Private Sector House Condition Survey 2010

FINAL REPORT

Cheshire East Council
Working in partnership with

Contents

Executive Summary

Introduction

Private Sector House Condition Surveys (HCS) are conducted on a regular basis by local authorities as a means of maintaining a detailed picture of housing conditions in the private sector (owner occupied and privately rented homes). Such a picture forms a useful evidence base on which to build strategies and inform investment decisions, and feed into statistical returns and other internal reports. The information is also useful in presenting the potential obligations on an authority in relation to current housing legislation:

- Section 3 Housing Act 2004

- Regulatory Reform (Housing Assistance) (England and Wales) Order 2002 (RRO)

The survey was a sample survey with a target of 2,000 dwellings, covering all private sector tenures excluding registered social landlord (RSL) or housing association dwellings. A sample of 3,846 was drawn with final total of 1,998 full surveys being undertaken.

In order to place the findings in context, comparisons to the position for all England were drawn from the English Housing Survey 2008 (EHS) and the Survey of English Housing 2007-2008 (SEH), both published by Communities and Local Government (CLG) and available as a download document from their website.

General survey characteristics

The following list gives some of the key features of Cheshire East's housing stock and population compared with national averages:

- A substantially lower proportion of the stock was built before 1945 than that found nationally (31.1% compared with 41.6%), with a much higher proportion of the stock built post 1944 to that found nationally (68.9% compared with 58.4%).

- The tenure profile showed some differences to the national pattern. The owner occupied stock had higher proportions than that found nationally (72% compared with 68%), with privately rented dwellings also being represented at a higher rate (17% compared with 14%) and the social rented sector being lower (11% compared with 18%).

- The stock had higher proportions of detached houses and, to a lesser extent, bungalows, with lower proportions of all other dwelling types.

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- There were fewer heads of household aged between 16 and 64 years than nationally (67.0% compared with 75.4%). There were, however, substantially more aged 65 and over than nationally (33.0% compared with 24.6%) which does have implications for private sector housing policy due to the potentially greater need for support typically associated with older households.

- The figures for length of residence, for those that had been resident for up to 5 years, showed a similar profile to that found nationally (35.9% compared with 35.4%).

- Overall average incomes for private sector occupiers were well below those reported for England as a whole at £476 per week compared with £710.

- The proportion of households with an income of less than £15,000 was 33.7% compared to 25.1% nationally with potential affordability issues for repair and improvements in the private sector dwelling stock.

- Receipt of a range of benefits is used to define vulnerability, which are mainly income related with the exception of some disability benefits, and are closely associated with the qualifying criteria used under the Warm Front scheme (see 4.10.2). In Cheshire East the proportion of households receiving a benefit, at 22%, was above the national average of 17%, which links in to the proportion of those on a low income (less than £15,000) previously mentioned.

Decent Homes Standard

It is Government policy that everyone should have the opportunity of living in a "decent home". The Decent Homes Standard contains four broad criteria that a property should:

A - be above the legal minimum standard for housing, and

B - be in a reasonable state of repair, and

C - have reasonably modern facilities (such as kitchens and bathrooms) and services, and

D - provide a reasonable degree of thermal comfort (effective insulation and efficient heating).

All of these criteria are described in more detail in their own individual chapters in the main report.

Overall, 40,370 private sector dwellings failed the Decent Homes Standard in Cheshire East. A total of 20.4% (29,890 dwellings) failed due to the presence of a category 1 hazard and 11.2% (16,340 dwellings) due to thermal comfort failure.

Cost implications for repair and improvement

The cost to make dwellings decent in the private sector provides an idea of the cost of bringing dwellings up to a good standard. The costs are the total sum that would be needed for remedial and improvement work, regardless of the source of funding. They take no account of longer term maintenance, which would be in addition to these costs.

Reason	Total Cost (£ million)	Average Cost per dwelling (£)*
Category 1 Hazard	£105.1	£3,520
Repair	£62.7	£5,470
Amenities	£29.1	£15,620
Thermal comfort	£27.5	£1,680
Total	**£224.4**	**£5,560**

* Rounded to nearest £10

Category 1 Hazards

One of the most significant changes under the Housing Act 2004 was a change in the minimum standard for housing. The fitness standard was removed and replaced by the Housing Health and Safety Rating System (HHSRS). The Housing Health and Safety Rating System (HHSRS) is a prescribed method of assessing individual hazards, rather than a general standard to give a judgment of fit or unfit. The HHSRS is evidence based – national statistics on the health impacts of hazards encountered in the home are used as a basis for assessing individual hazards.

The HHSRS system deals with a much broader range of issues than the previous fitness standard. It covers a total of 29 hazards in four main groups described in more detail in the main report:

- Primary hazard failures in Cheshire East are excess cold, falling on level surfaces and falling on stairs.

- Category 1 Hazards are strongly associated with older dwellings and, with dwellings occupied by households with an income under £10,000, those in receipt of a benefit, those aged 65 and over and dwellings with a disabled resident.

- Category 1 Hazards are strongly associated with converted flats, semi-detached houses and the private rented sector.

Energy Efficiency

Energy efficiency is a key consideration in private sector housing and the following illustrates some of the issues:

- Fuel poverty at 11.7% was lower than the rate found in England at 15.4%. The cost of remedial works to the 13,660 owner occupied dwellings in fuel poverty (i.e. needing to spend more than 10% of income on Space heating; Water heating; Lights and appliances and Cooking) was just over £20.5 million.

- The mean SAP (SAP 2005 energy rating on a scale of 0 (poor) to 100 (good)) was 56 in Cheshire East, which was higher than that found nationally in private sector dwellings (50).

- The least energy efficient dwellings were older dwellings (pre-1919); and converted flats (although these only represent 1.5% of the total private sector housing stock). The mean SAP rating for privately rented dwellings was 56, the same as that for owner occupied dwellings.

- Improving energy efficiency will contribute towards a range of Cheshire East's corporate priorities and indeed contribute to a wide range of issues e.g. reduced carbon emissions, tackling fuel poverty, elimination of Category 1 Hazards, improved health and well being – warmer, better homes

- The level of excess cold hazards is an issue given the numbers of older residents in Cheshire East and the potential link with cold related illnesses

The table below shows a summary of key findings from the Condition Survey:

Key findings from the house condition survey

Characteristic	Owner occupied	Privately rented	All private sector stock	England
Dwellings	118,290	28,030	146,320	
Per cent of stock[1]	*72%*	*17%*	*89%*	*82.0%*
Non-decent	31,250	9,120	40,370	
As a % of each tenure	*26.4%*	*32.5%*	*27.6%*	*34.4%*
Vulnerable in decent homes[2]	15,140	5,040	20,180	
% vulnerable households in decent homes	*66.7%*	*59.9%*	*64.8%*	*60.6%*
Category 1 hazard	23,900	5,990	29,890	
As a % of each tenure	*20.2%*	*21.4%*	*20.4%*	*23.6%*
In Fuel Poverty	13.660	2,740	16,400	
As a % of each tenure	*11.9%*	*10.9%*	*11.7%*	*15.4%*
Mean SAP[3]	56	56	56	50
Residents aged 60+	41,910	4,380	46,290	
As a % of each tenure [4]	*36.4%*	*17.4%*	*33.0%*	*24.6%*
Households in receipt of benefit	22,710	8,420	31,130	
As a % of each tenure [4]	*20.0%*	*34.0%*	*22.0%*	*17.0%*
1. Percentages given as a proportion of total housing stock, the remaining 11% is all social housing, which was not surveyed as part of this study
2. Refers to households in receipt of an income or disability benefit, as defined under former Public Service Agreement 7 objectives
3. SAP is the government's Standard Assessment Procedure for rating energy efficiency on a scale of 1 (poor) to 100 (excellent)
4. As a percentage of occupied dwellings, not all dwellings				

1 Introduction

1.1 Purpose of the survey

1.1.1 Private Sector House Condition Surveys (HCS) are conducted on a regular basis by local authorities as a means of maintaining a detailed picture of housing conditions in the private sector. Such a picture forms a useful evidence base that can feed into statistical returns and other internal reports. The information is also useful in presenting the potential obligations on the authority in relation to current housing legislation, outlined in more detail in Appendix D.

1.1.2 In 2010 Cheshire East Council commissioned a comprehensive House Condition Survey to address this legal requirement, and also to inform the Private Sector Housing Strategy and other housing policies. The survey work in Cheshire East was conducted in the mid to late part of 2010.

1.1.3 In addition to the mandatory duties outlined in Appendix D there are a number of non-mandatory powers available to the Authority under the Housing Act 2004. These include: taking the most satisfactory course of action in relation to Category 2 Hazards under the HHSRS (hazard categories are defined in chapter 5 of this report); additional licensing of HMOs that do not fall under the definition for mandatory licensing and serving of overcrowding notices. Part 3 of the Housing Act 2004, provides for selective licensing of other private rented sector accommodation subject to certain conditions being met.

1.1.4 This report will provide much of the evidence base, recommended under the ODPM guidance 05/2003, for the Authority's private sector housing strategy. In addition, information in the report is likely to prove useful as a source for a wide variety of private sector housing issues.

1.2 Nature of the survey

1.2.1 The survey was a sample survey of a nominal 2,000 dwellings and covered the owner occupied and privately rented tenures (RSL dwellings were excluded). The survey was based on a stratified random sample of addresses in Cheshire East, in order to gain a representative picture across the Council. A sample of 3,846 was drawn with, in practice, 1,998 surveys being undertaken in total.

1.2.2 The sample was drawn using the Building Research Establishment (BRE) stock modelling data, with dwellings being allocated into four bands (strata), based on the projection of vulnerably occupied non-decent dwellings. This form of stratification concentrates the surveys in areas with the poorest housing conditions and allows more detailed.

This procedure does not introduce any bias to the survey as results are weighted proportionally to take account of the over-sampling.

1.2.3   The models were based on information drawn from the Office of National Statistics Census data, the Land Registry, the English House Condition Survey and other sources. It is this data that was used to predict dwelling condition and identify the 'hot-spots' to be over-sampled.

1.2.4   Each of the 1,998 surveys conducted contained information on the following areas: General characteristics of the dwelling; condition of the internal and external fabric; provision of amenities; compliance with housing health and safety; age and type of elements; energy efficiency measures; compliance with the Decent Homes Standard and socio-economic information about the household (where occupied).

1.3   Central Government Guidance on house condition surveys

1.3.1   The 1993 Department of the Environment Local House Condition Survey Guidance Manual sets out a methodology that includes a detailed survey form in a modular format, and a step-by-step guide to survey implementation.

1.3.2   The 1993 guidance was updated in 2000 and under the new guidance local authorities are encouraged to make full use of the data gathered from house condition surveys in conjunction with data from other sources. Also included is guidance on the Housing Health and Safety Rating System. The 2010 Cheshire East Council HCS followed the ODPM 2000 guidance.

1.3.3   CPC's own bespoke software was used to analyse the results of the survey and to produce the outputs required from the data to write this report.

1.4   Comparative statistics

1.4.1   Comparisons to the position for all England are drawn from the English Housing Survey 2008 (EHS) and the Survey of English Housing 2007-2008 (SEH), both published by Communities and Local Government (CLG) and available as download documents from their website.

1.5   Statistical Variance and Standard Deviation

1.5.1   By definition, sample surveys are seeking to give an accurate representation of a larger number of dwellings than those surveyed. The total to be represented is referred to in statistical terms as the 'population', and in the case of this survey the population was all private sector dwellings in Cheshire East. Because any figure from a survey is based on a sample, it will be subject to some degree of variation. This statistical variance can be expressed in terms of 'confidence limits' and 'standard deviation'.

1.5.2   Standard deviation is the amount by which a given figure may be inaccurate either above or below its stated level. Confidence limits state that if the entire survey process were repeated, out of how many of these repetitions would there be confidence in staying within the variation. Traditionally, and in the case of this report, 95% confidence limits have been used, which state that if the survey were carried out 100 times, in 95 cases the standard deviation would be a given amount.

1.5.3   It should be borne in mind, therefore, that the figures in this report are estimates, and it is for this reason that figures are rounded, as described below. More detail on the calculation of standard deviation is given in the appendices.

1.6   Sub-area analysis

1.6.1   The sampling was based on a very detailed regime to give a representative picture of the stock as a whole. Although the sample was drawn at the neighbourhood level, these areas are far too small to allow for meaningful reporting due to the level of statistical variance that occurs when looking at extremely small samples. As a consequence the survey findings were grouped into four geographic areas; Crewe, Macclesfield, Market towns (Nantwich, Sandbach, Congleton, Holmes Chapel, Knutsford, Wilmslow, Alderley Edge, Poynton and Handforth) and Rural (remaining areas), a number of sub-areas which still allows effective analysis of the results given the overall sample size.

1.6.2   Table 1.1 shows the private sector stock totals by sub-area:

Table 1.1 Private Sector stock totals by sub-area

Areas	Dwellings	Percent
Crewe	29,830	20.4%
Macclesfield	27,980	19.1%
Market Towns	65,920	45.1%
Rural	22,590	15.4%
Total	**146,320**	**100%**

1.7   Presentation of figures

1.7.1   Due to the nature of statistical variation, as outlined above, it is not necessary to quote each individual figure to the nearest dwelling, as this implies a spurious level of accuracy. As with the English Housing Survey (EHS), figures in this report are either quoted to the nearest 100 dwellings or 10 dwellings, dependent upon the size of any given figure. Percentages within the report are only quoted to 1 decimal place for the same reason.

2 Profile of the private sector housing stock

2.1 Size of the dwelling stock

2.1.1 At the time of the survey there were an estimated 146,320 private sector dwellings in Cheshire East, which was the estimated private sector stock total, based on Council Tax Records provided by Cheshire East Council. Individual weights were created for each dwelling surveyed, in accordance with the stratified sampling regime, such that each survey would represent a specific number of dwellings within Cheshire East. Details of the sample stratification and weighting method are given in the Appendices.

2.2 Age of the dwelling stock

2.2.1 The age profile of the 146,320 owner occupied and privately rented stock in Cheshire East was significantly different to the national average. The proportion of dwellings built pre-1945 was substantially lower at 31.1% compared with 41.6% nationally. Conversely the proportion built post 1944 was substantially higher at 68.9% compared with 58.4%. The difference was particularly marked in the post-1990 age band at 17.8% compared with 12.5%.

Figure 2.1 Dwelling age profile England and Cheshire East

Source: 2010 House Condition Survey & EHS 2008

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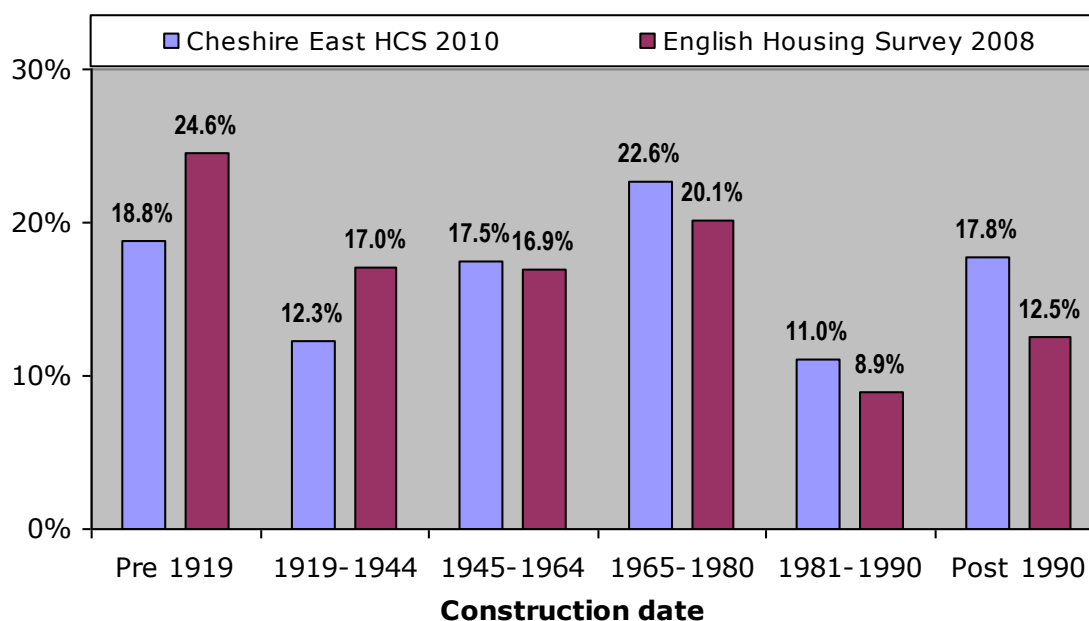
2.3 Dwelling type profile

Figure 2.2 Dwelling type profile Cheshire East and England
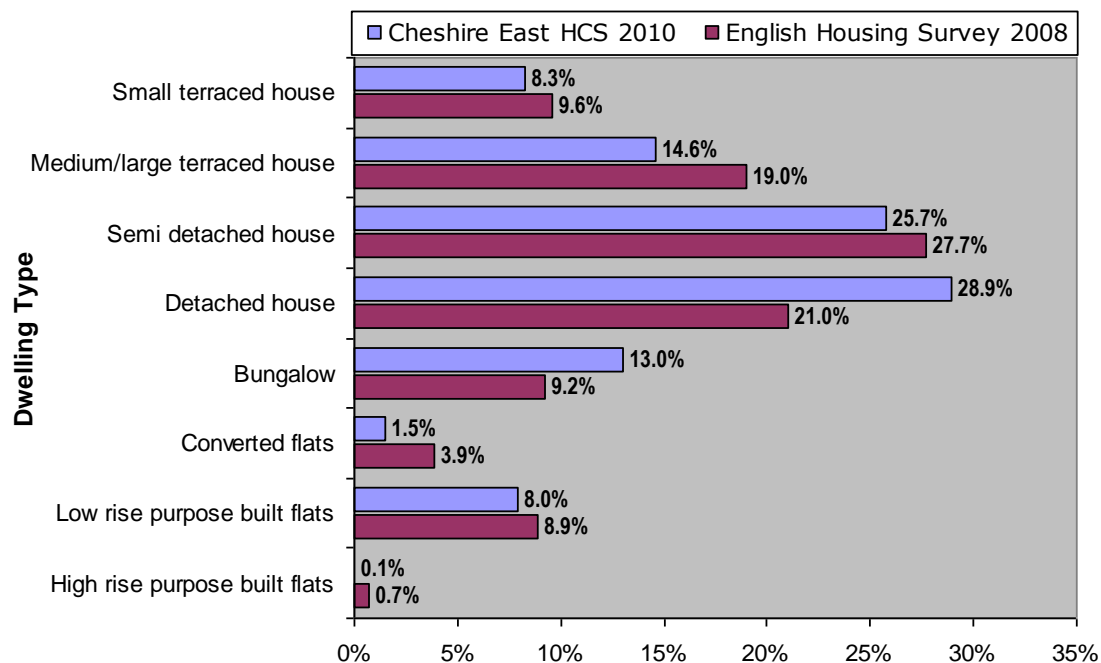
Source: 2010 House Condition Survey & EHS 2008

2.3.1   There were differences in the private sector building type profile in Cheshire East compared with the national pattern, with higher proportions of detached houses and bungalows but lower proportions of all other dwelling types. High rise purpose built flats were represented at such a low proportion, 0.1% or 160 dwellings, that they do not allow for any meaningful analysis and have therefore, been excluded from the reminder of the report.

2.4 Tenure

2.4.1   Table 2.1 draws tenure comparisons between the stock profile for Cheshire East and that for England as a whole.

Table 2.1 Tenure proportions

Tenure	Dwellings	Percent	EHS 2008
Owner occupied	118,290	72%	68%
Privately Rented	28,030	17%	14%
Private Sector Stock	*146,320*	*89%*	*82%*
Housing Association (RSL)	18,780	11%	9%
Local Authority & Other Public	0	0%	9%
Social Housing	*18,780*	*11%*	*18%*
All Tenures	**165,100**	**100%**	**100%**

Source: 2010 House Condition Survey & EHS 2008

2.4.2   The survey included for owner occupied and privately rented stock only, but the breakdown given in Table 2.1 includes social housing tenure for the sake of comparative purposes with the EHS.

2.4.3   The tenure profile again differed from the national profile with the owner occupied stock at a higher level (72% compared with 68%). The privately rented sector was also represented at a higher rate (17% compared with 14%). The overall proportion of social housing was lower at 11% compared with 18% nationally.

2.5   Tenure and age comparisons

2.5.1   Figure 2.3 Tenure by date of construction illustrates the differing dwelling age profile between the main private tenures.

Figure 2.3 Tenure by date of construction
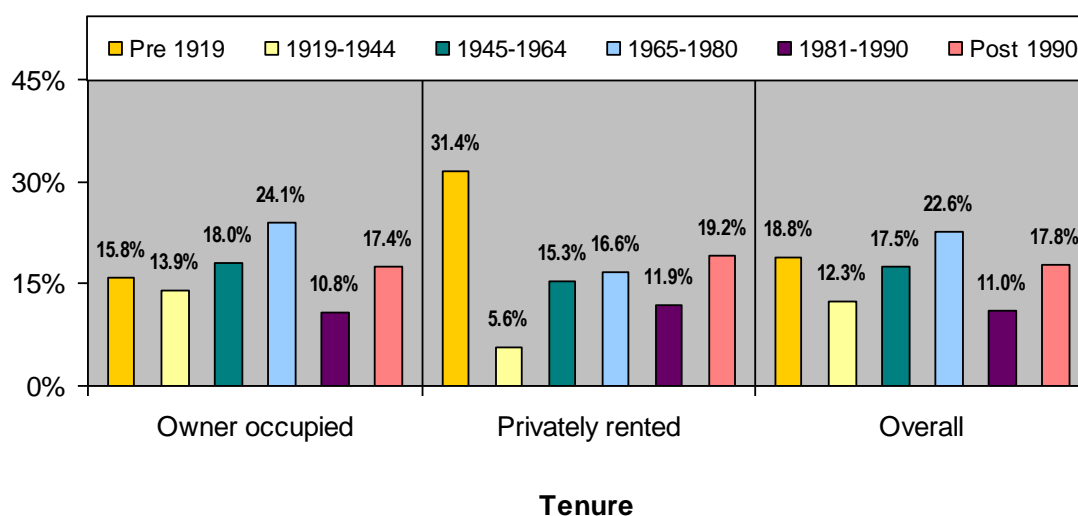
Source: 2010 House Condition Survey

2.5.2   As might have been expected, the owner occupied stock (at approximately 72% of all dwellings) had a similar age profile to the

overall stock position, with figures of approximately 52.3% for homes built post-1964 compared with 51.5% for the overall stock. The privately rented sector had the highest proportion of pre-1919 dwellings by a significant margin at 31.4% compared with 18.8% overall.

2.6 Dwelling Use and Houses in Multiple Occupation

2.6.1 Dwellings may be one of several different building types but these types may have different uses, for example a semi-detached house may have been converted into flats or be occupied as a House in Multiple Occupation (HMO).

Table 2.2 Dwelling use

Dwelling use	Dwellings	Percent
House	132,010	90.2%
Purpose Built Flat	11,590	7.9%
Converted Flat	2,160	1.5%
HMO	560	0.4%
Licensable HMO	0	0.0%
Total	**146,320**	**100%**

Source: 2010 House Condition Survey

2.6.2 The vast majority of dwellings (90.2%) were houses generally occupied as built. Of the remainder, most were purpose built or converted flats. An estimated 0.4% of dwellings were HMOs, representing 560 buildings being used to house multiple households. The national average for HMOs was approximately 2%.

2.6.3 The definition of HMO is that used in the Housing Act 2004, of which only some may potentially be subject to mandatory licensing (described below). Some converted flats now come within the new HMO definition which explicitly includes converted flats where the work does not meet specified standards (generally the Building Regulations 1991) and where less than two thirds are owner occupied.

2.6.4 HMOs formed only a very small proportion of the private sector stock in Cheshire East with none being identified as potentially licensable HMOs. It should be borne in mind, however, that figures from the survey are estimates derived from the randomly selected sample of dwellings surveyed and, with such a small level of HMOs, there may well be some that were not selected for survey.

2.7 Vacant dwellings

2.7.1 Vacant dwellings can be difficult to identify and there are frequently problems in gaining access. By using a combination of sources, including the survey, Council Tax lists, the Census and the Council's own figures, it was possible to estimate that there were 6,080 vacant

dwellings, 4.2% of the private housing stock within Cheshire East. The national average was approximately 4.6%.

2.7.2   Based on the results taken from the stock condition survey it was estimated that 3,960 (2.7%) of private sector dwellings within Cheshire East were long-term vacant, defined as any dwelling vacant for six months or more, or subject to unauthorised occupation. However, as figures from the survey are estimates derived from the sample of dwellings inspected they may be subject to variation.

