

Section 6: Existing Households in Housing Need

Introduction

- 6.1 Understanding the term housing need is key to assessing the requirement for affordable housing. It is important that the difference between housing need and housing demand is understood. The definition used by PPS3 and used throughout the SHMA is given below.

PPS 3 definitions relating to need and demand

Housing need: ‘the quantity of housing required for households who are unable to access suitable housing without financial assistance’.

Housing demand: ‘the quantity of housing that households are willing and able to buy or rent’.

- 6.2 This chapter firstly provides a detailed understanding of the nature of unsuitable housing in the sub-region. Then the outputs of the ORS Unsuitably Housed Model are described, noting that outputs are estimates of those households who are unsuitably housed in their current home across all tenures. The results of the ORS Housing Needs Model are then presented, noting that the outputs refer to current households who are unsuitably housed, who require to move and who cannot afford to meet their own housing costs.
- 6.3 A classification of unsuitable housing is set out in Figure 72 below, taken from CLG’s SHMA Practice Guidance Table 5.1.

Figure 72

Classification of Unsuitable Housing (Source: CLG Housing Market Assessments Practice Guidance: Version 2 August 2007)

Main Category	Sub-divisions
Homeless or with insecure tenure	i. Homeless households.
	ii. Households with tenure under notice, real threat of notice or lease coming to an end; housing that is too expensive for households in receipt of housing benefit or in arrears due to expense.
Mismatch of household and dwelling	iii. Overcrowded according to the ‘bedroom standard’.
	iv. Too difficult to maintain (e.g. too large) even with equity release.
	v. Couples, people with children and single adults over 25 sharing a kitchen, bathroom or WC with another household.
	vi. Households containing people with mobility impairment or other specific needs who are living in unsuitable dwelling (e.g. accessed via steps), which cannot be made suitable in-situ.
Dwelling amenities and condition	vii. Lacks a bathroom, kitchen or inside WC and household does not have the resources to make fit (e.g. through equity release or grants).
	viii. Subject to major disrepair or unfitness and household does not have the resources to make fit (e.g. through equity release or grants).
Social needs	ix. Harassment from others living in the vicinity which cannot be resolved except through a move.

- 6.4 We now examine the available data mainly from the Census and local authorities' Housing Strategy Statistical Appendices (HSSA) in order to provide information to describe the degree of unsuitability affecting existing households using the CLG main categories of unsuitable housing listed above.

Providing evidence of unsuitable housing within CLG practice guidance main categories

- 6.5 Evidence has been collected from local authority and other sources to examine the extent of unsuitability in each of the main categories listed in Figure 72.

Homelessness or with insecure tenure

- 6.6 The number of homeless households has been obtained from the HSSA. This contains information on both the number of homeless households and those in temporary accommodation in housing need as at 31st March each year.
- 6.7 As 2008/09 HSSA results have not been released, the 2007/08 results have been used but adjusted, taking into account the trend over the last five HSSAs for homeless households in the East of England. From 2003/04 to 2007/08, the number of homeless households has reduced by an average of 11% a year. This is displayed in Figure 73.

Figure 73

Homeless households or insecure tenure (Source: 2007/08 HSSA extrapolated to present using five year trend for East of England)

	Homeless Households eligible for assistance, unintentionally homeless and in priority need	Homeless Households in temporary accommodation and in priority need.
Dacorum	54	20
Hertsmere	77	58
St Albans	120	74
Three Rivers	34	17
Watford	63	61
Welwyn Hatfield	106	102
LCB West	454	332

- 6.8 Groups with insecure tenure are likely to be accounted for in the homeless households' data above. To avoid double counting, a separate assessment for these groups has therefore not been carried out.

Mismatch of household and dwelling

Overcrowding

- 6.9 At the time of the census 2001, 6% of households across the sub-region lived in overcrowded conditions. The room occupancy rating featured in Figure 74 uses a complicated formula to assess whether a household is overcrowded. The method assumes that every household requires at least two common rooms excluding bathrooms. The number of bedrooms required is assumed to depend on the composition of the household. For example, the age and gender mix of any children is a major factor in deciding how many rooms the household should live in so as not to be overcrowded.

A separate bedroom is required for each married or cohabiting couple, for any person aged 21 or over, for each pair of adolescents aged 10-20 of the same sex and for each pair of children under 10. Any unpaired person aged 10-20 is paired, if possible with a child under 10, or if that is not possible, he or she is counted as requiring a separate bedroom, as is any unpaired child under 10. This number of required bedrooms is then compared to the actual number of bedrooms. A household is considered overcrowded if it has one or more bedrooms less than the number required.

