



**Ealing**

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## Private Sector House Condition Survey 2010

**FINAL REPORT**  
**April 2011**

**Ealing Council**  
*Working in partnership with*



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# 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 Ealing Council commissioned a comprehensive House Condition Survey to address this legal requirement, and also to inform the Housing Strategy and other housing policies. The survey work in Ealing was conducted in the mid 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 1,000 dwellings from a total private sector stock of 102,640 dwellings, and covered the owner occupied and privately rented stock (excluding Registered Social Landlord (RSL) stock). The survey was based on a stratified random sample of addresses in Ealing, in order to gain a representative picture across the Council. A sample of 2,000 was drawn with, in practice, 977 surveys being undertaken in total.
- 1.2.2 Each of the 977 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 Ealing Council HCS followed the ODPM 2000 guidance.

1.3.3 CPC's own bespoke data 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 were drawn from the 2008/2009 English Housing Survey (EHS), 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 Ealing. 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. The survey findings were however, grouped into five geographic areas to replicate the areas that were ascribed under the last stock condition survey undertaken in 2004. It is normally recommended that sub-areas should include a minimum of 200 surveys to provide for statistically robust findings. However, in order to replicate the 2004 sub-areas, this was not possible and therefore, some of the sub-areas fell well below that level. The validity of the sub-area data produced cannot therefore be certain due to increased standard deviation (see 1.5.2).

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**

<b>Areas</b>	<b>Dwellings</b>	<b>Percent</b>
Acton	19,180	18.7%
Central	36,270	35.3%
Southall	16,880	16.4%
Greenford	21,890	21.3%
Northolt	8,420	8.2%
<b>Total</b>	<b>102,640</b>	<b>100%</b>

## **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 generally only quoted to 1 decimal place for the same reason.

## 2 Profile of the private sector housing stock

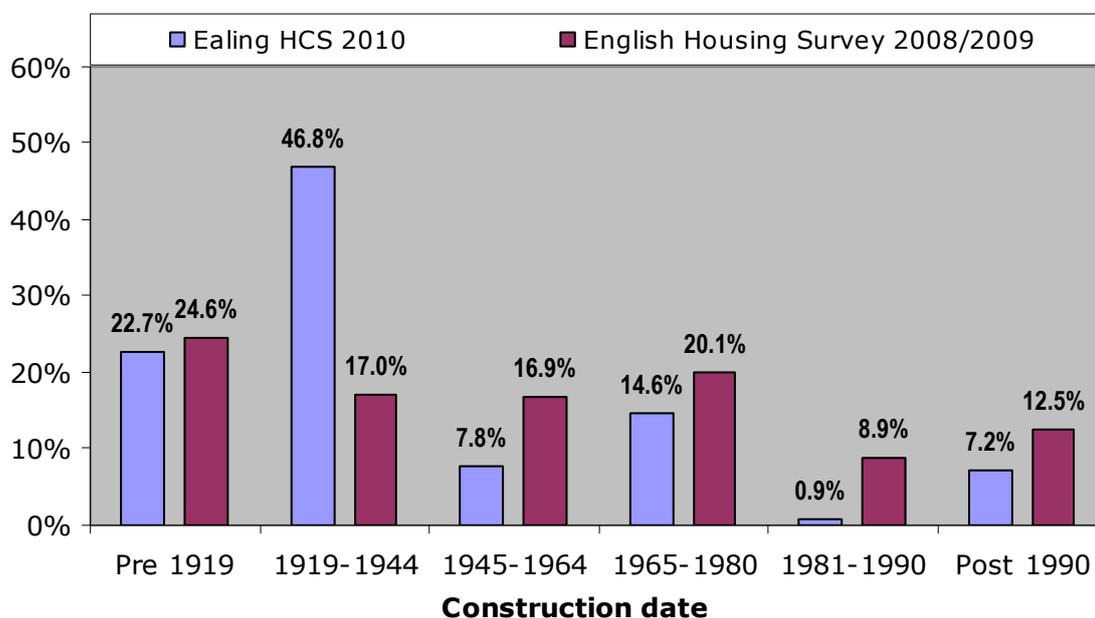
### 2.1 Size of the dwelling stock

2.1.1 At the time of the survey there were an estimated 102,640 private sector dwellings in Ealing. The 102,640 total for the stock was the estimated private sector stock total (excluding RSL dwellings), provided by Ealing Council and based on Council Tax Records. 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 Ealing. 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 102,640 owner occupied and privately rented stock in the Council differed to the national averages. The proportion of dwellings built within most of the age bands were lower than their national comparators, the only exception being the 1919 to 1944 age band which was substantially higher at 46.8% compared with 17.0% nationally.

