

# **Estimating Housing Need and Demand In Gloucestershire**

**Technical report for the  
Gloucestershire Strategic Housing Market Assessment**

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# CONTENTS

1	INTRODUCTION .....	3
	Study aims and scope .....	3
	Approach .....	3
	Report structure .....	4
2	AFFORDABILITY .....	5
	Income distribution by household type .....	5
	Income levels in Gloucestershire .....	7
	Matching households with dwellings .....	8
	Price levels and minimum market entry incomes .....	10
3	CURRENT HOUSING NEED .....	12
	Examination of Housing Registers .....	12
	Examination of Zone Agent data .....	14
	Final estimate of current housing need .....	15
4	FUTURE NEED .....	16
	Household projections .....	16
	Newly forming households .....	17
	Affordability test .....	18
	Existing households falling into need .....	19
5	AFFORDABLE HOUSING SUPPLY .....	21
	Affordable dwellings occupied by households in need .....	21
	Surplus stock, committed supply and units to be taken out of management .....	21
	Future re-let supply .....	22
	Intermediate supply .....	25
6	HOUSING NEED – BRINGING THE EVIDENCE TOGETHER .....	27
	Estimate of net annual housing need .....	27
	The size and type of affordable housing required .....	28
	The intermediate sector .....	30
	Implications for the market sector .....	33
	Price sensitivity test .....	35
	STATISTICAL APPENDIX .....	37
	Current Housing Need .....	37
	Household Projections .....	40
	Newly Arising Households .....	46
	Supply-side .....	48
	Intermediate sector .....	50

# 1 INTRODUCTION

- 1.1 This report sets out the findings of the additional technical work carried out to complete the Gloucestershire Strategic Housing Market Assessment (SHMA). It will be accompanied by an Executive Summary Report which integrates this Technical Report with other elements of the SHMA, most notably the previous work done by Fordham Research.

## Study aims and scope

- 1.2 The aim of this study is to address gaps in the Gloucestershire SHMA evidence base, to provide information to assist the Gloucestershire authorities with the formulation and implementation of housing related policies and the targeting of resources.
- 1.3 In particular the work produces outputs to inform the adoption of policies and targets related to paragraph 22 of PPS3. This paragraph reads as follows:

"Based upon the findings of the Strategic Housing Market Assessment and other local evidence, Local Planning Authorities should set out in Local Development Documents:

- The likely overall proportions of households that require market or affordable housing, for example, x% market housing and y% affordable housing.
  - The likely profile of household types requiring market housing e.g. multi-person, including families and children (x%), single persons (y%), couples (z%).
  - The size and type of affordable housing required."
- 1.4 The research also provides evidence to support policy relating to PPS3 paragraph 29, concerning the following:
- Setting an overall (i.e. plan-wide) target for the amount of affordable housing to be provided;
  - Setting separate targets for social-rented and intermediate affordable housing where appropriate;
  - Specifying the size and type of affordable housing that is likely to be needed in particular locations and, where appropriate, on specific sites;
  - Setting out the range of circumstances in which affordable housing will be required. The national indicative minimum site size threshold is 15 dwellings. However, Local Planning Authorities can set lower minimum thresholds, where viable and practicable, including in rural areas.

## Approach

- 1.5 The necessary outputs concerning affordable housing are products of the housing needs calculation. Therefore much of the approach is concerned with gauging housing need. As set out in PPS3, housing need is defined as 'the quantity of housing required for households who are unable to access suitable housing without financial assistance'.
- 1.6 The outputs of PPS3 require need to be split by household type which is then converted into requirements for dwellings of different types and sizes. This must then be compared to available affordable housing supply, also differentiated by type and size, to identify shortfalls and surpluses.
- 1.7 The approach taken is fully compliant with the Strategic Housing Market Assessments Practice Guidance produced by CLG in August 2007 (hereafter referred to as "the Practice

Guidance”). Chapter 5 of the Practice Guidance sets out the method of calculation, detailing 5 stages:

- Stage 1: Current housing need
- Stage 2: Future housing need (gross annual estimate)
- Stage 3: Affordable housing supply
- Stage 4: Housing requirements of households in need
- Stage 5: Bringing the evidence together

1.8 The work was carried out between November 2008 and January 2009 by Peter Smith Research and Consulting. It builds on the SHMA work carried out by Fordham Research in 2008, and draws on additional primary and secondary sources including:

- 2004 Gloucestershire County-wide Housing Needs Survey (response data and questionnaire);
- P1E homelessness data;
- Record level output from Housing Registers;
- Housing Benefit statistics;
- Zone Agent Information;
- Housing Strategy Statistical Appendix (HSSA)
- Data on empty properties;
- Local Authority Private Sector Stock Condition Surveys;
- Information supplied by Local Authorities on committed supply of new affordable units, demolitions and conversions;
- 2004-based sub-national household projections produced by CLG;
- 2001 Census data;
- Survey of English Housing 2005 (SEH);
- CORE (“Continuous Recording System”) data on social sector lettings and sales;
- Regulatory and Statistical Returns Survey (RSR);
- CACI Paycheck Area Report for Gloucestershire.

## **Report structure**

1.9 The report structure parallels that of Chapter 5 of the Practice Guidance, which sets out how to measure housing need. Section two of the report sets out in detail the approach taken to gauging affordability, which is an important part of the housing needs calculation. Section 3 presents the evidence used to estimate current housing need. Section 4 looks at newly arising need and section 5 provides the inputs for the supply-side of the calculation. Finally, section 6 brings together the various elements to generate the study’s main outputs.

1.10 A statistical appendix has been added to the end of the report providing a series of tables displaying more detailed breakdowns and background data which was generated during the analysis. This information forms part of the evidence base of the SHMA. Due to rounding totals in tables may not always sum

1.11 All references in the report to “Tewkesbury” indicate the Borough as a whole and not just the town. All references to “Stroud” indicate the District and not just the town.

## 2 AFFORDABILITY

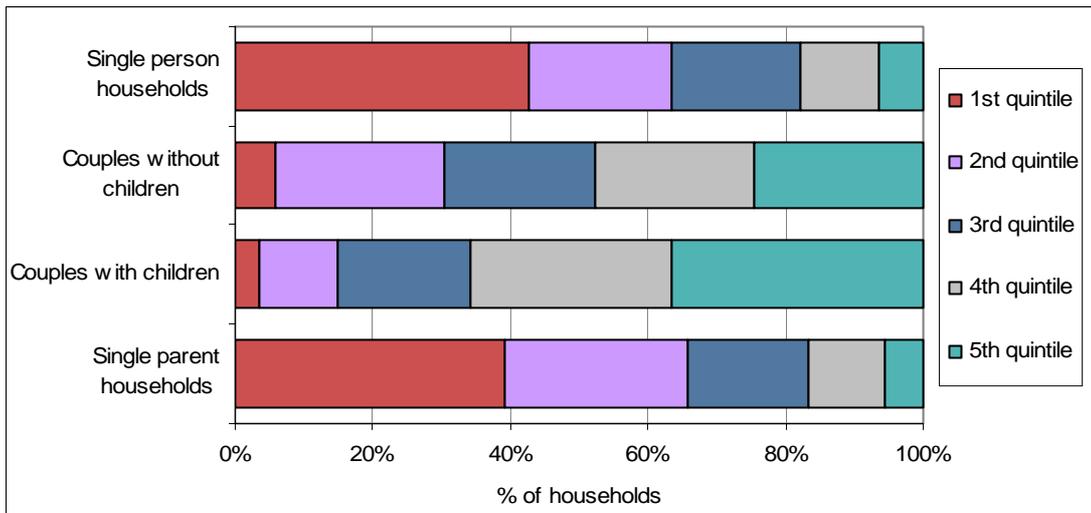
2.1 Assessing affordability is of central importance to measuring the need for affordable housing and demand for open market housing. This section of the report sets out the approach taken to measure affordability which is applied to the estimate of households in need in subsequent sections of the report.

### Income distribution by household type

2.2 The assessment of affordability requires household incomes to be measured against prices of appropriately sized dwellings. This sub-section examines evidence from a number of sources concerning the first of these elements. The approach differentiates income distribution by household type – single person households, couples without children, couples with children and single parent households.

2.3 The first source examined is the Survey of English Housing (SEH) covering the period April 2004 - March 2005. Record level response data is available for analysis containing a total of 19,061 responses throughout England (20,916 when weighted by the appropriate household variable). Of these respondents 245 were Gloucestershire households – too few to constitute a robust statistical sample. Because of this the initial level of analysis is for England as a whole. All respondent households are ordered by gross household income and then banded into five “quintiles” or 20% groups. The results are presented below.

**Figure 2.1 Income distribution by household type - England**



Source: SEH 2005

2.4 The graph shows, for each household type, the share belonging to each quintile based on the household income distribution of England as a whole. 43% of single person households belong to the lowest 20% of household incomes in England. The income distribution of couples with children is quite different, with 37% of these households among the 20% highest earning households.

2.5 Whether or not Gloucestershire has a similar pattern of income distribution by household type as England as a whole is a key question to be addressed in order to determine whether the analysis can be usefully applied to the Gloucestershire SHMA. Two additional analyses were carried out to investigate this issue, the first looking at a sub-set of SEH respondents and the second examining output from the 2004 Gloucestershire County-wide Housing Needs Assessment (HNA) Survey.

- 2.6 As stated above there are too few Gloucestershire respondents in the Survey for it to be of use at the County level. As a proxy a bespoke dataset made up of Gloucestershire and neighbouring areas was selected for analysis. The area comprises all local authorities in Gloucestershire, Avon, Wiltshire, Worcestershire and Herefordshire, as well as Stratford-on-Avon in Warwickshire and Oxfordshire except South Oxfordshire.
- 2.7 The SEH 2005 contains 1,590 respondent households from this area, making it a sufficiently robust sample for the purpose of the analysis. The breakdown of each household type by income quintile for the area is presented below. The quintiles are not those of the national dataset but are specific to the area, i.e. all respondent households from the area have been ranked by income and banded into new 20% groups defined within the area itself.
- 2.8 The second analysis uses response data from the Gloucestershire County-wide HNA, a household survey carried by Outside Consultants in 2004. This dataset contains 4,200 respondent households, 700 from each of Gloucestershire's six local authority districts.
- 2.9 As with the analysis of the SEH the household incomes were ranked from low to high and divided into five equal 20% groups. Because the income data was banded (unlike the SEH which provided an exact income figure for each respondent household) it was necessary to split those bandings which straddled inter-quintile boundaries, assigning a proportionate share to the quintile above and to the quintile below the boundary.
- 2.10 A weakness of the 2004 County-wide HNA is a high level of non-response to the question on household income. Only 45% of the returned surveys provided this information. This increases the risk of sampling error (skewed or biased sample). To counteract this to some extent weightings were applied to reach respondent household based on the 2006 household profile by household type and age, using 2004-based Sub-regional Household Projections from CLG.
- 2.11 The results of all three analyses of income distribution by household type are compared in the following table.

**Figure 2.2 Comparison of income distribution by household type from different sources**

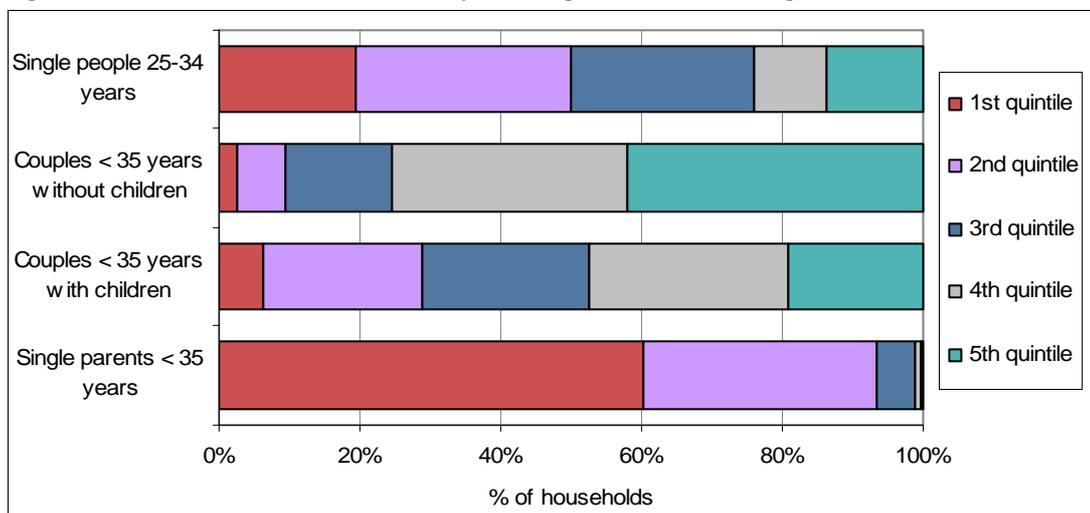
Household type	Source	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
Single person households	A	43%	21%	19%	11%	6%
	B	38%	28%	15%	14%	6%
	C	41%	23%	20%	12%	3%
	Average	40%	24%	18%	13%	5%
Couples without children	A	6%	25%	22%	23%	25%
	B	15%	17%	24%	22%	22%
	C	9%	26%	20%	21%	23%
	Average	10%	23%	22%	22%	23%
Couples with children	A	4%	11%	19%	29%	37%
	B	3%	12%	20%	29%	37%
	C	2%	3%	18%	33%	44%
	Average	3%	9%	19%	30%	39%
Single parent households	A	39%	27%	18%	11%	5%
	B	42%	34%	13%	9%	2%
	C	28%	30%	29%	10%	4%
	Average	36%	30%	20%	10%	4%

Source A: SEH England; Source B SEH Gloucestershire and surrounding area; Source C: 2004 Gloucestershire County-wide HNA Survey

- 2.12 Very similar patterns emerge from the three separate analyses, with the incomes of single person and single parent households being largely concentrated in the lower two quintiles. This contrasts with the incomes of couples with children which are largely concentrated in the upper two quintiles. The incomes of childless couples tend to be fairly evenly spread between the 2<sup>nd</sup> and 5<sup>th</sup> quintile, with relatively few in the lowest quintile.

- 2.13 The similarity of the results indicates a degree of universality in patterns of distribution of incomes by household type. The largest divergence from the average is 9%, for single parent households in the 1<sup>st</sup> and 3<sup>rd</sup> quintiles measured by the 2004 County-wide Survey. The mean divergence from the average is 2.3%.
- 2.14 Because of the sampling issues associated with the 2004 County-wide Survey it is not recommended that this source is used as input into the affordability calculations of the SHMA. Instead the decision is to use the national figures from the SEH as these are based on the greatest number of sampled households. Furthermore the figures generated from this source tend to sit closer to the average in the 2<sup>nd</sup> and 3<sup>rd</sup> quintiles. These quintiles straddle the affordable sector-market sector divide, which will come to light later in this section.
- 2.15 The income distributions presented in this sub-section are vital to understanding differences in average income between local authorities and individual neighbourhoods. For example high density urban areas generally have a significantly lower average income than suburban neighborhoods and commuter villages and this is to a large extent explained by the mix of households in each type of area – a higher share of single people in the former area and a higher share of couples with children in the latter. When comparing ‘like for like’ e.g. single person households in different areas, the variation in average income is usually much smaller. For this reason distinguishing income distribution by household type is considered essential to the affordability assessment, and working with broad averages is not considered to be a sufficiently sophisticated approach.
- 2.16 The preceding analysis concerns all households regardless of age. When it comes to gauging the affordability of newly arising households, it is necessary to focus on the income distribution of younger households (this is covered further in section 4 of this report). Once more this is done using SEH data covering all of England. The results are shown below.

**Figure 2.3 Income distribution of newly forming households - England**

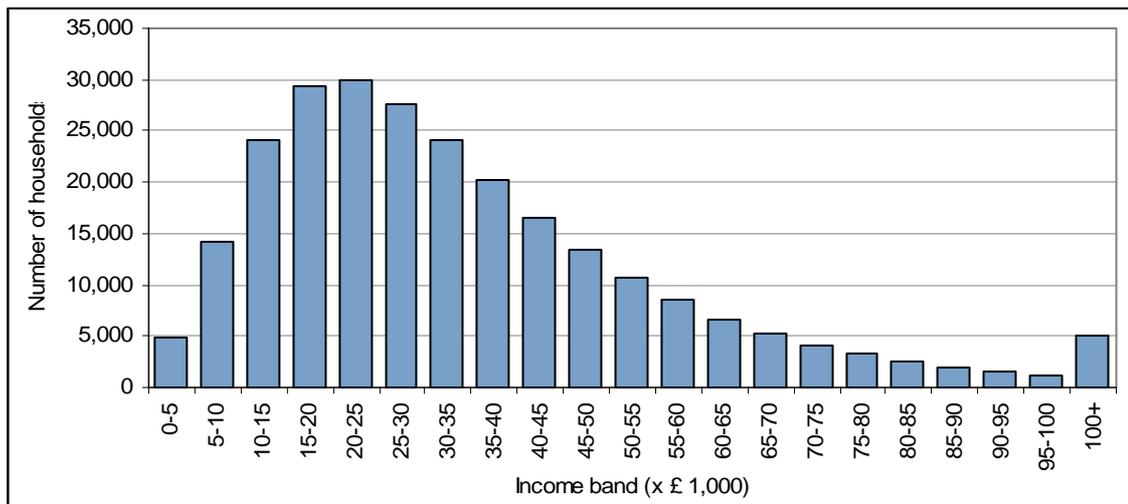


Source: SEH 2005

## Income levels in Gloucestershire

- 2.17 To this point we have examined household income distribution without reference to income amounts. The next step is to apply the identified income distribution patterns to actual household incomes in Gloucestershire. In this way the income distribution parameters are made locally specific and therefore applicable to an analysis of affordability in the SHMA area. This is done using CACI PayCheck income data showing the distribution of gross annual household incomes in the County in 2008 by income bands of £5,000.

