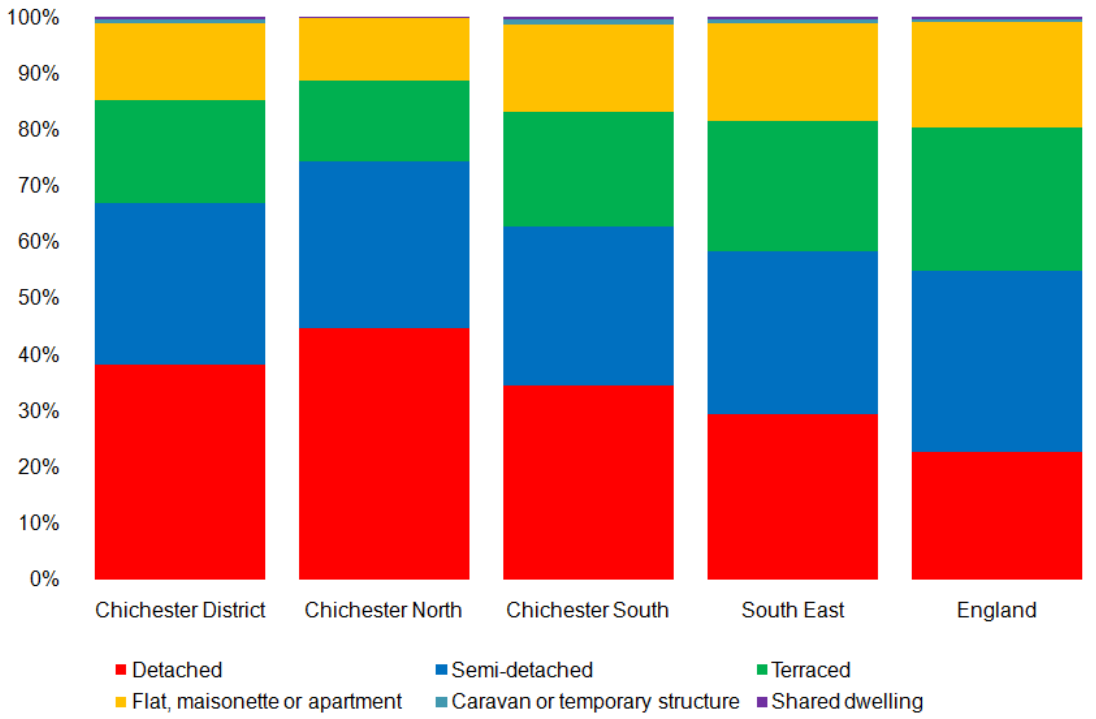
An alternative approach to considering what type of new housing is required in the future is to consider if there are particular biases in the current composition of the housing stock and whether this creates any issues that could be addressed through policy. A particular issue that rural areas often face is that they have a greater supply of larger properties and fewer smaller, and hence cheaper, properties. This contributes to affordability problems (already exacerbated by the high demand in commuter areas of the South East) since there is proportionately less entry level housing than in many urban areas. Affordability is a key issue within Chichester District, as highlighted by the Taylor Review (2008), which cited the district as one of the least affordable rural local authorities nationally.

This pattern can clearly be seen in Chichester District (see Figure 7). Flats and terraced properties are generally smaller than semi-detached and detached properties on average; and hence more affordable. But across Chichester District as a whole there are proportionately fewer flats and terraced properties and more detached and semi-detached properties than the average for the South East as a whole and for England.

This pattern is even more marked in the North of the District, whereas in the South the distribution of dwelling types is not so different to that found in the South East region as a whole. Furthermore a significant number of properties in rural areas have been lost as affordable housing through the Right to Buy. Many of these properties are extended and have the benefit of large gardens, hence when they are sold often in excess of £300,000 they are no longer affordable for first time buyers,

Overall only a third of the housing stock in the District are flats, maisonettes, apartments and terraced housing (33%), and two-thirds are detached or semi-detached housing (67%). This bias towards larger property types is particularly pronounced in the North, where detached housing alone makes up 45% of stock, and detached and semi-detached housing together total 75% of total stock (compared to 62% in the South). Consequently the South, in particular Chichester City, has a greater proportion of its stock as terraced or flats / apartments (totalling 35% in the South compared to 25% in the North).

Figure 7: Chichester Housing Stock Proportions by Type, 2001



Source: Census, 2001

The size bias of the housing stock is one reason why Chichester District has more severe affordability problems than urban areas; and it suggests that one way in which the planning authorities can seek to improve affordability is to encourage the development of relatively more small dwellings, rather than large dwellings.