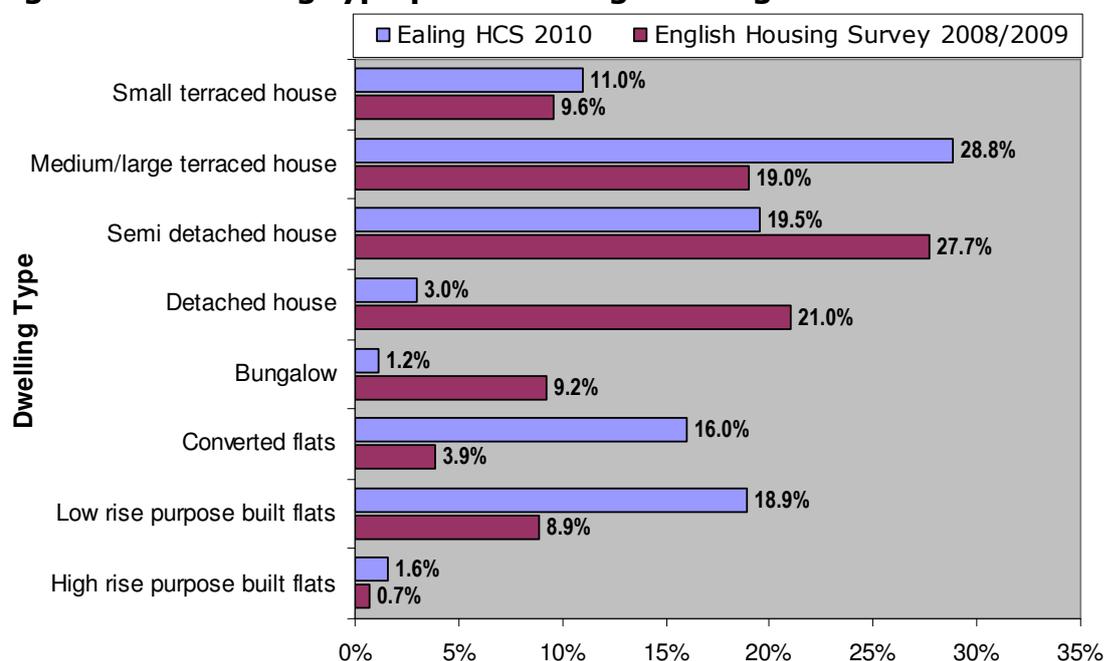
**Figure 2.1 Dwelling age profile England and Ealing**



Source: 2010 House Condition Survey & EHS 2008/2009

## 2.3 Dwelling type profile

**Figure 2.2 Dwelling type profile Ealing and England**



*Source: 2010 House Condition Survey & EHS 2008/2009*

2.3.1 The private sector building type profile in Ealing showed differences to the national pattern with substantially higher proportions of terraced housing (39.8% compared with 28.6%) and flats (36.5% compared with 13.5%). All of the other building types were found at much lower proportions, particularly so for detached houses (3.0% compared with 21.0%) and bungalows (1.2% compared with 9.2%), with semi-detached houses represented at 19.5% compared with 27.7%.

2.3.2 Due to the low levels of both bungalows and high rise purpose built flats found within Ealing, they do not constitute a statistically robust enough proportion to allow any further analysis within the rest of the report, so will be excluded from here-on-in.

## 2.4 Tenure

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

**Table 2.1 Tenure proportions**

Tenure	Dwellings	Percent	EHS 2008/2009
Owner occupied	66,310	52%	68%
Privately Rented	36,330	28%	14%
<b>Private Sector Stock</b>	<b>102,640</b>	<b>80%</b>	<b>82%</b>
Housing Association (RSL)	11,920	9%	9%
Local Authority & Other Public	13,310	11%	9%
<b>Social Housing</b>	<b>25,230</b>	<b>20%</b>	<b>18%</b>
<b>All Tenures</b>	<b>127,870</b>	<b>100%</b>	<b>100%</b>