Table 2.3 All dwellings by Occupancy Status

Vacancy Status	Dwellings	Percent
Occupied	140,240	95.84%
Vacant awaiting new owner	1,250	0.85%
Vacant awaiting new tenant	630	0.43%
Vacant being modernised	220	0.15%
Other	20	0.01%
Long term vacant*	3,960	2.71%
Total vacants	**6,080**	**4.2%**
Total stock	**146,320**	**100.0%**

* Includes vacant dwellings to let where they are being modernised prior to letting or have not been let for over 6 months
Source: 2010 House Condition Survey

2.7.3   The overall estimated proportion of long term vacant dwellings (taken from the survey results) at 2.7% was well above the average for England (approximately 1.5%). Whilst the level of long term vacant dwellings is a small proportion of the private sector stock they still represent a wasted resource, with Empty Dwelling Management Orders (through the powers conferred under the Housing Act 2004), compulsory purchase orders and Section 215 of the Town and Country Planning Act 1990 being available to assist the authority with any action that they may wish to take.

3 Profile of Residents

3.1 Introduction

3.1.1 This chapter will look at some of the key characteristics of households within the surveyed dwellings to determine whether links exist with dwelling condition. As the data can only be collected from occupied dwellings the results are set against a total occupied stock of 140,240.

3.2 Age Profile

3.2.1 Figure 3.1 examines the age distribution, of heads of household within the stock, both for Cheshire East and for England as a whole.

Figure 3.1 Age of head of household Cheshire East and England
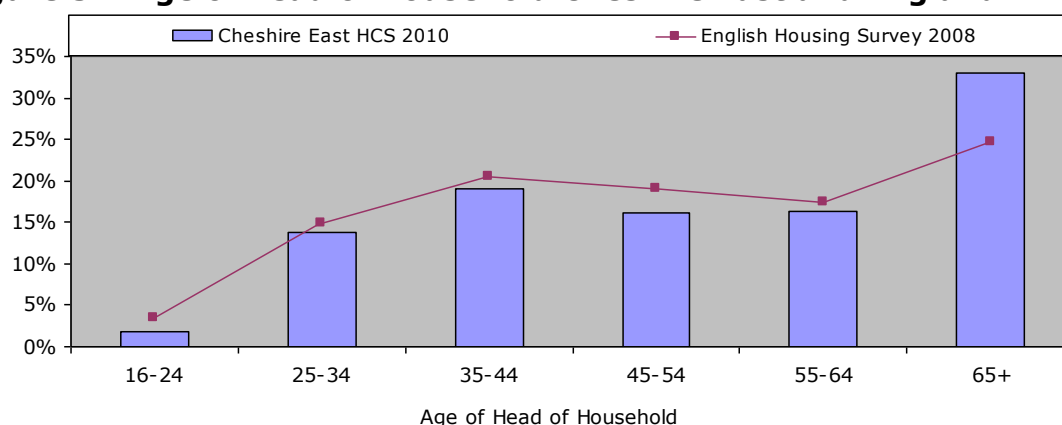
Source: 2010 House Condition Survey & EHS 2008

3.2.2 Data collected as part of the survey indicated that the age profile of heads of household in Cheshire East differed from the national position. The proportions of heads of household generally, were lower up to the age of 64 (67.0% compared with 75.4%) but with substantially more aged 65 and over (33.0% compared with 24.6%). This does have some implications for private sector housing policy due to the potentially greater need for support typically associated with older households, when dealing with dwelling condition issues or adaption needs, with many being on a low income (see figure 3.3). Owner occupiers may have substantial equity in their property that, if released, could help to assist with any dwelling condition issues, although for the private rented sector, negotiations with landlords and possible enforcement action may have to be considered.

3.3 **Household types**

3.3.1 Table 3.1 gives the distribution of different household types, within the stock, and compares this to England as a whole. Household types were derived from interviewing occupiers and determining the number of adults and children within the household. These figures were then used to determine household type. For example, 'Other multi-person household' for the purposes of this analysis, includes flat sharers, lone parents with non-dependent children only and households containing more than one couple or lone parent family, which follows the convention used in the English Housing Survey.

Table 3.1 Household type distribution

Household type	Cheshire East 2010		England 2008
Couple no Dependent Child	62,000	44.2%	39.4%
Couple with Dependent Child	30,110	21.5%	22.2%
Lone parent with dependent child	5,020	3.6%	4.8%
One person household	38,650	27.5%	26.2%
Other multi-person household	4,460	3.2%	7.4%
Total Household Type	**140,240**	**100%**	**100%**

Source: 2010 House Condition Survey & EHS 2008

3.3.2 The main differences to the distribution of households types to that found nationally was the greater proportion of couple with no dependent children type (44.2% compared with 39.4%) and, to a lesser extent, one person households (27.5% compared with 26.2%). All of the other types had lower proportions, considerably so in the case of other multi-person households (3.2% compared with 7.4%).

3.4 **Length of residence**

3.4.1 The proportion of households who had been resident for up to 5 years was 35.9%, although 24.4% had lived at their present address for 20 years or more. Data taken from the Survey of English Housing 2007/2008 showed that 35.4% of residents had lived in their dwellings for between one and four years, making the Cheshire East rate very similar. By sub-area, Macclesfield had the highest proportionate rate of households in the up to 4 year band (45.5%).

Table 3.2 Length of residence

Area	Up to 4 years	5 to 9 years	10 to 19 years	20 to 39 years	40 years or more
Crewe	32.4%	24.1%	19.9%	17.1%	6.5%
Macclesfield	45.5%	13.0%	21.0%	12.3%	8.2%
Market Towns	34.4%	21.9%	18.9%	19.4%	5.4%
Rural	32.6%	14.4%	23.4%	17.1%	12.5%
Cheshire East	**35.9%**	**19.5%**	**20.2%**	**17.2%**	**7.2%**
Survey of English Housing	**35.4%**	**17.1%**	**18.5%**	**21.6%**	**7.4%**

Source: 2010 House Condition Survey

3.5   Income

3.5.1   Residents were asked about the income of the head of household and, where appropriate, the partner of the head of household. Responses were combined to give a gross household income and the results of these are given below.

Figure 3.2 Household incomes in bands
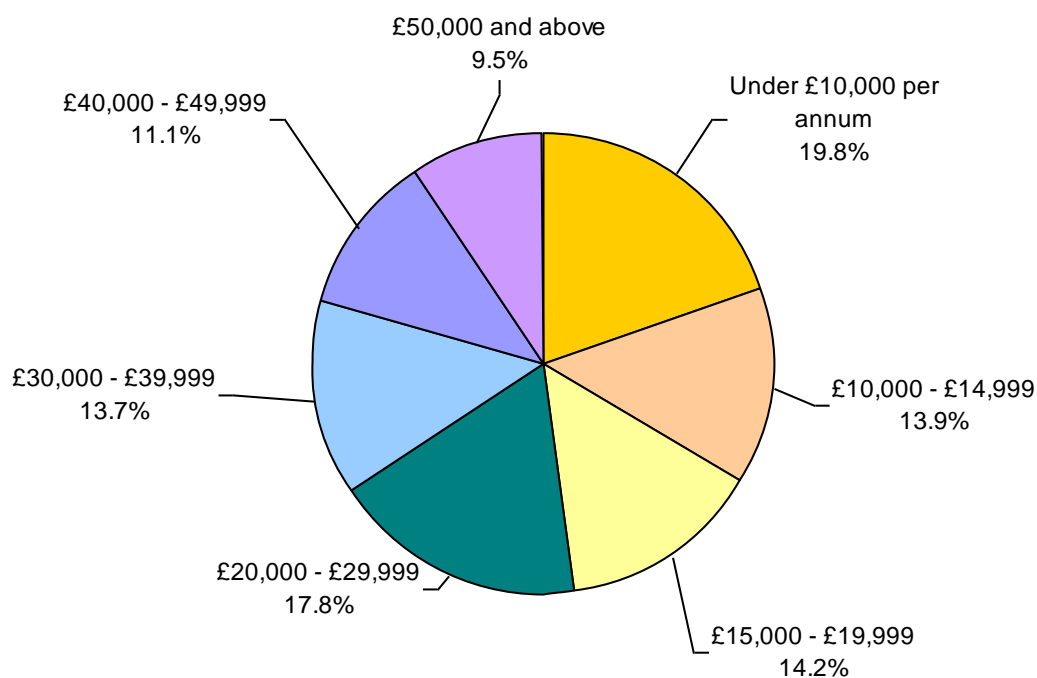
Source: 2010 House Condition Survey

Table 3.3 Number of households within each income band

Income band	No. of households Cheshire East 2010		EHS 2008
Under £10,000 per annum	27,750	19.8%	12.0%
£10,000 - £14,999	19,530	13.9%	11.0%
£15,000 - £19,999	19,960	14.2%	10.1%
£20,000 - £29,999	24,820	17.8%	18.8%
£30,000 - £39,999	19,280	13.7%	15.3%
£40,000 - £49,999	15,620	11.1%	10.9%
£50,000 and above	13,280	9.5%	21.9%
Total	**140,240**	**100%**	**100%**

Source: 2010 House Condition Survey & EHS 2008

3.5.2   The data in Figure 3.2 and the Table 3.3 show that there were higher proportions than the national average of households with an income of less than £30,000 (47.9% compared with 33.1%). Above that the proportions were generally lower, substantially so in the £50,000 and above band, although the £40,000 to £50,000 had a slight increase. The proportion of households within Cheshire East with an income of less than £15,000 (33.7% compared with 23.0% nationally), does suggest affordability will be an issue affecting repair and improvement in the private sector dwelling stock. The proportion of households with an annual income below £10,000 was well above that found nationally (19.8% compared with 12.0%).

Table 3.4 Mean weekly income by tenure

Tenure	Cheshire East HCS 2010 (Mean)	England 2008 (Mean)
Owner occupied	£493	£750
Privately rented	£403	£530
Cheshire East Average	£476	£710

Source: 2010 House Condition Survey & EHS 2008

3.5.3   These figures demonstrate that recent average incomes for heads of household and where appropriate their partner in Cheshire East were considerably lower than the averages for England, particularly so for the owner occupied tenure group who had average incomes that were 34% lower than the national average with the privately rented tenure group being 24% lower.

3.6   Income and age of head of household

3.6.1   Variations in income level are often associated with social characteristics such as the age of head of household, household type or disability. This section looks at the data from the survey to see what links can be shown and the possible associations between those links and unsatisfactory housing conditions described later.

3.6.2   Figure 3.3 illustrates that low income (annual household income below £10,000 per annum) was strongly associated with the younger (16 to 24) and older age groups (65 years and older). High incomes were predominantly associated with households aged between 35 to 54 years. This pattern suggests that the greatest need for assistance to vulnerable occupiers is at the younger and oldest ends of the age range.

Figure 3.3 High and low incomes by age of head of household
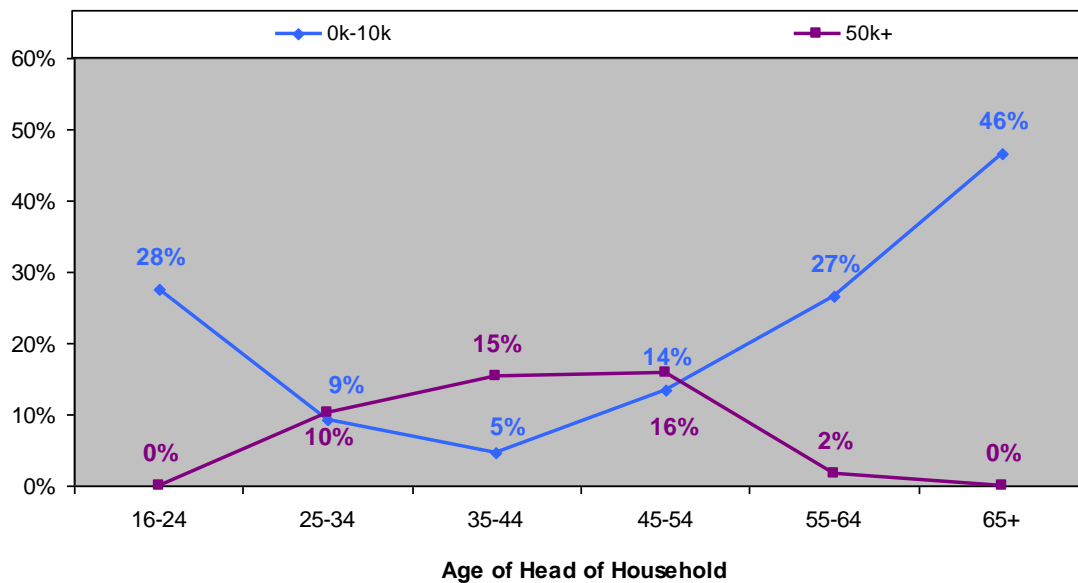
Source: 2010 House Condition Survey

3.7   Income and household type

3.7.1   Table 3.5 compares low and high annual household income figures by household type.

Table 3.5 Low and high household incomes by household type

Household Type	Low income (household income less than £10,000 per annum)	Middle income (household income £10k-£30k per annum)	High income (household income above £30,000 per annum)
Couple no Dependent Child	4%	57%	39%
Couple with Dependent Child	6%	35%	59%
Lone parent with dependent child	27%	61%	12%
One person household	53%	41%	6%
Other multi-person household	47%	32%	21%

Source: 2010 House Condition Survey

3.7.2   Table 3.5 does show that clear associations exist. One person households were most strongly associated with low incomes, followed by other multi-person households and lone parents with dependent child. Couple with dependent child households had greater proportions of higher incomes followed by couples with no dependent child.

3.8   Income and residents with disabilities

3.8.1   It is important to note that this survey used a broad definition of disabled person. This included residents that were frail elderly, as well as registered disabled persons and other persons with a disability.

3.8.2   When looking at the association between disability and income, 45.3% or 6,970 dwellings, of households with a disabled resident had a household income below £10,000 per annum, which was substantially higher than for those where there is no person with a disability (14.6%). The residents of these dwellings may not only have had physical difficulty dealing with repairs, but may not be able to afford alternative, more suitable accommodation provision. This will place an emphasis on the authority's Private Sector Housing Team to develop, where there is an assessed need, a package of assistance to meet those needs.

3.9   Benefit receipt

3.9.1   In addition to income, householders were asked if anyone within the dwelling was in receipt of one or more of a range of benefits (see 4.10.2). Overall 31,130 (22%) households were estimated to be in receipt of a benefit. At the national level 17% of private sector households had at least one resident in receipt of a benefit, which is just over that found within this survey. The distribution of benefit receipt by tenure showed the highest proportion, by a significant

margin, for the privately rented sector at 34% compared with 20% in the owner occupied sector.

Figure 3.4 Benefit receipt by tenure
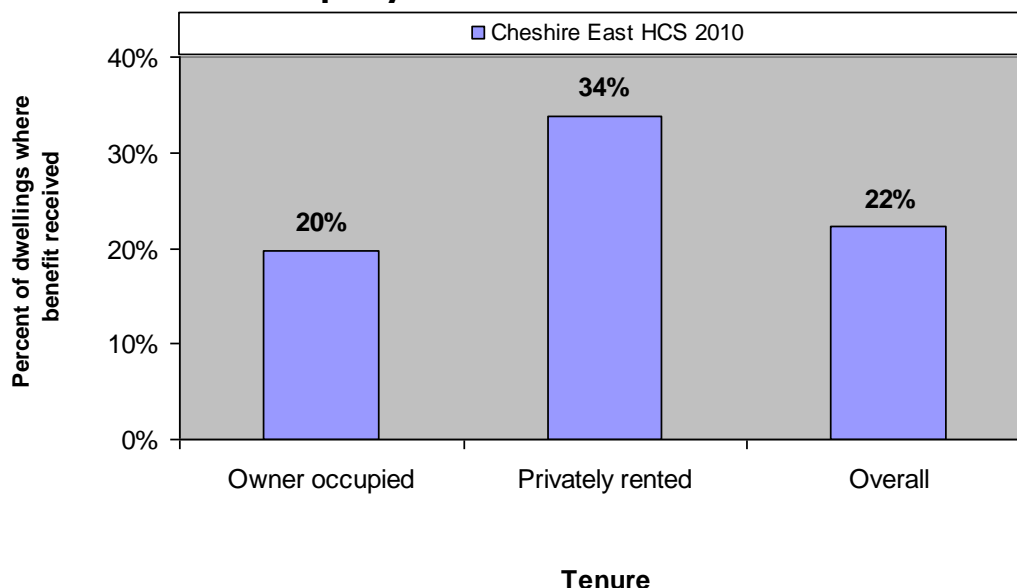
Source: 2010 House Condition Survey

3.10   Value of dwellings and equity

3.10.1   Owner occupiers were asked about the value of their dwelling, the level of any outstanding mortgage, any other debt and the consequent total equity. This was to allow the relationship between available equity and dwelling condition to be examined. Such relationships are relevant to the Regulatory Reform Order 2002; Government guidance focuses on local authorities moving towards facilitating loans/equity release rather than giving grants when offering financial assistance to householders.

3.10.2   The average value of a dwelling in Cheshire East was £241,000. This figure was based on the average sale prices in Cheshire East compiled by the Land Registry from July to September 2010. The figure was below the average value for the North West of £288,800.

3.10.3   The average mortgage level for owner-occupied dwellings in Cheshire East, based upon occupier responses, was £134,000 resulting in an average equity of £107,000 per dwelling using the Land Registry average value.

3.11   Residents with disabilities

3.11.1   Residents were asked if any member of the household suffers from a long term illness or disability. It was estimated from the results of this question that 15,400 (11.0%) occupied dwellings had at least one resident with a long term illness or disability. Residents were further

asked to choose the condition that best described their disability and the Figure 3.5 illustrates the results of this.

Figure 3.5 Residents with disabilities by type
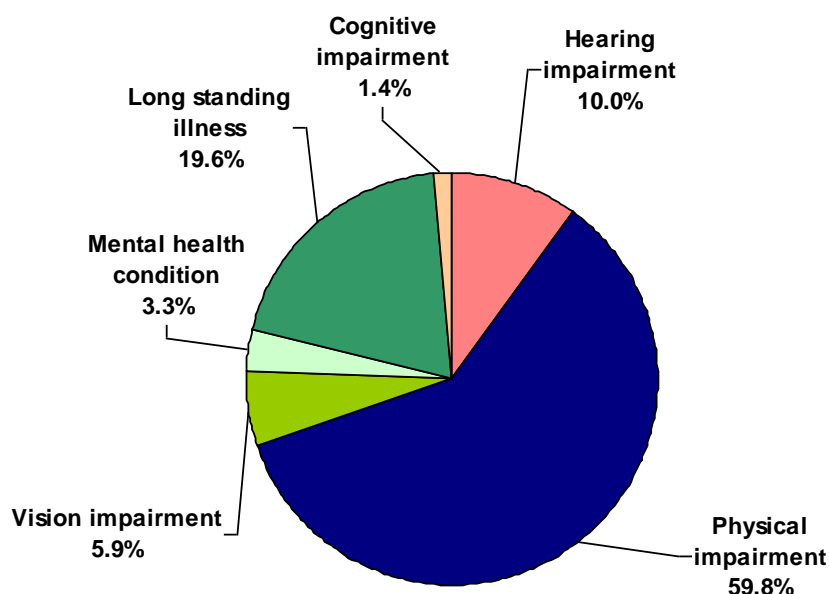
Source: 2010 House Condition Survey

3.11.2 In order to address the specific housing needs of residents with a disability, the provision of Disabled Facilities Grants (DFG) by local authorities remains mandatory. The potential requirement for adaptations or equipment for disabled occupiers and the potential DFG demand are discussed in more detail below.

3.12   Adaptations/Equipment

3.12.1 Where it was indicated that a member of the household suffered from a long term illness or disability, the survey form included a section regarding the existing provision of adaptations or equipment and also whether the occupier felt there was the need for further adaptations or equipment.

3.12.2 The provision of adaptations for disabled residents is mandatory under the Disabled Facilities Grants (DFG) scheme, and local authorities must consider this when assigning budgets to housing provision. There are certain factors that mitigate this demand: firstly, DFGs are subject to means testing, except for adaptations for children and the provision of equipment, and secondly, there needs to be an assessment by an Occupational Therapist who will consider whether an adaptation is necessary and appropriate and also by the authority's Private Sector

Housing team to establish if any recommended adaptations can be reasonably and practically undertaken taking into account the construction and configuration of the dwelling.

3.12.3 Figure 3.6 illustrates the proportion of dwellings, with residents who had existing adaptations/equipment and their perceived need for further adaptations or equipment; although it should be made clear that the following needs data has not been included as a direct result of a formal assessment of need. The chart is broken down by adaptation type.

Figure 3.6 Disabled adaptations/equipment present and required
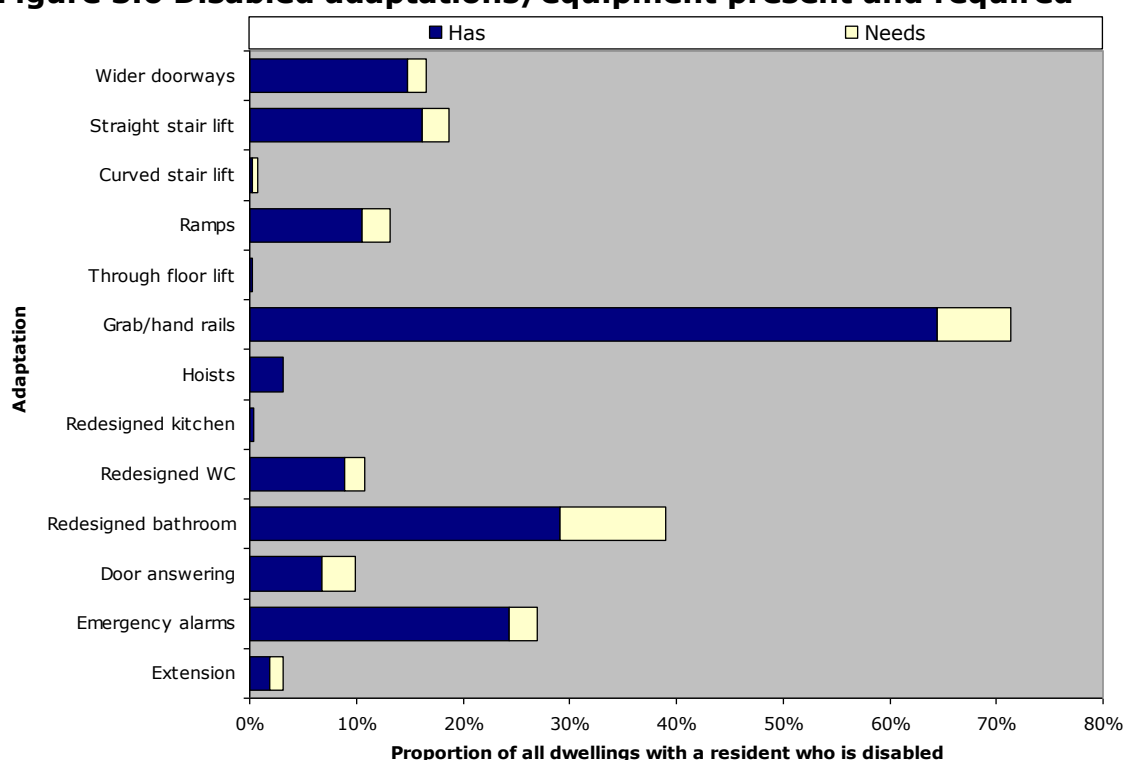
Source: 2010 House Condition Survey

3.12.4 Figure 3.6 shows that grab/hand rails had the highest level of current provision, present in 64.4% of dwellings occupied by a resident with a disability, followed by a redesigned bathroom at 29.1%. The most needed was a redesigned bathroom (9.9%) followed by the provision of grab/hand rails at 6.9%.

3.12.5 Table 3.6 takes the figures for adaptations/equipment a step further and looks at the numbers of adaptations/equipment needed and the associated costs. Costs are estimated averages for each of the elements listed below. As a full test of resources is the only accurate way of providing a figure for costs after means testing, where applicable, some assumptions have been made in order to provide an estimated figure, with those on an income of less than £10,000 assumed to have a nil contribution, those on an income of between

£10,000 and £25,000 having a 50% contribution and those on an income above that paying the full amount.

Table 3.6 Cost of adaptations for residents with disabilities

Adaptations and equipment	Adaptations and equipment *	Adaptation and equipment Cost	Cost after means testing
Wider doors	260	£309,000	£300,000
Straight stair lift	380	£641,000	£307,000
Curved stair lift	70	£304,000	£66,000
Ramps	390	£546,000	£402,000
Grab/hand rails	1,030	£52,000	£52,000
Redesigned kitchen	20	£96,000	£96,000
Redesigned WC	290	£717,000	£499,000
Redesigned bath	1,480	£7,388,000	£4,233,000
Door answer	470	£1,411,000	£1,275,000
Emergency alarms	380	£383,000	£191,000
Extension	200	£5,895,000	£5,895,000
Total	**4,970**	**£17,742,000**	**£13,316,000**

**Figures are for numbers of adaptations/equipment,
some dwellings may need multiple provision
Source: 2010 House Condition Survey*

3.12.6   The total cost of all adaptations and equipment that could potentially be fitted to benefit residents with a disability was just over £17.7 million. When the estimated means testing had been applied this total reduced to just over £13.3 million, which reflects the fact that there are some residents with disabilities with average or above average incomes.