**Figure 2.4 Household incomes by income band - Gloucestershire**



Source: CACI PayCheck Area Report for Gloucestershire

2.18 From this distribution inter-quintile points can be identified, assuming a linear income distribution within each of the given bands (e.g. 29,349 households in Gloucestershire have a gross annual income between £15,000 and £20,000. Therefore we assume that half of these households earn less than £17,500 and half earn £17,500 or more). Based on this assumption the following inter-quintile points were calculated from the banded data:

- 20% point: £16,308
- 40% point: £24,925
- 60% point: £34,796
- 80% point: £49,983

2.19 These outputs can then be combined with those from the previous sub-section to give the income of Gloucestershire households by household type. Taking the 3<sup>rd</sup> quintile as an example, we can now estimate that around 19% of couples with children in the County gross between £24,925 and £34,796 per annum.

### Matching households with dwellings

2.20 Before applying the affordability test it is necessary to match each household type with appropriately sized dwellings. To do this an approach has been adopted which is based on the actual occupation pattern of households with reference to the bedroom standard.

2.21 As with the analysis of income distribution by household type, three sources were used to explore patterns of dwelling occupation – an SEH dataset covering all households in England, an SEH dataset covering Gloucestershire and neighbouring areas, and the 2004 County-wide survey covering Gloucestershire only.

2.22 The bedroom standard designates a minimum number of bedrooms to each household in accordance with its age/sex/marital status composition and the relationship of the members to one another. A separate bedroom is allocated to each married or cohabiting couple, any other person aged 21 or over, each pair of adolescents aged 10-20 of the same sex and each pair of children under 10. Any unpaired person aged 10-20 is paired, if possible with a child under 10 of the same sex, or, if that is not possible, he or she is given a separate bedroom, as is any unpaired child under 10.

2.23 The bedroom standard provides an absolute minimum level for dwelling occupancy, and some of the assumptions about the sharing of bedrooms are considered to be at the margin of acceptability. To use the bedroom standard as the sole basis for determining the dwelling

mix required to meet housing need would not allow room for flexibility and household growth, and a household would immediately become overcrowded if it were to expand in size. For this reason we have included in the analysis those households that have one bedroom more than the minimum bedroom standard, in addition to those occupying their homes at the bedroom standard minimum. We have excluded overcrowded households (too few bedrooms when measured against the bedroom standard) and under-occupying households (defined here as households that have two or more spare bedrooms when measured against the bedroom standard). The reason for excluding this group is that under-occupation is an inefficient use of affordable housing stock.

2.24 Whether or not there are significant differences in dwelling occupation between tenures is also examined. The results of the analysis are presented in the following two tables, the first of which presents the data for owner-occupiers and the second for renters, both in the social and private rented sectors.

**Figure 2.5 Dwelling occupancy of owner-occupiers**

Household type	Source	1 bedroom	2 bedrooms	3 bedrooms	4+ bedrooms
Single person	A	17%	75%	7%	1%
	B	20%	73%	6%	1%
	C	39%	60%	0%	0%
Couple, no children	A	9%	86%	5%	1%
	B	10%	84%	6%	0%
	C	9%	76%	10%	4%
Couple with child(ren)	A	0%	10%	72%	18%
	B	0%	9%	71%	20%
	C	0%	10%	58%	32%
Single parent household	A	0%	21%	69%	10%
	B	0%	14%	69%	17%
	C	0%	32%	59%	9%

Source A: SEH England; Source B SEH Gloucestershire and surrounding area; Source C: 2004 Gloucestershire County-wide HNA Survey; selection = dwelling occupation equal to the bedroom standard or bedroom standard +1.

**Figure 2.6 Dwelling occupancy of renters**

Household type	Source	1 bedroom	2 bedrooms	3 bedrooms	4+ bedrooms
Single person	A	55%	36%	5%	3%
	B	56%	34%	3%	7%
	C	42%	58%	0%	0%
Couple, no children	A	35%	60%	4%	0%
	B	29%	69%	2%	0%
	C	4%	73%	20%	3%
Couple with child(ren)	A	0%	34%	59%	7%
	B	0%	29%	64%	7%
	C	0%	12%	62%	26%
Single parent household	A	0%	45%	49%	5%
	B	0%	49%	51%	0%
	C	0%	36%	60%	5%

Source A: SEH England; Source B SEH Gloucestershire and surrounding area; Source C: 2004 Gloucestershire County-wide HNA Survey; selection = dwelling occupation equal to the bedroom standard or bedroom standard +1.

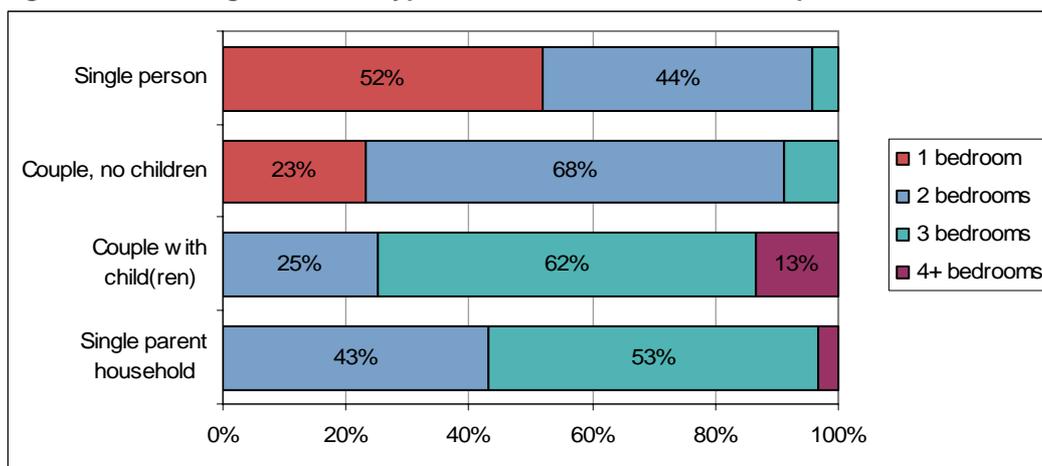
2.25 The first important conclusion to be drawn from the analysis is that there is a significant difference in the dwelling occupancy of owner-occupiers when compared with renters. This is apparent in all three sources examined. Owner-occupiers tend to be more spaciouly housed than renters. Because the outputs generated are to be used to inform affordable housing requirement the figures for renters are considered to be more applicable.

2.26 Valid arguments could be put forward for each of the three data sources examined. Source A – the SEH dataset covering all of England contains the greatest number of respondent households. The output generated by source B, the SEH dataset covering Gloucestershire and neighbouring areas, tends to fall between the other two sources (although it is much

closer to source A). Although it is based on the smallest sample size, it is sufficiently large to be robust and has the advantage of being more specific to the SHMA sub-region than national figures. The 2004 County-wide Survey is the most locally relevant source. However its robustness is undermined to some extent by inconsistencies in the raw data, particularly regarding the match between household membership data and the given household type. Furthermore adult couples were not always identified, making it difficult to accurately apply the bedroom standard in all cases.

2.27 On consideration of these issues the decision was made to generate average percentages from all three sources, using these to match households with dwelling types of different sizes. These breakdowns, presented in the next graph, will be used later in the assessment to determine the dwelling sizes required by households in need.

**Figure 2.7 Matching household type with number of bedrooms required**



### Price levels and minimum market entry incomes

2.28 Having explored household income distributions and bedroom requirement by household type it is now necessary to map out the costs of housing for various tenures in each of Gloucestershire's local authorities differentiated by number of bedrooms. In particular the cost of market entry needs to be established in order to distinguish those who can afford open market housing from those who need affordable housing. Within the affordable sector the price threshold separating social rented from intermediate housing needs to be defined.

2.29 In accordance with the Guidance a household is considered able to afford market housing if no more than 25% of its gross income is spent on rent. This parameter is also used by Fordham Research when they determined market entry price levels differentiated by bedroom size in each local authority as part of their preliminary Gloucestershire SHMA work (see table 14.2 of the Fordham Research report). The lower quartile price for the private rented sector constitutes the market entry level, as this is lower than the lower quartile price of owner-occupation in the second hand homes market.

2.30 Weekly rental prices have been converted to minimum annual gross incomes required to afford it using the following formula: Minimum gross annual income required to afford = weekly rental price ÷ 7 (days) x 365.25 (days in the year) x 4 (to equal 100% of gross income).

2.31 The affordability thresholds for the intermediate sector have been determined by taking the 90% value of the market entry price. This is discussed further in Section 6 of this report. The results are presented in the next table, and the minimum income required to afford average social rents has been included for completeness.

**Figure 2.8 Minimum income required to afford intermediate and open market housing**

Size	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury
Average social rent						
1 bed	£11,688	£13,358	£11,688	£10,018	£12,523	£11,688
2 bed	£12,523	£16,071	£12,940	£11,688	£14,610	£14,193
3 bed	£14,401	£17,949	£13,984	£13,358	£16,280	£16,488
4 bed	£16,280	£19,828	£15,027	£15,027	£17,949	£18,784
Intermediate						
1 bed	£21,414	£21,414	£17,282	£17,282	£19,724	£19,160
2 bed	£27,237	£27,049	£20,663	£23,668	£23,293	£24,232
3 bed	£32,873	£34,375	£23,856	£28,364	£31,182	£28,176
4 bed	£45,458	£39,071	£31,370	£32,497	£40,995	£44,894
Market entry (lower quartile private rent)						
1 bed	£23,793	£23,793	£19,202	£19,202	£21,915	£21,289
2 bed	£30,264	£30,055	£22,959	£26,298	£25,881	£26,924
3 bed	£36,525	£38,195	£26,507	£31,516	£34,647	£31,307
4 bed	£50,509	£43,413	£34,855	£36,108	£45,550	£49,883

Based on table 14.2 of Fordham Research's Gloucestershire SHMA Report, December 2008 (except for the intermediate sector which is discussed in section 6 of this report).

- 2.32 As set out in the preceding sub-section, each household type is associated with a range of bedroom requirements. To establish the appropriate level at which to test affordability the income levels given in figure 2.8 have been weighted by the percentages given in figure 2.7 to arrive at a series of averages for each household type within each local authority. The results are presented below.

**Figure 2.9 Minimum income required to afford market entry by household type**

Household type	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury
Intermediate						
Single people	£24,457	£24,440	£19,045	£20,554	£21,782	£21,768
Couples without children	£26,380	£26,383	£20,158	£22,599	£23,154	£23,401
Couples with children	£33,125	£33,156	£24,050	£27,731	£25,060	£29,402
Single parents	£30,864	£31,371	£22,731	£26,476	£26,724	£27,037
Market entry (lower quartile private rent)						
Single people	£27,174	£27,156	£21,161	£22,837	£24,202	£24,186
Couples without children	£29,311	£29,315	£22,398	£25,110	£25,727	£26,001
Couples with children	£36,806	£36,840	£26,722	£30,813	£33,582	£32,669
Single parents	£34,293	£34,856	£25,256	£29,418	£31,152	£30,041

- 2.33 In the final step of the affordability calculation the figures shown in the table above are measured against the income distribution of each household type to determine the proportion that can afford market entry, those that can afford intermediate housing and those will only be able to afford social renting. This is the affordability test used in the assessment of households in need in subsequent sections of the report.

### **3 CURRENT HOUSING NEED**

- 3.1 Stage 1 of the housing needs calculation as set out in the Practice Guidance concerns measuring the scale of current housing need, including any backlog, at the local authority level. As stated in the Guidance the central research question for this stage is: “what is the total number of households in housing need currently (gross estimate)?”
- 3.2 Current housing need is made up of several components. It includes those households unable to afford market housing who are currently:
- Homeless;
  - In temporary accommodation;
  - Overcrowded;
  - Concealed;
  - Housed in unsuitable dwellings, including those subject to major disrepair or unfitness;
  - Suffering from harassment from others living in the vicinity which cannot be resolved except through a move.
- 3.3 The Practice Guidance acknowledges the difficulty of obtaining a complete and robust estimate of backlog due to data limitations. No single data source provides full coverage of all of these elements at the level of local authorities, and when using different sources together there is a danger of double counting those households that have multiple causes of need.
- 3.4 The Guidance therefore advocates the calculation of a range of estimates for backlog, with the data sources that are most robust providing a minimum level estimate. Following the investigation of several alternatives approaches an estimate based on an analysis of the Housing Registers and Zone Agents data of the six Gloucestershire Local Authorities was selected as being most robust.

#### **Examination of Housing Registers**

- 3.5 In December 2008 each Local Authority provided an up-to-date dataset showing households currently registered as seeking affordable housing. The data fields contained in each Housing Register were not alike and it was necessary to carefully sort and analyse individual records using the available information to ensure consistent treatment of households on each list. Within each list the applicants belonging to the following groups were distinguished:
- Those already occupying social rented accommodation as opposed to those currently outside the social sector; social renters on the Register are transfer candidates who are possibly in need (for example living in unsuitable accommodation) but are treated separately from those outside the sector in the housing need calculation;
  - Those currently resident inside the local authority as opposed to those resident elsewhere; the latter were removed from the dataset to avoid double counting households registered in more than one local authority;
  - Single people younger than 26 years of age were also removed; this is in line with the information given in Table 5.1 of the Guidance which infers that when these households share their accommodation they are not considered to be in need.
- 3.6 In December 2008 there were close to 16,000 households on the Housing Registers of the six Gloucestershire Authorities. The next table provides an overview of these households, showing the numbers identified at each stage of the analysis.

**Figure 3.1 Households on the Housing Register**

	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Total number of households	3,082	2,145	2,100	5,016	2,252	1,325	15,920
- resident outside district	242	606	242	649	275	285	2,299
- current social renters	562	0	167	998	729	439	2,895
- single younger than 26 years	405	169	218	585	181	79	1,637
Remaining households	1,873	1,368	1,473	2,784	1,067	522	9,087

Totals may not sum due to rounding.

- 3.7 The dataset supplied to this assessment by Cotswold District Council did not contain social sector tenants needing or wanting a transfer. Furthermore this dataset did not contain any age group information, and single parent households and couples with children were not distinguished from each other. Therefore parameters (averages) distilled from the Housing Registers of the other local authorities were used to estimate the number of single people younger than 26 years of age in Cotswold District.
- 3.8 Households on the Housing Register are for a large part self selecting and some of those registered are likely to have sufficient income to afford market entry house prices. For this reason a number of the households identified in figure 3.1 will not be in need. Council housing officers have expressed the view that the proportion of those on the Housing Register who can afford market entry prices is likely to be very low. However there is limited data available to test this.
- 3.9 The Housing Registers of Cotswold District and the Forest of Dean District are alone in providing income data for applicant households, making it possible to assess affordability. By comparing the incomes given to the income required to enter the market (as shown in figure 2.9) the proportion of households able to afford in the market can be ascertained. The analysis reveals that 2.2% of households on the Cotswold District housing register are able to afford market entry prices, ranging from 1.2% of households with children to 3.3% of single person households. The analysis of the Forest of Dean District data indicates that 8% of households on the Register are able to afford in the open market, when measured against local lower quartile private rented sector prices. This ranges from 4% of single parent households to 12% of single person households.
- 3.10 This evidence, although only stemming from two of the Gloucestershire authorities, supports the estimate given by Gloucestershire Housing officers that there are relatively few households on Council Housing Registers able to afford in the open market when the official affordability criteria is applied. Additional evidence concerning the income profile of Housing Register applicants in a neighbouring local authority outside Gloucestershire has also been examined. This showed that 87% of applicants earned less than £ 16,000 p.a., 9% earned between £ 16,000 and £ 25,000 and the remaining 4% earned £ 25,000 or more. Given that the income needed to be able to afford market entry housing in Gloucestershire ranges between £ 21,000 and £ 37,000 depending on household type and local authority (see figure 2.9), the additional evidence is consistent with that from Cotswold District and the Forest of Dean District.
- 3.11 The above information indicates strongly that the incomes of households on Council Housing Registers are concentrated in the first three income quintiles. The income distribution of these households has been estimated though triangulation with the income distributions of each household types (shown in figure 2.1). When tested against the income levels required for market entry and intermediate housing (figure 2.9) the results of the modeling indicate that between 6 and 7% of housing register households in Gloucestershire will be able to afford market entry. More than 90% of the remaining households do not earn enough to be able to afford the intermediate sector. These results are presented in the next table.