Source: 2010 House Condition Survey & EHS 2008/2009

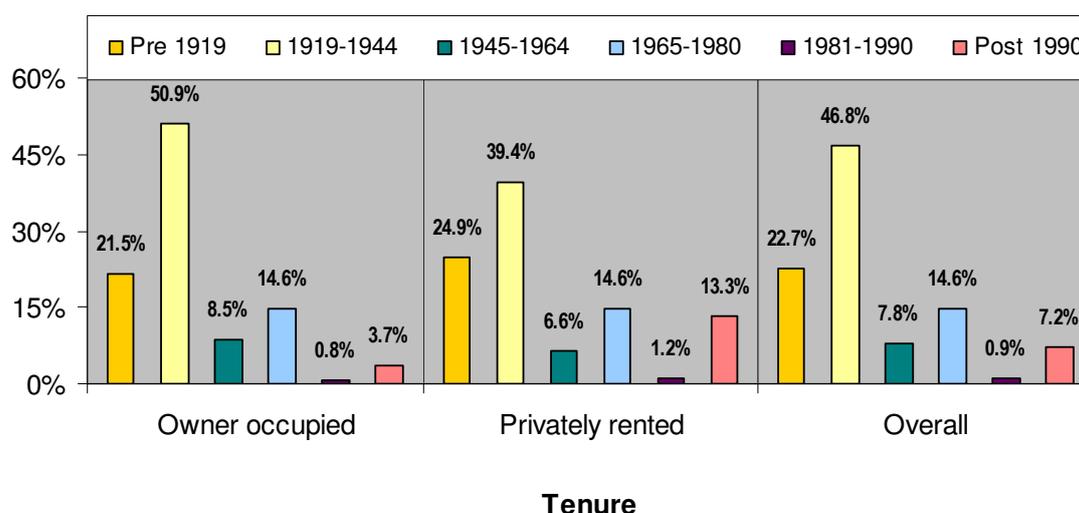
2.4.2 The breakdown given in Table 2.1 includes local authority and other public sector housing for the sake of comparative purposes with the EHCS.

2.4.3 The tenure profile again differed from the national profile with the owner occupied stock at a much lower level at 52% compared with 68%. The privately rented sector was represented at a substantially higher rate (28% compared with 14%). The overall proportion of social housing was slightly higher at 20% compared with 18% nationally.

## 2.5 Tenure and age comparisons

2.5.1 Figure 2.3 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 Most of the owner occupied stock was found in 1919 to 1944 dwellings at 50.9% compared with 46.8% for the overall private sector stock, with the privately rented stock at 39.4% for the same period. From 1965 onwards there were higher proportions of privately rented dwellings (29.1%) compared with 19.0% for owner occupied dwellings. Privately rented dwellings were, however, represented at a slightly higher rate in Pre-1919 dwellings at 24.9% compared with 21.5% in owner occupied dwellings.

## 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	61,240	59.7%
Purpose Built Flat	20,490	20.0%
Converted Flat	15,540	15.1%
HMO	4,690	4.6%
Licensable HMO	680	0.7%
<b>Total</b>	<b>102,640</b>	<b>100%</b>

*Source: 2010 House Condition Survey*

2.6.2 A majority of dwellings (59.7%) were houses generally occupied as built. Of the remainder, most were purpose built or converted flats. An estimated 5.3% of dwellings were HMOs, representing 5,370 buildings. 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).

2.6.4 HMOs formed a considerable proportion of the private sector stock in Ealing with 680 (0.7%) being identified as potentially licensable HMOs. It should be borne in mind, however, that figures from the survey are estimates derived from the sample of properties inspected and are therefore subject to variation.

2.6.5 Where a HMO was surveyed, surveyors were asked to look at a number of issues relating to the communal areas with the results shown in Table 2.3.

**Table 2.3 HMO communal areas**

HMO communal areas	Yes	No
Landlord/Agent details displayed	11.7%	88.3%
Condition of communal areas in a reasonable condition	79.9%	20.1%
Heat detectors in shared parts	8.1%	91.9%

2.6.6 Table 2.4 shows the availability of a range of certification with the positive response rate.

**Table 2.4 HMO available certificates**

Available certificates	Availability Rate
Electrical testing	10.9%
Fire Detection System	13.3%
Emergency Lighting	7.9%
Portable Appliance Testing	1.3%
Fire Equipment Maintenance	7.9%
Gas Safe Annual Gas Safety Certificate	15.6%
OFTEC Annual Safety Certificate	4.3%

## **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 3,110 vacant dwellings, 3.0% of the private housing stock within Ealing. The national average is approximately 4.6%.