3.12.7   It should be considered that two factors will affect the £13.3 million in terms of DFGs. Firstly, the figure does not contain any reduction for occupiers that would not be considered after a visit by an occupational therapist, as this cannot easily be factored in. Secondly, many of the residents may not have been aware of the need for an adaptation, may not have wanted an adaptation or may not have been aware that DFGs are available. The £13.3 million figure is an estimate of the amount that would need to be spent by the authority on adaptations, although this would be spread over a period of five years.

3.12.8   The figure is, however, indicative only and could vary substantially if there are significant adaptations for children (applications for which are no longer subject to the test of resources), which would significantly increase the authorities overall contribution. The figure does, however, give some indication of the potential demand for DFG that should be taken into account when considering future DFG budgets.

3.13 <u>Owner occupiers plans to repair their property</u>

3.13.1 Owner occupiers were asked whether they were aware of any defects requiring remedial work to their property, how much they estimated this work would cost and whether or not they would be interested in considering a number of funding options to undertake the works.

3.13.2 The great majority of owner occupiers (94.8%) indicated that they were not aware of any defects requiring repair to their property. It is interesting to note that 5.8% of those actually failed the repair criterion of the Decent Homes standard. Some 5,770 (5.2%) said that they were aware of the defects. Table 3.7 shows the costs estimated by occupiers for the work put into cost bands:

Table 3.7 Occupiers estimated cost of improvement works

Improvement Cost Band	Percentage
£1 to £4,999	77.4%
£5,000 to £9,999	14.7%
£10,000 to £14,999	4.2%
£15,000 to £19,999	0.3%
£20,000 to £24,999	0.0%
£25,000 +	3.4%

Source: 2010 House Condition Survey

3.13.3 The vast majority (77.4%) said that the work would cost under £5,000, with the bulk of the remainder saying the work would cost between £5,000 and £9,999 (14.7%).

3.13.4 Table 3.8 illustrates the responses by owner occupied residents that were aware of defects requiring repair, when asked if they would be interested in a range of funding options from the Council to assist their ability to undertake those works.

Table 3.8 Owner occupied residents prepared to consider funding from the Council

Option	Yes %
Zero interest loan	17.7%
Flexible loan	11.8%
Equity share loan	7.8%

Source: 2010 House Condition Survey

3.13.5 A zero interest loan had the greatest interest at 17.7% followed by a flexible loan at 11.8%, with an equity share loan having the least interest at 7.8%.

3.13.6 4.7% of residents said that they had received a previous Council loan/grant.

3.14 Security

3.14.1 Residents were asked if a range of security measures had been fitted to their property. Table 3.9 gives a breakdown of residents' responses to these questions.

3.14.2 The two highest levels of provision were door deadlocks (84.7%) and window locks (81.6%). Alarms were present in 37.2% of dwellings.

Table 3.9 Security measures present in property

Secure Doors (Deadlock)	Door Viewers	Door Chains	Secure Windows (locks)	Alarms
123,860	56,320	42,140	119,330	54,370
84.7%	38.5%	28.8%	81.6%	37.2%

Source: 2010 House Condition Survey

3.15 Ethnic origin, nationality and other social characteristics

3.15.1 Residents were asked to specify the majority ethnic origin type within their household and the results are given in Table 3.10:

Table 3.10 Ethnic origin

Ethnic Origin	Households	Per cent	England
White British	133,460	95.17%	87.0%
White Irish	710	0.51%	2.7%
White Other	<10	<0.01%	2.1%
White/Black Caribbean	2,190	1.56%	0.5%
White/Black African	310	0.22%	0.2%
White/Asian	20	0.01%	1.1%
Other mixed	1,140	0.81%	0.4%
Indian	200	0.14%	0.5%
Pakistani	1,160	0.83%	0.3%
Bangladeshi	250	0.18%	1.4%
Asian Other	70	0.05%	0.4%
Black Caribbean	300	0.21%	0.5%
Black African	50	0.04%	1.0%
Black Other	340	0.24%	1.3%
Chinese	20	0.01%	0.4%
Other	20	0.01%	0.2%
Total	**140,240**	**100%**	**100%**

Source: 2010 House Condition Survey

3.15.2 The majority of households described their ethnic origin as being predominantly White British (95.2%) compared with 2007 Office for National Statistics data for Cheshire East which showed 93.4%. In England as a whole the rate was 87.0%. Proportionately, therefore, in Cheshire East, the other ethnic groups represent only 4.8% of private

sector households. As the other ethnic groups, individually, were represented at such low levels they are not sufficiently statistically robust enough to allow meaningful comparisons to be made.

3.16   Satisfaction with home and neighbourhood

3.16.1   Residents were asked how satisfied they were with both their home and the neighbourhood within which they live. Table 3.11 provides a breakdown of the results.

Table 3.11 Satisfaction with home and neighbourhood

Satisfaction level	Satisfied with home	Satisfied with area
Very Satisfied	72.5%	73.3%
Fairly Satisfied	23.1%	22.6%
Neither	2.8%	3.3%
Fairly Dissatisfied	1.4%	0.7%
Very Dissatisfied	0.2%	0.1%

Source: 2010 House Condition Survey

3.16.2   The vast majority were satisfied with their home (95.6%) and their neighbourhood (95.9%). Of the 2,900 who were dissatisfied with either their home, their neighbourhood or both, 31% indicated that they were likely to move, with the majority of those indicating that they would move within Cheshire East (82.9%) and 11.8% within other parts of Cheshire. Only 5.3% stated that they would move outside of Cheshire.

3.17   Location of dwelling

3.17.1   Table 3.12 provides a breakdown of the location of dwellings, with the majority being suburban (65.1%).

Table 3.12 Dwelling Location

Dwelling location	Proportion
Rural	15.2%
Suburban	65.1%
Urban	19.7%

Source: 2010 House Condition Survey

3.17.2   Table 3.13 considers those that were dissatisfied with either their home or neighbourhood or both as well as the location of the dwelling. The suburban location had the highest rate (76.7%) for those that did not intend to move, with the Rural location having the highest level of heads of household who did intend to move (41.4%).

Table 3.13 Dwelling Location and intention to move where dissatisfied with either home or neighbourhood or both

Dwelling location	Intend to move	
	No	Yes
Rural	58.6%	41.4%
Suburban	76.7%	23.3%
Urban	59.7%	40.3%

Source: 2010 House Condition Survey

3.18   Over 60 care

3.18.1   Heads of household were asked if any adult over the age of 60 received care from another member of the family due to disability or health needs. Nearly 7% indicated that there was.

3.19   Resident landlord

3.19.1   Privately renting tenants were asked if their landlord was resident in the same building with only 0.2% indicating that they did.

3.20   Overcrowding

3.20.1   In the ODPM report Overcrowding in England: the national and regional picture it stated that "Households that are statutorily overcrowded are so rare that a reliable estimate of numbers cannot be produced at a national (England) level even using data from the Survey of English Housing and the 2001 English House Condition Survey, which are relatively large surveys. It follows that estimates for individual regions cannot be produced using these sources".

3.20.2   As with the above comments, this survey, which is considerably smaller than both of those mentioned, cannot produce any results that would be of any statistical relevance. Given that and issues revolving around the sample size, this section attempts to provide some basic information on the level of estimated overcrowding within Cheshire East.

3.20.3   The existing statutory overcrowding standards were set in 1935 and restated in Part 10 of the Housing Act 1985, and include both a room standard and a space standard.

3.20.4   In the Court of Appeal case Elrify v. City of Westminster Council (2007) it was established that both of the Housing Act measurements must be calculated to establish if a statutory overcrowding situation existed.

3.20.5   The Survey of English Housing uses a Bedroom standard as an indicator of occupation density, allocating a number of bedrooms to each household according to the age, sex and marital status composition coupled with the relationship of the members to one another.

3.20.6   If the Housing Act overcrowding measurement is taken, the estimated level of overcrowding is shown in Table 3.14:

Table 3.14 Statutory measurement of overcrowding

	Overcrowded	Not Overcrowded
Crewe	0.5%	99.5%
Macclesfield	0.6%	99.4%
Market Towns	0.1%	99.9%
Rural	0.4%	99.6%
Cheshire East	**0.3%**	**99.7%**

Source: 2010 House Condition Survey

3.20.7   Looking at the Survey of English Housing bedroom standard of occupation density, Table 3.15 shows the figures:

Table 3.15 Bedroom standard measurement of overcrowding

Area Name	Overcrowded	Not overcrowded
Crewe	2.3%	97.7%
Macclesfield	0.9%	99.1%
Market Towns	0.2%	99.8%
Rural	1.3%	98.7%
Cheshire East	**0.9%**	**99.1%**

Source: 2010 House Condition Survey

3.20.8   The bedroom standard (0.9%) had a higher overall rate than the statutory standard (0.3%) which is to be expected as the bedroom standard uses a more limited room indicator of occupation density. It must, however, be taken in the context described by the ODPM report mentioned above that a reliable estimate of numbers cannot be produced. Both these systems resulted in an estimated total of between 470 and 1,380 overcrowded dwellings within the Council. However, all the data relating to overcrowding should be treated with caution.

3.20.9   For the bedroom standard, the Crewe sub-area had the highest rate and for the statutory standard the Macclesfield sub-area had the highest rate followed by the Crewe sub-area.

3.20.10 Sections 139 to 144 of the Housing Act 2004 relate to the service of an overcrowding notice. It applies to an HMO if it has no interim or final management order in force and it is not required to be licensed under Part 2 of the Act. 170 HMOs were found to be overcrowded.

3.20.11 Under the Housing Health and Safety Rating Scheme, one of the elements to be considered is that of Crowding and Space, which takes into account a number of matters that are deemed likely to affect the likelihood and harm outcomes. This also indicates that the average likelihood of an illness or injury occurring is 1 in 8,000, showing the low average potential for harm. 190 dwellings (0.1% of the occupied stock) during the survey were scored under this heading.

4   The Decent Homes Standard

4.1   Introduction

4.1.1   It is Government policy that everyone should have the opportunity of living in a "decent home". The Decent Homes Standard contains four broad criteria that a property should:

>   A - be above the legal minimum standard for housing, and
>
>   B - be in a reasonable state of repair, and
>
>   C - have reasonably modern facilities (such as kitchens and bathrooms) and services, and
>
>   D - provide a reasonable degree of thermal comfort (effective insulation and efficient heating).

4.1.2   If a dwelling fails any one of these criteria it is considered to be "non-decent". A detailed definition of the criteria and their sub-categories are described in the ODPM guidance: "A Decent Home – The definition and guidance for implementation" June 2006.

4.1.3   The revised guidance did not substantially change the criteria for the decent homes standard laid out in 2002 with the exception of thermal comfort. This changed from a calculated, energy efficiency based approach to a simpler, but more practical system which takes into account the heating systems, fuel and insulation in a dwelling to determine if it provides adequate thermal comfort.

4.1.4   Obligations under the Decent Homes Standard were originally directed solely at the social housing sector. Under "The Decent Homes Target Implementation Plan" June 2003 – as modified April 2004, the ODPM outlined its commitments under Public Service Agreement (PSA) 7. These stated that PSA 7 will have been met if:

- There is a year on year increase in the proportion of vulnerable private sector households in decent homes;

- If the proportion of vulnerable private sector households in decent homes is above 65% by 2006/07.

- If the proportion of vulnerable private sector households in decent homes is above 70% by 2010/11.

- If the proportion of vulnerable private sector households in decent homes is above 75% by 2020/21.

4.1.5   Following the Comprehensive Spending Review in 2007, the Government scrapped the PSA7 target (effective from 1 April 2008).

However, Cheshire East Council took the strategic decision to continue to monitor progress against the target.

4.1.6 Due to this, the Cheshire East house condition survey collected adequate and appropriate data to allow judgement of dwellings across all tenures against the Decent Homes Standard.

4.2 Change of emphasis and the Housing Act 2004

4.2.1 Whilst the changes under the revised definition and guidance for the decent homes standard apply, there was a change in Criterion A of the standard from April 2006. Prior to this change, Criterion A used the Housing Fitness Standard as the measure of whether a dwelling meets the minimum legal standard. From April 2006 the Housing Health and Safety Rating System (HHSRS) under Part 1 of the Housing Act 2004 replaced the former statutory fitness standard.

4.2.2 The HHSRS system assesses "hazards" within dwellings and categorises them into Category 1 and Category 2 Hazards. Local housing authorities have a duty to take action to deal with Category 1 Hazards. The Housing Health and Safety Rating System also applies to the Decent Homes Standard – if there is a Category 1 hazard at the property it will fail Criterion A of the standard.

4.2.3 A detailed definition of the Housing Health and Safety Rating System are given in the following chapter.

4.3 The meaning of non-decency

4.3.1 Concern has been raised by a number of local authorities over the term 'non-decent', which tends to conjure up images of dilapidated houses and serious disrepair issues. It is the case, however, that a dwelling can fail the Decent Homes Standard on a single item, such as the heating system, whilst being in a very good state of repair. The owner of such a property may well not think that there is anything wrong with their home.

4.3.2 It is possible to regard the Decent Homes Standard as an ideal standard or a level to aspire to. In practice, it is a relatively low standard and failure to meet the standard should be regarded as a trigger for action. In some cases, however, it may not be practical to make a dwelling decent and it may also not be in the best interests of the occupiers to do so. The guidance on recording of outcomes recognises that there may be instances where it is appropriate to record cases where work to achieve only partial compliance with the standard has been achieved, or where non compliance results from the occupier refusing to have work carried out.

4.4 Overall level of non-decency

4.4.1   Based on the House Condition Survey data 40,370 dwellings (27.6%) were classified as non-decent. In England as a whole the rate was 34.4% (owner occupied and privately rented stock) making the Cheshire East rate lower than the national average. The all England figure was taken as the proportion of non-decent private sector dwellings from the EHS 2008. When the HHSRS for Criterion A was used for the first time in the EHCS 2006, a significant increase in Criterion A failure (homes not meeting the statutory component of the Decent Homes standard) was recorded.   This rose from just over 4% under the former fitness standard to 22.4% under the HHSRS Category 1 hazard rate, increasing the overall non-decency rate from 26.8% for privately occupied dwellings in 2005 to 35.3% in 2006.

4.4.2   The Decent Homes Standard contains 4 criteria. Table 4.1 gives a breakdown of the reasons for failure:

Table 4.1 Reasons for failure of dwellings as a decent home

Reason	Dwellings	Percent (of non-decent)	Percent (of stock)	Percent (EHS 2008)
Category 1 hazard dwellings	29,890	74.0%	20.4%	23.6%
In need of repair	11,460	28.4%	7.8%	6.5%
Lacking modern facilities	1,860	4.6%	1.3%	2.9%
Poor degree of thermal comfort	16,340	40.5%	11.2%	13.2%
Non-decency total	**40,370**		**27.6%**	**34.4%**

Source: 2010 House Condition Survey & EHS 2008

Table 4.2 Reasons for failure of dwellings as a decent home by tenure

| Reason	Owner Occupied		Privately Rented	
	Dwellings	Percent (of stock)	Dwellings	Percent (of stock)
Category 1 hazard dwellings	23,900	20.2%	5,990	21.4%
In need of repair	8,820	7.5%	2,630	9.4%
Lacking modern facilities	1,130	1.0%	730	2.6%
Poor degree of thermal comfort	11,780	10.0%	4,570	16.3%
Non-decency total	**31,250**	**26.4%**	**9,120**	**32.5%**

4.4.3   The percentages by non-decent do not total 100%. This reflects the fact that the categories are not mutually exclusive; although any dwelling can fail on just one criterion, it may fail on two or more.

4.4.4   In Cheshire East, the hierarchy of reasons for failure follows the national profile with a higher rate of failure for Category 1 Hazards than thermal comfort. Of the four Criterion, only disrepair had a higher rate than its national comparators, the other three being lower, reflecting the more modern stock found within Cheshire East.

4.4.5   Prior to the reported data from the EHCS 2006 being published, which used the HHSRS for the first time, poor degree of thermal comfort was the primary reason for failure of the Decent Homes Standard. It should however, be borne in mind that excess cold was the main Category 1 Hazard reason for failure (see chapter 5) and this overlaps heavily with poor thermal comfort.

4.5   Numbers of failures per dwelling

4.5.1   As mentioned above, dwellings can fail to be decent for more than one reason. The total number of failures per dwelling can give an indication of the severity of problems in particular dwellings. Figure 4.1 looks at the number of failures per dwelling in non-decent dwellings.

Figure 4.1 Degree of failure of the Decent Homes Standard
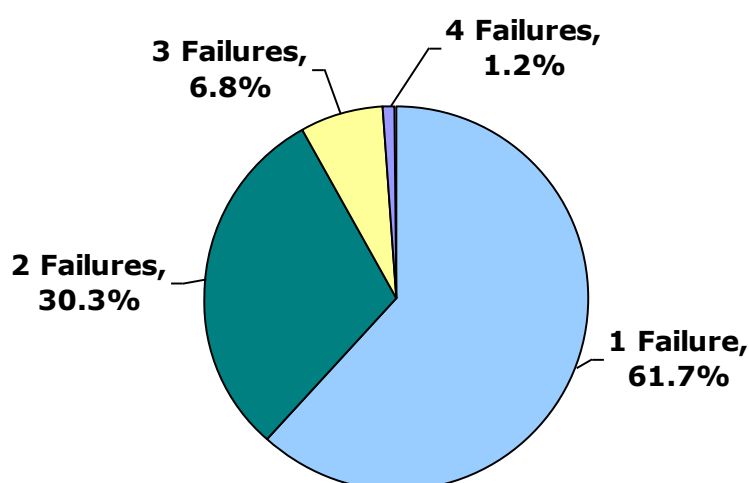
Source: 2010 House Condition Survey

4.5.2   The majority of failures were in respect of one criterion only, with the number of dwellings with two or more failures being 38.3%. In the majority of cases (72.5%), this related to heating/insulation issues as the excess cold hazard and thermal comfort criterion are interlinked.

4.6   Non-decency by general characteristics

4.6.1   Figure 4.2 shows the proportions of non-decent private sector dwellings by tenure, which follows that found nationally; the rate in the private rented sector (32.5%) being higher than that found in the owner occupied sector (26.4%).

Figure 4.2 Tenure by non-decent dwellings
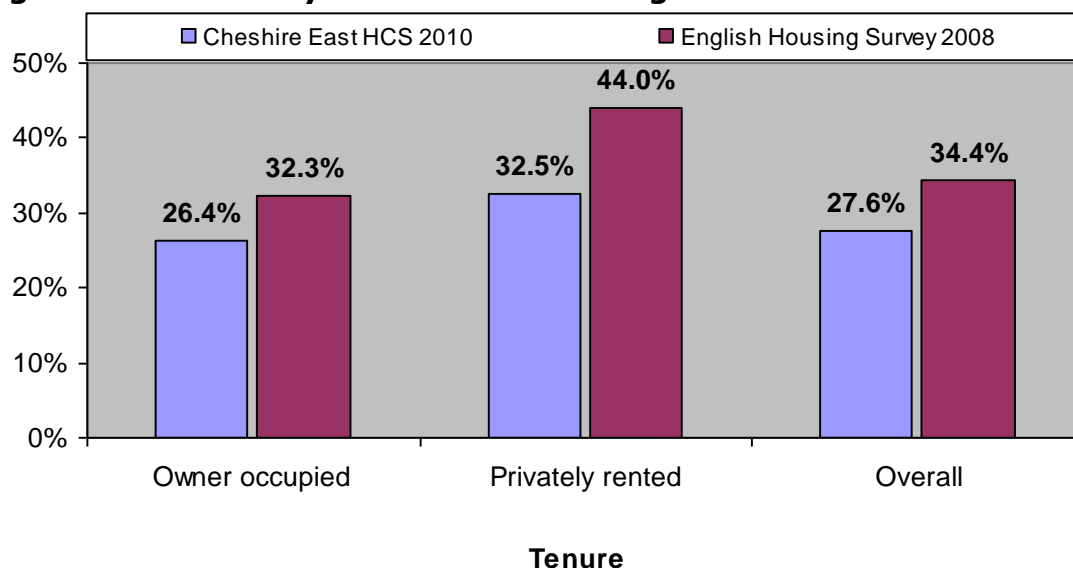
Source: 2010 House Condition Survey & EHS 2008

4.6.2   Figure 4.3 examines decent homes failures by dwelling type.

Figure 4.3 Non-decent dwellings by dwelling type
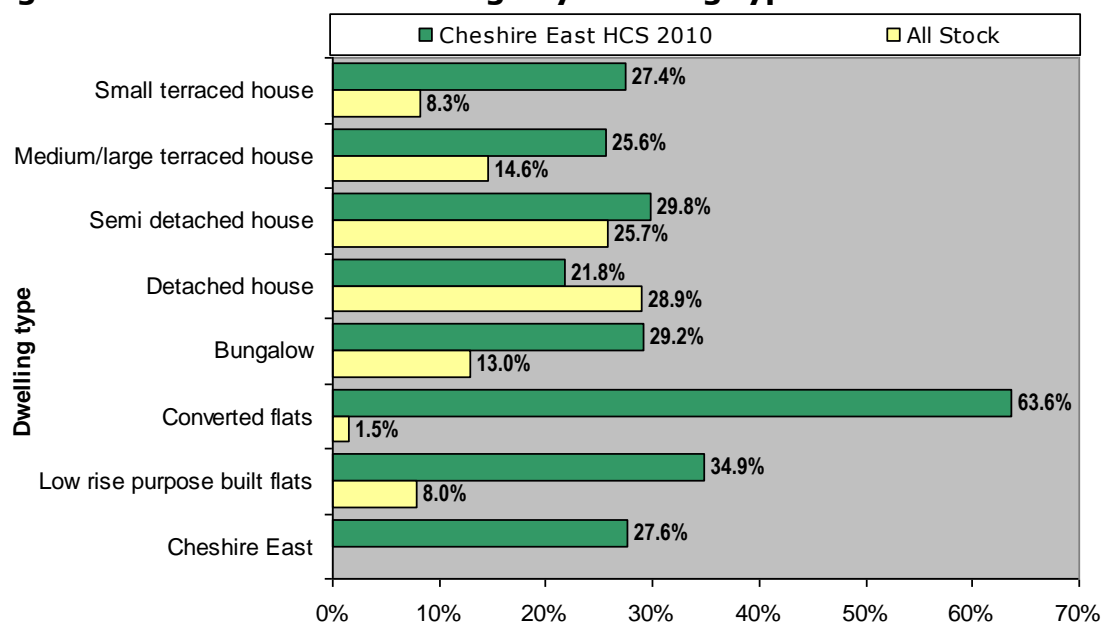
Source: 2010 House Condition Survey

4.6.3   The highest rates of non-decency were found in converted flats at 63.6%. However, converted flats only represent 1.5% of the stock or 2,200 dwellings. Two issues arise as a result of this: firstly, they cannot be considered statistically significant and may be subject to considerable survey bias due to being based on a very small number of surveys. Secondly, at such a small proportion of the dwelling stock, it cannot logically represent a priority. The next highest rate was found in

low rise purpose built flats (less than 6 storeys) at 34.9% followed by semi-detached houses (29.8%) and bungalows (29.2%). The lowest rate was found in detached houses (21.8%).

Figure 4.4 Non-decent dwellings by date of construction
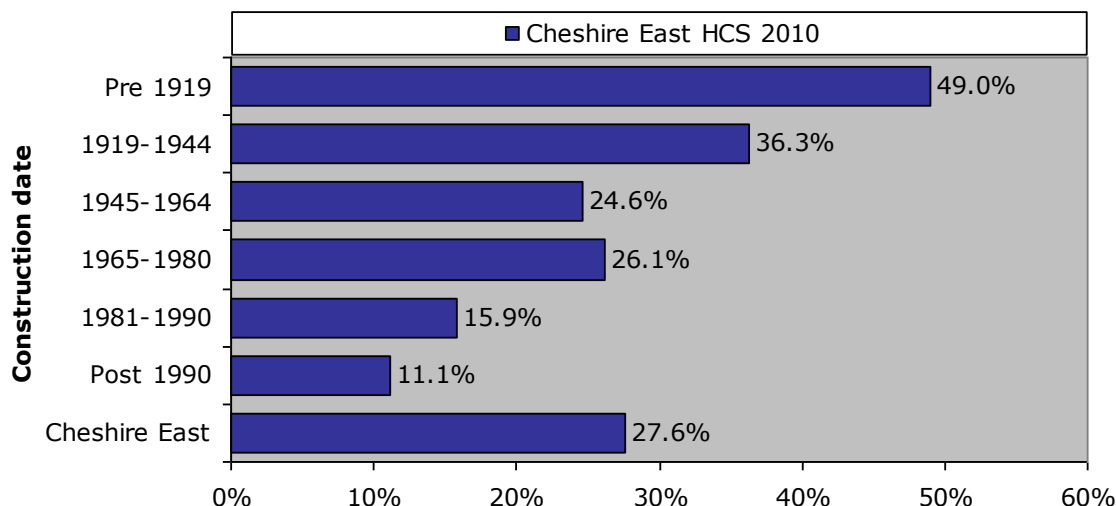
Source: 2010 House Condition Survey

4.6.4   As is commonly the case, the rate of failure of the Decent Homes Standard was highest in pre-1919 dwellings at 49.0%. A general trend of reducing rates with dwelling age is then followed although the 1965 to 1980 age group was slightly above the trend line. The lowest rate was found in post-1990 dwellings (11.1%).