**Figure 3.2 Selected households on the Housing Register adjusted for market affordability**

	Cheltenham	Cotsw old	Forest of Dean	Gloucester	Stroud	Tew kesbury	Gloucester-shire
Selected households	1,873	1,368	1,473	2,784	1,067	522	9,087
Able to afford open market	51	36	231	194	58	28	597
Able to afford intermediate	45	32	148	162	85	34	506
Can afford social rent only	1,777	1,300	1,094	2,429	924	460	7,984

Totals may not sum due to rounding.

### Examination of Zone Agent data

- 3.12 A second source providing information on those looking to access affordable housing in Gloucestershire is the Zone Agent list. This contains details of all those interested in Low Cost Home Ownership (HomeBuy), and is therefore relevant to the intermediate sector.
- 3.13 As of December 2008 there were 3,263 households on the Gloucestershire Zone Agent's list. Of these 591 were not resident in the County. Of the remaining 2,672 Gloucestershire households 41% expressed an interest in low cost home ownership in more than one district. In these cases, for the purpose of this assessment, their primary interest is assumed to be for the local authority in which they currently live.
- 3.14 The data included information on households' financial capacity, making it possible to test whether each household was able to afford open market housing. Application of the affordability thresholds set out at figure 2.9 determined that 980 (37%) of those on the list earn enough to be able to choose between shared-ownership, private renting and, for those with higher incomes, the second hand owner-occupier market. These households were therefore discounted from being in housing need.
- 3.15 The current tenure of the 1,692 households unable to afford open market housing was then analysed, revealing that 10% are already housed in the affordable sector (including 39 existing shared owners), 13% are owner-occupiers, 36% are private tenants and 35% are currently living with family or friends.

**Figure 3.3 Households on the Zone Agent list unable to afford in the market by tenure**

Current tenure	Cheltenham	Cotsw old	Forest of Dean	Gloucester	Stroud	Tew kes-bury	Gloucester-shire
Affordable sector	51	19	9	40	32	16	167
Owner-occupier	39	9	19	95	34	17	213
Private tenant	207	46	29	200	83	36	601
Living with family/friends	184	42	27	204	96	31	584
Other/not given	39	6	5	51	20	6	127
Total	520	122	89	590	265	106	1,692

Gloucestershire Zone Agent data December 2008

- 3.16 The two largest groups – private renters and those living with family or friends - are considered to be in housing need. The rationale behind this is that because they do not earn enough to be able to afford in the market, most private renters are likely to be in receipt of housing benefit. The Practice Guidance states that “only those in arrears or in receipt of housing benefit should be regarded as in housing need, on the grounds that their accommodation is too expensive” (CLG 2007, p. 42). Secondly, those living with family or friends are considered to be concealed households.
- 3.17 For those households registered with the Zone Agent that are in the social rented sector, shared ownership or own their own homes, there is a greater chance their registration was a speculative step rather than one necessitated by current circumstances. Although it is not possible to rule out that some of these households are in need (e.g. owner-occupiers who are unable to keep up with their mortgage payments) it is prudent to take a cautious approach. Therefore these tenure groups have been excluded all together.

## Final estimate of current housing need

- 3.18 By adding together those households identified as being in need from the Housing Register and from the Zone Agent's list we arrive at a final estimate for current housing need. While doing so two adjustments need to be made.
- 3.19 Firstly, those households shown in figure 3.3 with tenure "other/not given" have been redistributed on a pro-rata basis over the other tenure groups. Secondly, 105 of the households on the Zone Agent's list were also signed up on a local authority Housing Register. To avoid double counting, this number has been subtracted from the Zone Agent total. Those on the Zone Agent list unable to afford market housing have been allocated to the social rented or intermediate sector by testing the income information recorded in the Zone Agent dataset against market entry prices.

**Figure 3.4 Summary of households in current need**

		Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Those that can only afford social rents	HR candidates	1,777	1,300	1,094	2,429	924	460	7,984
	ZA candidates	292	67	46	331	162	77	975
	Total	2,069	1,367	1,141	2,759	1,086	537	8,959
Those able to afford the intermediate	HR candidates	45	32	148	162	85	34	506
	ZA candidates	64	15	13	58	32	19	201
	Total	109	47	160	220	117	53	707
<b>Total current need</b>		<b>2,179</b>	<b>1,414</b>	<b>1,301</b>	<b>2,979</b>	<b>1,203</b>	<b>590</b>	<b>9,666</b>

Totals may not sum due to rounding.

- 3.20 In total current housing need in Gloucestershire is estimated to be 9,666. This almost certainly represents an undercount, as not all households in need are on Council Housing Registers or the Zone Agent's list. It therefore constitutes a minimum level estimate.
- 3.21 This conclusion is backed up by an analysis of housing benefit data which shows that close to 8,000 households in the private rented sector in Gloucestershire on housing benefit, ranging from 853 in Tewkesbury Borough to 2,577 in Gloucester City. In relation to assessing affordability The Practice Guidance states that "only those in arrears or in receipt of housing benefit should be regarded as in housing need, on the grounds that their accommodation is too expensive" (CLG 2007, p. 42). Therefore private renters in receipt of housing benefit alone make up more than three-quarters of the total current need figure presented above, which also includes those in need in other situations such as concealed households and the homeless.
- 3.22 Finally, the Housing Register and Zone Agent's data provide information on household type. The aggregate figures for all 9,666 households in need are presented in the table below. This is an important input in determining dwelling size requirements later in the assessment.

**Figure 3.5 Breakdown of current need by household type**

Household type	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Single people	48%	31%	38%	33%	44%	32%	38%
Couple without children	16%	25%	17%	11%	17%	21%	16%
Couple with children	15%	17%	19%	21%	16%	22%	18%
Single parents	21%	27%	27%	35%	24%	26%	28%

## 4 FUTURE NEED

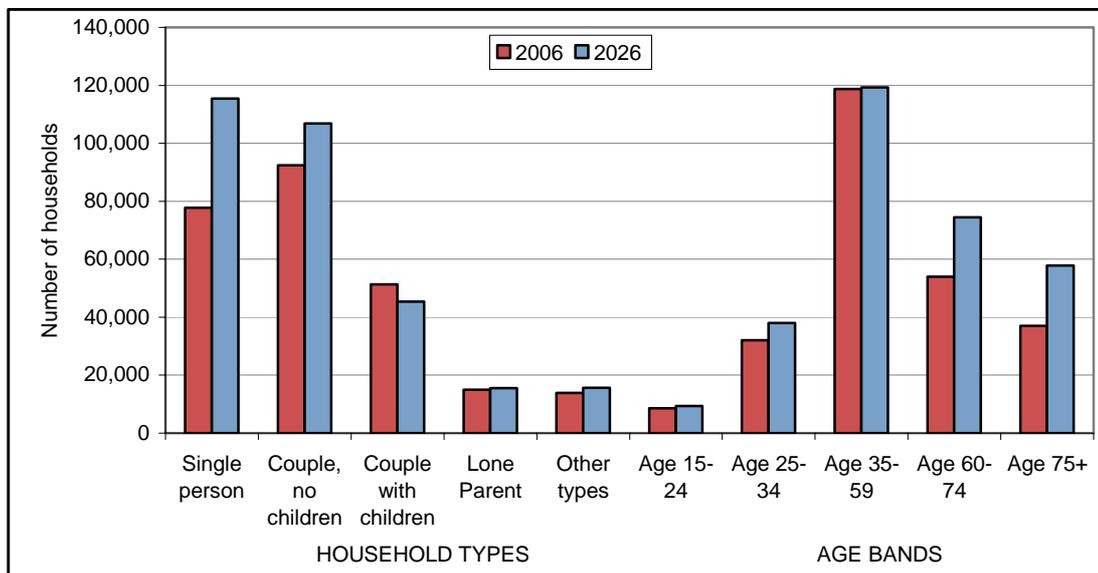
- 4.1 This Section presents the evidence required to meet Stage 2 of the housing needs assessment as set out in the Practice Guidance. Future need has two components: newly forming households in need and existing households falling into need. Each component is dealt with in turn below.

### Household projections

- 4.2 There are three available sources projecting household growth in Gloucestershire, namely the 2004-based sub-regional household projections produced by CLG in 2007, the RSS Examination in Public (EiP) Panel report published in January 2007 and the projections produced by Gloucestershire County Council in September 2008.
- 4.3 The CLG projections forecast the lowest rate of growth, followed by the Gloucestershire County Council projections. The differences between the sources are greatest at the district level, particularly regarding Tewkesbury Borough. The EiP Panel identified the potential of Tewkesbury Borough to accommodate a greater share of Gloucestershire's growth due to the availability of large development sites in the area. For Cheltenham Borough, Cotswold District and Forest of Dean District the scarcity of development sites led to lower levels of household growth being forecast. The EiP also looked at economic growth and job creation as a driver of household growth. Like the EiP Panel Report, the County Council modeling also factored-in site availability.
- 4.4 The relationship between growth in the number of households and expansion of the housing stock is a circular one because households move from areas where growth is restricted to areas where growth is facilitated. It is therefore important for the SHMA to distinguish between growth through migration and the need to expand the housing stock to facilitate growth arising from within the locality. The EiP Panel Report and the County Council projections anticipate household movements, both within and beyond Gloucestershire, to a greater extent than the CLG projections.
- 4.5 It is the aim of this study to measure the need for affordable housing arising within each district, in order to provide an evidence base for subsequent policy development. The CLG projections are considered to provide a better basis for the estimate of future need arising from newly forming households because they are less driven by assumptions about future new builds and migration. It is also deemed prudent to use these more conservative estimates given the uncertainties of economic development in the short to medium term.
- 4.6 There are two additional reasons why the CLG projections have been chosen. Firstly, there is a need to be consistent with Fordham Research's preliminary Gloucestershire SHMA work. Fordham Research used the CLG 2004-based household projections, which are referred to in their report as "CLG, 2007". Secondly, unlike the other two sources, the CLG projections are available for each local authority showing the number of households of each type in five year age bands. This level of detail is needed to estimate the rate of new household formation using the methodology set out below.
- 4.7 In order to calculate newly forming households in need it is first necessary to estimate the number of new households likely to form each year, differentiated by household type. The CLG household projections do not distinguish couples with children from couples without children. Given the importance of this distinction to framing housing requirements (number of bedrooms, house with a garden etc) it is necessary to disaggregate couples into these two groups. This was done through data triangulation. The Census 2001 census provides a breakdown of couple households into those with and without children. The percentage splits for each age band are applied to the sum of married and cohabiting couples in the CLG household projections generating a new set of figures for couple households.

- 4.8 Aggregated County level figures are presented in the following graph. The Statistical Appendix at the end of this report provides a more detailed breakdown of the projections, including tables for each Local Authority.

**Figure 4.1 Household projections by household type and age band - Gloucestershire**



Source: Data modeling using CLG (2004-based) sub-regional household projections and ONS Census 2001

- 4.9 Overall the number of households in Gloucestershire is projected to rise by around 48,500 between 2006 and 2026, from 250,400 to 298,900. This is an average increase of 2,425 households per annum. The results of the modeling point to important shifts in the composition of households over the coming 20 year period. The numbers of single person households and couples without children are expected to rise by 49% and 16% respectively. This correlates strongly with projected growth in the number of households belonging to the 60-74 year old age band (a 38% increase) and those aged 75 or more (a 56% increase).
- 4.10 These projections are an important input for estimating future market requirements. They also feed into the next element of the housing needs calculation which concerns the rate of new household formation.

### Newly forming households

- 4.11 The Guidance states unequivocally that an estimate of new household formation must be based on gross rather than net household formation i.e. it is the total number of newly forming households that must be measured as opposed newly forming households minus households dissolving. The method employed to calculate gross newly forming households is set out in paragraph 15 of Annex B of the Strategic Housing Market Assessment Guidance (CLG, 2007).
- 4.12 The approach is to track the development of each age cohort at five year intervals to measure change, with an increase in the size of the cohort being ascribed to newly forming households. The resultant numbers are then divided by five to arrive at annual figures. For example according to the projections data there were 224 single parent households aged between 20 and 24 in Cheltenham Borough in 2006. By 2011 there are projected to be 282 single parent households aged between 25 and 29 in the district. This means that 58 households of this type are expected to form during the five years 2006-2011, which is a rate of 12 per year.
- 4.13 As acknowledged in the Guidance most household formation is concentrated in the younger age ranges and it is therefore not necessary to look at all age cohorts. It is reasonable to

assume that newly forming households in age cohorts older than 35 years will have already found suitable accommodation be it in the market or in the social sector. Changes in the composition of older households are therefore far less likely to result in demand for additional housing. Moreover, if these older households suffer a reversal of circumstances they will be captured later in the calculation as existing households falling into need. For these reasons older households are excluded.

- 4.14 Table 5.1 of the Practice Guidance states that “couples, people with children and single adults over 25 sharing a kitchen, bathroom or WC with another household” constitutes a mismatch of housing need and dwellings (CLG 2007, p. 41). This infers that single person households 25 or younger are not to be counted as being in need if they do not live independently and instead share accommodation with other households. For this reason these households are excluded from the measurement of newly forming households in need.
- 4.15 This approach results in an estimated 17,390 newly forming households in Gloucestershire between 2006 and 2011, which is an average of 3,478 per annum. The annual breakdown of County-wide figures by household type is given below and full tables for each district are presented in the Statistical Appendix:
- Single person households: 646 (19%);
  - Couples without children: 862 (25%);
  - Couples with children: 1,255 (36%);
  - Single parent households: 493 (14%);
  - Other multi-person households: 222 (6%).
- 4.16 Subsequently the so-called “other multi-person households” (making up 6% of all households in Gloucestershire) were divided among the other three multi-person households on a pro-rata basis. The reason for this is that the income distribution of these households is not available from the SEH data (see Section 2). Furthermore the characteristics of sizes of these households tend to vary widely with some only containing adults (couples and non-couples) and others containing children including single parent households. Due to this diversity the pro-rata redistribution of other multi-person households is considered to be justified.

### **Affordability test**

- 4.17 While some newly forming households will have sufficient income to be able to rent or buy their own house in the market, others will not, and will therefore require affordable housing or some form of income assistance. The affordability test described in Section 2 is applied to all newly forming households and the results of the calculation are presented in the following table.

**Figure 4.2 Newly forming households in need**

Household type		Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Single person households	Total newly forming	201	73	52	124	99	98	646
	Able to afford market	89	32	33	71	52	51	329
	Intermediate	15	6	4	10	8	8	51
	Social rent	97	35	15	43	38	38	266
Couples without children	Total newly forming	241	132	81	200	146	139	939
	Able to afford market	202	111	75	180	130	123	822
	Intermediate	11	6	1	4	4	4	30
	Social rent	28	15	5	15	12	11	86
Couples with children	Total newly forming	285	175	178	332	222	168	1,359
	Able to afford market	125	77	119	189	112	89	710
	Intermediate	22	14	12	24	45	13	130
	Social rent	138	85	47	118	65	67	519
Single parent households	Total newly forming	111	43	57	171	84	69	534
	Able to afford market	2	1	4	7	3	3	18
	Intermediate	2	1	5	3	2	1	14
	Social rent	107	41	48	161	80	65	502
All households	Total newly forming	838	423	368	826	551	473	3,478
	Able to afford market	417	220	231	448	297	266	1,879
	Intermediate	50	26	22	41	60	27	226
	Social rent	370	177	115	336	194	181	1,374

Totals may not sum due to rounding.

- 4.18 Of the 3,478 new households expected to form each year in Gloucestershire it is estimated that 1,879 will be able to afford market entry and the remaining 1,599 will require affordable housing or some kind of financial assistance.

### Existing households falling into need

- 4.19 The second component of newly arising need concerns existing households that, through a reversal of circumstances, fall into need. The approach taken here is to estimate this annual flow on an analysis of CORE data for social sector lettings and shared ownership sales.
- 4.20 From CORE data on General Needs lettings in 2006/07 and 2007/08 a dataset was compiled containing lettings records of households in the age bands 35 years and older (using the age of "person 1") whose previous tenure was either owner-occupation or private renting. These households represent the annual flow of existing households falling into need and requiring social rented accommodation. To estimate the annual flow of those accessing intermediate affordable housing a similar analysis was carried out using the CORE data on sales of shared-ownership properties. In this case only those households were previously owner-occupiers were selected. The results from both datasets are presented in the next table. Each figure is an annual average calculated using the two years of data.

**Figure 4.3 Estimate of number of existing households falling into need each year**

	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Social sector	30	41	23	70	34	50	248
Intermediate sector	10	3	5	12	5	2	37
Total	40	44	28	82	39	52	285

Source: CORE data 2006/07 and 2007/08; annual average figures are presented

- 4.21 A limitation of this approach is that it only measures those households that have successfully gained entry into the social sector. There will undoubtedly be other households that fail to secure a social rented dwelling and end up renting in the private sector with the aid of Housing Benefit or are forced into accepting an unsuitable alternative. Providing a robust estimate for these households is problematic given the lack of useful secondary sources covering this aspect. In keeping with a conservative approach an estimate has not been

made. The outputs presented in figure 4.3 should therefore be regarded as a minimum level estimate.

- 4.22 The method of calculation requires newly forming households in need to be added to existing households falling into need to arrive at a total for newly arising need. During the approach the breakdown by household type has also been recorded, and the results are presented below.