2.7.2 Based on the results taken from the stock condition survey it was estimated that 560 (0.6%) of private sector dwellings within Ealing 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 2.5 All dwellings by Occupancy Status**

<b>Vacancy Status</b>	<b>Dwellings</b>	<b>Percent</b>
Occupied	99,530	97.0%
Vacant awaiting new owner	30	0.03%
Vacant awaiting new tenant	330	0.3%
Vacant being modernised	980	1.0%
Other	560	0.6%
Long term vacant*	1,210	1.2%
<b>Total vacants</b>	<b>3,110</b>	<b>3.0%</b>
<b>Total stock</b>	<b>102,640</b>	<b>100.0%</b>

\* 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 0.6% was well below the average for England (approximately 1.5%). Whilst the level of long term vacant dwellings is a very 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

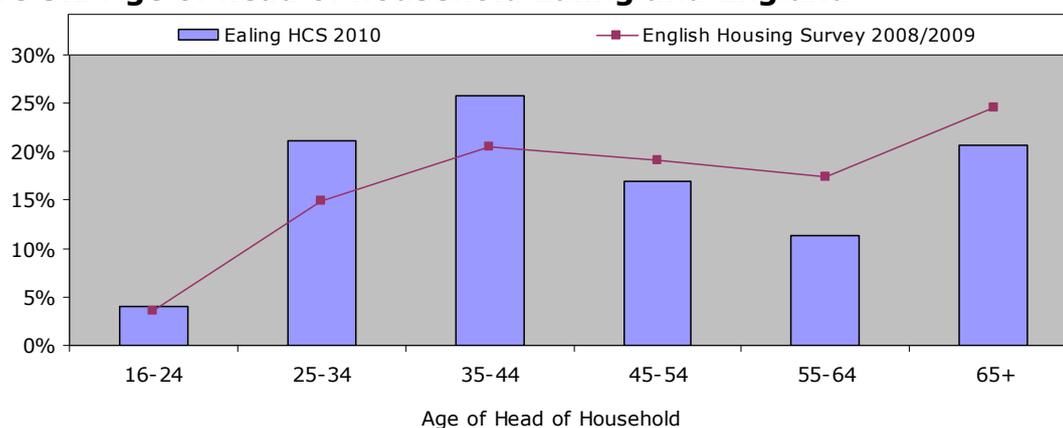
### 3.1 Introduction

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 99,530.

### 3.2 Age Profile

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

**Figure 3.1 Age of head of household Ealing and England**



*Source: 2010 House Condition Survey & English Housing Survey 2008/2009*

3.2.2 Data collected as part of the survey indicated that the age profile of heads of household in Ealing differed from the national position. The proportions of heads of household aged between 16 and 44 years were higher than those found nationally (50.9% compared with 38.9%), with lower proportions of heads of household aged between 45 years and over (32.1% compared with 42.0%). Looking specifically at heads of household aged 65 years and over the figure for Ealing was 20.7% compared with 24.5% nationally. Whilst lower than the national rate, this still has 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, two or more adults who are not a couple were considered an 'other multi-person household' for the purposes of this analysis which follows the convention used in the English Housing Survey.

**Table 3.1 Household type distribution**

Household type	Ealing 2010		England 2008/2009 *
Couple no Dependent Child (ren)	30,080	30.2%	39.4%
Couple with Dependent Child (ren)	28,950	29.1%	22.2%
Lone parent with dependent child	6,870	6.9%	4.8%
One person household	26,560	26.7%	26.2%
Other multi-person household	7,070	7.1%	7.4%
<b>Total Household Type</b>	<b>99,530</b>	<b>100%</b>	<b>100%</b>