6.10 Figure 74 illustrates how the proportion varies between local authorities and by tenure. It is apparent that nearly 10% of households in Watford were overcrowded. Watford HMA also has the highest proportion of households that are overcrowded.

6.11 When considering the differences by tenure, only 3.1% of owner occupied dwellings were overcrowded compared to 13.2% of social rented and 15.2% of private rented dwellings.

6.12 Figure 75 illustrates how the proportion of social renting households in overcrowded dwellings varies between local authorities and housing market areas. 27% of households in Three Rivers were overcrowded while less than 15% of social rented households in Watford were overcrowded. Less than 10% of households in the social rented sector in both Hemel Hempstead and Welwyn Garden city were overcrowded.

6.13 The SHMA typically measures trends from the baseline of the 2001 Census. However the Census data is now over eight years old and could be considered outdated so a more up to date position has been estimated and compared to census 2001 findings.

6.14 Trends in the Survey of English Housing (SEH) have been used to determine whether the above proportions remain valid. For the East of England and over the period 2001 to 2007, the SEH indicates that overcrowding levels have generally remained steady at an average of 1.4% of all households within a range of 1 to 2%. As such, it is assumed that the proportions indicated in the 2001 Census remain similar today and the estimated number of overcrowded households within each Borough is shown in Figure 76 below.

Figure 74
Proportion of Households Overcrowded by Local Authority Area, HMA and Tenure (Source: UK Census of Population 2001)

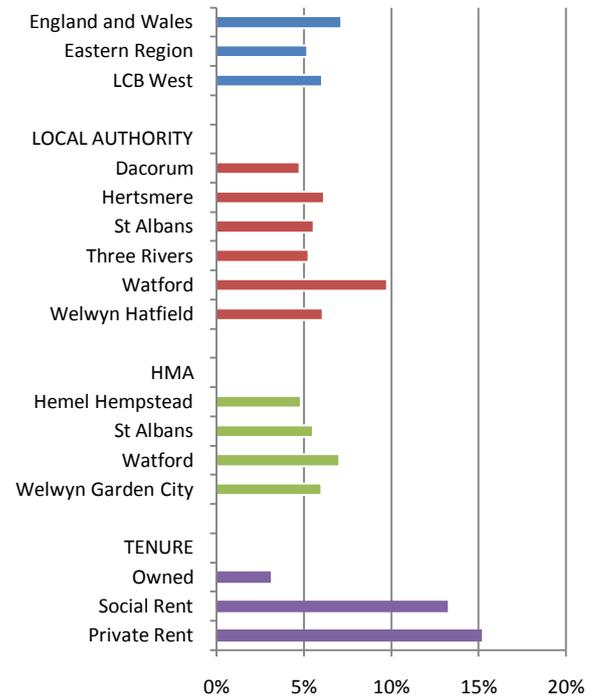


Figure 75
Proportion of Social Renting Households Overcrowded by Local Authority and HMA (Source: UK Census of Population 2001)

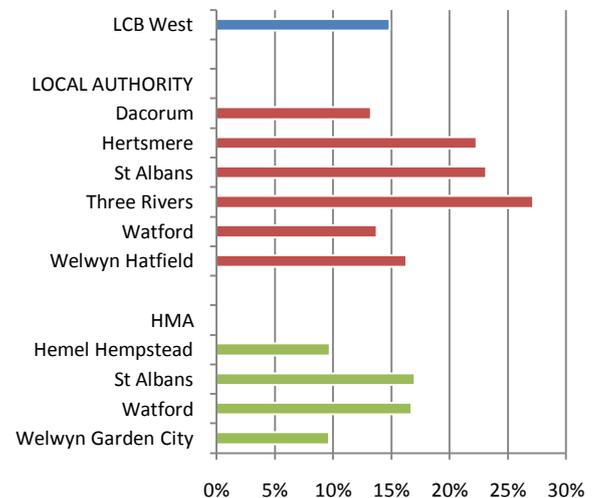


Figure 76

Number of overcrowded households by Local Authority area (Source: UK Census of Population 2001, SEH, figures 18, 28, 31 and 32. Note figures may not sum due to rounding)

	Households (estimated as at 2007/8)	Number of overcrowded households	Proportion of overcrowded households estimated at 2007/8	Proportion according to the census
LCB West	265,387	15,221	6%	6%
LOCAL AUTHORITY				
Dacorum	58,151	2,642	5%	5%
Hertsmere	39,024	2,327	6%	6%
St Albans	54,937	2,922	6%	6%
Three Rivers	35,040	1,757	5%	5%
Watford	34,459	3,152	10%	10%
Welwyn Hatfield	43,776	2,421	6%	6%
	265,387	15,221		
TENURE				
Owned	191,078	5,677	3%	3%
Social Rent	50,424	6,191	13%	13%
Private Rent	23,885	3,353	15%	15%

6.15 The estimated number and proportion of overcrowded social rented households are displayed in Figure 77 which also compares estimates to the 2001 census.