**Figure 4.4 Newly arising need by household type**

	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Single person households	130	58	27	91	56	62	423
Couples without children	48	31	12	29	26	33	180
Couples with children	167	109	67	158	118	87	706
Single parents	116	49	58	182	93	77	575
<b>Total</b>	<b>460</b>	<b>247</b>	<b>165</b>	<b>460</b>	<b>293</b>	<b>259</b>	<b>1,884</b>

Totals may not sum due to rounding.

## 5 AFFORDABLE HOUSING SUPPLY

- 5.1 This section presents evidence on the supply of affordable housing in Gloucestershire and in doing so provides the supply-side components of the housing needs calculation.

### **Affordable dwellings occupied by households in need**

- 5.2 The first component concerns affordable dwellings occupied by households in need. The Practice Guidance states that “partnerships should assess the figures identified in step 1 to estimate the number of dwellings vacated by current occupiers that are fit for use by other households in need. This is an important consideration in establishing the net levels of housing need (see Stage 5) as the movement of these households within affordable housing will have a nil effect in terms of housing need” (CLG 2007, p. 47).
- 5.3 This is interpreted to mean that because current housing need (as measured in step 1 of the calculation) includes households occupying social rented dwellings, this number also needs to be included on the supply-side of the calculation as the dwellings these households occupy will come free if and when the housing need of existing social sector tenants is addressed. The primary mechanism through which this takes place is social sector transfers and these have a net zero effect on the ‘bottom line’ of the calculation.
- 5.4 Because households within the social sector have been excluded from the figure for current housing need generated in Section 3 of this report, the number of affordable dwellings occupied by households in need is correspondingly excluded from the supply side here, and zero is entered into the calculation for this item.

### **Surplus stock, committed supply and units to be taken out of management**

- 5.5 As stated in step 3.2 of the Practice Guidance, data on empty dwellings should be used to gauge whether there is surplus affordable stock available to meet need. A certain level of voids is normal and necessary to allow for household moves and renovation works. According to the Guidance a void rate in excess of 3% indicates the existence of surplus stock. Data supplied by local authorities show the current void rate of affordable dwellings in Gloucestershire as a whole to be 1.3%, ranging from 0.8% in Tewkesbury Borough to 2.1% in Cheltenham Borough. It is therefore concluded that there is no surplus stock available to meet housing need.
- 5.6 Step 3.3 of the Practice Guidance concerns committed supply of new intermediate and social rented affordable units and step 3.4 concerns affordable units to be taken out of management due to planned demolitions, renewal and redevelopment schemes. The Guidance does not elaborate on the definition of “committed”, nor does it state that annual figures should be used. Furthermore the rationale for including these components in the housing needs calculation is not given.
- 5.7 It is important to understand the place these elements have within the housing needs calculation, as this understanding helps to inform the selection of the most appropriate figures to use. In stage 3, surplus stock and committed supply are added together and units to be taken out of management are subtracted to arrive at ‘total affordable housing stock available’. In stage 5 this figure is deducted from the number of households in current backlog need, with the result then converted into an annual backlog reduction quota, by dividing by five (years).
- 5.8 Committed supply is interpreted by some to mean projected supply over the short to medium term. In accordance with this interpretation numbers derived from future new build programmes are commonly entered into the housing needs calculation. Alternatively,

average annual flows in the recent past are often projected forward to arrive at an estimate of future completions.

- 5.9 These approaches are rejected here for two reasons. Firstly, future new build levels are notoriously hard to predict and there is a significant risk of overestimating production volumes when these estimates are based on ‘plans on the table’. Experience teaches us that sites are commonly delayed, withdrawn or subject to change even at the last minute. This is especially true since the start of the credit crisis in the second half of 2007 and the subsequent housing market slump which has increased levels of uncertainty around future development.
- 5.10 Secondly, factoring future new builds into the housing needs calculation is in effect a ‘policy-on’ scenario. Given that the fundamental purpose of the SHMA is to produce an evidence base to inform policy responses, it would be inappropriate to factor medium term new build assumptions into the housing needs calculation as this would make the interpretation of the results much more complicated.
- 5.11 A housing needs calculation that excludes new build assumptions is preferable because it allows need to be measured under ‘policy-off’ conditions, identifying the amount of unmet need if no new supply were to come forward. It then becomes apparent how much new supply is needed to make up the difference, which is a policy response consideration properly belonging to the end-use stage of the SHMA.
- 5.12 Considering the above, we have interpreted ‘committed supply’ very strictly to mean “affordable dwellings that are currently under construction or are absolutely certain of being built at the time of the assessment”. These units are, in the full sense of the word, already ‘committed’, as it is highly unlikely that the delivery of the units will be affected by any changes in circumstances from this point forward. In the same way ‘units to be taken out of management’ is given a strict interpretation. This is taken to mean “affordable units that are currently occupied for which an irreversible decision has been made to take them out of management in the immediate future”.
- 5.13 Housing officers of the partner authorities produced figures covering committed supply and units to be taken out of management in line with the strict definitions given above. These figures in addition to surplus stock are entered into the housing needs calculation as total affordable housing stock available.

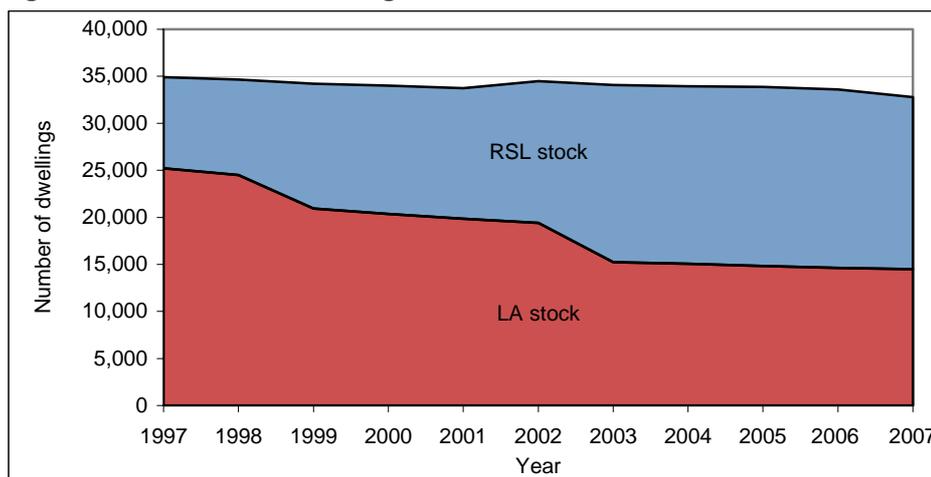
**Figure 5.1 Surplus stock, committed supply and units to be taken out of management**

	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Surplus stock	0	0	0	0	0	0	0
Committed supply	54	7	25	125	35	108	354
Units to be taken out of man.	0	0	0	0	0	0	0
<b>Total stock available</b>	<b>54</b>	<b>7</b>	<b>25</b>	<b>125</b>	<b>35</b>	<b>108</b>	<b>354</b>

### **Future re-let supply**

- 5.14 Re-let supply is a function of the size of the social rented stock and the rate of turnover, or ‘churn’, of these units. To project future re-lets it is necessary to consider whether the stock has been expanding or contracting in recent years. This is done using figures supplied by CLG Live Tables 115 and 116.

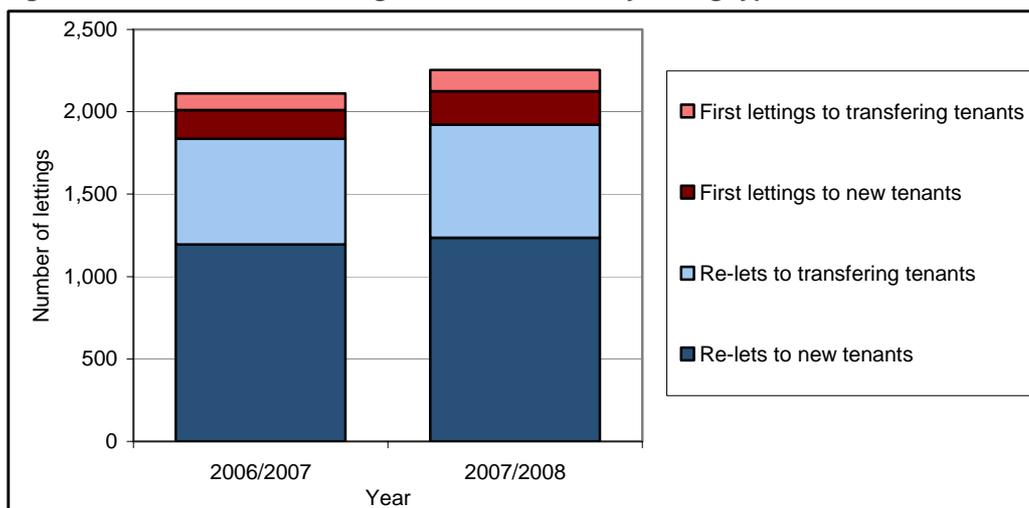
**Figure 5.2 Social sector dwellings in Gloucestershire 1997-2007**



Source: CLG Live Tables; stock at 1st April each year

- 5.15 The number of social sector dwellings has declined from close to 34,900 in 1997 to 32,760 in 2007. This is a fall of 6.1% which is an average of 0.6% per annum. This indicates that affordable new builds have failed to compensate fully for reductions in the stock through demolition and Right-to-Buy sales during this period.
- 5.16 The graph also shows that the number of Local Authority owned dwellings has declined the most. Large Scale Voluntary Transfers (LSVTs) in 1998 and 2002 have contributed to this, with significant numbers of units being transferred from Councils to Registered Social Landlords.
- 5.17 The County-wide figures mask variations between districts, which are considerable. Over the period examined the number of social sector dwellings has declined significantly in all local authorities except Cotswold District and Tewkesbury Borough. The percentage change for each local authority during this period is given here, and more complete data is provided in the Statistical Appendix:
- Cheltenham Borough: -7.2%;
  - Cotswold District: +0.5%;
  - Forest of Dean District: -18.4%;
  - Gloucester City: -3.8%;
  - Stroud District: -6.7%;
  - Tewkesbury Borough: -0.1%.
- 5.18 Looking now at the immediate past CORE data shows that there were 2,111 General Needs lettings in Gloucestershire in 2006/07 and 2,254 in 2007/08. It is important to distinguish between lettings to tenants transferring from within the social sector and lettings to new tenants moving into the social sector from other tenures and living arrangements. Another important distinction to make is between first time lettings of newly built dwellings and re-lets of existing social sector stock. When cross-tabulated these distinctions yield four types of lettings, which are plotted in the next graph.

**Figure 5.3 General needs lettings Gloucestershire by letting type, 2006/07 and 2007/08**



Source: CORE data

- 5.19 First lettings stem from new build activity. These made up 14% of General Needs lettings in Gloucestershire in the two years featured, and the data indicates no discrimination of access between new tenants and transferring tenants. Close to 64% of all General Needs lettings went to new tenants and 36% were taken up by transferring tenants, and roughly the same proportions applied to first lettings and re-lets.
- 5.20 Re-lets to transferring tenants is the mechanism through which need among those households already within the social sector is resolved, such as households that are inappropriately housed due to overcrowding or poor stock condition. These households were excluded from current housing need in stage one of the housing needs calculation and, correspondingly, must also be excluded from the re-let figure on the supply side of the calculation. This approach is consistent with the instructions contained in the Guidance concerning affordable dwellings occupied by households in need (Step 3.1, page 47).
- 5.21 To count first (new build) lettings along side re-lets of existing dwellings in the housing needs calculation would in effect constitute an assumption that past completion levels of affordable housing will continue in the future. This component of supply should be excluded because of uncertainty about future new build levels. Moreover the inclusion of new build lettings in the needs calculation makes it more difficult to interpret the results of the calculation as this would in effect constitute a 'policy-on' rather than a 'policy-off' scenario, confusing matters when the assessment is being used to formulate policies and targets for future supply. These issues are discussed in paragraphs 5.9, 5.10 and 5.11 above. For these reasons the annual supply of first lettings are excluded from re-let supply in the housing needs calculation.
- 5.22 Following the exclusion of both first lettings and re-lets to transferring tenants we are left with re-lets to new tenants. This element, converted into a yearly average, constitutes the future annual supply of social re-let (net) as described in Step 3.6 of the Guidance. The figure is based on annual average General Needs lettings from 2006/07 and 2007/08. The Practice Guidance recommends that an average over the past three years be used to predict the annual level. However CORE data's coverage of lettings of local authority stock is not complete in the years prior to 2005/06. Because CORE data provides better and more detailed information than any other source the choice has been made to use this CORE data over two years rather than an inferior data source for three years.
- 5.23 Although the affordable housing stock has been declining by an average of 0.6% per annum since 1997 (see paragraph 5.15 above) it has been decided not to project this decline into the future because there is uncertainty as to whether this trend will continue. Furthermore interpreting the outputs of assessment are simplified if we assume a 'flat-line' with regards to

re-let supply. District level figures split by dwelling type and bedroom number are presented in the next table.

**Figure 5.4 Annual supply of social re-lets**

	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Annual re-let supply	285	172	122	239	224	175	1,215
Flat < 2 bedrooms	42%	36%	30%	49%	35%	19%	36%
Flat 2+ bedrooms	39%	22%	21%	28%	31%	47%	32%
House < 2 bedrooms	4%	6%	12%	3%	7%	3%	5%
House 2 bedrooms	8%	23%	27%	10%	16%	19%	16%
House 3 bedrooms	7%	12%	11%	9%	11%	11%	10%
House 4+ bedrooms	1%	0%	0%	0%	0%	1%	1%

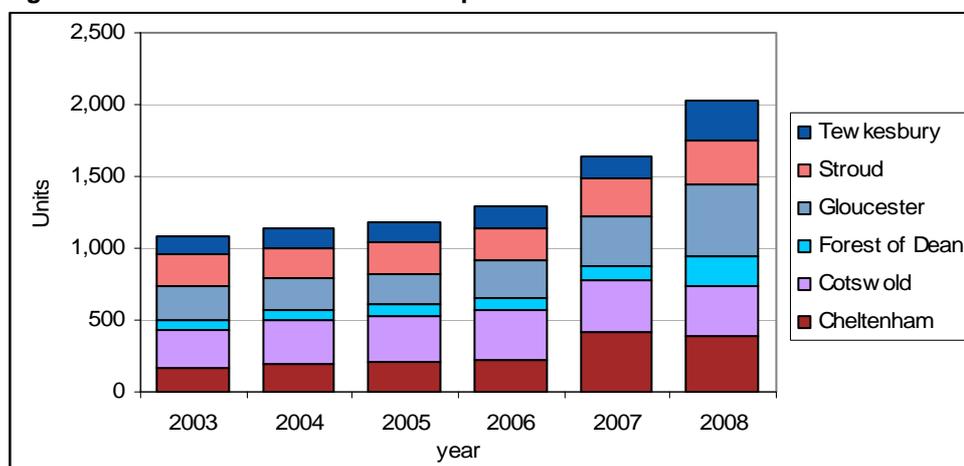
Source: CORE data (General Needs Lettings 2006/07 and 2007/08, annual averages)

- 5.24 The annual re-let supply to new tenants as a percentage of the total social rented stock is 3.7% for Gloucestershire as a whole, and ranges from 3.0% in the Forest of Dean to 4.3% in Tewkesbury Borough.

### Intermediate supply

- 5.25 The final supply component of the housing needs calculation concerns the supply of intermediate affordable units that come up for re-let or re-sale each year. This does not include new builds. As with social sector re-lets it is important to examine trend information in order to arrive at a robust estimate of likely supply in future years. This is done using Regulatory and Statistical Returns Survey data which shows the stock of shared ownership units in Gloucestershire to have increased from 1,080 in 2003 to 2,034 in 2008. This is an average increase of 191 units per annum, although the increase was 373 per annum between 2006 and 2008.

**Figure 5.5 Growth of shared ownership stock 2003-2008**



Source: RSR/Dataspring.

- 5.26 It is reasonable to assume that this upward trajectory will continue in coming years, as more and more shared-ownership units are delivered on new build sites. For the purpose of generating the required input for the housing needs calculation we have assumed that the 191 unit annual increase will continue between 2009 and 2013. This would result in an average stock total of 2,606 shared-ownership units in Gloucestershire during this period.
- 5.27 Because shared-ownership is a relatively new and growing tenure there is a lack of evidence showing the proportion of the stock that is being “recycled” each year i.e. the number of units becoming available for re-sale. As a proxy we have applied the re-let rate of social rented dwellings to generate an estimate. This rate is 3.7%, which pertains to re-lets to new tenants from outside the social sector.

5.28 The following table sets out the figures for each district. The bottom row contains the input for annual intermediate affordable re-sales as used in the housing needs calculation.

**Figure 5.6 Annual supply of intermediate re-sales**

	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Shared ownership stock 2008	383	359	199	499	315	279	2,034
"Trajectory" increase	491	460	255	639	404	358	2,606
3.7% turnover	18	17	9	24	15	13	96

## 6 HOUSING NEED – BRINGING THE EVIDENCE TOGETHER

6.1 This section completes the housing needs calculation. The results are then converted into the requirement for affordable dwellings of various types and sizes. This is followed by an analysis of the intermediate and market sectors.