Conclusion on Size and Type of Dwellings Required

It is difficult for planning authorities to anticipate what the demand will be for different types and sizes of dwellings, given that in the market sector this is a function more of household income rather than household size. Demand also varies given market conditions. For example the market for smaller dwellings is limited at present by the difficulty first time buyers are having in accessing mortgage finance, while the market in family homes is comparatively buoyant (though still depressed by historic standards).

However, having said this, given the attraction of Chichester District to in-migrants, being totally market led could result in housing development which is primarily driven by demand from households moving into the District and failing to ensure that local people can access the housing market.

DTZ therefore recommend that CDC and the SDNPA seek to influence housing mix without being too prescriptive through the following approach:

- The local planning authorities should recognise that planning for a mix of housing is not a precise science and therefore setting precise planning policy targets for particular types and sizes of market dwellings is likely to present difficulties in practice

- However, it is appropriate to seek to address bias and broad imbalances in the housing market and the existing stock of dwellings through new development, thus encouraging the development of smaller dwellings particularly in those areas where larger dwellings account for the majority of the stock

- In assessing the appropriate mix of housing to be sought on particular development sites or locations, a range of evidence needs to be considered in addition to projections of future household types and sizes, and appropriate weight needs to be given to these factors depending on the circumstances of the site and the characteristics of the existing area.

Part of the solution to affordability problems in the District would be to foster the development of smaller house types (terraces or flats) to increase the supply of less expensive house types. This would have the added advantage that such stock is less likely to appeal to wealthy in-migrants, and hence more likely to meet the needs of existing local residents. Encouraging development of smaller units will also provide opportunities for older people to downsize and free up housing that is being under-occupied.

In influencing the mix of housing, the planning authorities may need to actively seek to ensure the general provision of smaller house types through policy particularly in the current housing market. At present developers are most interested in focusing on developing family housing, because there is more demand for such housing, whereas the demand for smaller homes is constrained by the ability of first time buyers to access mortgages. However, planning policy must be aware of the patterns of housing demand.

The planning authorities could therefore look to secure a range of house sizes in developments of a certain number of units, with the objective of ensuring that the stock of smaller, (relatively) lower value new homes are built, since they will be relatively more affordable to existing local residents. Policies that set indicative targets for the overall balance of new homes in terms of different sizes of dwellings, would give some leverage over planning applications (without being overly prescriptive), as well as sending a message to developers.

With respect to the balance of houses and flats, DTZ are of the view that it is for developers to judge what will meet market demand, and the planning authority should focus on what mix of flats and houses is best suited in urban design terms to the particular site under consideration.

DTZ

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Chichester District LHRS: Appendix E – Working Paper providing Commentary on Affordable Housing Targets, Tenure Mix and House Types

Chichester District Council & South Downs National Park Authority

July 2011

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Contents

Introduction

This working paper is one of a series of papers that forms the basis for the Chichester District Local Housing Requirements Study (LHRS). It provides commentary on affordable housing targets, tenure mix and comments on the conclusions in terms of the affordable housing requirements (size and type) set out in the Coastal West Sussex Strategic Housing Market Assessment published in 2009.

The context for the discussion is the recent recession which has had a major impact on the delivery of market housing (and through Section 106 agreements has also affected the delivery of affordable housing) and the fundamental reshaping of the National Affordable Housing Programme (NAHP) by the coalition Government.

The main focus of future Government funding for housing provision will be on delivery of Affordable Rent homes – homes designed to house those in need, but where rents will be set at up to 80% of market levels. Affordable housing provided through Section 106 agreements will no longer attract grant except in exceptional circumstances but will be regarded as forming part of the overall NAHP.

PPS3 still states that affordable housing should meet the needs of eligible households including availability at a cost low enough for them to afford, determined with regard to local incomes and local prices. The affordability of affordable rents is also dependent on the availability of local housing allowance.

HCA funding for the next four years has been reduced by 62% measured on an annual basis, compared to the past three years.

Affordable Housing Targets

Chichester District Council's Interim Statement on affordable housing (adopted in 2007) seeks provision of 40% affordable housing units on housing developments of more than 10 units and 20% affordable housing units on schemes of 5 – 9 units. Given issues of affordability and levels of housing need both CDC and the SDNPA will wish to maximise provision of affordable housing.

DTZ are confident that a 40% affordable housing target can be justified in terms of current levels of local housing need, though this has not been the subject of specific review in this study. The issue will be whether the 40% housing target is achievable in the current market environment.