Figure 77

Number of social renting households overcrowded by Local Authority area ((Source: UK Census of Population 2001, SEH Figure 18, 28, 31 and 32. (Note figures may not sum due to rounding))

	Social renting households (estimate as at 2007/2008)	Number of overcrowded social renting households	Estimated proportion of overcrowded to all social rented households	Proportion as at the Census 2001
LCB West	50,424	7,311	14%	15%
LOCAL AUTHORITY				
Dacorum	12,502	1,625	13%	13%
Hertsmere	6,244	1,374	22%	22%
St Albans	6,318	1,453	23%	23%
Three Rivers	4,906	1,325	27%	27%
Watford	5,513	717	13%	14%
Welwyn Hatfield	12,257	1,961	16%	16%

6.16 The above figures show that the proportion of households estimated to be overcrowded has not changed between 2001 and 2007/8.

Dwelling amenities and condition

Too difficult to maintain

6.17 We have been unable to estimate the number of households in housing that is too difficult to maintain through the secondary data sources available.

Couples, people with children and single adults over 25 sharing a kitchen, bathroom or WC with another household

6.18 These groups are likely to be accounted for in the overcrowded housing section above through application of the bedroom standard. To avoid double counting, a separate assessment for these groups has therefore not been carried out.

Households containing people with mobility impairment or other specific needs who are living in unsuitable dwelling

6.19 The SEH contains annual statistics on the suitability of accommodation for persons with serious medical conditions or disabilities for all persons in England. The last survey found that 0.5% of the total population had a serious medical condition or disability and were not in suitable accommodation. Assuming these persons comprise one household or are part of a larger household, this percentage has been used to estimate the numbers shown in Figure 78 below.

Figure 78

Number of households containing a person with a serious medical condition or disability and are not in suitable housing (Source: Survey of English Households 2006/7)

Area	Households (estimate as at 2007/2008)	Estimated number of Households Containing a person with a serious medical condition or disability and housed in unsuitable accommodation
LCB West	265,387	1,327
LOCAL AUTHORITY		
Dacorum	58,151	291
Hertsmere	39,024	195
St Albans	54,937	275
Three Rivers	35,040	175
Watford	34,459	172
Welwyn Hatfield	43,776	219

Social needs

Harassment from others living in the vicinity, which cannot be resolved except through a move

6.20 We believe that the most serious cases will be part of the homelessness data.

Conclusion

6.21 Whilst we do not doubt that disrepair issues are a serious matter for households it does not impact on housing requirements to any significant extent and related practice guidance classifications are not pursued further. The factors with implications for housing requirements are homelessness and

overcrowding. Because of the lack of a comprehensive picture of unsuitable housing in all of its components ORS has developed a model to estimate the spatial distribution of unsuitable housing.

Modelling and mapping unsuitable housing

^{6.22} Secondary data sources such as those featured above do not contain sufficient information on the characteristics of households to allow a direct measure of how many households are unsuitably housed in any given area. The Index of Multiple Deprivation (IMD) can be used to predict concentrations of unsuitable housing, however, ORS has developed a model to predict levels of unsuitability at census area output level. This is the only reliable way that SHMA Practice Guidance core output 4 – estimating the number of households in housing need can reliably be achieved using secondary data. Firstly we consider information from the IMD before considering the ORS housing unsuitability model. The required core output is contained in Figure 83 below.

Index of Multiple Deprivation

^{6.23} Deprivation can be strongly linked to poor health, poor housing conditions and poor local environments. Many of the characteristics of an area can be aggregated to generate an overall picture of its relative wellbeing. This is known as the Index of Multiple Deprivation (IMD), and the 2004-based figures are shown in Figure 79 with the 2007-based figures shown overleaf in Figure 80.

^{6.24} Darker colours on the maps are associated with higher levels of deprivation and the boundaries are lower super output areas. It should be noted that the map shows relative deprivation within the sub-region, rather than how deprivation in the sub-region compares to the rest of England. Therefore, areas in the highest quintile on the maps are the most deprived areas in the sub-region and are not necessarily amongst the most deprived areas of England.