### Estimate of net annual housing need

6.2 The following summary table draws together the various components set out in preceding sections following the method set out in the Practice Guidance. The step numbers in the column on the left are those given in the Guidance, with additional letters used at some points to identify intermediate steps in the calculation, making it easier to follow.

**Figure 6.1 Completion of the housing needs calculation**

Step	Notes	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
<b>CURRENT NEED</b>								
1.1 to 1.4	All steps combined and unsuitably housed households in the affordable sector excluded	2,179	1,414	1,301	2,979	1,203	590	9,666
<b>FUTURE NEED</b>								
2.1	New household formation (gross/yr)	838	423	368	826	551	473	3,478
2.2	Proportion unable to afford	50%	48%	37%	46%	46%	44%	46%
2.2b	Newly forming in need (= 2.1 x 2.2)	420	203	137	378	254	207	1,599
2.3	Existing households falling into need	40	44	28	82	39	52	285
2.4	Total newly arising need, gross per year (= 2.2b + 2.3)	460	247	165	460	293	259	1,884
<b>AFFORDABLE HOUSING SUPPLY</b>								
3.1	Affordable dwellings occupied by households in need	<i>These households have been omitted in stage 1 and therefore are correspondingly omitted in stage 3</i>						
3.2	Surplus stock	0	0	0	0	0	0	0
3.3	Committed supply of new units	54	7	25	125	35	108	354
3.4	Units to be taken out of management	0	0	0	0	0	0	0
3.5	Stock available (= 3.1 + 3.2 + 3.3 + 3.4)	54	7	25	125	35	108	354
3.6	Annual supply of social relets	285	172	122	239	224	175	1,215
3.7	Annual supply of intermediate re-sales	18	17	9	24	15	13	96
3.8	Total annual supply (= 3.6 + 3.7)	303	189	131	262	238	188	1,311
<b>ESTIMATE OF NET ANNUAL HOUSING NEED</b>								
5.1a	Total net current need (= 1.4 - 3.5)	2,125	1,407	1,276	2,854	1,168	482	9,312
5.1b	Years to address backlog	5	5	5	5	5	5	5
5.1c	Annual quota (= 5.1a ÷ 5.1b)	425	281	255	571	234	96	1,862
5.1d	Gross annual housing need (= 2.4 + 5.1c)	885	528	420	1,031	527	356	3,747
5.1e	Net annual housing need (= 5.1d - 3.8)	582	339	289	769	288	168	2,435

Totals may not sum due to rounding.

6.3 Gross annual housing need in Gloucestershire is calculated to be 3,747. This is made up as follows:

- Annual reduction of backlog need: 1,862 (50% of the total);
  - Newly forming households in need: 1,599 (42.5%)
  - Existing households falling into need: 285 (7.5%)
- } *newly arising need*

6.4 Total annual affordable housing supply is estimated to be 1,311. By subtracting this from gross annual housing need we arrive at a figure for net annual need, otherwise termed 'unmet need'. This is calculated to be 2,435 per annum in Gloucestershire as a whole. All districts have a shortfall of affordable supply ranging from 168 in Tewkesbury Borough to 769 in Gloucester City.

6.5 According to data supplied in HSSA Returns an average of 441 new affordable dwellings in Gloucestershire were completed annually between 2003/04 and 2006/07. This is clearly a long way short of the 2,435 required to meet need. Furthermore this is a gross completions figure excluding any demolitions and other forms of stock loss such as Right-to-Buy sales. A step change in completions levels large enough to bridge this gap is extremely unlikely.

### The size and type of affordable housing required

6.6 Given the unlikelihood of fully meeting need it will be necessary to prioritise the new supply of certain types of affordable dwellings to meet need where it is most acute. Specifying the size of dwellings required to meet need is an important output of SHMAs to be used to inform housing and development policies and in particular meet the requirements of paragraph 22 of PPS3.

6.7 The outputs presented in sections 3 and 4 of the report included the household type breakdown of those in need. The method used to determine the various dwelling requirements of these households in terms of house type and bedroom size is detailed in section 2. The affordable housing requirement is generated by applying the percentages displayed in figure 2.7 to the household profiles of those in need. Another parameter used in the model is that households which include children require houses. Both flats and houses are considered to be acceptable to households without children.

6.8 The various components on the supply side of the calculation – committed supply, annual re-lets and affordable re-sales have also been broken down by dwelling type and size. Subtracting the supply side components from the various categories of need in the correct sequence of steps as set out in the main calculation results in the following matching table. A negative number indicates a shortfall of supply.

**Figure 6.2 Housing need and supply by dwelling/bedroom requirement**

Size and type		Cheltenham	Cotsw old	Forest of Dean	Gloucester	Stroud	Tew kes-bury	Gloucester-shire
1 bed flat or house	Total need	199	99	78	171	97	64	708
	Available supply	133	76	52	130	97	42	529
	Supply - need	-67	-23	-26	-41	-1	-22	-179
	Supply / need	67%	77%	67%	76%	99%	66%	75%
2 bed flat or house	Total need	225	132	92	188	113	78	829
	Available supply	113	41	27	71	72	84	407
	Shortfall/surplus	-113	-91	-65	-117	-42	6	-422
	Supply / need	50%	31%	29%	38%	63%	108%	49%
2 bed house	Total need	147	93	82	230	102	67	722
	Available supply	28	46	36	33	40	37	220
	Supply - need	-119	-48	-46	-197	-62	-30	-502
	Supply / need	19%	49%	43%	14%	39%	56%	30%
3 bed house	Total need	276	179	149	393	188	129	1,314
	Available supply	26	26	16	27	29	23	147
	Supply - need	-250	-153	-133	-366	-159	-106	-1,166
	Supply / need	9%	15%	11%	7%	16%	18%	11%
4+ bed house	Total need	37	25	20	49	25	18	174
	Available supply	4	0	0	1	1	2	8
	Shortfall/surplus	-33	-25	-20	-48	-25	-16	-166
	Supply / need	11%	0%	0%	3%	2%	9%	5%
All dwelling types	Total need	885	528	421	1,031	527	356	3,747
	Available supply	303	189	131	262	238	188	1,311
	Supply - need	-582	-339	-290	-769	-288	-168	-2,436
	Supply / need	34%	36%	31%	25%	45%	53%	35%

6.9 The results of the calculation show there to be shortfalls of all dwelling types and all bedroom sizes in each of the six Gloucestershire districts, with the exception of 2-bed flats in

Tewkesbury Borough, where there is a marginal surplus. Taking the County as a whole the absolute size of the shortfall is greatest for 3-bed houses, followed by 2-bed houses. In relative terms however it is 4+ bed houses that have the greatest shortfall. The annual supply of this dwelling type stands at 8 in Gloucestershire as a whole, which is just 5% of the number required to meet need.

- 6.10 The specification for “2 bed flats or houses” as opposed to “2 bed houses” is made in order to distinguish between demand from households with and without children. This is not to say that a 2-bed house is not an appropriate dwelling for small childless households. Were there to be a sufficient supply of 2-bed houses to meet the needs of households with children, any surplus would be available to single people and childless couples. This however is not the case in Gloucestershire.
- 6.11 In the case of Tewkesbury Borough, the figures indicate an oversupply of 2-bed flats (6 units too many), but a shortage of 1-bed flats/houses (22 units too few). In practice it is logical to expect demand to gravitate towards the larger units in the first instance, resulting in a balancing of supply and demand across both dwelling sizes. This would result in an overall shortage of 16 one and two bed units.
- 6.12 Concerning new supply of smaller units, it is an open policy consideration as to whether flats or houses are provided. For example, given the popularity and suitability of bungalows to a wide range of household types (including older households), the provision of these units might be promoted ahead of flats, covering all 1 and 2 bed needs. Alternatively, the more compact urban form achieved in flatted development may lead to the promotion of this dwelling type in higher density urban areas.
- 6.13 In interpreting figure 6.2, a high percentage indicates a small relative shortfall and a low percentage indicates a great relative shortfall. The results show clearly that the relative shortfall is greater for larger dwellings. In effect this means that households in need requiring larger dwellings have a smaller chance of acquiring a suitable home than households requiring smaller dwellings, and will therefore generally face longer waiting times before their needs are met. This is an important policy conclusion, especially given that this group consists in the main of households with children. Housing need is generally less acute for single person households and couples without children due to the greater annual supply of smaller dwellings.
- 6.14 In recognition of the unlikelihood of raising the level of new build completions sufficiently to meet all identified need, prioritising the provision of new dwellings to address need where it is most acute is a sensible policy response. This would involve targeting new build activity to boost the supply of those dwelling types with the lowest supply to need ratios, thus reducing the waiting times for the scarcest property types. An approach is set out in the following table which is designed to aid in this prioritisation. It shows the additional supply required annually to ensure that a minimum of two-thirds of need is met for each dwelling type.

**Figure 6.3 Prioritising additional affordable housing supply to meet two-thirds of need**

		Cheltenham	Cotsw old	Forest of Dean	Gloucester	Stroud	Tew kes-bury	Gloucester-shire
Number of units required	1 & 2 bed flats/houses	38	37	34	38	0	0	148
	2 bed houses	70	16	19	121	28	7	261
	3 bed houses	158	93	83	235	96	63	729
	4+ bed houses	21	17	13	31	16	10	108
	<b>Total</b>	<b>287</b>	<b>163</b>	<b>150</b>	<b>425</b>	<b>141</b>	<b>81</b>	<b>1,247</b>
Share	1 & 2 bed flats/houses	13%	23%	23%	9%	0%	0%	12%
	2 bed houses	24%	10%	13%	28%	20%	9%	21%
	3 bed houses	55%	57%	56%	55%	68%	78%	58%
	4+ bed houses	7%	10%	9%	7%	12%	13%	9%

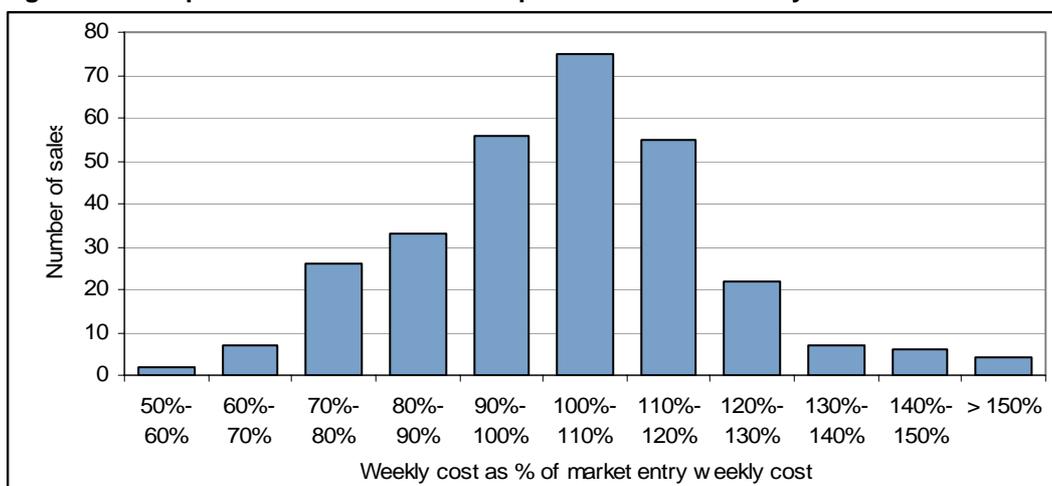
Totals may not sum due to rounding.

- 6.15 The method of calculation used to do this is most clearly explained by example, and three bed houses in Cheltenham Borough is set out here for this purpose. Total need for this dwelling type is estimated to be 276 per annum (see figure 6.2), and two-thirds of this is 184. The annual supply of this dwelling type is 26. 184 minus 26 equals 158 which is the amount of new supply required to 'top up' the annual supply of re-lets and affordable re-sales in order to meet two-thirds of need. This calculation is repeated for all dwelling sizes/types in all local authorities. The results are converted into percentage figures to serve as a guide for the prioritisation of need where it is most severe.
- 6.16 The percentage figures given in the figure 6.3 are recommendations to inform policy responses as required by paragraph 22 of PPS3. Thus in the County as a whole it is recommended that 58% of new affordable dwellings should be three bed houses, 21% two bed houses, 12% 1 or two bed flats and 9% houses with 4 or more bedrooms.

### The intermediate sector

- 6.17 Pages 59 and 60 of the Practice Guidance sets out the approach to be taken to determine the requirement for intermediate affordable housing. It emphasises two aspects:
- the assessment must be based on the ability to afford intermediate sector products;
  - any measure of the intermediate market must be related to specific products that either exist, or are being considered.
- 6.18 In Gloucestershire at present the intermediate sector consists almost exclusively of shared-ownership products. These are being provided through a number of different delivery programmes including Newbuild Homebuy and Social HomeBuy. These products have been analysed using CORE data which registered 293 shared ownership sales in the 2007/08 financial year. The data shows that equity shares ranged from 25% to 88%, with an average of 54% and a mode of 50%.
- 6.19 The prices of these shared ownership products have been converted into weekly costs using the method set out on page 59 of the Practice Guidance. Mortgage payments on the equity share and the rental cost of the remaining share are summed. The weekly cost of each dwelling in the dataset is compared to the equivalent market entry weekly cost (lower quartile private rent) with reference to the number of bedrooms and the local authority in which it is located. The results are shown in the following graph.

**Figure 6.4 Comparison of shared ownership cost and market entry cost**



- 6.20 58% of the shared-ownership properties sold in Gloucestershire in the 2007/08 financial year were more expensive than renting an identically sized property on the open market. These properties therefore **did not constitute affordable housing** under the PPS3 definition.
- 6.21 Anecdotal evidence points to disappointing sales of shared-ownership dwellings in recent years, and an important reason for this is likely to be that the products being offered are no cheaper than open market housing, which means that households in need are unable to afford them. Feedback from the field also suggests that current subsidy arrangements do not support lower intermediate sector prices.
- 6.22 In the preliminary Gloucestershire SHMA work carried out by Fordham Research the intermediate price level was defined as being at the mid-point between average social rent and the market entry price. On average this equates to 75% of the market entry price. As indicated in figure 6.4, there are very few shared ownership properties being offered at or below this price level at present.
- 6.23 As stated above, the Practice Guidance emphasises that it is vital that any measure of the intermediate affordable housing market is related to specific products that either exist, or are being considered, and takes into account the requirements of prospective clients. Given that so few intermediate products are being delivered at prices significantly lower than market entry 90% of the market entry price level is considered to be an appropriate price level to use to determine the share of households in need being served by the intermediate sector. These prices are shown in the following table.

**Figure 6.5 Weekly cost of intermediate sector housing as defined at 90% market entry price**

Dwelling size	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury
1 bedroom	£103	£103	£83	£83	£95	£92
2 bedrooms	£131	£130	£99	£113	£112	£116
3 bedrooms	£158	£165	£114	£136	£149	£135
4 bedrooms	£218	£187	£150	£156	£196	£215

- 6.24 These are the prices used to calculate the income required by households to be able to afford intermediate housing as set out in figure 2.8 in Section 2. Although more than three-quarters of shared ownership sales in 2007/08 were above the equivalent of these price levels, it would not be appropriate to choose a higher threshold as this would in effect “squeeze” the intermediate sector, marginalising the contribution it could make to addressing housing need.
- 6.25 In the outputs of section 3 (current need) and section 4 (newly arising need) those in need able to afford the intermediate sector were distinguished from those only able to afford social renting. The data also allows a distinction to be made between social rented supply and intermediate supply for each of the components presented in section 4.
- 6.26 An estimated 93% of those in current need, and 86% of those making up newly arising need, are not be able to afford intermediate housing and have therefore been ascribed to the social rented sector. By subtracting the supply-side components (committed supply, re-lets and re-sales) we arrive at net annual housing need, and the following tenure split emerges for Gloucestershire as a whole:
- 88% social rented sector;
  - 12% intermediate sector.
- 6.27 The detailed calculations are shown in the next two tables:

**Figure 6.6 Housing needs calculation - social rented sector only**

Step	Notes	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
1.4	Current need	2,069	1,367	1,141	2,759	1,086	537	8,959
2.2b	Newly forming in need	370	177	115	336	194	181	1,374
2.3	Existing households falling into need	30	41	23	70	34	50	248
2.4	Total newly arising need (2.2b+2.3)	400	218	138	406	228	231	1,622
3.5	Stock available	49	0	19	75	27	62	232
3.6	Annual supply of social relets	285	172	122	239	224	175	1,215
5.1a	Total net current need (= 1.4 - 3.5)	2,020	1,367	1,122	2,684	1,059	475	8,727
5.1b	Years to address backlog	5	5	5	5	5	5	5
5.1c	Annual quota (= 5.1a ÷ 5.1b)	404	273	224	537	212	95	1,745
5.1d	Gross annual housing need (= 2.4 + 5.1c)	804	491	362	943	440	326	3,367
5.1e	Net annual housing need (= 5.1d - 3.6)	519	319	241	705	217	151	2,152

Totals may not sum due to rounding.