4.6.5   The distribution by sub-area is shown in Figure 4.5. The highest rate was recorded in the Macclesfield sub-area at 31.0%, followed by the Crewe sub-area at 28.1%, both of which had the highest rates of pre-1945 dwellings. The lowest rate was found in the Rural sub-area at 21.4%.

Figure 4.5 Non-decent dwellings by sub-area
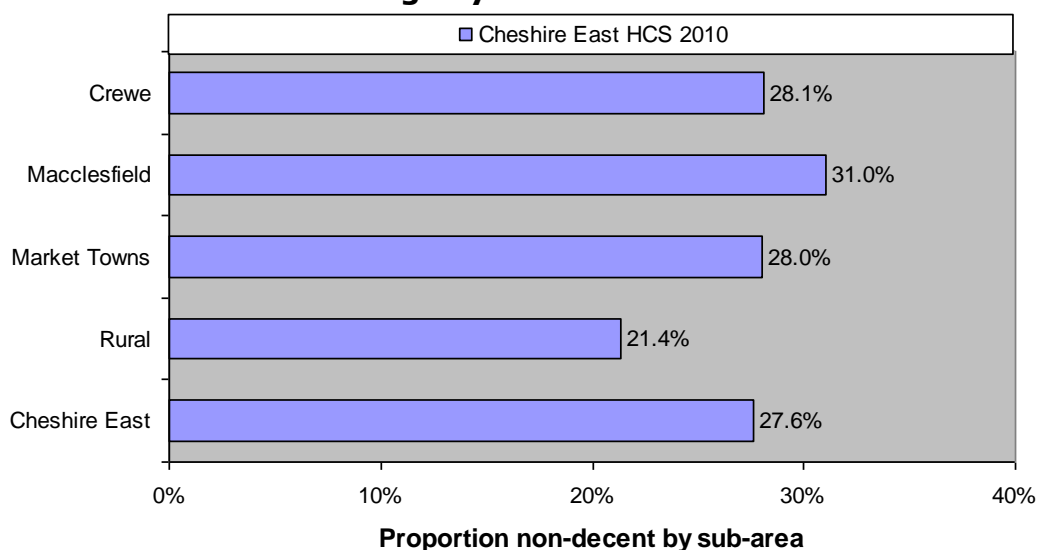
Source: 2010 House Condition Survey

Table 4.3 Non-decency by construction date and sub-area

Construction date	Crewe	Macclesfield	Market Towns	Rural
Pre 1919	11.6%	12.0%	7.6%	7.1%
1919-1944	5.2%	3.4%	4.7%	4.2%
1945-1964	3.5%	5.6%	4.6%	2.9%
1965-1980	5.4%	5.6%	6.8%	4.4%
1981-1990	1.1%	2.5%	2.1%	0.8%
Post 1990	1.3%	1.9%	2.2%	2.0%
Cheshire East	**28.1%**	**31.0%**	**28.0%**	**21.4%**

Source: 2010 House Condition Survey

4.7   Cost to Remedy

4.7.1   Having determined the reasons for dwellings being classified as non-decent, it is possible to indicate what level of repairs / improvements would be needed to make all dwellings decent.

4.7.2   The cost to remedy non-decency was determined by examining the specific failures of each non-decent dwelling and determining the work necessary to make the dwelling decent.   This was done for each criterion of the standard and Table 4.4 shows the cost distribution for all non-decent dwellings in the stock, with the costs being based on the assumption that only those items that cause dwellings to be non-decent are dealt with.

Table 4.4 Repair cost by non-decency reason (HHSRS)

| Reason	Total Cost (£ million)	Average cost per dwelling (£)*
Category 1 Hazard	£105.1	£3,520
Repair	£62.7	£5,470
Amenities	£29.1	£15,620
Thermal comfort	£27.5	£1,680
Total	**£224.4**	**£5,560**

* Rounded to nearest £10
Source: 2010 House Condition Survey

4.8   Age of Head of Household and non-decency

4.8.1   As part of the social survey a grid was filled in containing basic details for each of the residents in a dwelling, such as their age, working status, sex etc. It was left to residents to determine who was considered the head of the household, and therefore what the relationship between all other residents and the head was (e.g. spouse, child, parent, lodger etc).

4.8.2   Age of head of household is a useful indicator as it generally gives an impression of the age of the household and its profile; in addition dwelling conditions often vary according to age of head of household.

4.8.3   Figure 4.6 illustrates the relationship between the age of head of household and levels of non-decency. Within age groups, the highest proportionate rate of non-decency occurred where the age of head of household was aged 55 to 64 (33.2%) followed by the 65+ age band (30.6%) and the 16 to 24 age band (28.9%). The lowest rate was found in the 45 to 54 age band at 20.5%.

Figure 4.6 Non-decency by age of head of household
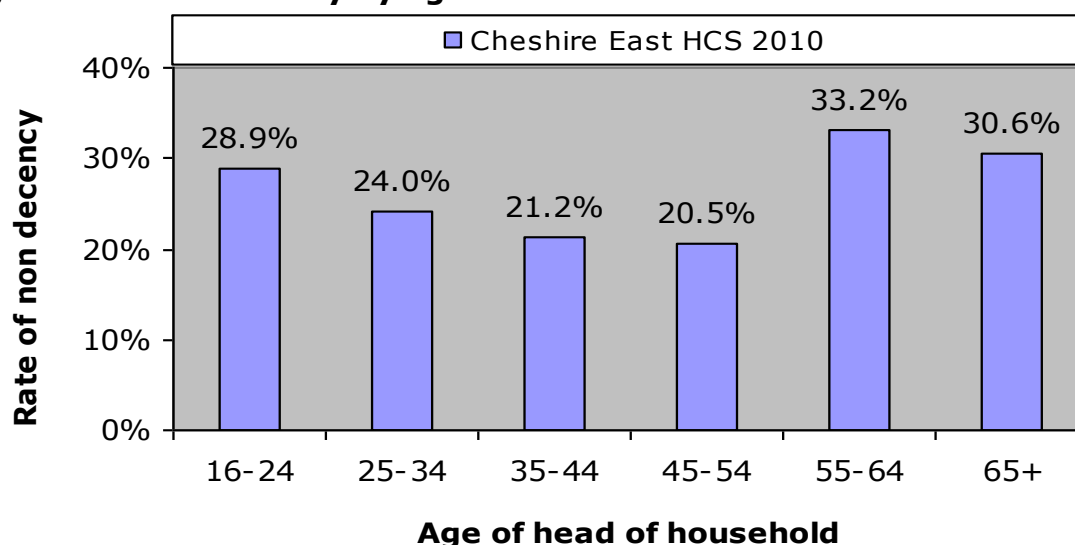
Source: 2010 House Condition Survey

4.9   Household income and non-decency

4.9.1   The relationship between income and non-decency can be analysed by combining household income figures with failures under the Decent Homes Standard. The largest proportion of dwellings found to be non-decent were occupied by households with an annual income of between £10k and £15k (33.9%) followed by those with an income of less than £10k (32.7%) and those with an income between £15k and £20k (30.3%) The overall rate for those with an income of less than £15k was 33.2%. The lowest rates were found where household income was over £20K.

Figure 4.7 Non-decency by annual household income band
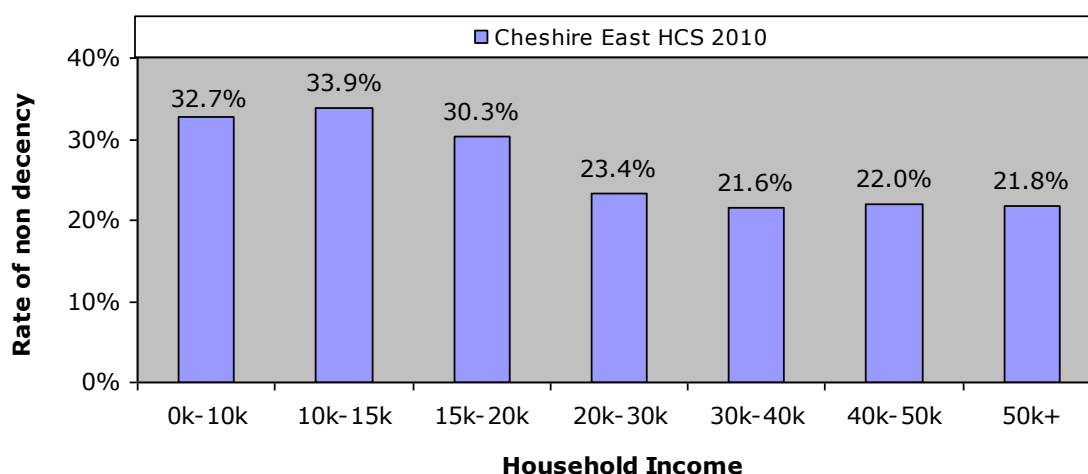
Source: 2010 House Condition Survey

4.10   Private sector vulnerable occupier base-line

4.10.1   Up until the 1 April 2008, the government target for achieving decency standards in the private sector was that set by PSA7, which set a target of 65% of all dwellings occupied by vulnerable residents being made decent by 2006/07, with the baseline figure being measured against the results of the EHCS 2006-07. In practice, the most challenging target was the 70% to be met by 2010/11.

4.10.2   Vulnerable households are defined as those in receipt of the benefits listed below, certain of which are means tested:

- Income support
- Housing benefit
- Council tax benefit
- Income based job seekers allowance
- Attendance allowance
- Disabled living allowance

- Industrial injuries disablement benefit

- War disablement pension

- Pension credit

- Working tax credit (with a disability element) [total income < £16,190]

- Child tax credit [total income < £16,190]

4.10.3   In Cheshire East, there were 31,130 private sector dwellings (owner occupied and privately rented) that were occupied by residents in receipt of one of the benefits listed above. Of these an estimated 10,950 were classified non-decent, which represents 35.2% of dwellings occupied by a vulnerable resident. Conversely this means that 64.8% were decent. The EHS 2008 found that 39.4% of vulnerable households were living in non-decent homes.

4.10.4   On that basis Cheshire East has failed to meet the national target for 2010/11 of 70% of vulnerable households to be living in decent homes.

4.10.5   The proportion of non-decent dwellings by sub-area has already been considered earlier. Table 4.5 gives the numbers of non-decent dwellings within each sub-area with the rate of non-decency, and also lists the level of shortfall for each sub-area in terms of meeting the 70% target for vulnerable occupiers in the private sector.

4.10.6   The shortfall column considers the number of dwellings that need to be made decent in each of the sub-areas in order to meet the 2010/11 former PSA7 target of 70% of vulnerable households living in decent homes. This shows Macclesfield sub-area had both the highest proportionate (39.6%) and numerical (750 dwellings) shortfall against the 70% target, with both the Market Towns and Rural sub-areas having the next highest proportionate rate jointly (33.9%), whilst the Market Towns sub-area had a greater numerical shortfall (500 dwellings).

Table 4.5 Non-decent dwellings with vulnerable households by sub-area and tenure

Area	Tenure	Vulnerable households in non decent dwellings	Percent vulnerable households in decent dwellings	Percent vulnerable households in non decent dwellings	Shortfall for vulnerable occupiers
Crewe	Owner Occupied	1,710	68.0%	32.0%	110
	Privately Rented	530	62.0%	38.0%	110
Macclesfield	Owner Occupied	1,130	72.0%	28.0%	-80
	Privately Rented	1,970	48.2%	51.8%	830
Market Towns	Owner Occupied	3,600	65.3%	34.7%	480
	Privately Rented	760	69.3%	30.7%	20
Rural	Owner Occupied	1,130	61.6%	38.4%	250
	Privately Rented	120	83.4%	16.6%	-110
Cheshire East	Owner Occupied	7,570	66.7%	33.3%	760
	Privately Rented	3,380	59.9%	40.1%	850
Total		**10,950**	**64.8%**	**35.2%**	**1,610**

Source: 2010 House Condition Survey

4.10.7   The rates by tenure show that owner occupied dwellings had a higher decency rate (66.7%) and a dwelling shortfall of 760, whilst the much smaller privately rented sector had a lower decency rate (59.9%) and a higher shortfall (850 dwellings).

5 Meeting the Decent Homes Standard – The Statutory Minimum Standard for Housing (Category 1 Hazards)

5.1 Requirement to remedy poor housing

5.1.1 Formerly, under Part XI of the Housing Act 1985, local authorities had a statutory duty to take: 'The most satisfactory course of action', with regard to unfit dwellings and the Act was supported by relevant statutory guidance. A range of enforcement measures were available including service of statutory notices to make dwellings fit. Closure or demolition was only appropriate in the most extreme cases.

5.1.2 With owner occupied dwellings in particular, many local authorities looked to offer financial assistance, especially where owners were on low incomes. In the private rented sector enforcement action was much more likely in respect of unfit homes.

5.1.3 From April 2006 Part XI of the Housing Act 1985 was replaced by Part 1 of the Housing Act 2004, which repealed the former housing fitness standard and through statutory instruments and statutory guidance replaced it with the Housing Health and Safety Rating System.

5.1.4 As described in Appendix D, the Act differentiates between Category 1 and Category 2 Hazards. Local authorities have a duty to take 'the most appropriate course of action' in respect of any hazard scored under the HHSRS as Category 1. Authorities have discretionary power to take action with Category 2 Hazards (which do not score past the threshold for Category 1). Further information on the HHSRS is given in Appendix D and below.

5.2 Definition of Hazards under the HHSRS and Category level

5.2.1 The Housing Health and Safety Rating System (HHSRS) replaced the former fitness standard and is a prescribed method of assessing individual hazards, rather than a conventional standard to give a judgment of fit or unfit. The HHSRS is evidence based – national statistics on the health impacts of hazards encountered in the home are used as a basis for assessing individual hazards.

5.2.2 The HHSRS system deals with a much broader range of issues than the previous fitness standard. It covers a total of 29 hazards in four main groups:
- *Physiological Requirements* (e.g. damp & mould growth, excess cold, asbestos, carbon monoxide, radon, etc)

- *Psychological Requirements* (crowding and space, entry by intruders, lighting, noise)

- *Protection Against Infection* (domestic hygiene, food safety, personal hygiene, water supply)

- *Protection Against Accidents* (e.g. falls on the level, on stairs & steps & between levels, electrics, fire, collision…).

5.2.3   The HHSRS scoring system combines two elements: firstly, the probability that deficiency (i.e. a fault in a dwelling whether due to disrepair or a design fault) will lead to a harmful occurrence (e.g. an accident or illness) and the spread of likely outcomes (i.e. the nature of the injury or illness). If an accident is very likely to occur and the outcome is likely to be extreme or severe (e.g. death or a major or fatal injury) then the score will be very high.

5.2.4   All dwellings contain certain aspects that can be perceived as potentially hazardous, such as staircases and steps, heating appliances, electrical installation, glass, combustible materials, etc. It is when disrepair or inherent defective design makes an element of a dwelling significantly more likely to cause a harmful occurrence that it is scored under the HHSRS.

5.2.5   Surveyors were required to score all hazards under the HHSRS and the survey form allowed for this. Excess Cold was modelled from survey data, at the individual dwelling level, in order to provide a more accurate picture for this hazard type. The modelling of excess cold hazards by use of SAP (energy efficiency) information was outlined in CLG guidance in June 2006 and has been used by the BRE as part of the housing stock projections for excess cold hazards.

5.2.6   The modelling of excess cold hazards is based on the use of the individual SAP rating for each dwelling, which is scaled to give a hazard score. Where a dwelling has a SAP rating of less than 35, this produces a category 1 hazard score.

5.2.7   The exact scores generated under the HHSRS can be banded into one of ten bands from A to J, with bands A to C being further defined as Category 1 Hazards and those in bands D to J as Category 2. The threshold score for a Category 1 Hazard is 1,000. As stated earlier, a Local Authority has a duty to deal with any Category 1 Hazards found and a discretionary power to deal with Category 2 Hazards. This survey focuses particularly on Category 1 Hazards, but describes all hazards, including Category 2, for comparative purposes.

## 5.3   **Overall dwelling conditions**

5.3.1   The overall proportion of dwellings with a Category 1 Hazard in Cheshire East was 20.4% compared with 23.6% (owner occupied and privately rented dwellings) found in the EHS 2008. This represented

29,890 dwellings across Cheshire East with 27,500 being houses and 2,390 being flats.

5.4 Reasons for Category 1 Hazards

5.4.1 Figure 5.1 provides a breakdown of the proportions with a Category 1 Hazard by type and ranked highest to lowest. Note: the chart excludes those hazards where there was a nil return

Figure 5.1 Category 1 Hazards by reason, as % of Category 1 Hazards
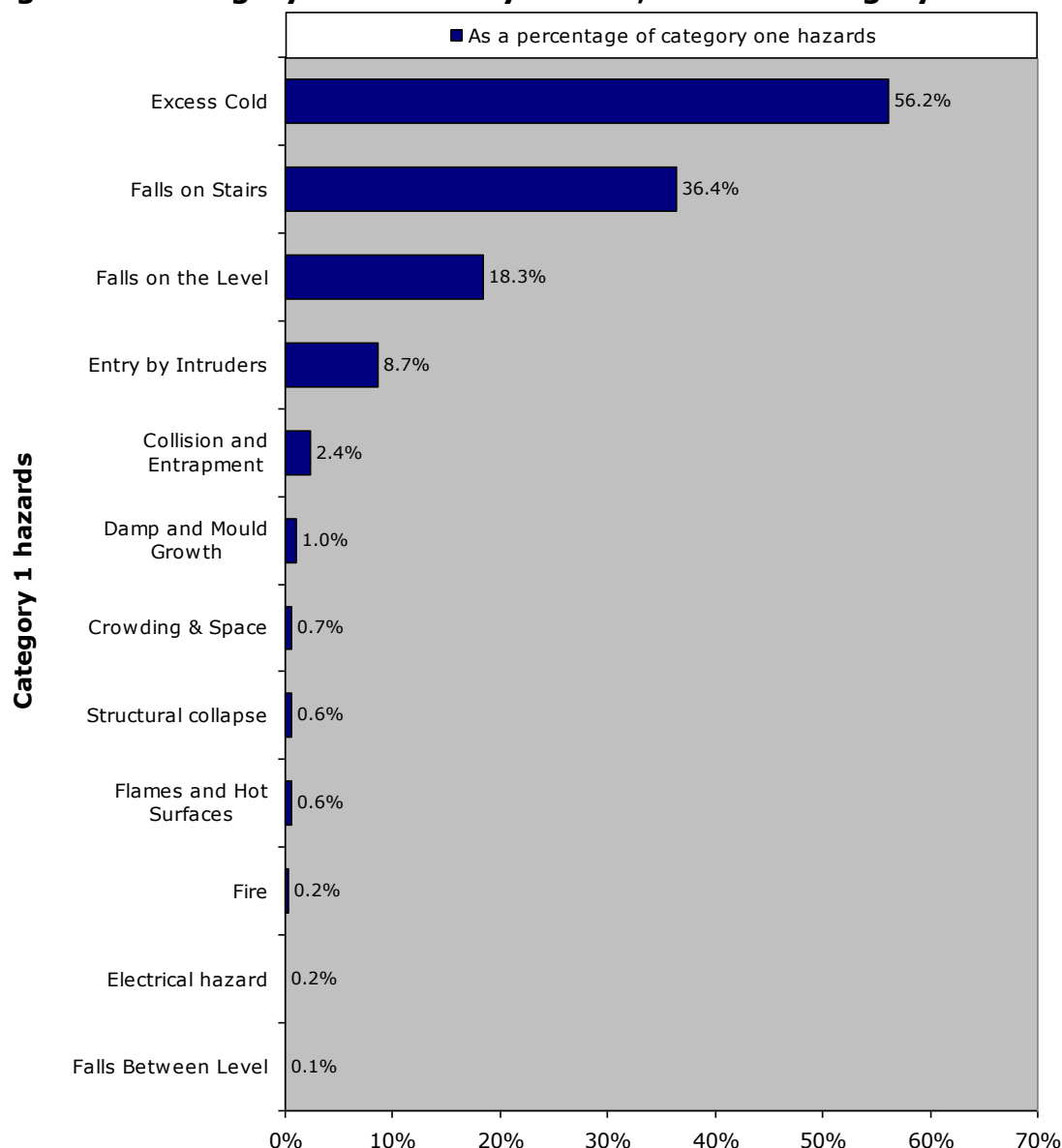
Source: 2010 House Condition Survey

5.4.2 The pattern by hazard shows excess cold as the most common hazard followed by on falling on stairs and then falling on level surfaces. This deviates from the national rates where falls on stairs had the highest rate then followed by excess cold and falls on level surfaces.

5.4.3   Due to statistical validity issues, it was only possible to analyse excess cold and falls on the stairs any further than the overall proportions.

5.4.4   For excess cold the highest rate of failure was associated with owner occupied dwellings (82.4%), those aged 65 and over (40.1%) and pre-1919 dwellings (44.4%). There was no particular association with heads of household in receipt of a benefit.

5.4.5   Falls on stairs were associated with owner occupied dwellings (78.0%), with those aged between 55 and 64 (21.0%) and those aged 65 and over (37.2%) accounting for well over half of the proportionate failure rate. By construction date, 51.1% were found in dwellings constructed pre 1945 with 26.5% in pre-1919 dwellings.
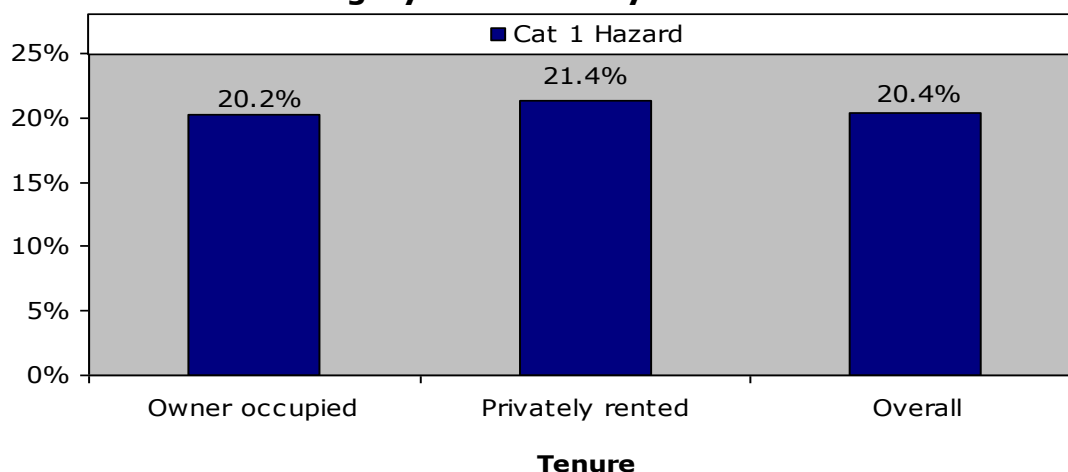
5.5   Severity of Category 1 Hazards

5.5.1   One indication of the severity of Category 1 Hazard failure is the number of items that a dwelling fails the standard on. Overall, only 20.1% (6,020 dwellings) had two or more Category 1 Hazards.

5.6   Category 1 Hazards by general characteristics

5.6.1   This section examines the relationship between those general stock characteristics set out in chapter two, with the level of Category 1 Hazards. The following charts and commentary examine the rates of Category 1 Hazards by tenure, dwelling type and construction date.

5.6.2   As is usually the case the highest rate of Category 1 Hazard failure was found in the privately rented stock at 21.4% compared with 20.2% in the owner occupied stock. Looking at the top three Category 1 Hazards; excess cold, falls on stairs and falls on the level, if each are taken as a proportion of the total number within each tenure group, there is very little difference between the tenure groups (22.8% for owner occupied dwellings and 21.9% in privately rented dwellings).

Figure 5.2 Rates of Category 1 Hazards by tenure

Source: 2010 House Condition Survey

5.6.3   Figure 5.3 shows the rates of Category 1 Hazards by build type. The highest rate was found in converted flats at 48.0%; however, as indicated at paragraph 4.6.3, they constitute only a small proportion of the stock (1.5% or 2.200 dwellings) and therefore the data is less statistically robust. Semi-detached houses had the next highest rate (24.4%) followed by bungalows (21.1%). The lowest rate was found in low rise purpose built flats (less than 6 storeys) at 11.4%.