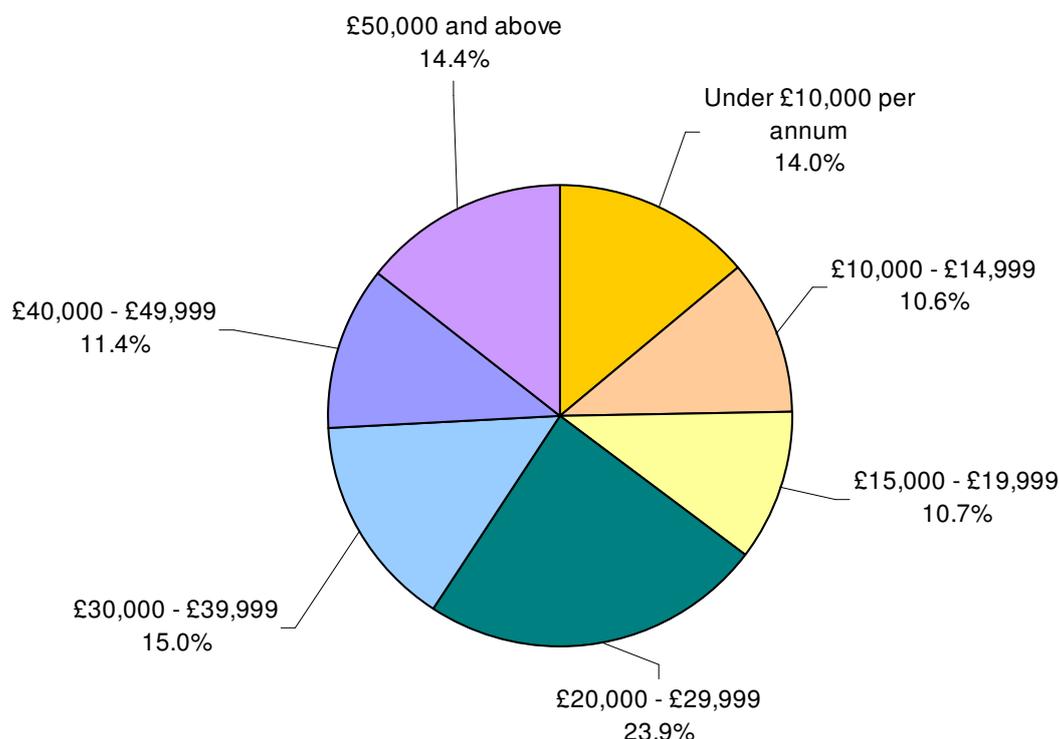
*Source: 2010 House Condition Survey & \*English Housing Survey 2008/2009*

3.3.2 The main differences to the distribution of households types to that found nationally was the greater proportion of couple with dependent child (ren) (29.1% compared with 22.2%) and lone parent with dependent child (ren) (6.9% compared with 4.8%), with one person households being slightly elevated. Both of the remaining types had lower proportions, particularly so in the case couple no dependent child (ren) (30.2% compared with 39.4%).

### 3.4 Income

3.4.1 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 3.2 Number of households within each income band**

Income band	No. of households Ealing 2010		England 2008/2009 *
Under £10,000 per annum	13,940	14.0%	12.0%
£10,000 - £14,999	10,540	10.6%	11.0%
£15,000 - £19,999	10,620	10.7%	10.1%
£20,000 - £29,999	23,850	23.9%	18.8%
£30,000 - £39,999	14,940	15.0%	15.3%
£40,000 - £49,999	11,350	11.4%	10.9%
£50,000 and above	14,290	14.4%	21.9%
<b>Total</b>	<b>99,530</b>	<b>100%</b>	<b>100%</b>

\* Source: English Housing Survey 2008/2009  
Source: 2010 House Condition Survey

3.4.2 The data in figure 3.2 and the Table 3.2 show that there were similar proportions to the national average of households with an income of less than £15,000 (24.6% compared with 23.0%). Above that the proportions varied with, in the main, higher rates for incomes above £15,000, with the exception of the £30,000 and £39,999 which was slightly lower and those with an income of £50,000 and above where the rate was much lower.

**Table 3.3 Average weekly income by tenure**

Tenure	Ealing HCS 2010	England 2008/2009
Owner occupied	£596	£750
Privately rented	£470	£530
Average	£550	£710