Figure 79
Index of Multiple Deprivation 2004 (Source: CLG. Note: Data shown at lower level super output area. Higher levels of deprivation shown in darker shading)

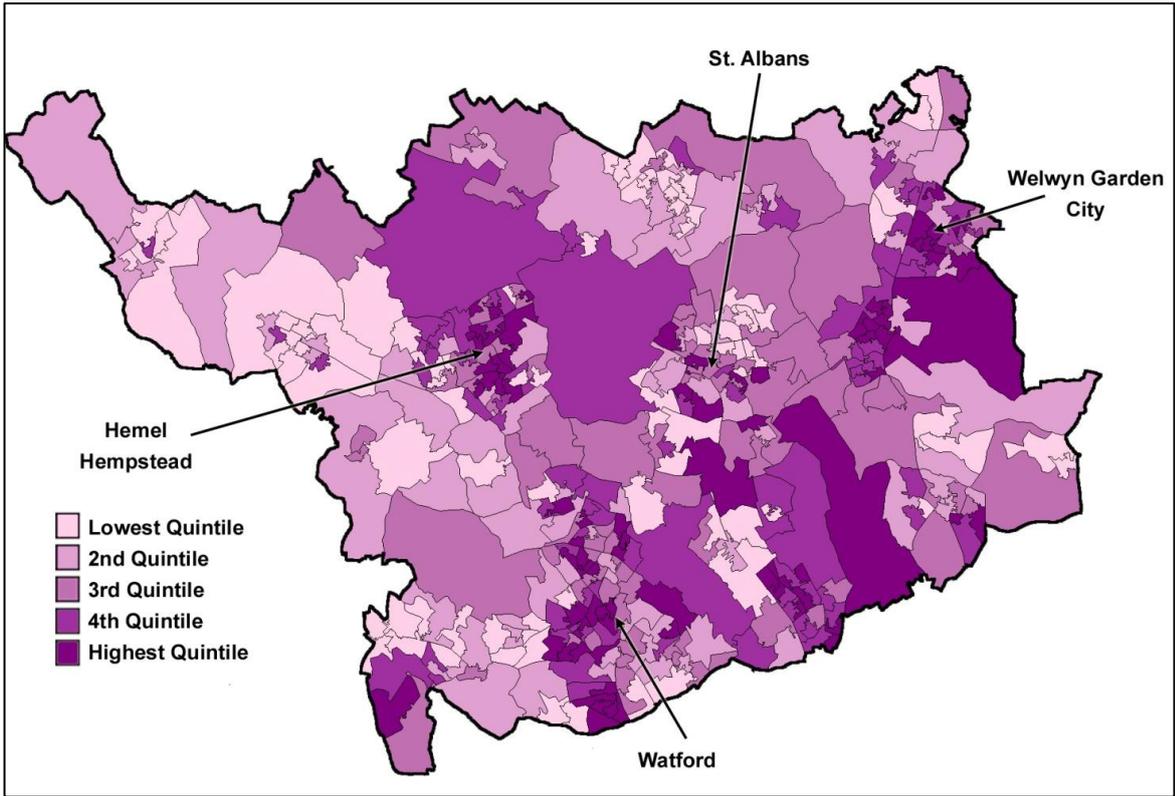
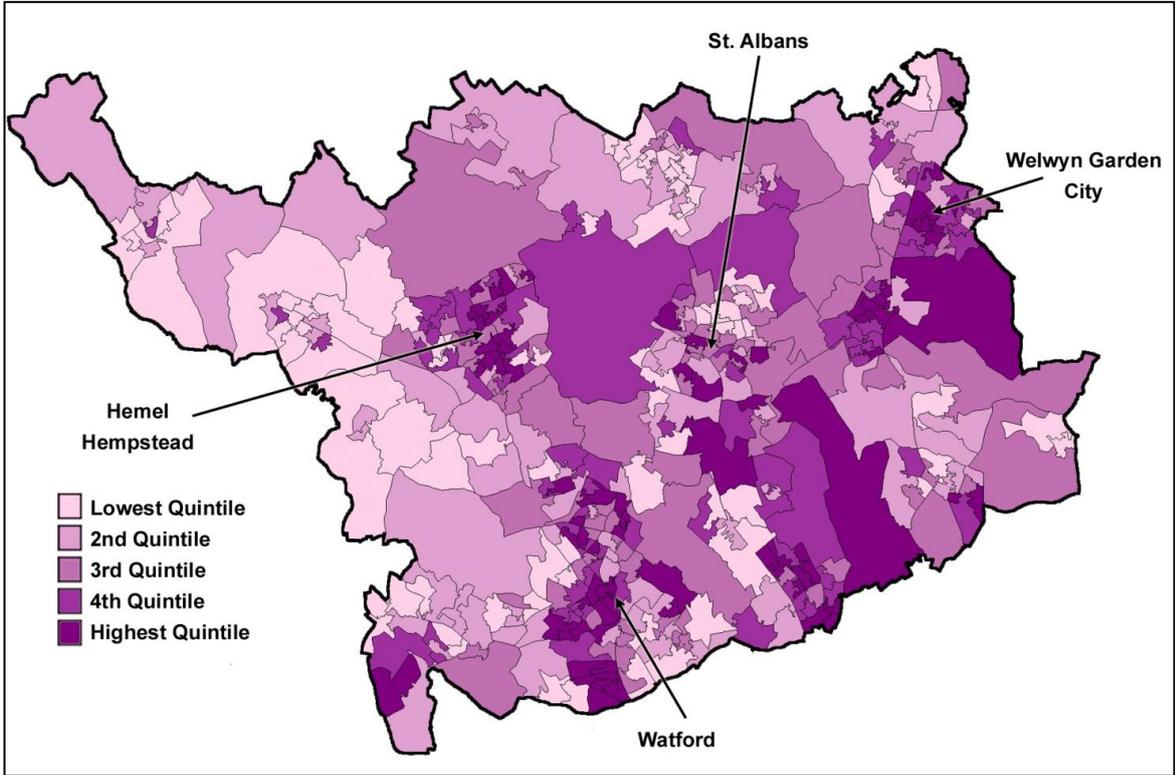