Figure 5.3 Rates of Category 1 Hazards by building type
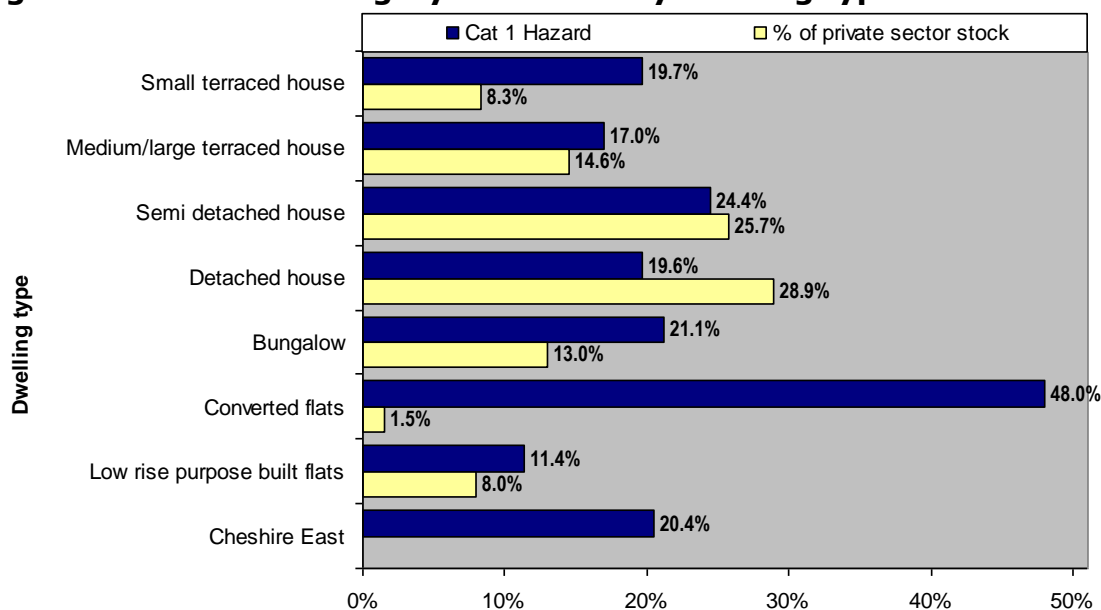
Source: 2010 House Condition Survey

5.6.4   Category 1 Hazards are generally much less closely linked with the deterioration of building elements than the former fitness standard, as the HHSRS system is concerned primarily with the effect of deficiencies, which may be due to design faults, as well as disrepair. In Cheshire East the rates followed the usual pattern of increasing rates as dwellings became older, with the highest rate being found in pre-1919 dwellings (39.6%) and the lowest in post-1990 dwellings (7.1%). Taking the top three Category 1 Hazards; excess cold, falls on stairs and falls on the level, if each are considered as a proportion of the total number within each age band, pre-1919 dwellings have the highest proportionate rates in both excess cold (27.1%) and falls on the level (7.1%), with 1919 to 1944 dwellings having the highest rate for falls on stairs (14.8%).

Figure 5.4 Rates of Category 1 Hazards by construction date
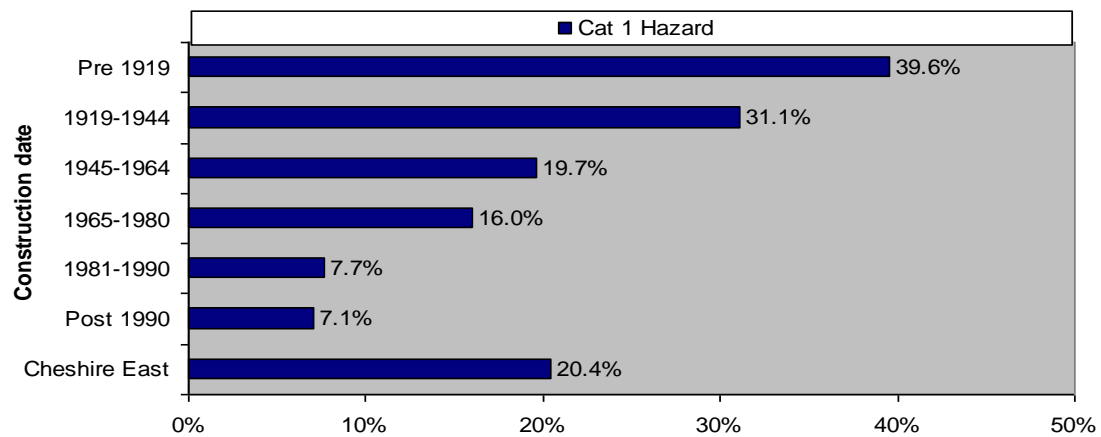
Source: 2010 House Condition Survey

5.6.5   The final division to be considered are Category 1 Hazard failures by sub-area. The highest rate was found in the Market Towns sub-area at 22.5%, followed by the Macclesfield sub-area (20.1%). The lowest rate was found in the Rural sub-area (17.8%). For the top three Category 1 Hazards; excess cold, falls on stairs and falls on the level, if each are taken as a proportion of the total number within each sub-area, the Market Town sub-area has the highest proportionate rates in both excess cold (13.7%) and falls on the level (4.2%), with the Rural sub-area the highest for falls on stairs (9.2%).

Figure 5.5 Rates of Category 1 Hazards by sub-area
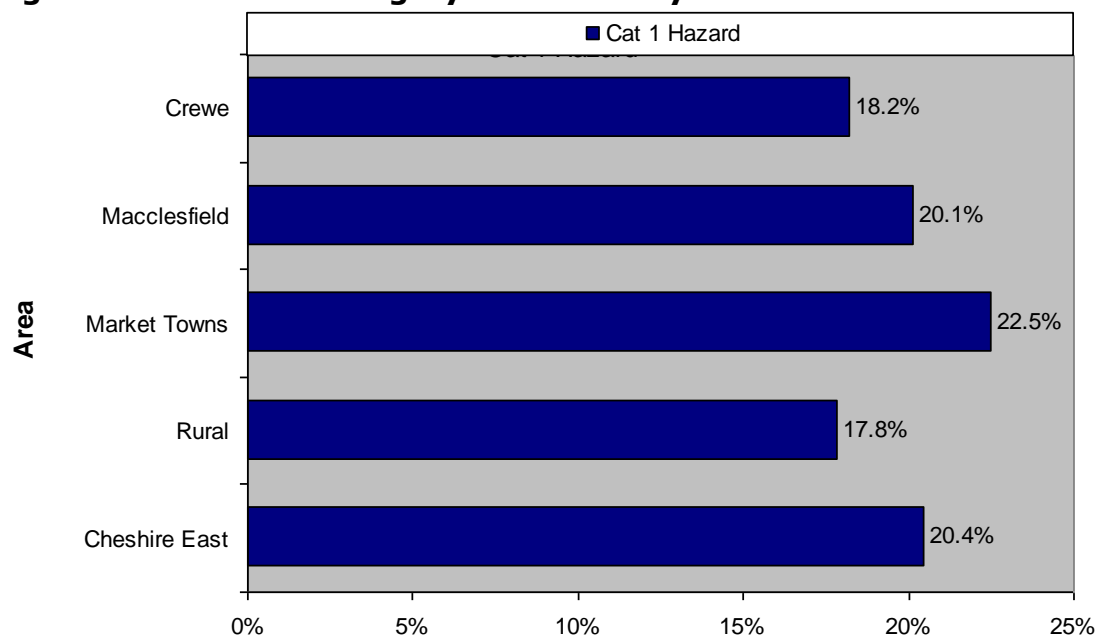
Source: 2010 House Condition Survey

5.7 Category 1 Hazards by social characteristics

5.7.1 This section looks at the impact that Category 1 Hazards have on a number of social variables, including age, benefit receipt and disability.

5.7.2 Table 5.1 shows that most of the variables had rates that were higher then the Council average of 20.4%, with the exception of those on an income of less than £10k which was just slightly lower (19.9%).

Table 5.1 Category 1 Hazards by social characteristics

Group	Category 1 hazard
Income under 10k	19.9%
On Benefit	24.0%
Under 25	23.2%
65 and Over	20.9%
65 and over on benefit	28.9%
Resident with disability	29.3%
Cheshire East	**20.4%**

Source: 2010 House Condition Survey

5.7.3 Considering the Category 1 excess cold hazard by age of head of household specifically, the highest proportionate rate was found for those aged 65 and over (40.1%).

5.8 Cost of works to dwellings with a Category 1 Hazards

5.8.1 This section seeks to present the cost not only of basic failure items, but also the comprehensive cost of repairs in Category 1 Hazard dwellings. Where a dwelling had a Category 1 Hazard, certain works relating to this were indicated as being urgent and these costs were isolated to form the basic remedial costs. The remaining urgent costs represent those works that should be carried out within the next year. Comprehensive repair is the level of repair and improvement needed such that no new work is required to the dwelling in the next 10 years. This level of work most closely resembles the former mandatory renovation grant regime. Table 5.2 shows the basic remedial costs, the cost for urgent works and works required within 5 years and 10 years.

5.8.2 Once all costs had been calculated, they were assigned to a time frame. Where a dwelling had a Category 1 Hazard, certain works relating to this were indicated as being urgent and these costs were isolated to form the basic remedy costs. The remaining urgent costs represent those works that should be carried out within the next year. All other costs were generated based on the age of element and renewal period of that element. These costs were banded into 5 year, 10 year and 30 year costs.

5.8.3   The cost to just remedy the top three Category 1 Hazards, excess cold, falls on stairs and falls on the level, was estimated to be just over £51.6 million, an average of £1,560 in 33,160 dwellings. Within each of the Category 1 Hazards the cost to remedy excess cold hazards was estimated to be £37.4 million, an average of £2,230, for falls on stairs it was 8.5 million, an average of £780 and for falls on the level it was £5.7 million, an average of £1,050.

5.8.4   The total cost just to rectify Category 1 Hazards was an estimated £105.1 million at an average cost per dwelling overall of £3,500. The average cost per dwelling was highest in privately rented dwellings at £5,500 compared with £3,000 in owner occupied dwellings. The total level of comprehensive repair (i.e. carrying out all works reasonably foreseen as necessary over the next 10 years) in dwellings with a Category 1 Hazard in Cheshire East was an estimated £512.0 million, an average of £17,100 per dwelling, with the private rented sector having the highest average cost at £17,800 compared with £17,000 in the owner occupied stock.

Table 5.2 Repair costs in Category 1 Hazard dwellings by tenure

Tenure	Remedial	Urgent[2]	5 year[2]	Comprehensive[2]
Owner occupied (£m)[1]	**72.2**	**122.1**	**184.7**	**405.2**
Average (£s)	*3,000*	*5,100*	*7,700*	*17,000*
Privately Rented (£m)[1]	**32.9**	**47.2**	**57.9**	**106.8**
Average (£s)	*5,500*	*7,900*	*9,700*	*17,800*
All tenures (£m)[1]	**105.1**	**169.3**	**242.6**	**512.0**
Average (£s)	*3,500*	*5,700*	*8,100*	*17,100*

1. Figures given in millions of pounds sterling

2. Figures are cumulative and therefore include the previous column

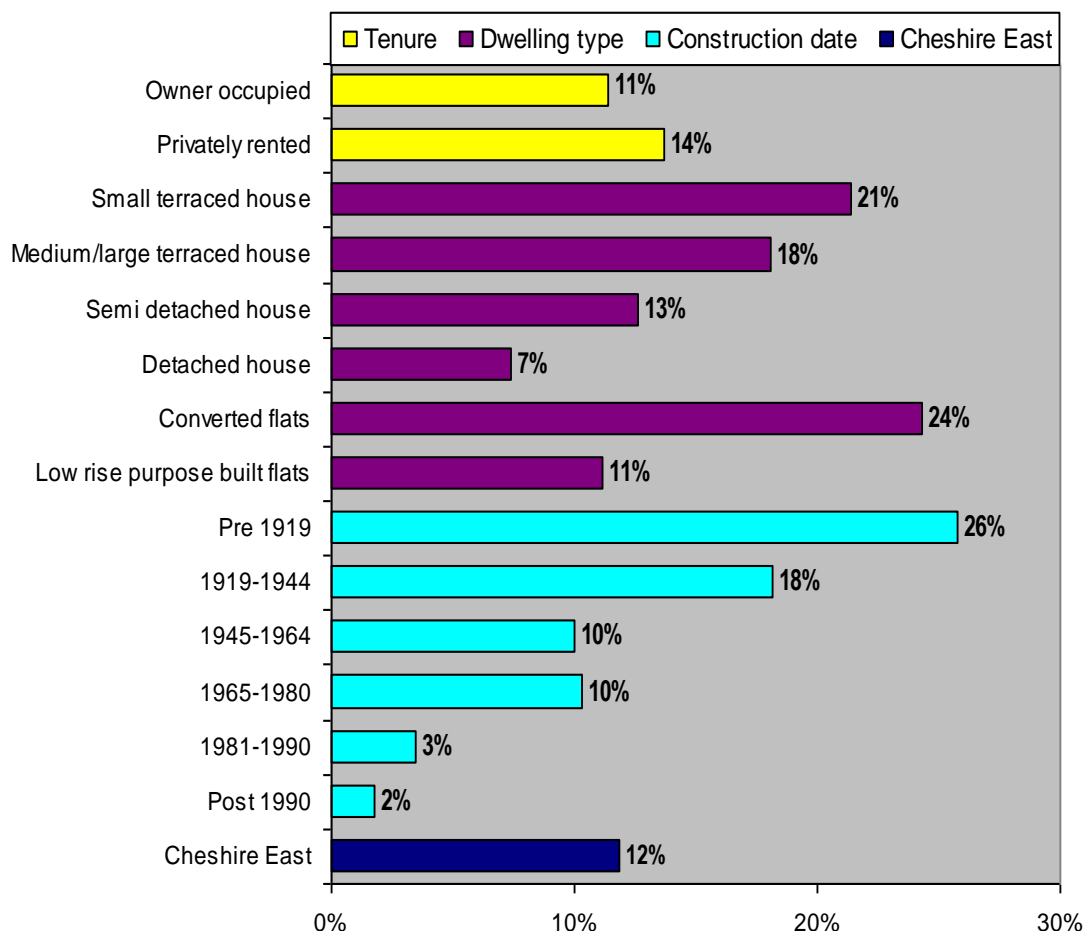*Source: 2010 House Condition Survey*

5.9   Category 2 Hazards in bands D and E

5.9.1   There were an estimated 17,300 (11.8%) of dwellings in Cheshire East that had at least one Category 2 Hazard (Bands D and E). Of those 11,400 (65.8%) had no corresponding Category 1 hazard.

5.9.2   Figure 5.6 illustrates the distribution of Category 2 Hazards (Bands D and E) by tenure, building type and age.
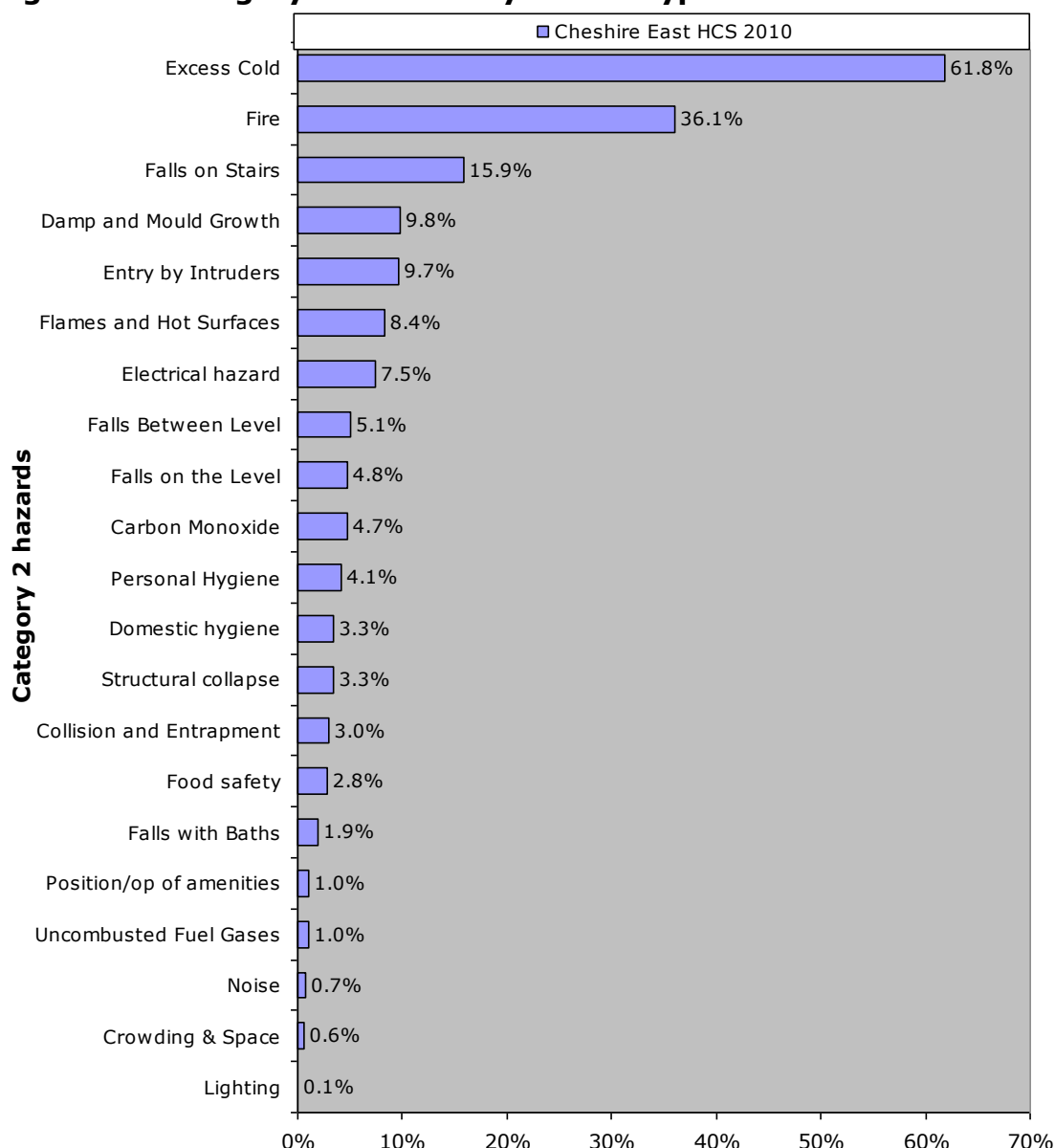
Figure 5.6 Category 2 Hazards by general characteristics

Source: 2010 House Condition Survey

5.9.3   The highest rate of Category 2 Hazards (Bands D and E) was found in the privately rented sector (14%) with the owner occupied sector at 11%. By tenure group the highest proportionate rates of failure for the top three Category 2 Hazards; excess cold (8.3%), fire (4.5%) and falls on stairs (2.1%), were found in the privately rented sector.

5.9.4   By build type, converted flats had the highest rate at 24% (but see 4.6.3 regarding the robustness of this data) followed by small terraced houses (21%). The lowest rate was found in detached houses at 7%.

5.9.5   A pattern of decreasing incidence with age was followed, with the highest rate being in pre-1919 dwellings (26%) and the lowest in post-1990 dwellings (2%). The highest proportionate rates of failure for the top three Category 2 Hazards; excess cold, fire and falls on stairs, were found in pre-1919 dwellings.

5.9.6   Figure 5.7 illustrates the distribution of Category 2 Hazards (Bands D and E) by hazard type and ranked highest to lowest.

Figure 5.7 Category 2 Hazards by hazard type

| Category 2 hazards	Cheshire East HCS 2010
Excess Cold	61.8%
Fire	36.1%
Falls on Stairs	15.9%
Damp and Mould Growth	9.8%
Entry by Intruders	9.7%
Flames and Hot Surfaces	8.4%
Electrical hazard	7.5%
Falls Between Level	5.1%
Falls on the Level	4.8%
Carbon Monoxide	4.7%
Personal Hygiene	4.1%
Domestic hygiene	3.3%
Structural collapse	3.3%
Collision and Entrapment	3.0%
Food safety	2.8%
Falls with Baths	1.9%
Position/op of amenities	1.0%
Uncombusted Fuel Gases	1.0%
Noise	0.7%
Crowding & Space	0.6%
Lighting	0.1%

Source: 2010 House Condition Survey

5.9.7   As with Category 1 Hazards, the most common hazard was excess cold (SAP rating of between 35 and 45) but then followed by fire and falling on stairs.   Damp and mould growth and entry by intruders also featured prominently. Again hazards with a nil return were not shown.

5.9.8   Considering the Category 2 excess cold hazard by age of head of household specifically, The highest proportionate rate was found for those aged 65 and over.

5.9.9   Figure 5.8 looks at the extent of Category 2 Hazards (Bands D and E) by sub-area. The highest rate was found in the Crewe sub-area (15%) followed by the Macclesfield sub-area (13%), both of which had rates above the Council rate (12%). Considering the highest proportionate

rates of failure within the top three Category 2 Hazards; excess cold, fire and falls on stairs, the Macclesfield sub-area had the highest rate for excess cold (10.1%), the Rural sub-area the highest rate for fire (5.4%) and the Crewe sub-area the highest rate for falls on stairs (3.2%).

Figure 5.8 Category 2 Hazards by sub-area
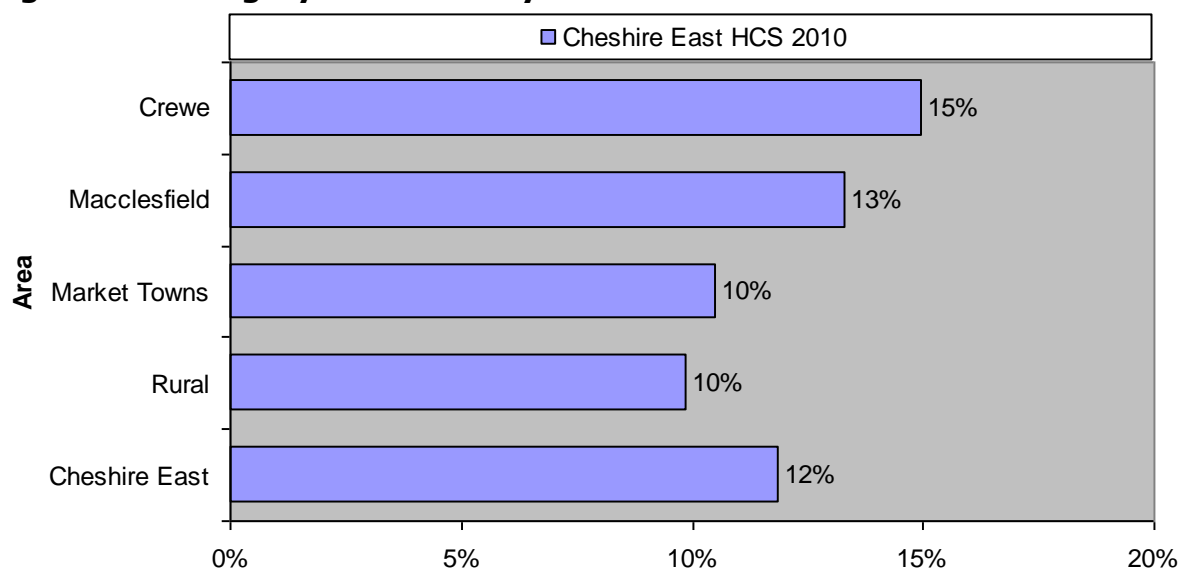
Source: 2010 House Condition Survey

6 Meeting the Decent Homes Standard – Reasonable State of Repair

6.1 Introduction

6.1.1 Criterion B of the Decent Homes Standard looks at the issue of the state of general repair of a dwelling which will fail if it meets one or more of the following:

- One or more key building components are old (which are specifically defined in the criteria) and, because of their condition need replacing or major repair or:

- Two or more other building components are old and, because of their condition need replacing or major repair.

6.1.2 A building that has component failure before the components expected lifespan does not fail the decent homes standard. A dwelling will be considered to be in disrepair if it fails on one or more major element or two or more minor elements. Major and minor element failures are listed below:

Table 6.1 Major building elements (disrepair failure)

Element	Age to be considered old
Major Walls (Repair/Replace >10%)	80
Roofs (Replace 50% or more)	50 for houses 30 for flats
Chimney (1 or more needing partial rebuild)	50
Windows (Replace 2 or more windows)	40 for houses 30 for flats
Doors (Replace 1 or more doors)	40 for houses 30 for flats
Gas Boiler (Major Repair)	15
Gas Fire (Major Repair)	10
Electrics (Major Repair)	30

Table 6.2 Minor building elements (disrepair failure if 2 or more fail)

Element	Age to be considered old
Kitchen (Major repair or replace 3+ items)	30
Bathroom (Replace 2+ items)	40
Central heating distribution (Major Repair)	40
Other heating (Major Repair)	30

6.2 **Disrepair and general characteristics**

6.2.1 In Cheshire East 11,460 dwellings failed this criterion. At 7.8%, the rate of failure was above the national rate of 6.5%.