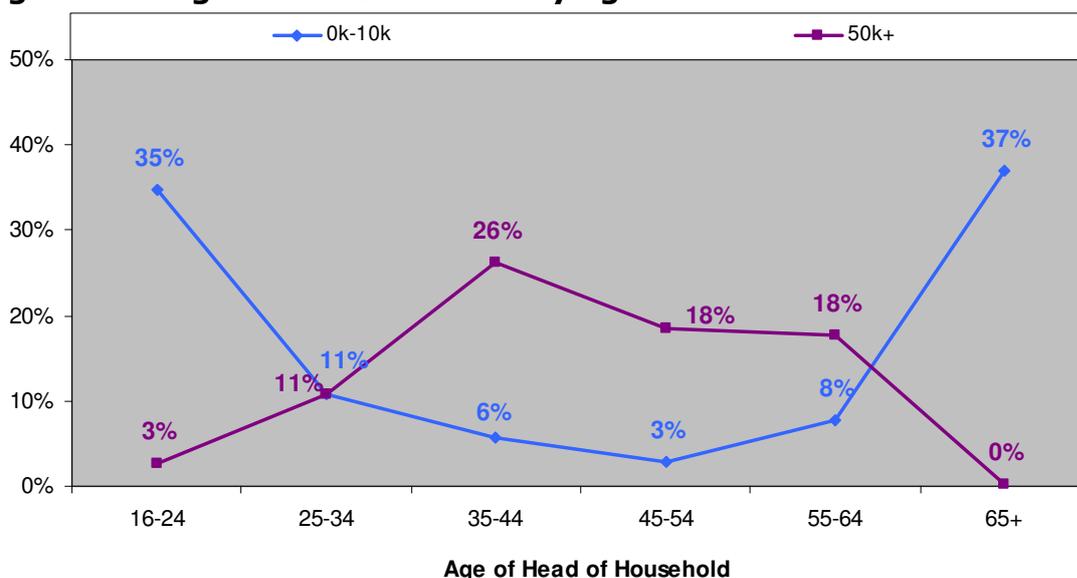
Source: 2010 House Condition Survey & English Housing Survey 2008/2009

3.4.3 These figures demonstrate that recent average incomes for heads of household and where appropriate their partner were in Ealing lower than the averages for England.

### 3.5 Income and age of head of household

3.5.1 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.

**Figure 3.3 High and low incomes by age of head of household**



Source: 2010 House Condition Survey

3.5.2 Figure 3.3 above 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 25 to 64 years. This pattern suggests that the greatest need for assistance to vulnerable occupiers is at the younger and oldest ends of the age range.

### **3.6 Income and household type**

3.6.1 Table 3.4 compares low and high annual household income figures by household type.

**Table 3.4 Low and high household incomes by household type**

<b>Household Type</b>	<b>Low income (household income less than £10,000 per annum)</b>	<b>Middle income (household income £10k- £30k per annum)</b>	<b>High income (household income above £30,000 per annum)</b>
Couple no Dependent Child (ren)	3%	50%	47%
Couple with Dependent Child (ren)	4%	44%	52%
Lone parent with dependent child (ren)	13%	60%	27%
One person household	36%	43%	21%
Other multi-person household	35%	48%	17%

*Source: 2010 House Condition Survey*

3.6.2 Table 3.4 does show that clear associations exist. One person households were most strongly associated with low incomes and middle income households, followed by other multi-person households. Couple with dependent child (ren) households had greater proportions of higher incomes followed by couples with no dependent child (ren).

### **3.7 Income and residents with disabilities**

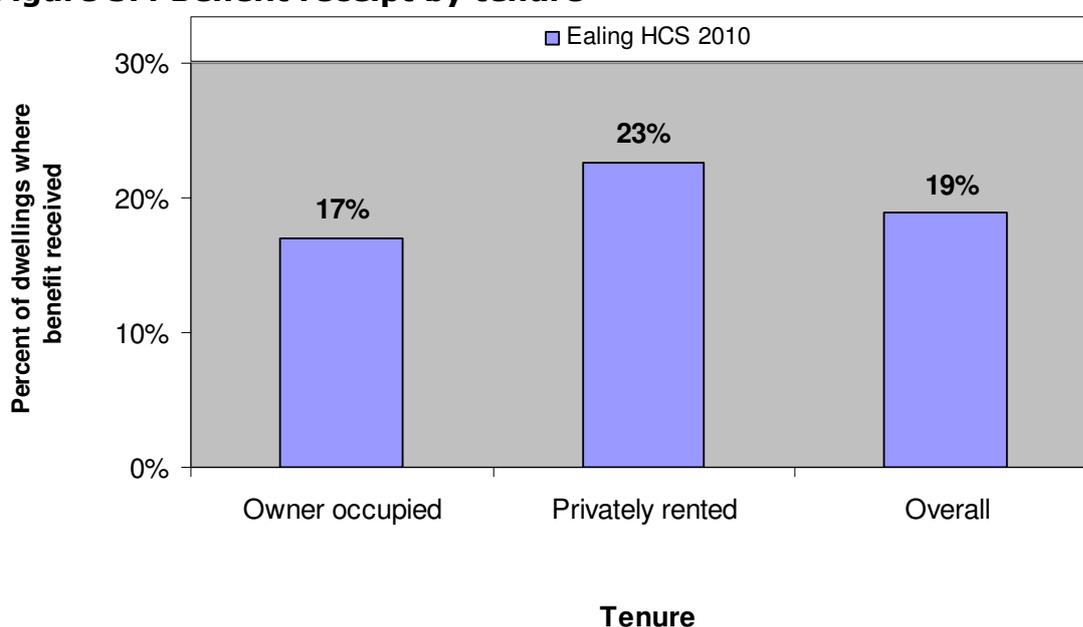
3.7.1 It is important to note that this survey used a broad definition of disabled person. This included residents that were frail elderly, as well as registered disabled persons and other persons with a disability.