It is possible that developers may challenge the 40% affordable housing target on grounds of viability. With respect to this we would note that previous affordable housing viability studies that CDC have undertaken are now somewhat dated, particularly in the light of the changes to the affordable housing regime.

However developers may well take the view that rather than challenge the targets set in affordable housing policy, they will seek to reduce their commitment through scheme specific negotiation if they believe the affordable housing requirement renders their scheme unviable (although this has not been a major issue in Chichester District to date).

We recommend that the two planning authorities review and test whether the affordable housing targets set in planning policy are sound under the new regime for funding affordable housing – specifically the Affordable Rent programme and zero grant on S106 sites.

The issue facing developers is that there is little evidence yet over what Affordable Rent housing will contribute to Gross Development Value, and hence its impact on overall scheme viability. The starting

assumption in assessing viability would be that the affordable housing is provided with no subsidy and the capitalised value of the rental stream needs to be sufficient to cover the cost of constructing the units with the land being provided at nil cost. This should be reflected in the price a developer pays for the land.

Tenure Mix

The current CDC approach in discussions with housing developers is to seek a 70/30 split, where 70% of new affordable housing development is for social renting and 30% intermediate housing for intermediate rent, shared ownership or shared equity sale.

This approach needs to be reviewed in the light the introduction of the new Affordable Rent programme, and the bidding process put in place by the HCA for allocation of grant aid. It will also be useful in undertaking such a review to understand what Registered Providers have bid for, secured funding for, and are committed to deliver as part of their four year package (yet to be agreed) with the HCA.

The key issues for the two planning authorities are whether they accept that Affordable Rent homes are a substitute for social rented housing. The Government has made it clear that Affordable Rent is intended to meet the needs of the same client group as social rented housing.

In its housing policy role, CDC will however need to consider together with Registered Providers what type of households are best suited to being allocated Affordable Rent homes and what level of rent is affordable to those in housing need.

There is also a need to review the mechanism for delivering shared ownership or shared equity housing. It is not envisaged that there will be significant amounts of HCA funding for intermediate ownership products, outside the new Government's First Buy shared equity programme, which is planned to help 10,000 households in England.

However the housebuilders are likely to continue to provide privately funded shared equity products, and Registered Providers may be interested in shared ownership schemes on s106 sites. Shared ownership is likely to deliver better returns for Registered Providers than affordable rent due to the financial benefit to cashflows of selling a proportion of each home following completion.

The main purpose of policies seeking a mix of affordable rent and low cost home ownership has been to help achieve mixed and balanced communities. This rationale remains for having an element of low cost home ownership, at least, in larger schemes.

Therefore DTZ would recommend retention of current policy on tenure mix, while recognising that flexibility may be needed as the implications of the new regime are worked through.

Housing Need and Size and Type Requirements

It has not been a part of the Local Housing Requirements Study to review housing need, but the brief requires this report to review and comment on the recommendations for affordable housing in the Coastal West Sussex Strategic Housing Market Assessment (SHMA) published in 2009.

The SHMA states that there is an acute need for affordable housing in Chichester District – in line with other areas in Coastal West Sussex. This is partly due to the significant barriers to market entry. The SHMA estimates a range of net annual affordable housing need in Chichester District of between 360 and 699 households per year. As set out in the Delivery Assessment Working Paper (Appendix C), the average level

of new build affordable housing delivery over the last 10 years through planning policy has been 120 dwellings per year. Housing need therefore exceeds the delivery of affordable housing by between 3 and 5.8 times.

In terms of the size requirements for affordable housing, the Coastal West Sussex SHMA identifies that the greatest pressure is for smaller properties – with 54% of households on the Housing Register requiring one-bed properties and a further 27% requiring 2-bed units. Comparing these requirements to annual lettings, the SHMA indicates that 1-bed and 4-bed dwellings are experiencing the greatest demand pressures.

However, providing more 2-bed and 3-bed units would allow transfers between types of units, which would release smaller units to those currently on the waiting list. This would also help to correct the imbalance in stock caused through larger properties (especially in rural areas) being lost through 'right to buy'. The SHMA therefore recommends that in terms of housing size and mix, future affordable provision in the District should be aimed at providing 20% 1-bed, 30% 2-bed, 30% 3-bed and 20% 4 bed units. The mix of affordable unit sizes is broadly in line with the requirements by size for private housing outlined in Appendix D. In DTZ's view this recommendation remains appropriate.