Figure 80
Index of Multiple Deprivation 2007 (Source: CLG. Note: Data shown at lower level super output area. Higher levels of deprivation shown in darker shading)



6.25 The maps show the areas with the highest levels of deprivation in the sub-region are associated with the centres of the major towns. This mirrors the areas with lower household incomes shown in the

section regarding the local economy). South Oxhey (south of Watford) also has a notably high level of deprivation attributable to its origins in providing housing for greater London rather than being a town centre location.

6.26 The maps show that many areas in the centres of Hemel Hempstead, Watford, Hatfield and Welwyn Garden City are associated with the highest levels of deprivation to be found in the sub-region. It should also be noted that when compared to the rest of England and Wales the levels of deprivation in London Commuter Belt (West) are low with most areas in the lowest quartile of deprivation relative to the rest of the country.

Assessing established households in unsuitable housing using modelling

6.27 Local authorities typically estimate their requirement for affordable housing due to unsuitable housing by means of a housing needs assessment or use their housing register points or banding systems to assess a household's housing need. ORS uses a different method that does not distinguish between categories of unsuitability. This is called the ORS unsuitably housed model. It should not be confused with the ORS Housing Mix Model that is introduced in the next section.

6.28 The advantages of the ORS model over other methods is that:

- the model provides outputs at a smaller spatial level than could economically be achieved by a household survey; and
- it is less reliant upon a household's self assessment of unsuitability.

6.29 ORS has developed a model which forecasts unsuitably housed households at Census Output Area level. The model is based upon the evidence of 20,000 primary data surveys conducted across a wide range of urban and rural areas across England over the last three years. Household data was collected between 2005 and 2008 by ORS as part of housing requirement studies in Milton Keynes, Broadland, Norwich South Norfolk, Carrick, Kerrier, Penwith, Restormel, East Devon, Exeter, Mid Devon, Teignbridge, Torbay, Lewisham, Bradford, Suffolk Coastal, Redbridge and Bristol. The evidence from within these studies was then linked to secondary data sources to find secondary data which could be used to predict where unsuitably housed households will arise. The same secondary data sources are then used to forecast the level of unsuitably housed in the area under consideration.

6.30 The variables which are used to predict the level of households who are unsuitably housed in Figure 83, are:

- income – postcode level data drawn from CACI Paycheck (2006/7);
- average house prices – from property level data from HM Land Registry (2007/8);
- relative house prices – output area average relative to borough average;
- Index of Multiple Deprivation scores (2007) for Lower Super Output Areas;
- DEFRA geography category for the COA – Urban, Town and Fringe, Village or Hamlet;
- household types – from UK Census of Population (2001);
- overcrowding – from UK Census of Population (2001);
- household type – from UK Census of Population (2001);
- ethnic composition – from UK Census of Population (2001);