6.2.2 The overall repair cost within Cheshire East was £62.7 million, an average of £5,470 per dwelling. (This is the cost of simply rectifying failures of the repair criterion of the Decent Homes Standard – it is not the cost of comprehensive repairs required over a 10 year period), with the breakdown of disrepair elements and cost to remedy shown in Table 6.3.
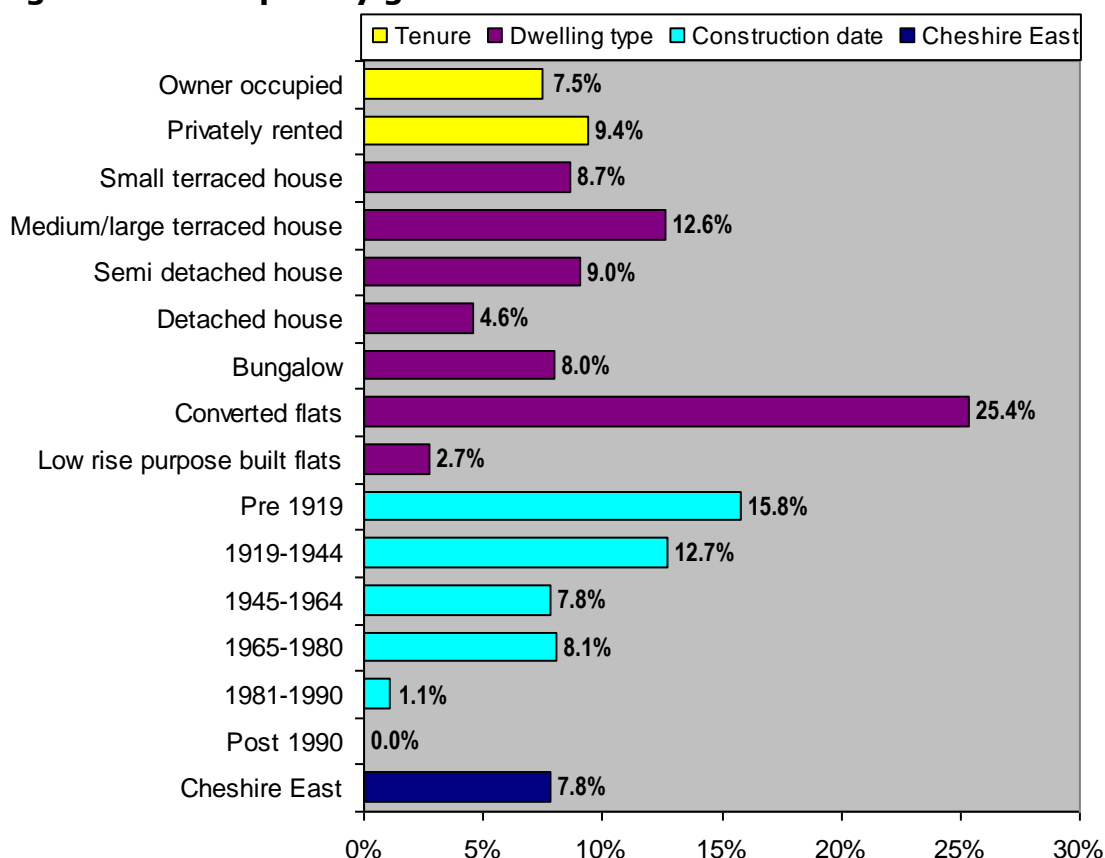
Table 6.3 Disrepair elements

Disrepair Work	Cost	Dwellings	Average cost per dwelling
Wall structure	£2.48	440	£5,700
Wall surface	£0.04	200	£200
Roof structure	£2.69	1,130	£2,400
Roof finish	£10.14	2,090	£4,800
Chimneys	£0.14	70	£1,900
Windows	£7.43	2,770	£2,700
Doors	£0.91	1,220	£700
Central heating	£7.46	4,030	£1,900
Other heating	£5.09	1,310	£3,900
Electrics	£22.05	3,870	£5,700
Minor works costs	£4.33	4,760	£900
Total	**£62.7**	**11,500**	**£5,470**

Source: 2009 House Condition Survey
*For notes on statistical variance & small sample sizes see appendix C

6.2.3 The following section gives a breakdown of repair failure by a number of key variables.

Figure 6.1 Disrepair by general characteristics

Legend: ☐ Tenure ■ Dwelling type ■ Construction date ■ Cheshire East

| Category	Value
Owner occupied	7.5%
Privately rented	9.4%
Small terraced house	8.7%
Medium/large terraced house	12.6%
Semi detached house	9.0%
Detached house	4.6%
Bungalow	8.0%
Converted flats	25.4%
Low rise purpose built flats	2.7%
Pre 1919	15.8%
1919-1944	12.7%
1945-1964	7.8%
1965-1980	8.1%
1981-1990	1.1%
Post 1990	0.0%
Cheshire East	7.8%

Source: 2010 House Condition Survey

6.2.4   The rate in the private rented sector at 9.4% was above that for the owner occupied sector at 7.5%. Disrepair failure rates for the same tenure groups found in the EHS 2008, were 11.2% for privately rented dwellings and 5.4% for owner occupied dwellings.

6.2.5   By dwelling type, the highest rate was found in converted flats (25.4%) but as they only represent 1.5% of the stock there are statistical validity issues (see 4.6.3). The next highest rate was found in medium/large terraced houses (12.6%). The lowest rate was found in low rise purpose built flats (less than 6 storeys) at 2.7%.

6.2.6   The proportionate rate of repair failure by construction date, in general terms, follows the usual pattern of increasing rates as dwellings became older, with the highest rate being found in pre-1919 dwellings (15.8%). No disrepair was found in post-1990 dwellings.

6.3   Disrepair by sub-area

6.3.1   Figure 6.2 provides a breakdown of disrepair by sub-area.

Figure 6.2 Disrepair by sub-area
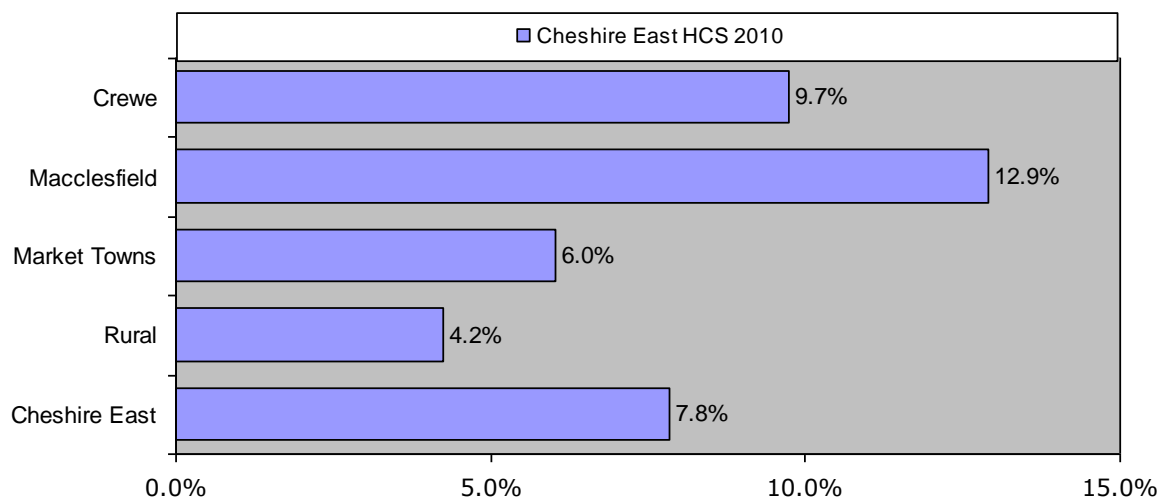
Source: 2010 House Condition Survey

6.3.2   The highest repair failure rate was recorded in the Macclesfield sub-area (12.9%), followed by the Crewe sub-area (9.7%), both of which were above the Council rate (7.8%). The lowest rate was found in the Rural sub-area (4.2%), which had the most modern stock profile (74.9% built post-1944).

6.4   Disrepair by social characteristics

6.4.1   The impact that disrepair has on a range of social variables, including age, benefit receipt and disability, is shown in Table 6.4.

6.4.2   Four of the variables had rates that were above the average Council rate (9.1%), with only those aged under 25 having a lower rate (5.5%).

Table 6.4 Disrepair by social characteristics

Group	In disrepair
Income under 10k	12.3%
On Benefit	14.3%
Under 25	5.5%
65 and Over	10.5%
65 and over on benefit	18.7%
Resident with disability	14.7%
Cheshire East	**7.8%**

Source: 2010 House Condition Survey

7 Meeting the Decent Homes Standard – Modern Facilities

7.1 Introduction

7.1.1 So far this report has considered Criterion A of the Decent Homes Standard: Category 1 Hazards and Criterion B: dwellings failing due to disrepair issues. The third criterion of the Decent Homes Standard is that a dwelling should have adequate modern facilities, and this chapter deals with that issue.

7.1.2 At national level, only a small proportion of the private sector stock failed on this criterion (2.9%). In Cheshire East, the rate was significantly lower than the national average with 1,860 (1.3%) dwellings failing for this reason. The low level of failure nationally, and in Cheshire East, reflects the fact that a dwelling only fails if it lacks *three* or more of the following:

- A kitchen which is 20 years old or less
- A kitchen with adequate space and layout
- A bathroom that is 30 years old or less
- An appropriately located bathroom and WC
- Adequate noise insulation
- Adequate size and layout of common parts of flats

7.1.3 For example, if a dwelling had a kitchen and bathroom older than the specified date, it would not fail unless the kitchen had a poor layout or the bathroom was not properly located.

7.1.4 As a result of the relatively small number of dwellings failing the Decent Homes Standard on this criterion, it was not possible to further subdivide those failures to examine their tenure distribution or other characteristics. However, this chapter will examine the general provision of facilities and in particular consider the potential for a greater level of failure in the future.

7.2 Key amenities bathrooms and kitchens

7.2.1 Under the Decent Homes Standard the age of bathrooms and kitchens is of importance to the modern facilities criterion. Figure 7.1 examines the age of these two facilities in dwellings within Cheshire East.

Figure 7.1 Bathroom and Kitchen age
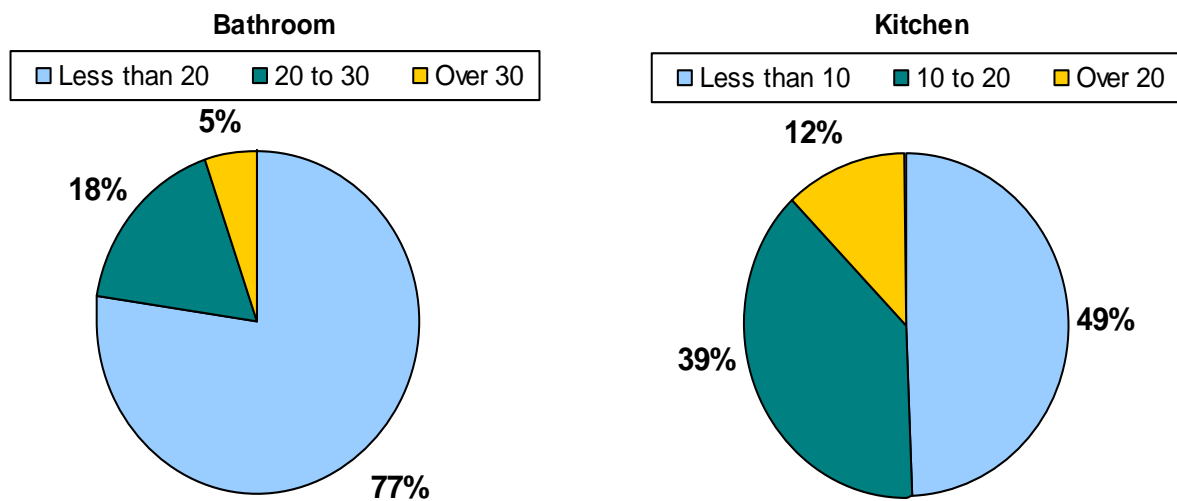
Source: 2010 House Condition Survey

7.2.2   It is possible to see from the two charts that potential for failure under the facilities criterion of the Decent Homes Standard is fairly low with bathrooms as the great majority (77%) were less than 20 years old but slightly greater with kitchens as 51% were either older than the age specified in the criterion or would become so in the next 10 years. For these dwellings to fail, however, it would be necessary that one of the other elements of this criterion be breached (such as inadequate noise insulation). It is unlikely therefore that failure to replace older kitchens and bathrooms would cause any significant increase in non-decency.

8 Meeting the Decent Homes Standard – Thermal Comfort

8.1 Thermal comfort failures

8.1.1 Failure of the thermal comfort criterion, and consequently the work required to remedy that failure, is based on the combination of heating system type and insulation present within a dwelling. In Cheshire East 16,340 dwellings (11.2%) failed the thermal comfort criterion, which was below the national average of 13.2%.

8.1.2 The following requirements under the thermal comfort criterion of the Decent Homes Standard are:

- For dwellings with gas/oil programmable heating, cavity wall insulation (if there are walls that can be insulated effectively) or at least 50mm loft insulation (if there is a loft space) is an effective package of insulation.

- For dwellings heated by electric storage heaters/ LPG/ programmable solid fuel central heating a higher specification of insulation is required: at least 200mm of loft insulation (if there is a loft) and cavity wall insulation (if there are walls that can be insulated effectively).

All other heating systems fail (i.e. all room heater systems are considered to fail the thermal comfort standard).

8.2 Thermal comfort failures by general characteristics

8.2.1 Figure 8.1 below shows the distribution of thermal comfort failure by tenure, building type and age.
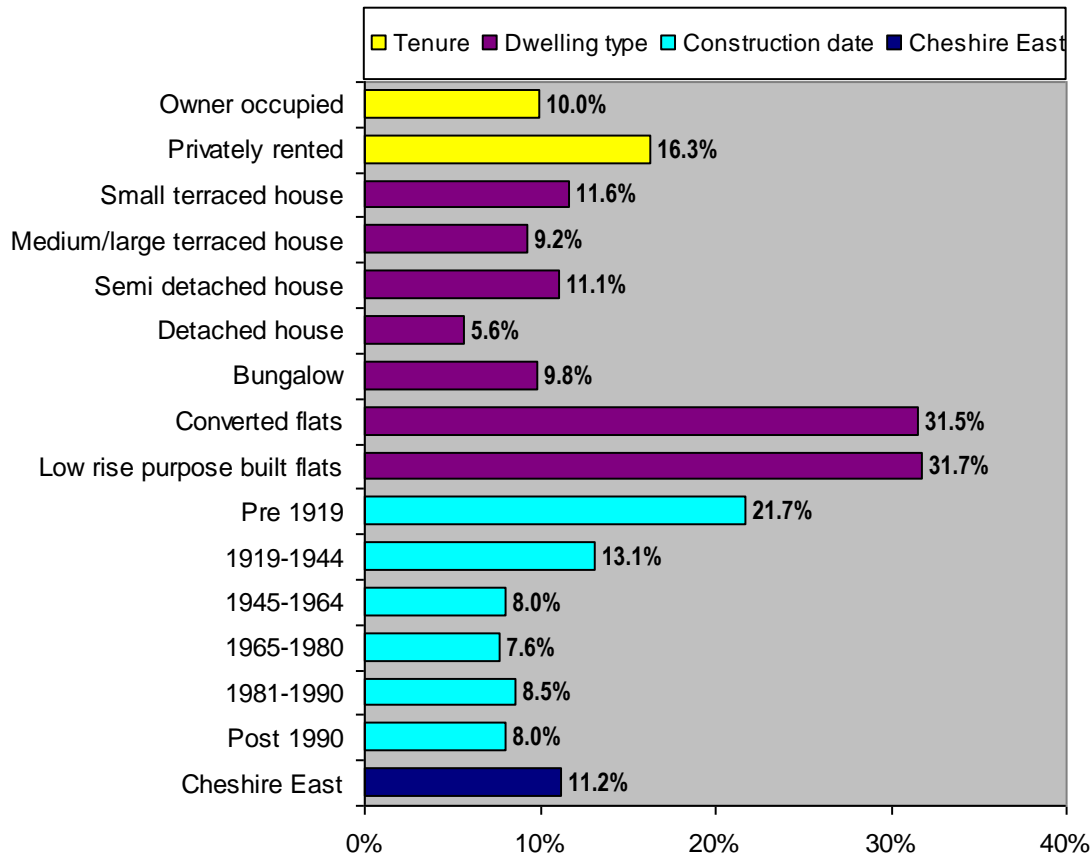
8.2.2 The private rented sector failure rate at 16.3% was above that found in owner occupied dwellings (10.0%). Thermal comfort failure rates for the same tenure groups found in the EHS 2008, were 19.3% for privately rented dwellings and 11.8% for owner occupied dwellings.

8.2.3 Low rise purpose built flats, by a small margin, had the highest thermal comfort failure rate (31.7%) followed by converted flats at 31.5% but are represented at such a low rate (1.5%) compared with the overall stock, there are statistical robustness issues (see 4.6.3). The next highest failure rate was found in small terraced houses (11.6%) followed by semi-detached houses (11.1%). The lowest rate was found in detached houses (5.6%).

8.2.4 Thermal comfort failure rates usually increase with dwelling age, this was generally the case in Cheshire East, with pre-1919 dwellings

(21.7%) having the highest failure rate followed by 1919 to 1944 dwellings (13.1%). The remaining age bands had very similar rates, ranging between 7.6% for 1965 to 1980 dwellings to 8.5% for 1981 to 1990 dwellings.

**Figure 8.1 Thermal comfort failure by general characteristics**

Legend: Tenure | Dwelling type | Construction date | Cheshire East

Category	Value
Owner occupied	10.0%
Privately rented	16.3%
Small terraced house	11.6%
Medium/large terraced house	9.2%
Semi detached house	11.1%
Detached house	5.6%
Bungalow	9.8%
Converted flats	31.5%
Low rise purpose built flats	31.7%
Pre 1919	21.7%
1919-1944	13.1%
1945-1964	8.0%
1965-1980	7.6%
1981-1990	8.5%
Post 1990	8.0%
Cheshire East	11.2%

Source: 2010 House Condition Survey

8.3   Thermal comfort failure by sub-area

8.3.1   Figure 8.2 provides a breakdown by sub-area.

Figure 8.2 Average thermal comfort failure by sub-area
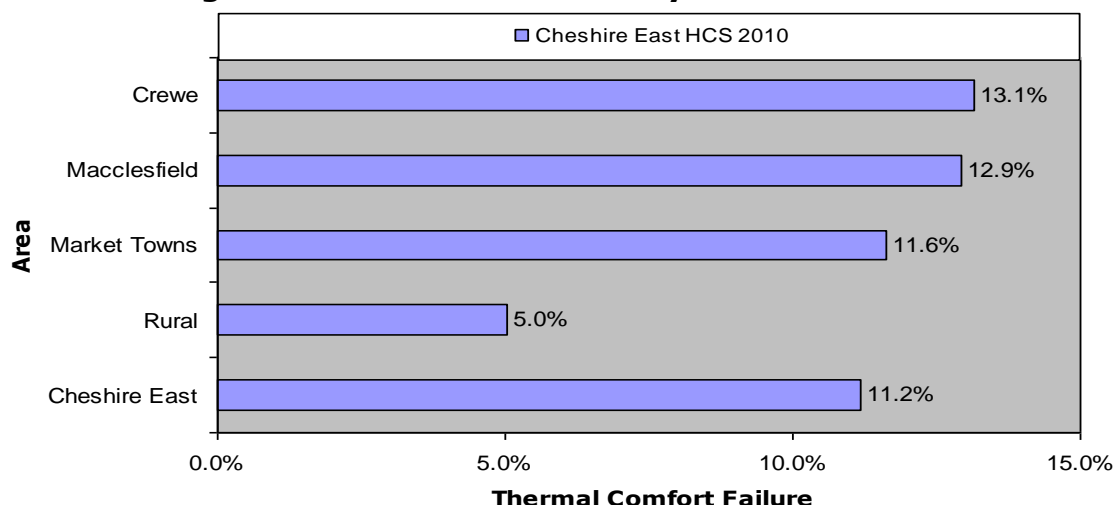
Source: 2010 House Condition Survey

8.3.2   The highest rate was found in the Crewe sub-area at 13.1%, followed by the Macclesfield sub-area (12.9%). The lowest rate was found in the Rural sub-area (5.0%).

8.4   Thermal comfort failure by social characteristics

8.4.1   The impact that thermal comfort failure has on a range of social variables, including age, benefit receipt and disability, is shown in Table 8.1

8.4.2   All of the variables had rates that were either at or above the average Council rate (11.2%).

Table 8.1 Thermal comfort failure by social characteristics

Group	Thermal Comfort Failure
Income under 10k	14.0%
On Benefit	13.5%
Under 25	18.8%
65 and Over	11.2%
65 and over on benefit	16.2%
Resident with disability	18.2%
Cheshire East	**11.2%**

Source: 2010 House Condition Survey

9 Energy Performance

9.1 Energy performance and SAP ratings

9.1.1 The Standard Assessment Procedure or SAP is a government rating for energy efficiency. It is used in this report in conjunction with annual CO_2 emissions figures, calculated on fuel consumption, and the measure of that fuel consumption in kilo Watt hours (kWh), to examine energy efficiency.

9.1.2 The SAP rating in this report was the energy rating for a dwelling and was based on the calculated annual energy cost for space and water heating. The calculation assumes a standard occupancy pattern, derived from the measured floor area so that the size of the dwelling did not strongly affect the result. It is expressed on a 0-100 scale. The higher the number the better the energy rating for that dwelling.

9.1.3 The software used to calculate SAP ratings for this report used SAP2005.

9.2 Distribution of SAP ratings

9.2.1 The average SAP rating in Cheshire East for private sector dwellings was 56, compared to an average SAP rating of 50 nationally (for private sector dwellings only), based on the findings of the EHS 2008, which also used SAP2005.

9.2.2 Table 9.1 shows the energy performance distribution by tenure incorporating the same banding system used by the EHS 2008. The majority for each tenure group were contained within the 39 to 68 bandings, being 70.1% for owner occupied dwellings and 66.9% for the privately rented stock. The overall stock rate was 69.5% within those bands, which was below the national rate (73.8%).

Table 9.1 Energy performance SAP banded

EPC SAP Range Banded	Owner occupied	Privately rented	Whole Stock	EHS 2008
Band A/B (81-100)	0.7%	2.2%	1.0%	0.2%
Band C (69-80)	18.0%	19.1%	18.2%	7.0%
Band D (55-68)	42.6%	36.1%	41.4%	33.3%
Band E (39-54)	27.5%	30.9%	28.1%	40.5%
Band F (21-38)	9.5%	9.9%	9.6%	15.1%
Band G (1-20)	1.7%	1.8%	1.7%	3.9%
Total	100.0%	100.0%	100.0%	100.0%

Source: 2010 House Condition Survey & EHS 2008

9.3 SAP ratings by general characteristics

9.3.1 The physical characteristics of dwellings have a major effect on the efficiency of a dwelling. The number of exposed external walls and the construction materials and methods all affect the overall heat loss and therefore the energy efficiency. Different types and ages of dwellings will have different energy characteristics.

9.3.2 Figure 9.1 gives a breakdown of average SAP ratings by tenure, building type and construction date.

9.3.3 The average SAP rating for both the owner occupied and privately rented stock was the same at 56 compared with 50 for each tenure type, found in the EHS 2008.

9.3.4 When examining SAP ratings by built form, converted flats had the lowest SAP rating at 43 (again the comments regarding small sample size at paragraph 4.6.3 should be borne in mind), followed by bungalows and semi-detached houses both at 54. The highest mean SAP rating was found in low rise purpose built flats (61).