3.7.2 When looking at the association between disability and income, 36.3% or 2,540 dwellings, of households with a disabled resident had a household income below £10,000 per annum, which was substantially higher than the 11.6% where there was no person with a disability. 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 authorities Home Improvement Agency to develop, where there is an assessed need, a package of assistance to meet those needs.

### 3.8 Benefit receipt

3.8.1 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 4.11.2). Overall 18,830 (19%) 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 23% compared with 17% in the owner occupied sector.

**Figure 3.4 Benefit receipt by tenure**



*Source: 2010 House Condition Survey*

### 3.9 Value of dwellings and equity

3.9.1 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.

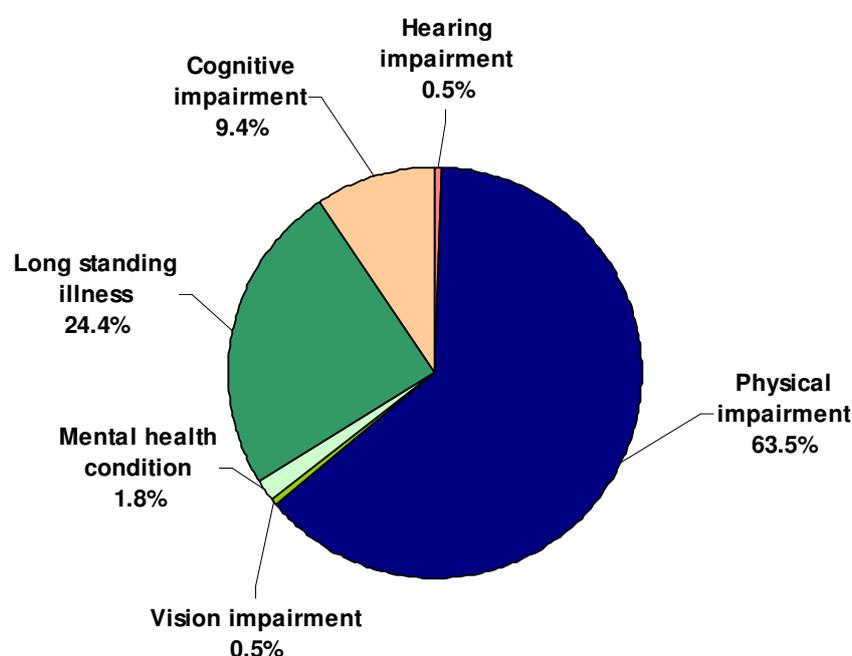
3.9.2 The average value of a dwelling in Ealing was £340,000. This figure was based on the average sale prices in Ealing compiled by the Land Registry from January to March 2010. The figure was well above the average value across the UK of £234,800.

3.9.3 The average mortgage level for owner-occupied dwellings in Ealing, based upon occupier responses, was £133,000 resulting in an average equity of £207,000 per dwelling using the Land Registry average value.

### **3.10 Residents with disabilities**

3.10.1 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 7,000 (7.0%) 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*

3.10.2 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.