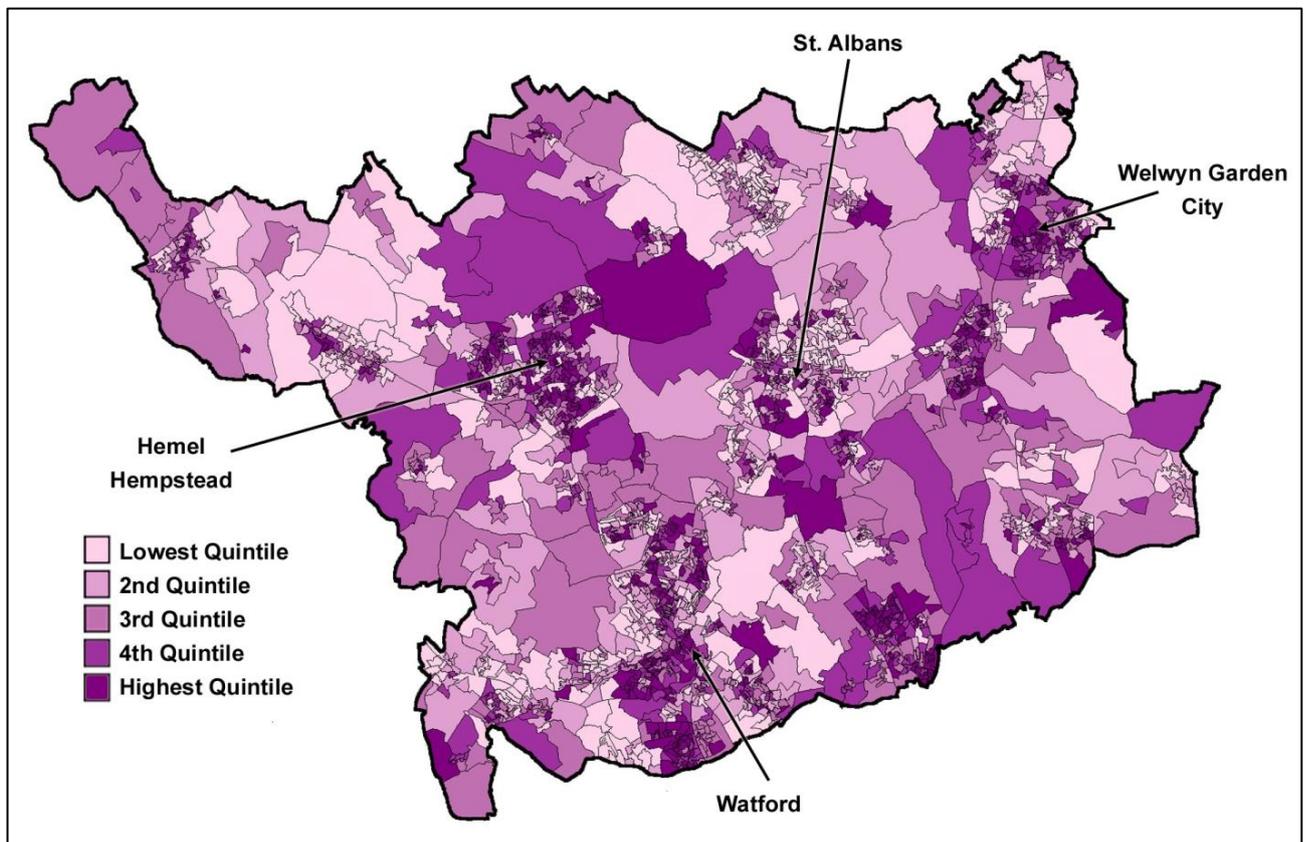
- tenure – from UK Census of Population (2001); and
- population density – persons per hectare from UK Census of Population (2001).

6.31 Figure 81 shows the outputs of the ORS unsuitably housed model results for LCB (West) local authorities. Figure 82 shows model results at output area level. This shows a similar pattern to that observed for IMD 2007 with much of the predicted areas of unsuitable housing being in urban areas. Across the whole of LCB (West), 12.6% of households are predicted to be unsuitably housed.

Figure 81
Unsuitably Housed Households by Local Authority 2008 (Source: ORS Unsuitably Housed Model)

Local Authority	% of households unsuitably housed	Number of households unsuitably housed
Dacorum	12.9	7,500
Hertsmere	13.9	5,400
St Albans	10.1	5,500
Three Rivers	12.1	4,200
Watford	14.7	4,900
Welwyn Hatfield	13.0	5,600
LCB (West)	12.6%	33,000

Figure 82
Modelled Unsuitably Housed by Output Area 2008 (Source: ORS Unsuitably Housed Model)



Households in unsuitable housing and the need for additional affordable housing

6.32 Not all housing unsuitability problems require the households involved to move from their current home. In-situ solutions may be more appropriate to resolve some of the problems identified. For example, overcrowding could be resolved by one or more member(s) of the household leaving to live elsewhere, or an alternative solution could be to extend the existing property. Similarly, homeowners or landlords may undertake repairs to resolve problems with the condition of the property. In these cases (and many others) the problems identified can be resolved without the need for relocation to alternative accommodation.