9.3.5 Increases in SAP ratings tend to be associated with a reduction in dwelling age; the most modern stock having the highest SAP rating. This pattern was followed in Cheshire East; the lowest mean SAP rating was for pre-1919 dwellings at 45 and the highest in post-1990 dwellings at 66.
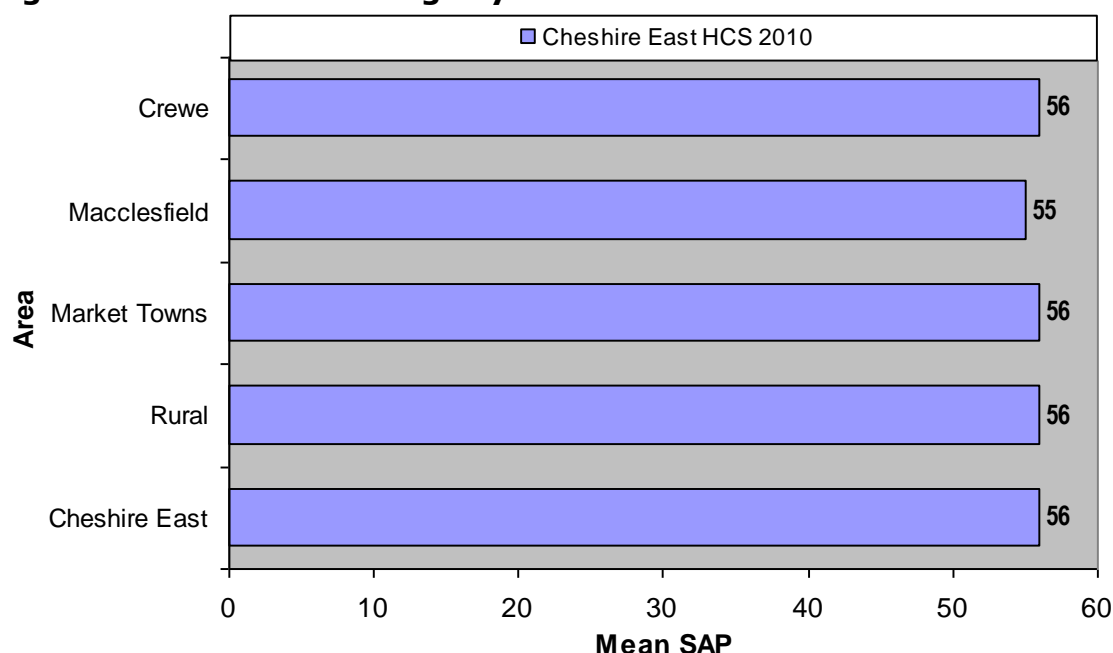
Figure 9.1 SAP ratings by general characteristics
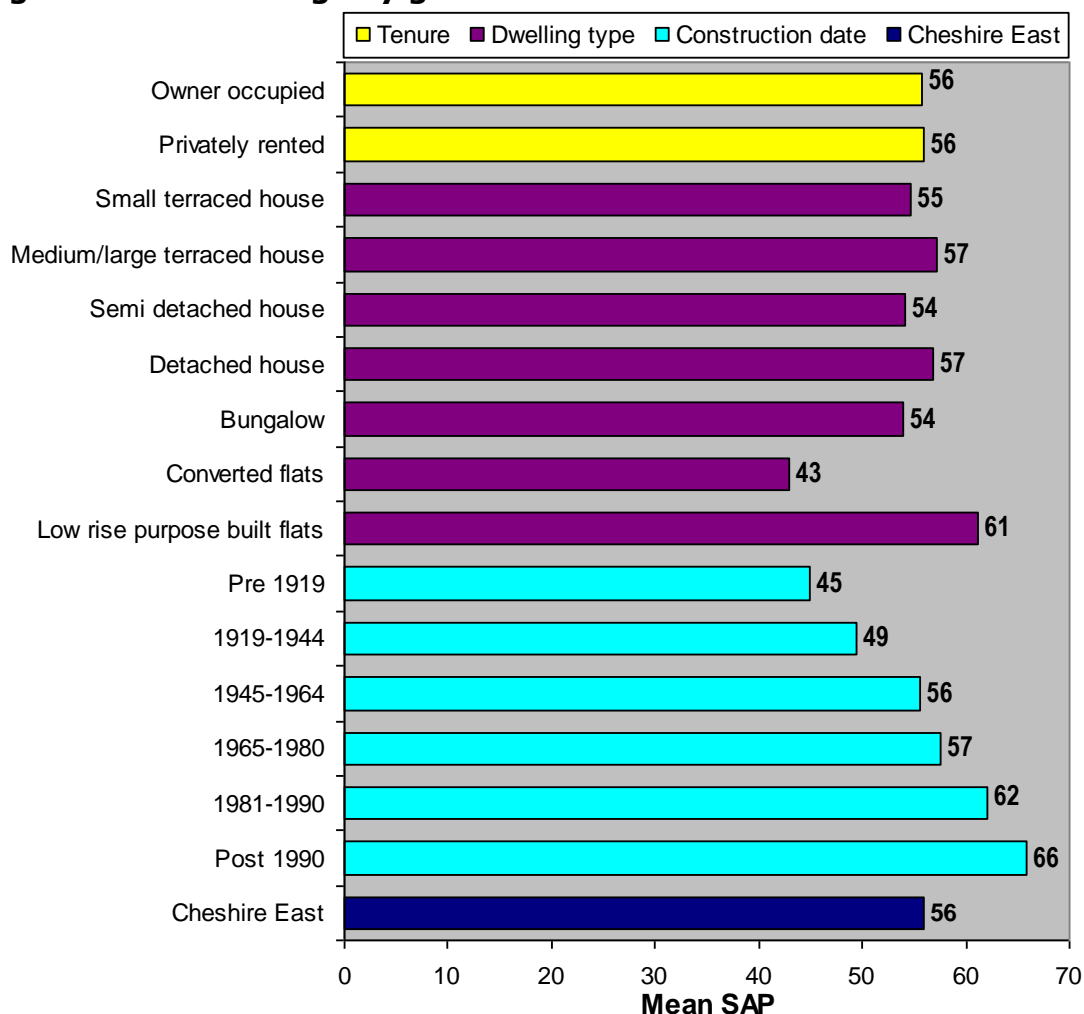
Source: 2010 House Condition Survey

9.3.6   Figure 9.2 shows the distribution of mean SAP ratings by sub-area.

Figure 9.2 Mean SAP ratings by sub-area

Source: 2010 House Condition Survey

9.3.7   All of the sub-areas had rates that were very similar and close to the authority average (56).

9.4   **Carbon Dioxide emissions**

9.4.1   As part of the 2007 Comprehensive Spending Review the Government announced a single set of indicators which would underpin the performance framework as set out in the Local Government White Paper "Strong and Prosperous Communities". To provide a more powerful and consistent incentive to local authorities, to develop and effectively implement carbon reduction and fuel poverty strategies, included within the set of indicators were a per capita reduction in Carbon Dioxide (CO_2) emissions in the Local Authority area and the tackling of fuel poverty.

9.4.2   PSA Delivery Agreement 27 (Lead the global effort to avoid dangerous climate change) stated that "The overall framework for the Government's domestic action was set out in the Climate Change Bill for which Parliamentary approval will be sought". This was subsequently passed into legislation on 26 November 2008, through the Climate Change Act 2008, which included legally binding targets to achieve greenhouse gas emission reductions through action in the UK and abroad of at least 80% by 2050, and reductions in CO_2 emissions of at least 26% by 2020, against a 1990 baseline.

9.4.3   The former Labour government launched a consultation document entitled "Heat and energy saving strategy consultation" in February 2010. However, since the general election in May 2010, the new coalition government has set out its broad energy strategy through an

Annual Energy Statement in June 2010. The following information may therefore, be subject to change.

9.4.4   The overall aim of the consultation was to reduce annual emissions by up to 44 million tonnes of CO_2 in 2020, the equivalent of a 30% reduction in emissions from households compared to 2006, making a significant contribution to meeting the government's carbon budgets.

9.4.5   One key aspect of the approach was to consider the energy needs of the 'whole house', putting together a more comprehensive programme of work for the whole house rather than the installation of individual measures one at a time. It was considered that modern heating offered the potential to cut energy bills and reduce CO_2 emissions, and the government wanted to help the development of heating networks within communities where it made sense to do so.

9.4.6   The strategy for saving energy and decarbonising heating both now and into the future, had four main objectives:

- to help more people, especially in the current difficult economic climate, as well as over the longer term, to achieve a reduction in their energy bills by using less energy;

- to reduce the UK's emissions and increase the use of renewable energy in line with the demands of the government's carbon budgets, their renewables target and the ultimate objective of reducing greenhouse gas emissions by 80% by 2050;

- to help maintain secure and diverse energy supplies; and

- to take advantage of the economic opportunities presented by the shift to a low carbon economy in the UK and in the rest of the world, helping us during the current economic downturn and over the longer term.

9.4.7   By 2015, it is the intention to have insulated all the lofts and cavity walls where it is practicable to do so. Although it is considered that this will not be enough to achieve the ambitions for the 2050 target of cutting emissions by 80%. Once these options have been exhausted, more substantial changes are being considered, such as small-scale energy generation and solid wall insulation, with the aim of helping up to seven million homes by 2020.

9.4.8   It was proposed to retain the current Carbon Emissions Reduction Target (CERT) until 2012, when it was thought that a more coordinated, community-based approach, working door-to-door and street-to-street to cover the needs of the whole house. This more coordinated approach was piloted under a new Community Energy Savings Programme (CESP), launched in September 2009.

9.4.9   Since the coalition government took office they have published a proposal for "The Green Deal" which looks likely to take over from CERT when it finishes in 2012. This would provide for energy improvement costs to be met by energy suppliers and paid back by owner occupiers or tenants through savings on energy bills. In addition, a new Energy Company Obligation (ECO) is being developed to run in parallel with The Green Deal, with the intention of focusing on ensuring the poorest and most vulnerable can afford to heat their homes adequately.

9.4.10   Cheshire East had three Lower Super Output areas (E01018459 - West Coppenhall & Grosvenor L1, E01018476 - East Coppenhall L2, E01018484 - St Barnabas) contained within the list of areas of low income that the Government proposed qualify for the Community Energy Saving Programme.

9.4.11   The CO_2 data provided as part of this survey indicated that emissions within the private sector stock of Cheshire East were 577,300 tonnes per annum an average of 3.9 tonnes per annum per property or 1.9 tonnes per capita. The EHS 2008 reported total CO_2 emissions of 123.5 million tonnes per annum or 6.7 tonnes per dwelling (owner occupied and privately rented)

9.4.12   Figure 9.3 shows the range of dwelling CO_2 emissions released per annum. The majority of dwellings (67.2%) had emissions of between 2 and 5 tonnes per annum, with 20.0% having annual emissions above this. 11.3% of dwellings had emissions above 6 tonnes per annum.

Figure 9.3 Annual dwelling CO_2 emissions
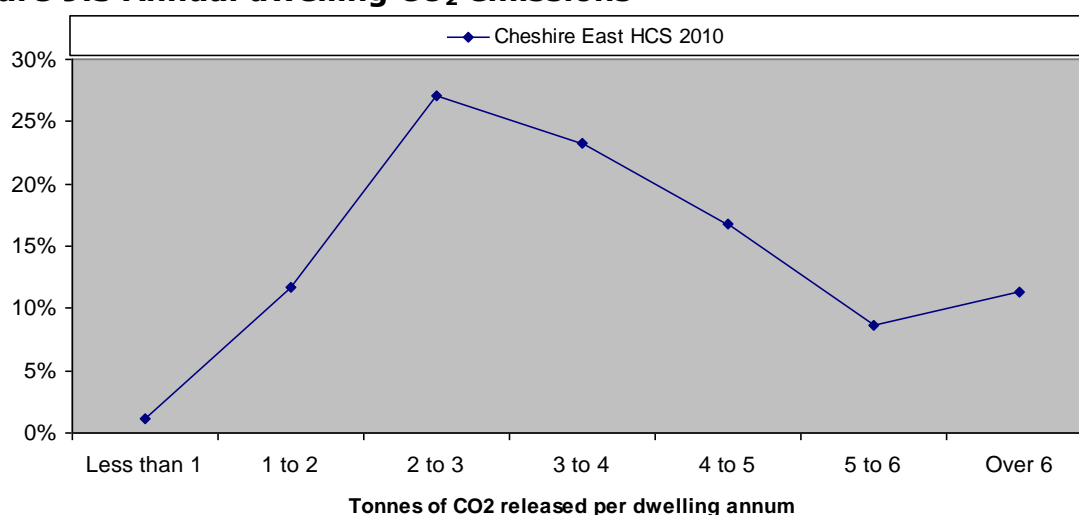
Source: 2010 House Condition Survey

9.4.13   Emissions per main fuel type are given in Table 9.2; oil had the highest average at 7.9 tonnes followed by smokeless fuel (6.8 tonnes) and coal/wood (6.7 tonnes).

Table 9.2 Main fuel CO$_2$ emissions

Fuel main	CO$_2$ (tonnes)	Average CO$_2$ per property
Mains Gas	468,928	3.7
LPG/Bottled Gas	7,977	5.4
Oil	53,759	7.9
Coal/Wood	5,858	6.7
Anthracite	0	0.0
Smokeless Fuel	1,047	6.8
On Peak Electricity	6,172	4.6
Off Peak Electricity	33,528	4.3

Source: 2010 House Condition Survey

9.4.14   Table 9.3 examines the total CO$_2$ emissions by each of the survey sub-areas as well as the average CO$_2$ emissions per dwelling within each area.

Table 9.3 Areas CO$_2$ emissions

Area	CO$_2$ (tonnes)	Average CO$_2$ per property
Crewe	102,000	3.4
Macclesfield	101,300	3.6
Market Towns	286,300	4.3
Rural	87,700	3.9
Cheshire East	**577,300**	**3.9**

Source: 2010 House Condition Survey

9.4.15   The Market towns sub-area had the highest average emissions (4.3 tonnes) followed by the Rural sub-area at 3.9).

9.5   Energy efficiency improvement

9.5.1   The great majority of dwellings (90.5%) had mains gas. The survey found that 92.1% of dwellings had a central heating system, above the 89.7% found in the EHS 2008. Table 9.4 shows the type of heating provision within each tenure group. Owner occupied dwellings had a higher proportion of dwellings with a central heating system (93.5% compared with 86.4%).

Table 9.4 Heating type by tenure

Heating Type	Owner Occupied	Privately Rented
Central Heating	93.5%	86.4%
Storage Heaters	3.5%	9.8%
Room Heaters	2.4%	2.0%
Portable Heating Only	0.6%	1.8%
Total	**100%**	**100%**

Source: 2010 House Condition Survey

9.5.2   Table 9.5 shows the heating type found by dwelling type. Converted flats had the lowest rate of central heating provision (54.9%) but see 4.6.3 regarding the statistical robustness of data for this dwelling type. The next lowest rate was found in low rise purpose built flats (59.4%). The highest rates of gas central heating provision were found in detached houses (98.0%) and medium/large terraced houses (70m^2 or more) at 95.5%.

Table 9.5 Heating type by dwelling type

Heating Type	Small terraced house	Medium /large terraced house	Detached house	Semi detached house	Bungalow	Converted flats	Low rise purpose built flats
Central Heating	91.8%	95.5%	98.0%	95.0%	94.2%	54.9%	59.4%
Storage Heaters	5.6%	1.0%	0.1%	0.9%	1.8%	35.7%	38.0%
Room Heaters	2.3%	3.2%	1.9%	3.2%	2.2%	3.8%	0.1%
Portable Heating Only	0.4%	0.4%	0.0%	0.9%	1.8%	5.5%	2.4%

Source: 2010 House Condition Survey

9.5.3   Table 9.6 shows the breakdown of loft insulation provision by tenure group. The privately rented sector has the highest rate of loft that have less than 200mm of insulation (42.9%) with the owner occupied stock at 33.1%.

Table 9.6 Level of insulation by tenure

Tenure	No Loft Insulation	Less than 50mm	50mm to 100mm	100mm to 150mm	150mm to 200mm	200mm or more	No Loft
Owner occupied	5.3%	0.4%	6.0%	7.5%	13.9%	66.2%	0.7%
Privately rented	15.6%	1.0%	3.0%	9.3%	14.0%	53.1%	4.0%
Cheshire East	**7.3%**	**0.5%**	**5.4%**	**7.9%**	**13.9%**	**63.7%**	**1.3%**
EHC 2008	**3.4%**	**2.7%**	**21.1%**	**32.6%**	**12.5%**	**20.0%**	**7.7%**

Source: 2010 House Condition Survey

9.5.4   Table 9.7 shows the breakdown of loft insulation provision within each dwelling type, including where there was no loft to insulate. Within Cheshire East, 65.0% of dwellings had either no loft to insulate or had loft insulation of 200mm or more, compared with 27.7% of dwellings found in the EHS 2008. The dwelling type with the highest rate of lofts with less than 200mm of insulation was found in low rise purpose built flats (55.7%) and converted flats (40.2%).

Table 9.7 Level of insulation by dwelling type

Dwelling Type	No Loft Insulat-ion	Less than 50mm	50mm to 100mm	100mm to 150mm	150mm to 200mm	200mm or more	No Loft
Small terraced house	3.0%	0.8%	8.2%	9.0%	15.5%	63.4%	0.0%
Medium/large terraced house	3.9%	0.5%	3.2%	7.8%	15.3%	69.2%	0.2%
Semi detached house	4.0%	0.9%	5.4%	9.7%	14.1%	65.8%	0.0%
Detached house	2.5%	0.2%	6.6%	7.9%	17.5%	65.3%	0.0%
Bungalow	3.3%	0.2%	7.4%	7.6%	9.5%	71.3%	0.6%
Converted flats	18.5%	2.6%	1.4%	9.2%	8.4%	20.4%	39.4%
Low rise purpose built flats	49.9%	0.0%	0.1%	0.8%	4.9%	38.6%	5.7%
Cheshire East	**7.3%**	**0.5%**	**5.4%**	**7.9%**	**13.9%**	**63.7%**	**1.3%**
EHS 2008	**3.4%**	**2.7%**	**21.1%**	**32.6%**	**12.5%**	**20.0%**	**7.7%**

Source: 2010 House Condition Survey

9.5.5   The provision of different heating systems and insulation within the dwelling stock does allow scope for some dwellings to have additional insulation, improved heating, draught proofing etc. Such improvements can lead to a reduction in energy consumption with consequent reduction in the emission of gases such as carbon dioxide implicated in climate change.

9.5.6   However, it should be noted that improving energy efficiency does not necessarily equate to a reduction in energy consumption. In the majority of cases there will be a reduction, but, for example, where a household is in fuel poverty and improvements are made, energy consumption may well go up. In such dwellings the occupiers may well have been heating the dwelling to an inadequate level using expensive fuel. Use of cheaper fuels can create affordable warmth, but also lead to increased energy consumption.

9.6 The cost and extent of improvement

9.6.1 The following figures are based on modelling changes in energy efficiency, brought about by installing combinations of items listed below. These are based on measures that have been provided by many local authorities and are loosely based on the Warm Front scheme.

- Loft insulation to 270mm
- Cylinder insulation to 70mm Jacket (unless foam already)
- Double Glazing to all windows
- Cavity wall insulation
- Installation of a modern high efficiency gas boiler where none is present
- Full central heating where none is present

9.6.2 The computer model entered whatever combination of these measures is appropriate for a particular dwelling taking into account the provision of heating and insulation shown by the survey.

9.7 Future improvement

9.7.1 If all combinations of improvements listed above were carried out to all dwellings, the total cost would be just under £176.7 million, an average of £1,510 per dwelling, where improvements were required.

9.7.2 The total cost of improvements given above was distributed among 117,400 dwellings, 80.2% of the stock where improvements were required. The majority of these dwellings will have complied with Building Regulations current at the time they were built and realistically most of them will currently provide an adequate level of thermal efficiency. In most cases, however, there is still scope for improvement even if only minor.

9.7.3 The following analysis looks at how many dwellings could have each type of measure applied, both overall and then by tenure.

Table 9.8 All energy efficiency measures that could be carried out

Measure	Dwellings	Percent of stock	Cost (millions)
Loft insulation	53,100	36.3%	£25.5
Cavity wall insulation	33,000	22.6%	£21.5
Double glazing	12,200	8.3%	£90.4
Cylinder insulation	74,100	50.6%	£3.6
New boiler	26,100	17.8%	£23.5
New central heating	4,100	2.8%	£12.3
Any measures	**117,400**	**80.2%**	**£176.7**

Source: 2010 House Condition Survey

Table 9.9 Energy efficiency measures that could be carried out by tenure

Measure	Owner Occupied			Privately Rented		
	Dwellings	Percent	Cost (millions)	Dwellings	Percent	Cost (millions)
Loft insulation	39,900	43.6%	£19.2	13,200	51.2%	£6.3
Wall insulation	26,200	28.6%	£2.7	6,800	26.4%	£0.9
Double glazing	7,900	8.6%	£48.1	4,300	16.7%	£42.3
Cylinder insulation	56,000	61.1%	£17.0	18,100	70.2%	£4.5
New boiler	21,800	23.8%	£19.7	4,300	16.7%	£3.9
New central heating	3,000	3.3%	£9.1	1,100	4.3%	£3.2
Any measures	91,600	77.4%	£115.7	25,800	92.0%	£61.0

Source: 2010 House Condition Survey

9.7.4 The wide range of measures indicates that, in most cases, two or more improvements could be carried out. Generally loft insulation would be an improvement on existing insulation, rather than an installation where none exists. With cylinder insulation, most improvements would be the replacement of old cylinders with jackets, for new integral foam insulated cylinders. Installation of new central heating is only indicated where the dwelling currently relied solely on room heaters as the primary heating source.

9.8 Tackling fuel poverty

9.8.1 A key issue in reducing energy consumption is tackling fuel poverty. The occupiers of a dwelling are considered to be in fuel poverty if more than 10% of their net household income would need to be spent on heating and hot water to give an adequate provision of warmth and hot water. Not only do dwellings where fuel poverty exists represent dwellings with poor energy efficiency, they are, by definition, occupied by residents with low incomes least likely to be able to afford improvements. In "Fuel Poverty in England: The Government's Plan for Action" published in 2004, the government set a target for the total eradication of fuel poverty by November 2016.

9.8.2 There are an estimated 16,400 (11.7%) dwellings in fuel poverty in Cheshire East compared to approximately 15.4% based on the findings of the EHS 2008, as reported in the Annual Report on Fuel Poverty Statistics 2010, published by the Department of Energy & Climate Change (DECC).

9.8.3 A lower proportion to the national average, the 16,400 dwellings still represent a significant number of households that are in fuel poverty, presenting issues in terms of both energy efficiency and occupier health. The highest proportionate rate of fuel poverty was found in the owner occupied sector at 11.9% (13,660 households) compared with 10.9% (2,740 households) in the private rented sector.

9.8.4   Intervention programmes such as Warm Front have been set up to tackle fuel poverty among vulnerable households in the private rented and owner occupied sectors, and provide grant packages to undertake energy efficiency measures for those eligible.

9.8.5   By the very nature of fuel poverty, it is almost always associated with those residents on the lowest incomes. 12,220 households (75% of the households in fuel poverty) were households with incomes below £10,000 per annum, with the remaining 4,180 (25%) having incomes above £10,000 per annum. This means that the rate of fuel poverty in the 12,220 households with an income below £10,000 was 44.0%.

9.8.6   Fuel poverty is usually associated with dwellings where one or more residents are in receipt of a means tested benefit as such benefits are indicative of low income. In Cheshire East fuel poverty was found in 9,260 households where a benefit was received, compared with 7,140 households where occupiers did not receive benefit. This means that 29.7% of households in receipt of benefit were in fuel poverty.

9.8.7   For owner-occupiers, assistance in the form of advice can be given, as well as grants and other partnership schemes with energy efficiency companies and other organisations. The total cost of energy efficiency improvements to dwellings in fuel poverty in the owner-occupied sector, was just over £20.5 million. This expenditure requirement is distributed between the 13,660 owner-occupied dwellings in fuel poverty where works were possible at an average cost per dwelling of £1,500. Within the private rented sector, the cost of energy efficiency improvements to dwellings in fuel poverty was just under £6.8 million an average of £2,500 in 2,740 privately rented dwellings in fuel poverty.

9.8.8   For those in receipt of a benefit who were also in fuel poverty, the total cost of energy efficiency improvements was just under £15.5 million, an average of £2,800 per dwelling.

9.9   **Area focus on fuel poverty**

9.9.1   Figure 9.4 shows the rate of fuel poverty by sub-area. The highest rate was found in the Crewe sub-area (14.4%), followed by the Market Towns sub-area (12.0%). The Macclesfield sub-area had the lowest rate at 9.3%.

Figure 9.4 Fuel poverty by sub-area
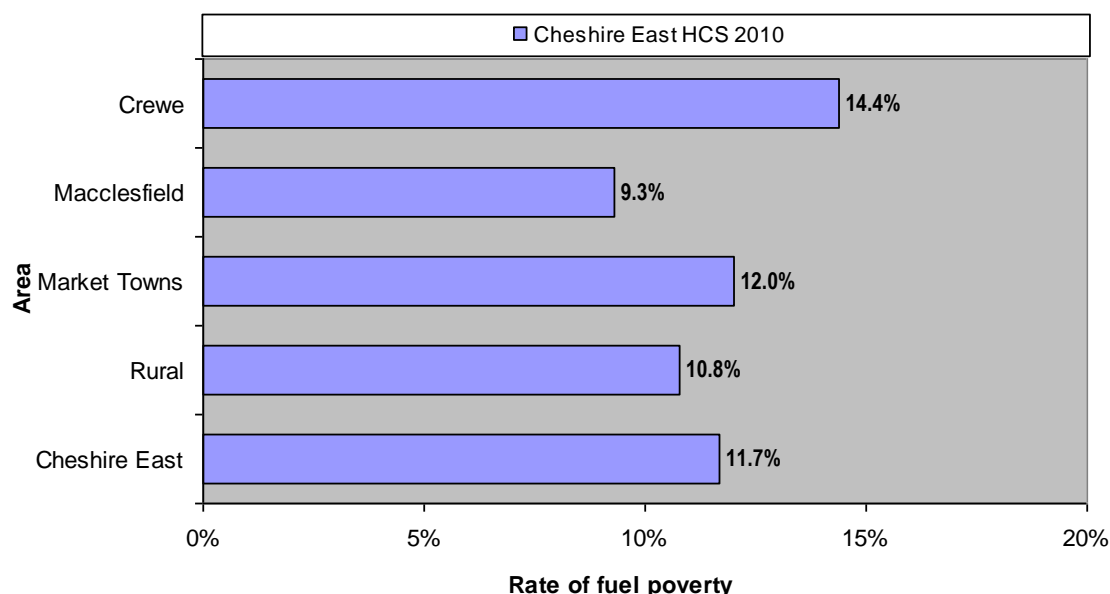
Source: 2010 House Condition Survey

9.10   Energy efficiency works to all other dwellings

9.10.1   The cost of carrying out all works to all dwellings where the residents were not in fuel poverty but where potentially improvements could be made is just under £149.5 million.   This represents an average expenditure of approximately £1,200 per dwelling in 123,840 dwellings.

9.10.2   Due to the high proportion of dwellings where potential improvements could be undertaken, the numbers are widespread and targeting, is therefore, not specifically concentrated in any particular area or property type.