**Figure 6.7 Housing needs calculation – intermediate sector only**

Step	Notes	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
1.4	Current need	109	47	160	220	117	53	707
2.2b	Newly forming in need	50	26	22	41	60	27	226
2.3	Existing households falling into need	10	3	5	12	5	2	37
2.4	Total newly arising need (2.2b+2.3)	60	29	27	53	65	29	263
3.5	Stock available	5	7	4	50	8	46	120
3.7	Annual supply of intermediate re-sales	18	17	9	24	15	13	96
5.1a	Total net current need (= 1.4 - 3.5)	104	40	156	170	109	7	587
5.1b	Years to address backlog	5	5	5	5	5	5	5
5.1c	Annual quota (= 5.1a ÷ 5.1b)	21	8	31	34	22	1	117
5.1d	Gross annual housing need (= 2.4 + 5.1c)	81	37	58	87	86	30	380
5.1e	Net annual housing need (= 5.1d - 3.7)	63	20	49	64	72	17	284

Totals may not sum due to rounding.

- 6.28 To make sure that new homes being delivered are affordable to those households in need (and therefore comply with the definition of affordable housing as given in PPS3) it is vital that arrangements are in place to ensure that new homes labelled as ‘intermediate sector’ are in fact offered at price levels consistent with the weekly costs shown in figure 6.5.
- 6.29 If intermediate housing is provided at the top end of the intermediate price scale (i.e. fractionally below the market entry level) very few households in the ‘intermediate range’ will be able to afford them. This aspect will therefore need to be policed; otherwise the premise on which the housing need calculation is based will be undermined. It is also recommended that consideration be given to increasing the supply of intermediate rental accommodation, as shared-ownership is not an attractive tenure for all candidate households.
- 6.30 If intermediate sector products were to be made cheaper by increasing the level of subsidy, then a greater proportion of households in need would be able to afford them. If for example, it were possible to lower the average intermediate sector price to the mid-point between average social rent and the market entry price (the price level promulgated by Fordham Research) then between 25% and 30% of those in need would be able to afford the intermediate sector. Following subtraction of the supply side components of the housing needs calculation, this scenario would result in a tenure split for Gloucestershire as a whole of circa 60% social rent and 40% intermediate sector.
- 6.31 This makes it clear that intermediate sector prices and tenure split are interdependent, as the lowering of the former will result in the tenure split shifting towards a greater proportion for the intermediate sector. The 88:12 tenure split given above is predicated on the average

intermediate product being offered at 90% of open market renting, which is in fact cheaper than the average price currently being offered (see figure 6.4).

- 6.32 Development viability constraints in combination with the new build premium are resulting in new build products that scarcely address housing need at all, and the issue is frequently the subject of complex and prolonged negotiations concerning viability, leading to delays and in some cases preventing development projects from proceeding at all.
- 6.33 This is an area which should be addressed with some urgency if the intermediate sector is to realise its full potential to meet the needs of a substantial number of households in need. It is important to note that an intermediate property requires less subsidy (whether measured as residual land value or as grant) than social rented housing because the occupant household is able to pay a greater share of the cost themselves. Therefore more intermediate homes could be provided than social rented homes for the same amount of subsidy.
- 6.34 It is recommended that subsidy mechanisms be reviewed and where necessary changed in order to achieve the situation where the choice of tenure (social rent or intermediate) is a financially neutral one from the perspective of the developer. This would then leave affordable housing providers free to determine the tenure mix on site without this impacting on the balance sheet of the project.

### Implications for the market sector

- 6.35 The projections set out in section 3 indicate an average increase in the number of households in Gloucestershire of 2,425 per annum between 2006 and 2026. The housing needs calculation has concluded that annual unmet need is close to 2,436, which is almost identical to the net household growth projected.
- 6.36 It is therefore clear that the amount of new affordable housing to be delivered needs to be maximized as far as possible. However 100% affordable housing is not practicable given the level of subsidy involved and the need to obtain finance from the private sector, not only to contribute towards affordable housing but also to pay for necessary infrastructure. Nor is 100% affordable housing appropriate or desirable on larger sites and in some regeneration areas as it will not contribute to the creation of mixed sustainable communities. Therefore a careful balance needs to be struck between requirements for affordable housing on the one hand and project viability on the other.
- 6.37 Newly forming households able to afford market housing were quantified as a bi-product of the housing needs calculation set out above. Approximately 1,900 (54%) of the almost 3,500 annual newly forming households in Gloucestershire are able to afford an open market housing solution. A breakdown by district and household type is given here.

**Figure 6.8 Annual newly forming households able to afford market entry**

	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Single person households	89	32	33	71	52	51	329
Couples without children	202	111	75	180	130	123	822
Couples with children	125	77	119	189	112	89	710
Single parent households	2	1	4	7	3	3	18
All households	417	220	231	448	297	266	1,879

Totals may not sum due to rounding.

- 6.38 These future households requiring market housing will not necessarily opt for a new build solution. Given the income profile of newly forming households and the fact that a premium is paid for new build dwellings, the majority are likely to end up in the existing stock.
- 6.39 Household projections provide an important steer to future new build development in the market sector. In the period up to 2026 the number of older single person households and

couples without children is expected to expand rapidly, as is the number of single people in the 35 to 59 year old age band. Accordingly it will be important to develop large numbers of smaller homes to cater for these smaller households, and two bedroom units in particular are recommended. One bedroom units are not generally advised as these will not provide the extra space expected by those purchasing or renting in the private sector.

**Figure 6.9 Household projections 2006-2026: annual change by household type and age band**

Household type	Age band	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Single Person	15-24	-5	3	4	10	3	3	19
	25-34	35	20	23	49	34	30	191
	35-59	132	72	50	111	108	80	554
	60-74	107	104	78	133	117	78	617
	75+	55	73	96	86	102	95	507
Couple, no children	15-24	0	0	0	-3	-1	0	-4
	25-34	-1	3	2	7	0	3	14
	35-59	-41	-28	-34	-25	-30	-20	-177
	60-74	29	76	63	75	81	56	380
	75+	65	89	93	67	110	84	509
Couple with children	15-24	0	0	0	-1	0	0	-1
	25-34	1	4	3	8	0	3	18
	35-59	-53	-48	-59	-63	-62	-43	-328
	60-74	1	2	2	3	3	1	12
	75+	0	0	0	0	0	0	2
Lone Parent	15-24	3	0	0	3	1	0	8
	25-34	7	2	4	12	4	4	32
	35-59	-10	0	0	-3	-3	-3	-19
	60-74	0	1	0	2	1	1	4
	75+	0	0	0	0	0	0	1
Other Multiperson	15-24	8	2	1	1	1	1	14
	25-34	16	5	3	9	6	2	40
	35-59	-4	1	-4	5	-1	-1	-3
	60-74	6	1	6	3	0	-2	13
	75+	4	6	3	1	-1	9	22

- 6.40 The fact that there is a current backlog of nearly 9,000 households in need in Gloucestershire is the primary reason why net annual housing need is as large as the projected net annual increase in the number of households. The situation has been exacerbated by the continued erosion of the social housing stock in recent years resulting in fewer affordable homes becoming available for re-let to newly forming households who are unable to afford in the market.
- 6.41 Taking the period 2009-2026 as a whole, the proportion of new builds required in the open market will depend on a number of factors including the rate at which the current backlog of need is reduced. This is because the elimination of backlog would go hand in hand with an expansion of the affordable housing stock. This would in turn increase the annual supply of re-lets available to meet newly arising need.
- 6.42 At the present rate of turnover, 100 new affordable homes would result in an additional annual supply of circa 4 re-lets or re-sales. Compounded year on year, this means that once backlog is eliminated, and gross need is made up solely of newly arising need, the increased re-let supply would be sufficient to meet newly arising need, and no additional affordable new builds would be required. In other words, re-lets and newly arising need would reach a point of equilibrium.
- 6.43 Under the above (admittedly unlikely) scenario, there would need to be in excess of 14,000 net affordable new builds between 2009 and 2014 after which point no new affordable homes would be required because re-lets and newly arising need would be in equilibrium. This would mean that all new build after 2014 could be in the market sector. This would mean that

for the whole period 2009-2026 33% new build would be affordable, leaving 67% for the market sector.

- 6.44 If, however, the backlog quota was not able to be reduced in 5 years but instead was reduced over the entire 18 year period, then the point of equilibrium described above would not be reached until the end of the period. Because of the slower rate of increase in the re-let supply, 45% of new builds would need to be affordable, and 55% open market. This is analogous to paying ones debts off slowly rather than quickly.
- 6.45 However neither of these scenarios are particularly realistic given the low rate of affordable new builds currently being delivered and the constraints of project viability. A third scenario is therefore presented here – one where backlog need is left untouched. This scenario is predicated on 10,300 net additional affordable homes in Gloucestershire between 2009 and 2026 (a rate of circa 570 per annum) would be provided, resulting in the point of equilibrium between newly arising need and re-let supply being reached in 2026. Given that the net increase in households in the County is projected to be around 43,500 in this period, the difference would be made up of market sector housing: approximately 32,000. This is close to 75% of the total.
- 6.46 This last scenario represents a ‘holding pattern’ whereby backlog need would be prevented from growing because re-let and re-sales in combination with net new build supply would be sufficient to meet newly arising need. If levels of need were to decline through falling market prices for example, then the surplus new build supply would be available to reduce backlog need further. Continuing with the financial analogy this would be akin to a budgetary windfall enabling part of the principle to be repaid instead of just the interest.
- 6.47 The scenarios presented here are only applicable to Gloucestershire as a whole and their implications for individual local authorities would need to be the subject of further scenario building at that level.

### Price sensitivity test

- 6.48 A sensitivity test has been carried out to determine the extent to which a change in house prices would impact on the estimate of housing need calculated. The scenario tested is where market entry house prices (lower quartile private renting) are 10% lower than the level measured in March 2008. All other inputs into the calculations are assumed to remain constant, including household incomes. The results are given here:

**Figure 6.11 Housing need given a 10% fall in the market entry price level**

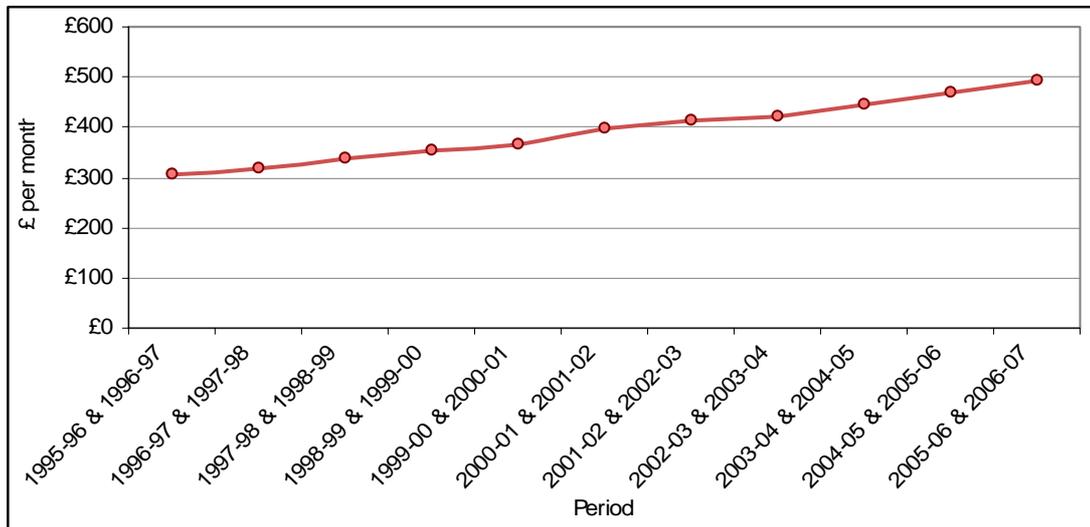
Step	Notes	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
1.4	Current need	2,069	1,367	1,141	2,759	1,096	537	8,969
2.2b	Newly forming in need	370	177	115	336	222	181	1,402
2.3	Existing households falling into need	40	44	28	82	39	52	285
2.4	Total newly arising need (2.2b+2.3)	410	221	143	418	261	233	1,687
3.5	Stock available	54	7	23	125	35	108	352
3.6	Annual supply of social relets	297	177	123	243	229	176	1,243
5.1a	Total net current need (= 1.4 - 3.5)	2,015	1,360	1,118	2,634	1,061	429	8,617
5.1b	Years to address backlog	5	5	5	5	5	5	5
5.1c	Annual quota (= 5.1a ÷ 5.1b)	403	272	224	527	212	86	1,723
5.1d	Gross annual housing need (= 2.4 + 5.1c)	813	493	367	945	473	318	3,410
5.1e	Net annual housing need (= 5.1d - 3.6)	516	316	244	703	245	143	2,167

- 6.49 Under the given scenario current need in Gloucestershire as a whole is 8% lower than the baseline estimate, newly arising need would be 10.5% lower and net annual unmet need would be 13.5% lower. It can therefore be concluded that the decrease in housing need that

would be caused by a 10% decline in the market entry price level would not be significantly large as to undermine the primary conclusions of this report regarding the level of affordable housing required in the future.

- 6.50 Figures derived from the Survey of English Housing show that private rents in the South West region have increased steadily between 1995 and 2007 at an average rate of 4.9% per annum.

**Figure 6.10 Mean private sector rents in the South West Region**



Source: CLG Live Table 734

- 6.51 However anecdotal evidence suggests that private rents started to decline in 2008 in tandem with price falls and declining sales volumes in the buyer's market. There is currently no up to date secondary data available with which to measure these price falls and this is clearly an issue that a follow-up monitoring study will need to be addressed.
- 6.52 The unfolding national and global recession which had its roots in the credit crisis of 2007 and started to spread into the productive economy in 2008 will undoubtedly have far reaching consequences for housing need and demand in Gloucestershire. Not only are prices being affected, but incomes profiles will also change as unemployment grows. Higher numbers of house repossession mean that more existing households will be falling into need. These issues make underline the importance of continued monitoring and updating of the findings of this study.

# STATISTICAL APPENDIX

## Current Housing Need

### Cheltenham Borough Housing Register by household type and age

Selected?	Household type	<26 years	26-34 years	35-59 years	60+ years	Age not known	Total
No - resident outside district	Single	0	29	59	36	0	124
	Couple, no child	6	5	9	12	0	32
	Couple with child(ren)	4	10	21	1	0	36
	Single parent family	7	10	28	2	3	50
	<b>Total</b>	<b>17</b>	<b>54</b>	<b>117</b>	<b>51</b>	<b>3</b>	<b>242</b>
No - single < 26		405	0	0	0	0	405
No - social sector	Single	15	13	79	65	0	172
	Couple, no child	2	6	24	29	0	61
	Couple with child(ren)	23	66	65	3	1	158
	Single parent family	37	52	75	6	1	171
	<b>Total</b>	<b>77</b>	<b>137</b>	<b>243</b>	<b>103</b>	<b>2</b>	<b>562</b>
Yes	Single	0	224	478	165	14	881
	Couple, no child	104	43	66	70	1	284
	Couple with child(ren)	42	103	118	9	2	274
	Single parent family	77	117	214	7	19	434
	<b>Total</b>	<b>223</b>	<b>487</b>	<b>876</b>	<b>251</b>	<b>36</b>	<b>1,873</b>

### Forest of Dean District Housing Register by household type and age

Selected?	Household type	< 26	26-34	35-59	60+	Total
No - not resident	Single person	0	13	35	42	90
	Expectant Mother	2	0	0	0	2
	Couple	2	6	15	27	50
	Couple Expecting	2	3	0	0	5
	Family with resident child	8	6	17	0	31
	One Parent Family	9	13	20	2	44
	Other/not given	2	1	5	12	20
	<b>Total</b>	<b>25</b>	<b>42</b>	<b>92</b>	<b>83</b>	<b>242</b>
No - single < 26		218	0	0	0	218
No - social sector	Single person	8	2	16	31	57
	Expectant Mother	0	0	0	1	1
	Couple	1	1	9	11	22
	Couple Expecting	0	2	0	0	2
	Family with resident child	10	10	12	2	34
	One Parent Family	4	8	12	2	26
	Other/not given	1	5	11	8	25
	<b>Total</b>	<b>24</b>	<b>28</b>	<b>60</b>	<b>55</b>	<b>167</b>
Yes	Single person	0	86	215	176	477
	Expectant Mother	22	1	1	1	25
	Couple	49	30	42	88	209
	Couple Expecting	30	12	4	0	46
	Family with resident child	51	65	92	6	214
	One Parent Family	40	104	163	7	314
	Other/not given	16	15	70	87	188
	<b>Total</b>	<b>208</b>	<b>313</b>	<b>587</b>	<b>365</b>	<b>1,473</b>

### Cotswold District Housing Register by household type

Selected?	Household Type	All age bands
No - not resident in Cotswold	Single Person	183
	Couple, no children	157
	Single parent or couple with child(ren)	209
	Mixed Household Family	57
	Total	606
No - single < 26 years old		169
Yes	Single Person	378
	Couple, no children	328
	Single parent or couple with child(ren)	549
	Mixed Household Family	113
	Total	1,368