- 6.33 Whilst in practice it is important to resolve the housing needs of individual households, a strategic analysis is primarily concerned with addressing overall housing need. In this context, it is particularly relevant to consider housing suitability issues concerned directly with the dwelling stock, such as major disrepair or unfitness. Resolving such individual household needs (through enabling a move to alternative housing) will not reduce the overall level of housing need because the vacancy that arises will inevitably, over time, be occupied by another household, who will once again be in housing need. In such cases, it is investment in the existing stock, or in extreme cases, clearance and redevelopment, that is required to reduce the numbers unsuitably housed.
- 6.34 Where a move is appropriate and required to resolve a housing problem, some households may need to move to homes outside the area, for example, those moving for care or support. Others will choose to move further afield for other reasons. Where unsuitably accommodated households are likely to willingly leave the area, their needs should not be counted within the estimate of net need. Nevertheless, in discounting the needs of likely out-migrants, any needs of in-migrants to the area will add to the total requirement.
- 6.35 The same estimation techniques which were used to predict the percentage of households who are unsuitably housed can also be used to model the percentage of households who are in housing need. Again evidence is drawn from matching secondary sources to observed cases of households who are in housing need and households who are not in housing need. The evidence from this exercise is then applied to each Census Output area in the LCB (West) sub-region to provide a prediction for the share of households in housing need. It should be noted that these figures provide an estimate of the number of households who are unsuitably housed and who require to move, but cannot afford to meet their own housing costs.

Figure 83
Household in Housing Need by Local Authority 2008 (Source: ORS Housing Needs Model)

Local Authority	% of households in housing need	Number of households in housing need
Dacorum	1.50%	850
Hertsmere	1.95%	750
St Albans	1.72%	950
Three Rivers	2.05%	700
Watford	1.66%	550
Welwyn Hatfield	1.95%	850
LCB West	1.78%	4,700

- 6.36 Figure 83 shows the results of this exercise for LCB (West) sub-region. Due to the application of the in-situ solutions, migration outside the area and affordability tests, a household in housing need is a much rarer event than being unsuitably housed. Whereas 33,000 households were assessed as being unsuitably housed in their current home, across the whole of LCB (West) sub-region it is projected that 1.78% of households will be in housing need, which amounts to around 4,700 households. Therefore, 4,700 households are estimated to be unsuitably housed, need to move home and not be able to afford to meet their own housing costs.

Summary of Key Points

- Housing need is defined as ‘the quantity of housing required for households who are unable to access suitable housing without financial assistance’ and therefore it is necessary to consider the suitability of households’ current housing circumstances.
- Households are considered to be unsuitably housed if they fall into one or more of four categories (detailed above) and needs are not prioritised.
- When compared to other areas in England and Wales, deprivation in LCB (West) is low with most areas in the lowest quartile for deprivation relative to the rest of the country.
- In 2001 6% of households in the sub-region lived in overcrowded conditions, with this being as high as 10% in Watford.
- Only 3.1% of owner occupied dwellings were overcrowded, although as much as 13.2% of social rented and 15.2% of private rented dwellings were overcrowded. Social rented dwellings in Three Rivers are most likely to be overcrowded (27%) whereas less than 10% of social rent dwellings in Hemel Hempstead and Welwyn Garden City are overcrowded.
- Sometimes, households may have to move if their current dwelling is unsuitable, although moving from one property to another does not necessarily mean additional homes are needed. Similarly, sometimes an in-situ solution may be more appropriate. Some additional dwellings will be needed to house households with particular characteristics or to house households currently in temporary accommodation.
- The Index of Multiple Deprivation (IMD) is an aggregation of many characteristics to generate an overall picture of the relative wellbeing of an area. The areas with the highest levels of deprivation in the sub-region are associated with the centres of the major towns, such as Hemel Hempstead, Watford, Hatfield and Welwyn Garden City.
- ORS has developed a model which forecasts unsuitably housed households at Census Output Area level, the results of which show a similar pattern to that observed for IMD (2007), with much of the predicted areas of unsuitable housing being in urban areas. 12.6% of households across the LCB (West) sub-region are predicted to be unsuitably housed.
- Across the whole of LCB (West) sub-region it is predicted that 1.78% of households will be in housing need, which amounts to around 4,700 households.

Section 7: The ORS Housing Mix Model

- ^{7.1} This section summarises the ORS Housing Mix Model. A fuller technical report of the methodology employed is appended.
- ^{7.2} The Model is based exclusively on secondary data from a wide range of sources. It has been designed to help understand the key issues and provide insight into how different assumptions will impact on the required mix of housing over future planning periods.
- ^{7.3} It builds on existing household projections to effectively profile how the housing stock will need to change in order to accommodate the projected future population. Assumptions on changes in affordability and the projected relationship between future housing costs and household income are readily updateable and are easily fed into the model to enable effective sensitivity testing to be undertaken.
- ^{7.4} The Model considers both housing need and overall housing requirements on a longer-term basis, providing robust and credible evidence about the required mix of housing over the planning period and understanding how key housing market drivers, such as affordability, will impact on the appropriate housing mix.