9.10.3   There were 7,300 dwellings where the household was not in fuel poverty but where the mean SAP rating was less than 35. To carry out all improvement works required for these dwellings would cost just under £41 million, with the majority of this cost being required for the owner-occupied stock.   The mean cost per dwelling (5,550) in the owner-occupied stock was £4,100.   The reason the average cost of improvements is higher is that many of these dwellings would require the installation of full central heating, insulation and other measures to bring their SAP rating above 35.

9.10.4   Part of the survey considered whether a range of energy measures had been installed within dwellings, including low energy light bulbs, photo voltaic cells, solar water heating and other renewable energy sources. Table 9.10 provides a breakdown of the proportion of rooms that had low energy light bulbs fitted, with the results showing a broad spread of current provision. The proportions due however, show that just over 65% of dwellings had 50% or more rooms fitted with low energy light

bulbs, with 27.7% of dwellings having 75% or more of their rooms fitted with low energy light bulbs.

Table 9.10 Low energy light bulb provision

Range of rooms with low energy light bulbs	Proportion within range
1% to 24%	11.4%
25% to 49%	14.4%
50% to 74%	37.7%
75% to 100%	27.7%
None	8.8%

Source: 2010 House Condition Survey

9.10.5   As far as other provision is concerned, Table 9.11 shows the level of photo voltaic cells, solar water heating and other renewable energy sources. It is clear that very little provision was found.

Table 9.11 Other energy measures

Photo Voltaic Cells	Solar Water Heating	Other Renewables
0.01%	0.57%	0.05%

Source: 2010 House Condition Survey

Appendix A- Index of tables and figures

A.1 The following is a list of tables throughout the main report which are referenced to the relevant chapter number by the first digit of the table number.

The following is a list of figures throughout the report which are referenced to the relevant chapter number by the first digit of the table number.

Appendix B- Methodology

B.1 The survey used a stratified random sample of 3,846 dwellings from an address file supplied by Cheshire East Council. The sample was a stratified random sample drawn by the BRE to give representative findings across the authority, with the objective of gaining as many surveys as possible.

B.2 All addresses on the original address list were assigned an ID number and a random number generating computer algorithm was used to select the number of addresses specified within each sub area.

B.3 The survey incorporates the entire private sector stock, excluding registered social landlords (Housing Associations).

B.4 Each dwelling selected for survey was visited a minimum of three times where access failed and basic dwelling information was gathered including a simple assessment of condition if no survey was ultimately possible. To ensure the sample was not subject to a non-response bias, the condition of the dwellings where access was not achieved was systematically compared with those where the surveyors were successful. Where access was achieved, a full internal inspection was carried out including a detailed energy efficiency survey. In addition to this, where occupied, an interview survey was undertaken.

B.5 The basic unit of survey was the 'single self-contained dwelling'. This could comprise a single self-contained house or a self contained flat. Where more than one flat was present the external part of the building, encompassing the flat and any access-ways serving the flat were also inspected.

B.6 The house condition survey form is based on the survey schedule published by the ODPM in the 2000 guidelines (Local House Condition Surveys 2000 HMSO ISBN 0 11 752830 7).

B.7 The data was weighted using the CLASSIC Reports software. Two approaches to weighting the data have been used.

B.8 The first method is used for data such as building age, which has been gathered for all dwellings visited. In this case the weight applied to the individual dwellings is very simple to calculate, as it is the reciprocal of the sample fraction. Thus if 1 in 10 dwellings were selected the sample fraction is 1/10 and the weight applied to each is 10/1.

B.9 Where information on individual data items is not always present, i.e. when access fails, then a second approach to weighting the data is taken. This approach is described in detail in the following appendix, but a short description is offered here.

B.10 The simplest approach to weighting the data to take account of access failures is to increase the weight given to the dwellings where access is achieved by a proportion corresponding to the access failures. Thus if the sample fraction were 1/10 and 10 dwellings were in a sample the weight applied to any dwelling would be 10/1 which would give a stock total of 100. However, if access were only achieved in 5 dwellings the weight applied is the original 10/1 multiplied by the compensating factor, 10/5. Therefore 10/1 x 10/5 = 20. As there are only 5 dwellings with information the weight, when applied to five dwellings, still yields the same stock total of 100. The five dwellings with no data are ignored.

B.11 With an access rate above 50% there may be concern that the results will not be truly representative and that weighting the data in this manner might produce unreliable results. There is no evidence to suggest that the access rate has introduced any bias. When externally gathered information (which is present for all dwellings) is examined the stock that was inspected internally is present in similar proportions to those where access was not achieved suggesting no serious bias will have been introduced.

B.12 Only those dwellings where a full survey of internal and external elements, energy efficiency, housing health and safety and social questions were used in the production of data for this report. A total of 1,998 such surveys were produced.

B.13 The use of a sample survey to draw conclusions about the stock within the area as a whole introduces some uncertainty. Each figure produced is subject to sampling error, which means the true result will lie between two values, e.g. 5% and 6%. For ease of use, the data are presented as single figures rather than as ranges. A full explanation of these confidence limits is included in the following appendix.

Appendix C - Survey Sampling

Sample Design

C.1   The sample was drawn from the Cheshire East address file derived from Council Tax records, using the Building Research Establishment (BRE) stock modelling data. This allocated dwellings into four bands (strata), based on the projection of vulnerably occupied non-decent dwellings. This form of stratification concentrates the surveys in areas with the poorest housing conditions and allows more detailed analysis. This procedure does not introduce any bias to the survey as results are weighted proportionally to take account of the over-sampling.

C.2   The models are based on information drawn from the Office of National Statistics Census data, the Land Registry, the English House Condition Survey and other sources. It is this data that is used to predict dwelling condition and identify the 'hot-spots' to be over-sampled.

Stock total

C.3   The stock total is based initially on the address list; this constitutes the sample frame from which a proportion (the sample) is selected for survey. Any non-dwellings found by the surveyors are marked as such in the sample; these will then be weighted to represent all the non-dwellings that are likely to be in the sample frame. The remaining dwellings surveyed are purely dwellings eligible for survey. These remaining dwellings are then re-weighted according to the original sample fractions and produce a stock total.

C.4   In producing the stock total the amount by which the total is adjusted to compensate for non-dwellings is estimated, based on how many surveyors found. With a sample as large as the final achieved data-set of 1,998 dwellings however, the sampling error is likely to be very small and the true stock total is likely, therefore, to be very close to the 146,320 private sector dwellings reported. Sampling error is discussed later in this section.

Weighting the data

C.5   The original sample was drawn from the Cheshire East Address file. The sample fractions used to create the sample from this list can be converted into weights. If applied to the basic sample these weights would produce a total equal to the original address list. However, before the weights are applied the system takes into account all non-residential and demolished dwellings. This revised sample total is then weighted to produce a total for the whole stock, which will be slightly lower than the original total from which the sample was drawn.

The survey response rate

C.6 The following table gives a breakdown of the response rate to the survey, including taking into account unusable addresses and RSL properties that were not able to be screened out.

Table C.1 Response rates

	Dwellings	**Percent of addresses issues**	**Percent of traceable dwellings**
Addresses Issued	3,846	100.0%	N/a
Non Residential	3	0.1%	N/a
Untraceable	3	0.1%	N/a
Traceable eligible	3,840	99.8%	100.0%
Vacant dwellings	216	5.6%	5.6%
Internal Data Collected	1,998	52.0%	52.0%

C.7 The Survey achieved a response rate of 52.0%, after taking into account ineligible dwellings. Vacant dwellings were not excluded as these are legitimate targets for survey and 177 of the 216 identified were able to be given full surveys.

Dealing with non-response

C.8 Where access fails at a dwelling selected for survey the easiest strategy for a surveyor to adopt is to seek access at a neighbouring property. Unfortunately this approach results in large numbers of dwellings originally selected subsequently being excluded from the survey. These are the dwellings whose occupiers tend to be out all day, i.e. mainly the employed population. The converse of this is that larger numbers of dwellings are selected where the occupiers are at home most of the day, i.e. older persons, the unemployed and families with young children. This tends to bias the results of such surveys as these groups are often on the lowest incomes and where they are owner-occupiers they are not so able to invest in maintaining the fabric of their property.

C.9 The methods used in this survey were designed to minimise the effect of access failures. The essential features of this method are; the reduction of access failures to a minimum by repeated calls to dwellings and the use of first impression surveys to adjust the final weights to take account of variations in access rate.

C.10 Surveyors were instructed to call on at least three occasions and in many cases they called more often than this. At least one of these calls was to be outside of normal working hours, thus increasing the chance of finding someone at home.

C.11 Where access failed this normally resulted in a brief external assessment of the premises. Among the information gathered was the surveyor's first impression of condition. This is an appraisal of the likely condition of the dwelling based on the first impression the surveyor receives of the dwelling on arrival. It is not subsequently changed after this, whatever conditions are actually discovered.

C.12 Where access fails no data is collected on the internal condition of the premises. During data analysis weights are assigned to each dwelling according to the size of sample fraction used to select the individual dwelling.

C.13 The final weights given to each dwelling are adjusted slightly to take into account any bias in the type of dwellings accessed. Adjustments to the weights (and only the weights) are made on the basis of the tenure, age and first impression scores from the front-sheet only surveys.

Sampling error

C.14 Results of sample surveys are, for convenience, usually reported as numbers or percentages when in fact the figure reported is at the middle of a range in which the true figure for the population will lie. This is due to the fact that a sample will be subject to error since one dwelling is representing more than one dwelling in the results. The large the sample, the smaller the error range of the survey and if the sample were the same size as the population the error range would be zero. Note: population is a statistical term referring to the whole; in this case the population is the total number of private sector dwellings.

C.15 The error range of the survey can be expressed in terms of the amount above or below a given figure that the true result is expected to lie. For example, in what range does the true figure for the proportion of dwellings with a category one hazard lie. This error range is also affected by how confident we want to be about the results. It is usual to report these as the 95% confidence limits, i.e. the range either side of the reported figure within which one can be 95% confident that the true figure for the population will lie. In other words, if we re-ran the whole survey 100 times, we would expect that 95 times out of 100 the result would fall within a given range either side of the reported figure. This range is referred to as the standard deviation.

C.16 The calculation for standard deviation, within 95% confidence limits, is the standard error multiplied by 1.96. The following is the formula for calculating standard error :

$$s.e.(p_{srs}) = \sqrt{(1 - \frac{n}{N}) \frac{p(1-p)}{n}}$$

Where $s.e.(p_{srs})$ is the notation to describe the general formula for the standard error for a simple random sample.

N = the number of dwellings in the population.

n = the number of dwellings in the sample.

p = the proportion of dwellings in the sample with a particular attribute such as category one hazards.

C.17 This formula can be used to calculate the confidence limits for the results of any attribute such as category one hazards. Table C.1 gives a number of sample sizes and the confidence limits for a range of different possible results.

C.18 For this survey the estimate of dwellings with a category 1 hazard was 20.4%. Calculating the standard deviation for this figure, and using the 95% confidence limits, we find that the true figure lies in a range of + or − 1.8%. In other words one can say that 95% of all samples chosen in this way would give a result in the range between 18.6% and 22.2%.

C.19 The standard deviation figure of + or − 1.8%, however, would only stand true if this were a simple random sample. In other words, it would only be true if the 1,998 surveys had been selected totally at random from the whole private sector housing stock. This was not the case for this survey as stratified random sampling was used in order to concentrate on non-decent dwellings occupied by vulnerable residents.

C.20 Because the survey was a stratified random sample, an altered version of the standard deviation calculation needs to be used. This more complex formula takes into account the results for each individual stratum within the survey. When this formula is applied the standard deviation for the survey increases to + or − 2.5%. In other words, we can be 95% confident that the level of category one hazards present in the private sector housing stock will fall somewhere between 17.9% and 22.9%.

C.21 The following formula is that used to calculate the standard error of a stratified random sample. Multiplying the result by 1.96 then gives the standard deviation within 95% confidence limits:

$$s.e.(p_{st}) = \sqrt{\frac{1}{N^2} \sum \frac{N_i^2 \, p_i \, (1 - p_i)}{n_i - 1}}$$

Where $s.e.(p_{st})$ is the notation to describe the general formula for the standard error for a stratified random sample.

N = the number of dwellings in the population.

N_i = the population of dwellings in an individual stratum of the sample.

n_i = the number of dwellings in an individual stratum of the sample.

p_i = the proportion of dwellings in the sample with a particular attribute such as category one hazards.

Table C.3 95% per cent confidence limits for a range of possible results and sample sizes

	Sample size									
Expected result as per cent	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1,000**
10	5.9	4.2	3.4	2.9	2.6	2.4	2.2	2.1	2	1.9
20	7.8	5.5	4.5	3.9	3.5	3.2	3	2.8	2.6	2.5
30	9	6.4	5.2	4.5	4	3.7	3.4	3.2	3	2.8
40	9.6	6.8	5.5	4.8	4.3	3.9	3.6	3.4	3.2	3
50	9.8	6.9	5.7	4.9	4.4	4	3.7	3.5	3.3	3.1
60	9.6	6.8	5.5	4.8	4.3	3.9	3.6	3.4	3.2	3
70	9	6.4	5.2	4.5	4	3.7	3.4	3.2	3	2.8
80	7.8	5.5	4.5	3.9	3.5	3.2	3	2.8	2.6	2.5
90	5.9	4.2	3.4	2.9	2.6	2.4	2.2	2.1	2	1.9

Very small samples and zero results

C.22 When sub-dividing the results of a sample survey by multiple variables, it is possible to produce a result where no survey carried out matches these criteria. In such a case the result given will be zero, however, this can give a false impression that no such dwellings exist. In reality, it may well be possible that a very small number of dwellings, with the given characteristics, are present, but that in numbers that are too low to have been randomly picked by the sample.

C.23 In the case of the 2010 Cheshire East HCS, the average weight is approximately 73 (146,320 private sector dwellings divided by 1,998 surveys). As a consequence, if there are fewer than 100 dwellings of a certain type within the Council, the result from the survey will tend to be a very crude measure. This is because, based on the average weight, only a result of 73, 146 or 222 could be given, which if, in reality, there are 50 dwellings with a certain characteristic, is fairly inaccurate.

C.24 Because of the points outlined above, the reader is encouraged to view extremely small or zero results with caution. It should be considered that these represent a small but indeterminate total, rather than none at all.

Appendix D – Legislative Requirements

D.1 Section 605 of the Housing Act 1985 (as amended) placed a duty on Local Authorities to consider the condition of the stock within their area, in terms of their statutory responsibilities to deal with unfit housing, and to provide assistance with housing renewal. Section 3 of the Housing Act 2004 replaced this with a similar duty to keep housing conditions under review.

D.2 The Regulatory Reform (Housing Assistance) (England and Wales) Order 2002 came into effect on the 19 July 2003 and led to major change in the way Local Authorities can give financial help for people to repair or improve private sector homes. Before the Order, the Government set clear rules which controlled the way financial help could be given and specified the types of grant which could be offered. The Order set aside most of these rules (apart from the requirement to give mandatory Disabled Facility Grants). It now allows Local Authorities to adopt a flexible approach, using discretion to set up their own framework for giving financial assistance to reflect local circumstances, needs and resources.

D.3 The Office of the Deputy Prime Minister (ODPM), published guidance under Circular 05/2003. In order to use the new freedom, a Local Authority must prepare and publish a Private Sector Renewal Policy. The policy must show that the new framework for financial assistance is consistent with national, regional and local policies. In particular, it has to show that the local priorities the strategy is seeking to address have been identified from evidence of local housing conditions including stock condition.

D.4 The Housing Act 2004 received Royal Assent in November 2004. The Act makes a number of important changes to the statutory framework for private sector housing, which came into effect in April 2006:

- The previous fitness standard and the enforcement system have been replaced by the new Housing Health and Safety Rating System (HHSRS).
- The compulsory licensing of higher risk houses in multiple occupation (HMO) (three or more storeys, five or more tenants and two or more households).
- New discretionary powers including the option for selective licensing of private landlords, empty dwelling management orders and tenancy deposit protection.

D.5   Operating Guidance was published on the Housing Health and Safety Rating System in February 2006. This guidance describes the new system and the methods for measurement of hazards, as well as the division of category 1 and 2 hazards. Guidance has been issued by the ODPM on the licensing provisions for HMOs, which describes the high risk HMOs that require mandatory licensing and those that fall under additional, voluntary licensing.

D.6   As the Rating System has now replaced the fitness standard, this report will deal with findings based on statutory hazards, not unfitness.

Mandatory Duties

- Unfit houses (Housing Act 1985) - to take the most satisfactory course of action – works to make property fit, closure/demolition or clearance declaration.

With effect from April 2006 replaced by:

- Category 1 Hazards, Housing Health and Safety Rating System (HHSRS) (Housing Act 2004) – to take the most satisfactory course of action – improvement notices, prohibition orders, hazard awareness notices, emergency remedial action, emergency prohibition orders, demolition orders or slum clearance declaration.

- Houses in Multiple Occupation (Housing Act 1985) - to inspect certain HMOs, to keep a register of notices served, to require registration where a registration scheme is in force.

With effect from April 2006 replaced by:

- HMO Licensing by the Authority (Housing Act 2004) of all HMOs of three or more storeys, with five or more residents and two or more households. Certain exceptions apply and are defined under sections 254 to 259 of the Housing Act 2004.

- Overcrowding - (Housing Act 1985) - to inspect and report on overcrowding

Now In Addition

- Overcrowding – (Housing Act 2004) – to inspect and report on overcrowding as defined under sections 139 to 144 of the Housing Act 2004 along with statutory duty to deal with any category 1 overcrowding hazards found under the HHSRS.

- The provision of adaptations and facilities to meet the needs of people with disabilities (Housing Grants, Construction and Regeneration Act 1996) - to approve applications for Disabled Facilities Grants for facilities and/or access

Appendix E - Definition of a Non-decent Home

Measure of a decent home

E.1 A dwelling is defined as non-decent if it fails any one of the following 4 criteria:

Table E.1 Categories for dwelling decency

A	It meets the current statutory minimum standard for housing – at present that it should not have a Category 1 hazard under the HHSRS
B	It is in a reasonable state of repair – has to have no old and defective major elements*
C	It has reasonably modern facilities and services – Adequate bathroom, kitchen, common areas of flats and is not subject to undue noise
D	Provides a reasonable degree of thermal comfort

* Described in more detail below

E.2 Each of these criteria has a sub-set of criteria, which are used to define such things as 'providing a reasonable degree of thermal comfort'. The exact details of these requirements are covered in the aforementioned ODPM guidance (see 4.1.2).

Applying the standard

E.3 The standard is specifically designed in order to be compatible with the kind of information collected as standard during a House Condition Survey (HCS). All of the variables required to calculate the standard are contained within a complete data set.

E.4 The four criteria used to determine the decent homes standard have specific parameters. The variables from the survey used for the criteria are described below:

Criterion A:

E.5   Criterion A is simply determined as whether or not a dwelling fails the current minimum standard for housing. This is now the Housing Health and Safety Rating System (HHSRS) – specifically Category 1 Hazards. All dwellings surveyed were marked on the basis of the HHSRS and if any one or more Category 1 Hazards was identified the dwelling was deemed to fail under criterion A of the Decent Homes Standard.

Criterion B:

E.6   Criterion B falls into 2 parts: firstly, if any one of a number of key major building elements is both in need of replacement and old, then the dwelling is automatically non-decent. Secondly, if any two of a number of key minor building elements are in need of replacement and old, then the dwelling is automatically non-decent. The elements in question are as follows:

Table E.2 Major Elements (1 or more)

Element	Age to be considered old
Major Walls (Repair/Replace >10%)	80
Roofs (Replace 50% or more)	50 for houses 30 for flats
Chimney (1 or more needing partial rebuild)	50
Windows (Replace 2 or more windows)	40 for houses 30 for flats
Doors (Replace 1 or more doors)	40 for houses 30 for flats
Gas Boiler (Major Repair)	15
Gas Fire (Major Repair)	10
Electrics (Major Repair)	30

Table E.3 Minor Elements (2 or more)

Element	Age to be considered old
Kitchen (Major repair or replace 3+ items)	30
Bathroom (Replace 2+ items)	40
Central heating distribution (Major Repair)	40
Other heating (Major Repair)	30

Criterion C:

E.7 Criterion C requires the dwelling to have reasonably modern facilities. These are classified as the following:

Table E.4 Age categories for amenities

Amenity	Defined as
Reasonably modern kitchen	Less than 20 yrs
Kitchen with adequate space and layout	If too small or missing facilities
Reasonably modern bathroom	Less than 30 yrs
An appropriately located bathroom and W.C.	If unsuitably located etc.
Adequate noise insulation	Where external noise a problem
Adequate size and layout of common parts	Flats

E.8 You may notice that the age definition for kitchens and bathrooms differs from criterion B. This is because it was determined that a decent kitchen, for example, should generally be less than 20 years old but may have the odd item older than this. The same idea applies for bathrooms.

Criterion D:

E.9 The dwelling should provide an adequate degree of thermal comfort. It is currently taken that a dwelling, which is in fuel poverty, is considered to be non-decent. A dwelling is in fuel poverty if the occupiers spend more than 10% of their net income (after Tax, N.I and housing cost e.g. mortgage or rent) on heating and hot water.

E.10 A number of Local Authorities criticized this approach, as it requires a fully calculated SAP for each dwelling that is being examined. Whilst this is fine for a general statistical approach, such as this study, it does cause problems at the individual dwelling level for determining course of action.

E.11 The alternative, laid out in the new guidance, is to examine a dwelling's heating systems and insulation types. The following is an extract from the new guidance:

E.12 The revised definition requires a dwelling to have both:

Efficient heating; and

Effective insulation

Efficient heating is defined as any gas or oil programmable central heating or electric storage heaters or programmable LPG/solid fuel central heating or similarly efficient heating systems, which are developed in the future. Heating sources, which provide less efficient options, fail the decent homes standard.

Because of the differences in efficiency between gas/oil heating systems and other heating systems listed, the level of insulation that is appropriate also differs:

For dwellings with gas/oil programmable heating, cavity wall insulation (if there are cavity walls that can be insulated effectively) or at least 50mm loft insulation (if there is loft space) is an effective package of insulation;

For dwellings heated by electric storage radiators/LPG/programmable solid fuel central heating a higher specification of insulation is required: at least 200mm of loft insulation (if there is a loft) and cavity wall insulation (if there are cavities that can be insulated effectively).

E.13 For the purposes of this study the above definition will be used in calculating the proportion of dwellings that are considered non-decent.

Appendix F - Additional amenities

F.1 The following charts examine the position for electrical systems and boilers. Electrical systems over 30 years of age are considered as reaching a point where regular inspection and testing is advisable to ensure that they are not likely to present a hazard. Many boilers over the age of 15 will still be working satisfactorily but they will be reaching the end of their economic life and their energy efficiency is likely to be declining. Boilers installed now have much higher levels of efficiency in order to meet current Building Regulations.

F.2 68% of boilers and 51% of electrical systems are either older than the age specified in the criterion or will become so in the next 10 years.

Figure F.1 Electrics and boiler age
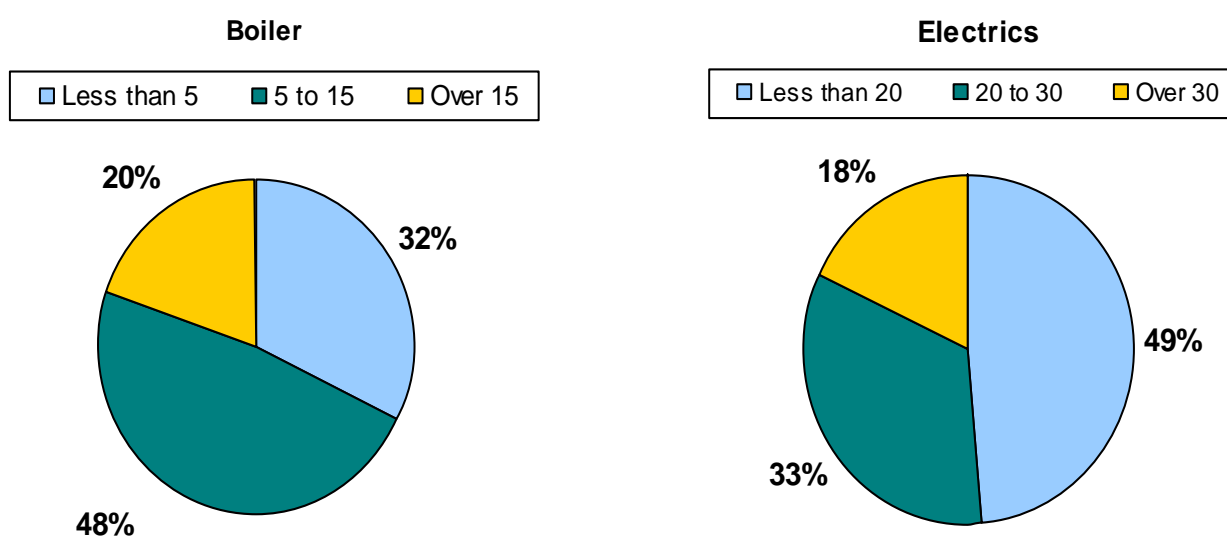
Source: 2010 House Condition Survey

F.3 The age bands used in these charts and those used in chapter 7 differ, dependent upon the design life of the amenity in question. The second band in each chart represents where the amenity will become older than its design life during the next ten years.