### Gloucester City Housing Register by household type and age

Selected?	Household type	< 26	26-39	40-59	60+	Age not given	Total
No - no local connection	Single person	74	110	94	49	3	330
	Couple without child(ren)	17	13	16	26	3	75
	Couple with children	0	0	0	0	96	96
	Single parent household	0	0	0	0	146	146
	Other	0	0	0	0	2	2
	Total	91	123	110	75	250	649
No - single < 26 years old		585	0	0	0	0	585
No - social sector tenants	Single person	80	65	114	115	14	388
	Couple without child(ren)	12	17	18	41	6	94
	Couple with children	0	0	0	0	180	180
	Single parent household	0	0	0	0	319	319
	Other	0	0	0	0	17	17
	Total	92	82	132	156	536	998
Yes	Single person	20	422	359	135	14	950
	Couple without child(ren)	102	63	47	70	1	283
	Couple with children	0	0	0	0	524	524
	Single parent household	0	0	0	0	1,017	1,017
	Other	0	0	0	0	10	10
	Total	122	485	406	205	1,566	2,784

### Stroud District Housing Register by household type and age

Selected?	Household type	< 26	26-39	40-59	60+	Total
No - not a resident	Single person	0	16	35	40	91
	Couple, no children	5	2	25	26	58
	Couple with child(ren)	14	26	17	1	58
	Single parent	14	36	15	0	65
	Other multiperson HH	0	0	3	0	3
	Total	33	80	95	67	275
No - single < 26		181	0	0	0	181
No - social renters	Single person	6	19	75	150	250
	Couple, no children	3	8	43	64	118
	Couple with child(ren)	31	91	54	4	180
	Single parent	38	90	42	0	170
	Other multiperson HH	0	4	7	0	11
	Total	78	212	221	218	729
Yes	Single person	0	114	182	161	457
	Couple, no children	36	20	47	73	176
	Couple with child(ren)	34	65	41	7	147
	Single parent	79	112	85	0	276
	Other multiperson HH	0	0	9	2	11
	Total	149	311	364	243	1,067

**Tewkesbury Borough Housing Register by household type and age**

Selected?	Household type	< 26	26-39	40-59	60+	Total
No - out of area	Single person	0	26	43	37	106
	Couple, no children	10	12	13	14	49
	Couple with child(ren)	10	39	10	1	60
	Single parent	13	37	9	0	59
	Other multiperson	1	1	8	1	11
	<b>Total</b>		<b>34</b>	<b>115</b>	<b>83</b>	<b>53</b>
No - Single person < 26		79	0	0	0	79
No - social renter	Single person	6	13	52	72	143
	Couple, no children	3	5	20	34	62
	Couple with child(ren)	17	64	25	2	108
	Single parent	23	57	21	1	102
	Other multiperson	0	8	16	0	24
	<b>Total</b>		<b>49</b>	<b>147</b>	<b>134</b>	<b>109</b>
Yes	Single person	0	40	60	46	146
	Couple, no children	24	16	39	32	111
	Couple with child(ren)	18	54	31	0	103
	Single parent	31	69	43	0	143
	Other multiperson	0	1	16	2	19
	<b>Total</b>		<b>73</b>	<b>180</b>	<b>189</b>	<b>80</b>

## Household Projections

### Household projections by household type – Gloucestershire

	2006	2026	Change	Change (%)	Annual ave.
Single person	77,752	115,491	37,739	49%	1,887
Couple, no children	92,390	106,831	14,441	16%	722
Couple with children	51,309	45,373	-5,936	-12%	-297
Lone Parent	15,002	15,532	530	4%	27
Other	13,905	15,637	1,732	12%	87
<b>Total</b>	<b>250,358</b>	<b>298,864</b>	<b>48,506</b>	<b>19%</b>	<b>2,425</b>

### Household projections by age band – Gloucestershire

	2006	2026	Change	Change (%)	Annual ave.
15-24	8,600	9,321	721	8%	36
25-34	32,057	37,965	5,908	18%	295
35-59	118,734	119,269	535	0%	27
60-74	53,936	74,464	20,528	38%	1,026
75+	37,031	57,845	20,814	56%	1,041
<b>Total</b>	<b>250,358</b>	<b>298,864</b>	<b>48,506</b>	<b>19%</b>	<b>2,425</b>

### Household projections by household type and age band – Gloucestershire

HH-type	Age	2006	2026	Change	Change (%)	Annual ave.
Single person	15-24	2,370	2,742	372	16%	19
	25-34	8,260	12,074	3,814	46%	191
	35-59	27,430	38,501	11,071	40%	554
	60-74	18,136	30,477	12,341	68%	617
	75+	21,556	31,697	10,141	47%	507
Couple, no children	15-24	2,200	2,130	-71	-3%	-4
	25-34	8,146	8,422	276	3%	14
	35-59	37,560	34,027	-3,533	-9%	-177
	60-74	31,891	39,487	7,597	24%	380
	75+	12,593	22,765	10,172	81%	509
Couple with children	15-24	1,144	1,123	-20	-2%	-1
	25-34	10,085	10,448	363	4%	18
	35-59	38,889	32,326	-6,563	-17%	-328
	60-74	1,125	1,367	241	21%	12
	75+	66	109	43	65%	2
Lone Parent	15-24	1,428	1,586	158	11%	8
	25-34	3,977	4,624	647	16%	32
	35-59	9,383	9,011	-372	-4%	-19
	60-74	156	241	85	54%	4
	75+	58	70	12	21%	1
Other multiperson household	15-24	1,458	1,740	282	19%	14
	25-34	1,589	2,397	808	51%	40
	35-59	5,472	5,404	-68	-1%	-3
	60-74	2,628	2,892	264	10%	13
	75+	2,758	3,204	446	16%	22

### Household projections by household type – Cheltenham Borough

	2006	2026	Change	Change (%)	Annual ave.
Single person	17,903	24,378	6,475	36%	324
Couple, no children	16,247	17,269	1,022	6%	51
Couple with children	8,659	7,641	-1,018	-12%	-51
Lone Parent	3,129	3,129	0	0%	0
Other	3,984	4,583	599	15%	30
<b>Total</b>	<b>49,922</b>	<b>57,000</b>	<b>7,078</b>	<b>14%</b>	<b>354</b>

### Household projections by age band – Cheltenham Borough

	2006	2026	Change	Change (%)	Annual ave.
15-24	2,514	2,615	101	4%	5
25-34	8,412	9,574	1,162	14%	58
35-59	22,341	22,819	478	2%	24
60-74	9,352	12,203	2,851	30%	143
75+	7,303	9,789	2,486	34%	124
<b>Total</b>	<b>49,922</b>	<b>57,000</b>	<b>7,078</b>	<b>14%</b>	<b>354</b>

### Household projections by household type and age band – Cheltenham Borough

HH-type	Age	2006	2026	Change	Change (%)	Annual ave.
Single person	15-24	591	494	-97	-16%	-5
	25-34	2,745	3,435	690	25%	35
	35-59	6,583	9,227	2,644	40%	132
	60-74	3,589	5,721	2,132	59%	107
	75+	4,395	5,501	1,106	25%	55
Couple, no children	15-24	557	549	-9	-2%	0
	25-34	2,247	2,228	-19	-1%	-1
	35-59	6,102	5,283	-820	-13%	-41
	60-74	5,001	5,574	573	11%	29
	75+	2,339	3,636	1,297	55%	65
Couple with children	15-24	147	146	0	0%	0
	25-34	1,840	1,860	20	1%	1
	35-59	6,479	5,417	-1,061	-16%	-53
	60-74	182	201	19	11%	1
	75+	12	16	4	38%	0
Lone Parent	15-24	302	359	57	19%	3
	25-34	812	955	143	18%	7
	35-59	1,952	1,748	-204	-10%	-10
	60-74	41	44	3	7%	0
	75+	22	23	1	5%	0
Other multiperson household	15-24	917	1,067	150	16%	8
	25-34	768	1,096	328	43%	16
	35-59	1,225	1,144	-81	-7%	-4
	60-74	539	663	124	23%	6
	75+	535	613	78	15%	4

### Household projections by household type – Cotswold District

	2006	2026	Change	Change (%)	Annual ave.
Single person	11,099	16,532	5,433	49%	272
Couple, no children	14,523	17,342	2,819	19%	141
Couple with children	7,330	6,499	-831	-11%	-42
Lone Parent	1,628	1,693	65	4%	3
Other	1,793	2,071	278	16%	14
<b>Total</b>	<b>36,373</b>	<b>44,137</b>	<b>7,764</b>	<b>21%</b>	<b>388</b>

### Household projections by age band – Cotswold District

	2006	2026	Change	Change (%)	Annual ave.
15-24	785	900	115	15%	6
25-34	3,485	4,138	653	19%	33
35-59	17,193	17,144	-49	0%	-2
60-74	8,707	12,381	3,674	42%	184
75+	6,203	9,574	3,371	54%	169
<b>Total</b>	<b>36,373</b>	<b>44,137</b>	<b>7,764</b>	<b>21%</b>	<b>388</b>

### Household projections by household type and age band – Cotswold District

HH-type	Age	2006	2026	Change	Change (%)	Annual ave.
Single person	15-24	202	262	60	30%	3
	25-34	781	1,175	394	50%	20
	35-59	3,738	5,173	1,435	38%	72
	60-74	2,888	4,973	2,085	72%	104
	75+	3,490	4,949	1,459	42%	73
Couple, no children	15-24	219	227	8	3%	0
	25-34	1,000	1,064	65	6%	3
	35-59	5,833	5,283	-551	-9%	-28
	60-74	5,232	6,746	1,514	29%	76
	75+	2,239	4,023	1,784	80%	89
Couple with children	15-24	151	158	7	5%	0
	25-34	1,227	1,299	71	6%	4
	35-59	5,747	4,780	-966	-17%	-48
	60-74	194	242	48	25%	2
	75+	11	19	8	69%	0
Lone Parent	15-24	94	103	9	10%	0
	25-34	319	352	33	10%	2
	35-59	1,182	1,186	4	0%	0
	60-74	24	39	15	63%	1
	75+	9	13	4	44%	0
Other multiperson household	15-24	119	150	31	26%	2
	25-34	158	248	90	57%	5
	35-59	693	722	29	4%	1
	60-74	369	381	12	3%	1
	75+	454	570	116	26%	6

**Household projections by household type – Forest of Dean District**

	2006	2026	Change	Change (%)	Annual ave.
Single person	9,400	14,414	5,014	53%	251
Couple, no children	13,790	16,293	2,503	18%	125
Couple with children	7,466	6,399	-1,067	-14%	-53
Lone Parent	1,826	1,917	91	5%	5
Other	1,796	1,986	190	11%	10
<b>Total</b>	<b>34,278</b>	<b>41,009</b>	<b>6,731</b>	<b>20%</b>	<b>337</b>

**Household projections by age band – Forest of Dean District**

	2006	2026	Change	Change (%)	Annual ave.
15-24	899	1,026	127	14%	6
25-34	3,399	4,087	688	20%	34
35-59	16,397	15,478	-919	-6%	-46
60-74	8,495	11,471	2,976	35%	149
75+	5,088	8,947	3,859	76%	193
<b>Total</b>	<b>34,278</b>	<b>41,009</b>	<b>6,731</b>	<b>20%</b>	<b>337</b>

**Household projections by household type and age band – Forest of Dean District**

HH-type	Age	2006	2026	Change	Change (%)	Annual ave.
Single person	15-24	222	305	83	37%	4
	25-34	632	1,092	460	73%	23
	35-59	3,025	4,022	997	33%	50
	60-74	2,577	4,135	1,558	60%	78
	75+	2,944	4,860	1,916	65%	96
Couple, no children	15-24	246	248	2	1%	0
	25-34	743	779	36	5%	2
	35-59	5,840	5,169	-671	-11%	-34
	60-74	5,241	6,507	1,266	24%	63
	75+	1,720	3,589	1,870	109%	93
Couple with children	15-24	195	200	5	2%	0
	25-34	1,480	1,533	53	4%	3
	35-59	5,587	4,414	-1,173	-21%	-59
	60-74	195	235	40	21%	2
	75+	9	18	8	91%	0
Lone Parent	15-24	176	184	8	5%	0
	25-34	439	518	79	18%	4
	35-59	1,189	1,192	3	0%	0
	60-74	16	16	0	0%	0
	75+	6	7	1	17%	0
Other multiperson household	15-24	60	89	29	48%	1
	25-34	105	165	60	57%	3
	35-59	756	681	-75	-10%	-4
	60-74	466	578	112	24%	6
	75+	409	473	64	16%	3

### Household projections by household type – Gloucester City

	2006	2026	Change	Change (%)	Annual ave.
Single person	15,646	23,429	7,783	50%	389
Couple, no children	16,039	18,461	2,422	15%	121
Couple with children	10,502	9,441	-1,061	-10%	-53
Lone Parent	3,955	4,242	287	7%	14
Other	2,565	2,924	359	14%	18
<b>Total</b>	<b>48,707</b>	<b>58,497</b>	<b>9,790</b>	<b>20%</b>	<b>490</b>

### Household projections by age band – Gloucester City

	2006	2026	Change	Change (%)	Annual ave.
15-24	2,410	2,618	208	9%	10
25-34	7,751	9,432	1,681	22%	84
35-59	23,375	23,876	501	2%	25
60-74	8,945	13,259	4,314	48%	216
75+	6,226	9,312	3,086	50%	154
<b>Total</b>	<b>48,707</b>	<b>58,497</b>	<b>9,790</b>	<b>20%</b>	<b>490</b>

### Household projections by household type and age band – Gloucester City

HH-type	Age	2006	2026	Change	Change (%)	Annual ave.
Single person	15-24	818	1,014	196	24%	10
	25-34	1,990	2,970	980	49%	49
	35-59	5,797	8,022	2,225	38%	111
	60-74	3,331	5,990	2,659	80%	133
	75+	3,710	5,433	1,723	46%	86
Couple, no children	15-24	578	525	-53	-9%	-3
	25-34	1,777	1,912	136	8%	7
	35-59	6,753	6,254	-498	-7%	-25
	60-74	4,941	6,440	1,499	30%	75
	75+	1,991	3,330	1,339	67%	67
Couple with children	15-24	310	284	-26	-8%	-1
	25-34	2,452	2,613	160	7%	8
	35-59	7,546	6,291	-1,256	-17%	-63
	60-74	182	237	55	30%	3
	75+	11	16	5	47%	0
Lone Parent	15-24	504	571	67	13%	3
	25-34	1,266	1,499	233	18%	12
	35-59	2,144	2,083	-61	-3%	-3
	60-74	32	75	43	134%	2
	75+	9	14	5	56%	0
Other multiperson household	15-24	200	224	24	12%	1
	25-34	266	438	172	65%	9
	35-59	1,135	1,226	91	8%	5
	60-74	459	517	58	13%	3
	75+	505	519	14	3%	1

**Household projections by household type – Stroud District**

	2006	2026	Change	Change (%)	Annual ave.
Single person	13,572	20,883	7,311	54%	366
Couple, no children	18,226	21,438	3,212	18%	161
Couple with children	10,257	9,064	-1,193	-12%	-60
Lone Parent	2,595	2,635	40	2%	2
Other	2,193	2,306	113	5%	6
<b>Total</b>	<b>46,843</b>	<b>56,326</b>	<b>9,483</b>	<b>20%</b>	<b>474</b>

**Household projections by age band – Stroud District**

	2006	2026	Change	Change (%)	Annual ave.
15-24	1,081	1,158	77	7%	4
25-34	4,967	5,837	870	18%	44
35-59	23,247	23,502	255	1%	13
60-74	10,512	14,552	4,040	38%	202
75+	7,036	11,277	4,241	60%	212
<b>Total</b>	<b>46,843</b>	<b>56,326</b>	<b>9,483</b>	<b>20%</b>	<b>474</b>

**Household projections by household type and age band – Stroud District**

HH-type	Age	2006	2026	Change	Change (%)	Annual ave.
Single person	15-24	284	347	63	22%	3
	25-34	1,118	1,806	688	62%	34
	35-59	4,887	7,055	2,168	44%	108
	60-74	3,225	5,574	2,349	73%	117
	75+	4,058	6,101	2,043	50%	102
Couple, no children	15-24	303	288	-15	-5%	-1
	25-34	1,238	1,237	0	0%	0
	35-59	7,657	7,058	-598	-8%	-30
	60-74	6,557	8,181	1,624	25%	81
	75+	2,471	4,674	2,202	89%	110
Couple with children	15-24	214	208	-6	-3%	0
	25-34	1,768	1,761	-8	0%	0
	35-59	8,016	6,775	-1,242	-15%	-62
	60-74	245	297	52	21%	3
	75+	14	23	10	73%	0
Lone Parent	15-24	172	186	14	8%	1
	25-34	655	725	70	11%	4
	35-59	1,732	1,678	-54	-3%	-3
	60-74	27	38	11	41%	1
	75+	9	8	-1	-11%	0
Other multiperson household	15-24	108	129	21	19%	1
	25-34	188	308	120	64%	6
	35-59	955	936	-19	-2%	-1
	60-74	458	462	4	1%	0
	75+	484	471	-13	-3%	-1