- 7.6 The Model considers the projected household population alongside the existing dwelling stock in order to establish the necessary balance between market housing and affordable housing in relation to the additional dwellings to be provided. For affordable housing the balance between intermediate affordable housing and social rented housing is estimated.
- 7.7 The first stage of the model starts by separating households into two groups, owners and non owners on the basis of baseline information about existing households from the 2001 Census.
- 7.8 Household projections do not typically provide information about changing tenure patterns so the model estimates the number of households likely to become owners and non-owners on the basis of an affordability assessment. The affordability assessment considers both the likely affordability of newly forming households and the changing affordability patterns of existing households.
- 7.9 The model also takes account of the dissolution of households that are existing owner occupiers that is projected to occur over the household projection period. This is based on Government Actuaries Department survival rates and 2001 Census data on the tenure mix for older households. This enables the loss of owner occupiers to be offset against any new owners identified through the affordability analysis.
- 7.10 The outcome is to establish the number of households who are owners and non-owners at each stage of the household projection.
- 7.11 In developing the Housing Mix Model, ORS recognised the need for local level data about household incomes and secured a licence to use the CACI Paycheck data within the model. This dataset provides information at postcode level, detailing the mean and median income for the area and also the number of households in each £5,000 income band. ORS has compared this distribution to that obtained using ORS collected household survey data and has found that the results from the CACI model tend to under-estimate the proportion of households in the lower income bands. ORS has developed and applied a tool that improves the accuracy of the distribution of local household incomes.
- 7.12 ORS has developed an Income Model to identify the income distribution of owners and non-owners to directly inform the Housing Mix Model affordability profiling.
- 7.13 By taking information from the Land Registry transaction database, it is possible to profile the distribution of purchase prices for transactions over time across a given area. Combining the Land Registry data with information from the 2001 Census on the balance between owner occupiers and private renters, specific to the location and property type of each sale, the model establishes the likelihood of the transaction being a property that will be occupied by the purchaser or let privately.
- 7.14 The Housing Mix Model considers housing cost distribution profiles for both owned and privately rented housing in order to establish the distribution of incomes required to access all market housing. This profile is considered alongside the income distribution profile for non-owners. The household income threshold for market housing is set at the lowest level where there is sufficient market housing available. If there is less market housing available than households can afford, 'affordable' housing will be required to address the shortfall and therefore the threshold price for market housing must be set above this level.
- 7.15 Once the income threshold for market housing has been established, the Housing Mix Model estimates the number of households who are non-owners that can afford market housing. Combining

this with the projected number of owner occupiers estimates the total number of households requiring market housing within the area.

- 7.16 The requirement for affordable housing is estimated by subtracting the total number of households requiring market housing from the overall household projections.
- 7.17 The Housing Mix Model considers the need for social rented housing on the basis of social trends. The social trends for each household type, for example, single person or single parent households, are then applied to the household projection data to establish the level of social rented requirement for future years for each type of household. The model establishes a total requirement for social rented housing.
- 7.18 The requirement for intermediate affordable housing is estimated by offsetting the total number of households requiring social rented housing from the projected number of households requiring affordable housing overall.
- 7.19 To establish the current housing stock profile, the Model considers the baseline housing stock from the 2001 Census broken down by tenure. It supplements this information with data on housing completions broken down by tenure reported in local authority annual monitoring reports. The Housing Mix Model also considers data on losses from the affordable housing stock based on right-to-buy sales, and projects the likely future losses from stock on the basis of trends in sales since the recent change in legislation.
- 7.20 The Housing Mix Model considers the future requirement for market housing alongside the current stock of market housing and establishes the net additional dwellings that are required as market housing.
- 7.21 The future requirement for intermediate affordable housing is considered alongside the stock of existing intermediate affordable housing and the stock of sub-market housing, which is affordable to households on incomes below the income threshold for market housing, to establish the net additional dwellings that are required to be provided as intermediate affordable housing.
- 7.22 The future requirement for social rented housing is considered alongside the stock of existing social rented housing to establish the net additional dwellings that are required to be provided as social rented housing.
- 7.23 The Housing Mix Model considers the size and tenure of housing that was occupied by different household types recorded by the 2001 Census. The Model recognises that many households under-occupy their homes, choosing to live in larger properties than they need on the basis of the bedroom standard set out in the Housing Act. However, housing allocation policies mean that new social tenants are less likely to under-occupy their homes.
- 7.24 A trend-based occupancy profile is applied to the projected household mix of households in each housing tenure to establish an overall size mix of future housing requirements. This is then set alongside information about the existing housing stock to establish the net additional dwellings that are required by size and tenure.