### Household projections by household type – Tewkesbury Borough

	2006	2026	Change	Change (%)	Annual ave.
Single person	10,132	15,855	5,723	56%	286
Couple, no children	13,565	16,028	2,463	18%	123
Couple with children	7,095	6,329	-766	-11%	-38
Lone Parent	1,869	1,916	47	3%	2
Other	1,574	1,767	193	12%	10
<b>Total</b>	<b>34,235</b>	<b>41,895</b>	<b>7,660</b>	<b>22%</b>	<b>383</b>

### Household projections by age band – Tewkesbury Borough

	2006	2026	Change	Change (%)	Annual ave.
15-24	911	1,004	93	10%	5
25-34	4,043	4,897	854	21%	43
35-59	16,181	16,450	269	2%	13
60-74	7,925	10,598	2,673	34%	134
75+	5,175	8,946	3,771	73%	189
<b>Total</b>	<b>34,235</b>	<b>41,895</b>	<b>7,660</b>	<b>22%</b>	<b>383</b>

### Household projections by household type and age band – Tewkesbury Borough

HH-type	Age	2006	2026	Change	Change (%)	Annual ave.
Single person	15-24	253	320	67	26%	3
	25-34	994	1,596	602	61%	30
	35-59	3,400	5,002	1,602	47%	80
	60-74	2,526	4,084	1,558	62%	78
	75+	2,959	4,853	1,894	64%	95
Couple, no children	15-24	297	293	-4	-1%	0
	25-34	1,142	1,201	59	5%	3
	35-59	5,375	4,980	-395	-7%	-20
	60-74	4,918	6,040	1,122	23%	56
	75+	1,833	3,514	1,681	92%	84
Couple with children	15-24	127	127	0	0%	0
	25-34	1,317	1,383	66	5%	3
	35-59	5,514	4,649	-865	-16%	-43
	60-74	128	154	26	20%	1
	75+	9	16	7	74%	0
Lone Parent	15-24	180	183	3	2%	0
	25-34	486	575	89	18%	4
	35-59	1,184	1,124	-60	-5%	-3
	60-74	16	29	13	81%	1
	75+	3	5	2	67%	0
Other multiperson household	15-24	54	81	27	50%	1
	25-34	104	142	38	37%	2
	35-59	708	695	-13	-2%	-1
	60-74	337	291	-46	-14%	-2
	75+	371	558	187	50%	9

## Newly Arising Households

### Projected newly forming households by household type – Gloucestershire

Household type	2006-2011		2011-2016		2016-2021		2021-2026	
Single Person	3,231	19%	4,266	22%	4,644	24%	4,702	25%
Couple, no children	4,310	25%	4,447	23%	4,208	22%	4,020	21%
Couple with children	6,274	36%	6,700	35%	6,765	35%	6,459	34%
Lone Parent	2,465	14%	2,746	14%	2,812	15%	2,756	15%
Other Multiperson	1,110	6%	1,030	5%	871	5%	872	5%
<b>All households</b>	<b>17,390</b>	<b>100%</b>	<b>19,189</b>	<b>100%</b>	<b>19,300</b>	<b>100%</b>	<b>18,809</b>	<b>100%</b>

**Projected newly forming households by household type – Cheltenham Borough**

Household type	2006-2011		2011-2016		2016-2021		2021-2026	
Single Person	1,005	24%	1,402	30%	1,475	31%	1,468	32%
Couple, no children	1,011	24%	1,085	23%	997	21%	961	21%
Couple with children	1,194	29%	1,275	27%	1,299	28%	1,241	27%
Lone Parent	464	11%	554	12%	590	13%	593	13%
Other Multiperson	514	12%	413	9%	322	7%	329	7%
All households	4,188	100%	4,729	100%	4,683	100%	4,592	100%

**Projected newly forming households by household type – Cotswold District**

Household type	2006-2011		2011-2016		2016-2021		2021-2026	
Single Person	364	17%	434	19%	480	21%	501	23%
Couple, no children	615	29%	623	28%	605	27%	581	26%
Couple with children	815	39%	843	38%	849	38%	818	37%
Lone Parent	199	9%	209	9%	204	9%	200	9%
Other Multiperson	123	6%	121	5%	111	5%	115	5%
All households	2,116	100%	2,230	100%	2,249	100%	2,215	100%

**Projected newly forming households by household type – Forest of Dean District**

Household type	2006-2011		2011-2016		2016-2021		2021-2026	
Single Person	259	14%	368	17%	435	20%	452	21%
Couple, no children	387	21%	414	20%	395	18%	376	18%
Couple with children	844	46%	934	44%	952	44%	908	43%
Lone Parent	269	15%	303	14%	315	14%	311	15%
Other Multiperson	79	4%	84	4%	78	4%	70	3%
All households	1,838	100%	2,103	100%	2,175	100%	2,117	100%

**Projected newly forming households by household type – Gloucester City**

Household type	2006-2011		2011-2016		2016-2021		2021-2026	
Single Person	620	15%	775	18%	809	19%	788	19%
Couple, no children	942	23%	924	21%	848	20%	798	19%
Couple with children	1,565	38%	1,666	38%	1,677	39%	1,595	38%
Lone Parent	805	20%	857	19%	843	19%	820	20%
Other Multiperson	196	5%	195	4%	162	4%	160	4%
All households	4,128	100%	4,417	100%	4,339	100%	4,161	100%

**Projected newly forming households by household type – Stroud District**

Household type	2006-2011		2011-2016		2016-2021		2021-2026	
Single Person	495	18%	670	21%	758	24%	785	25%
Couple, no children	688	25%	726	23%	708	22%	674	21%
Couple with children	1,045	38%	1,125	36%	1,134	35%	1,079	34%
Lone Parent	398	14%	463	15%	482	15%	462	15%
Other Multiperson	128	5%	147	5%	139	4%	139	4%
All households	2,754	100%	3,131	100%	3,221	100%	3,139	100%

**Projected newly forming households by household type – Tewkesbury Borough**

Household type	2006-2011		2011-2016		2016-2021		2021-2026	
Single Person	488	21%	617	24%	687	26%	708	27%
Couple, no children	667	28%	675	26%	655	25%	630	24%
Couple with children	811	34%	857	33%	854	32%	818	32%
Lone Parent	330	14%	360	14%	378	14%	370	14%
Other Multiperson	70	3%	70	3%	59	2%	59	2%
All households	2,366	100%	2,579	100%	2,633	100%	2,585	100%

## Supply-side

### Social sector stock 1997-2007

Local Auth.	LA/RSL	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Cheltenham	LA	5,967	5,773	5,655	5,457	5,349	5,232	5,026	4,947	4,807	4,753	4,695
	RSL	1,335	1,398	1,484	1,525	1,550	1,821	1,874	1,957	2,137	2,149	2,081
	Total	7,302	7,171	7,139	6,982	6,899	7,053	6,900	6,904	6,944	6,902	6,776
Cotsw old	LA	0	0	0	0	0	4	4	5	0	6	0
	RSL	4,971	4,902	4,937	4,918	5,044	5,076	5,089	5,129	5,214	5,014	4,995
	Total	4,971	4,902	4,937	4,918	5,044	5,080	5,093	5,134	5,214	5,020	4,995
Forest of Dean	LA	4,357	4,278	4,111	3,981	3,874	3,752	0	0	0	0	0
	RSL	612	701	699	783	841	866	4,475	4,384	4,355	4,367	4,054
	Total	4,969	4,979	4,810	4,764	4,715	4,618	4,475	4,384	4,355	4,367	4,054
Gloucester	LA	5,715	5,504	5,371	5,233	5,038	4,899	4,800	4,770	4,703	4,580	4,548
	RSL	1,163	1,357	1,296	1,554	1,544	2,274	2,382	2,405	2,372	2,416	2,067
	Total	6,878	6,861	6,667	6,787	6,582	7,173	7,182	7,175	7,075	6,996	6,615
Stroud	LA	5,996	5,872	5,792	5,675	5,579	5,503	5,410	5,339	5,294	5,278	5,254
	RSL	749	856	886	958	972	1,113	1,093	1,062	1,076	1,053	1,038
	Total	6,745	6,728	6,678	6,633	6,551	6,616	6,503	6,401	6,370	6,331	6,292
Tew kesbury	LA	3,157	3,066	7	1	0	0	0	0	6	0	6
	RSL	877	927	3,961	3,918	3,919	3,928	3,920	3,934	3,906	3,977	4,022
	Total	4,034	3,993	3,968	3,919	3,919	3,928	3,920	3,934	3,912	3,977	4,028

### CORE data General Needs lettings by LA 2006/07 and 2007/08, letting type (annual averages)

Type of letting	Unit type/size	Cheltenham	Cotsw old	Forest of Dean	Gloucester	Stroud	Tew kesbury	Gloucester-shire
Re-lets to new tenants	Flat < 2 bedrooms	115	63	35	106	77	33	429
	Flat 2+ bedrooms	107	39	25	61	69	81	380
	House < 2 bedrooms	10	10	14	7	15	6	61
	House 2 bedrooms	21	40	32	23	35	33	182
	House 3 bedrooms	20	21	13	19	25	19	116
	House 4+ bedrooms	4	0	0	1	1	2	7
	Bedsit/shared/other	9	1	3	24	4	2	41
	Total	285	172	122	239	224	175	1,215
Re-lets to transferring tenants	Flat < 2 bedrooms	18	21	6	48	10	10	111
	Flat 2+ bedrooms	24	15	6	46	16	14	120
	House < 2 bedrooms	6	6	4	17	14	5	50
	House 2 bedrooms	21	36	17	25	34	28	159
	House 3 bedrooms	33	52	25	34	33	18	194
	House 4+ bedrooms	2	5	0	5	2	1	15
	Bedsit/shared/other	4	1	1	8	2	1	16
	Total	106	134	57	182	110	76	664
First lettings to new tenants	Flat < 2 bedrooms	13	3	2	9	5	2	32
	Flat 2+ bedrooms	7	0	6	19	4	18	53
	House < 2 bedrooms	0	0	0	2	0	1	2
	House 2 bedrooms	4	2	19	16	3	13	56
	House 3 bedrooms	4	1	9	19	1	6	40
	House 4+ bedrooms	2	0	0	5	0	1	7
	Bedsit/shared/other	0	0	0	1	0	0	1
	Total	28	6	35	70	12	40	189
First lettings to transferring tenants	Flat < 2 bedrooms	2	1	0	1	0	1	5
	Flat 2+ bedrooms	3	0	0	11	3	3	19
	House < 2 bedrooms	0	0	0	0	0	0	0
	House 2 bedrooms	4	1	3	9	5	7	28
	House 3 bedrooms	11	1	4	22	3	10	50
	House 4+ bedrooms	2	1	1	7	1	2	13
	Bedsit/shared/other	0	0	0	2	0	0	2
	Total	21	3	8	51	12	21	115

**CORE data General Needs Lettings 2006/07 and 2007/08, various breakdowns**

	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
<i>Year</i>							
2006/2007	375	330	189	575	320	322	2,111
2007/2008	504	299	251	506	393	301	2,254
<i>Landlord</i>							
Housing Association	278	629	440	456	140	623	2,566
Local Authority	601	0	0	625	573	0	1,799
Housing Association	32%	100%	100%	42%	20%	100%	59%
Local Authority	68%	0%	0%	58%	80%	0%	41%
<i>Unit type</i>							
Flat	573	279	157	599	365	320	2,293
Bedsit	17	3	3	67	10	3	103
House	282	347	276	414	338	297	1,954
Shared/other	7	0	4	1	0	3	15
Flat	65%	44%	36%	55%	51%	51%	53%
Bedsit	2%	0%	1%	6%	1%	0%	2%
House	32%	55%	63%	38%	47%	48%	45%
Shared/other	1%	0%	1%	0%	0%	0%	0%
<i>Number of bedrooms</i>							
1	345	206	125	443	250	115	1,484
2	359	260	213	397	321	378	1,928
3	157	153	100	206	134	119	869
4+	18	10	2	35	8	11	84
1	39%	33%	28%	41%	35%	18%	34%
2	41%	41%	48%	37%	45%	61%	44%
3	18%	24%	23%	19%	19%	19%	20%
4+	2%	2%	0%	3%	1%	2%	2%
<i>New let/Re-let</i>							
New let	97	17	84	241	47	122	608
Re-let	782	612	356	840	666	501	3,757
New let	11%	3%	19%	22%	7%	20%	14%
Re-let	89%	97%	81%	78%	93%	80%	86%
<i>Reason for vacancy</i>							
New let	97	17	84	241	47	122	608
Previous tenant transferred	256	275	134	366	239	167	1,437
Previous tenant died	100	75	47	101	100	58	481
Abandoned by tenant	22	12	8	23	4	21	90
Previous tenant evicted	72	33	14	56	30	34	239
Previous tenant moved to PS	332	217	153	294	293	221	1,510
New let	11%	3%	19%	22%	7%	20%	14%
Previous tenant transferred	29%	44%	30%	34%	34%	27%	33%
Previous tenant died	11%	12%	11%	9%	14%	9%	11%
Abandoned by tenant	3%	2%	2%	2%	1%	3%	2%
Previous tenant evicted	8%	5%	3%	5%	4%	5%	5%
Previous tenant moved to PS	38%	34%	35%	27%	41%	35%	35%
<i>Transferring tenant/new tenant</i>							
Transferring tenant	253	274	128	465	243	194	1,557
New General Needs tenant	626	355	312	616	470	429	2,808
Transferring tenant	29%	44%	29%	43%	34%	31%	36%
New General Needs tenant	71%	56%	71%	57%	66%	69%	64%
<i>Previous tenure</i>							
Social sector tenancy	253	274	128	465	243	194	1,557
PS tenancy (incl. tied)	108	133	91	251	125	126	834
Owner-occupation	7	12	13	12	21	39	104
Supported housing	91	34	8	42	2	7	184
Living with family or friends	275	115	129	198	161	196	1,074
Other (incl. temp. accom.)	145	61	71	113	161	61	612
Social sector tenancy	29%	44%	29%	43%	34%	31%	36%
PS tenancy (incl. tied)	12%	21%	21%	23%	18%	20%	19%
Owner-occupation	1%	2%	3%	1%	3%	6%	2%
Supported housing	10%	5%	2%	4%	0%	1%	4%
Living with family or friends	31%	18%	29%	18%	23%	31%	25%
Other (incl. temp. accom.)	16%	10%	16%	10%	23%	10%	14%

### Additional affordable dwellings in 2003-2007

Local authority	2003/04	2004/05	2005/06	2006/07	Annual average	% social rent	% shared ownership/equity
Cheltenham	155	112	29	84	95	73%	27%
Cotswold	57	122	41	49	67	63%	37%
Forest of Dean	23	32	37	49	35	75%	25%
Gloucester	50	66	147	128	98	60%	40%
Stroud	24	84	80	94	71	55%	45%
Tewkesbury	71	38	101	92	76	69%	31%
Gloucestershire	380	454	435	496	441	65%	35%

HSSA (Section N "outturn")

### Social rented prices

Local authority	Bed-rooms	Median price		Upper quartile price		90% price	
		Total w k cost	Income required	Total w k cost	Income required	Total w k cost	Income required
Cheltenham	1 bed	55.16	11,513	62.31	13,005	71.95	15,017
	2 bed	63.18	13,188	66.43	13,866	77.83	16,244
	3 beds	71.16	14,852	74.60	15,571	86.35	18,022
Cotswold	1 bed	68.14	14,222	78.54	16,393	84.51	17,638
	2 bed	81.10	16,927	85.54	17,853	89.91	18,766
	3 beds	97.31	20,310	97.31	20,310	90.67	18,924
Forest of Dean	1 bed	61.55	12,846	63.82	13,320	64.45	13,451
	2 bed	67.92	14,176	72.08	15,045	73.38	15,314
	3 beds	74.72	15,596	78.70	16,426	80.64	16,831
Gloucester	1 bed	55.37	11,556	62.28	12,999	66.93	13,969
	2 bed	67.50	14,089	74.21	15,489	76.50	15,967
	3 beds	79.31	16,553	81.16	16,939	84.29	17,593
Stroud	1 bed	54.40	11,353	57.46	11,993	63.40	13,232
	2 bed	62.58	13,062	66.90	13,964	76.21	15,906
	3 beds	69.07	14,417	71.71	14,968	81.35	16,979
Tewkesbury	1 bed	62.82	13,111	66.10	13,796	69.28	14,460
	2 bed	72.54	15,140	76.97	16,065	83.92	17,515
	3 beds	81.98	17,110	86.90	18,137	91.39	19,075

Source: CORE data (General Needs Lettings 2007/08)

### Intermediate sector

#### Gloucestershire households with registered interest in HomeBuy (Zone Agent data)

Afford market?	Key-worker?	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Don't know	No	34	6	12	41	19	13	125
	Yes	0	0	0	1	1	1	3
	Total	34	6	12	42	20	14	128
Yes	No	142	39	69	272	114	51	687
	Yes	30	13	15	68	30	9	165
	Total	172	52	84	340	144	60	852
No	No	430	103	76	489	222	93	1,413
	Yes	90	19	13	101	43	13	279
	Total	520	122	89	590	265	106	1,692
All	No	606	148	157	802	355	157	2,225
	Yes	120	32	28	170	74	23	447
	Total	726	180	185	972	429	180	2,672