### **3.11 Adaptations/Equipment**

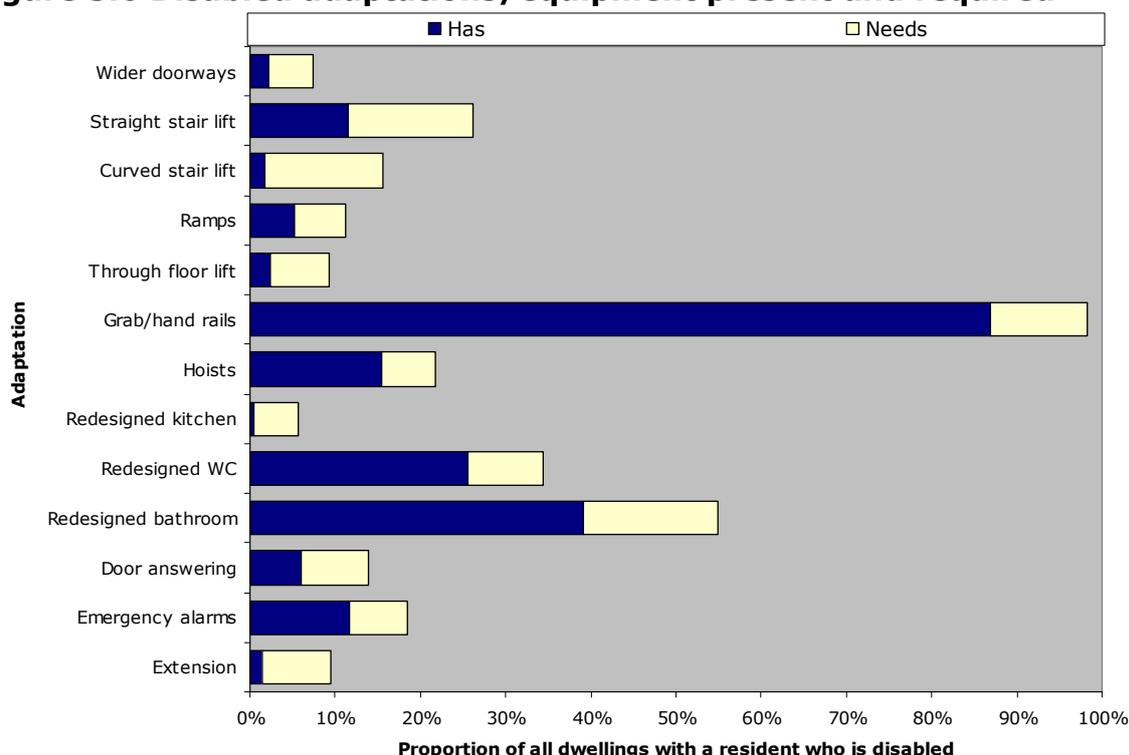
3.11.1 Where it was indicated that a member of the household suffered from a long term illness or disability, the survey form included a section regarding the existing provision of adaptations or equipment and also

whether the occupier felt there was the need for further adaptations or adaptations.

3.11.2 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 authorities disability service to establish if any recommended adaptations can be reasonably and practically undertaken taking into account the construction and configuration of the dwelling.

3.11.3 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

3.11.4 Figure 3.6 shows that grab/hand rails had the highest level of current provision, present in 86.9% of dwellings occupied by a resident with a disability, followed by redesigned bathrooms at 39.1%. The most

needed was a redesigned bathroom (15.7%) followed by the provision of straight stair lift at 14.7%.

3.11.5 Table 3.5 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 3.5 Cost of adaptations for the disabled**

<b>Adaptations and equipment</b>	<b>Adaptations and equipment *</b>	<b>Adaptation and equipment Cost</b>	<b>Cost after means testing</b>
Wider doors	370	£448,000	£224,000
Straight stair lift	1,060	£3,195,000	£1,414,000
Curved stair lift	1,010	£10,089,000	£1,594,000
Ramps	440	£1,110,000	£467,000
Through floor lift	500	£4,966,000	£2,483,000
Grab/hand rails	820	£408,000	£204,000
Hoists	460	£916,000	£458,000
Redesigned kitchen	370	£2,241,000	£1,121,000
Redesigned WC	630	£1,581,000	£806,000
Redesigned bath	1,140	£5,680,000	£2,788,000
Door answer	580	£1,732,000	£939,000
Emergency alarms	490	£493,000	£229,000
Extension	580	£5,824,000	£2,291,000
<b>Total</b>	<b>8,450</b>	<b>£38,683,000</b>	<b>£15,018,000</b>

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

3.11.6 The total cost of all adaptations and equipment that could potentially be fitted to benefit residents with a disability was just under £38.7 million. When the estimated means testing had been applied this total reduced to just over £15.0 million, which reflects the fact that there are some residents with disabilities with average or above average incomes.

3.11.7 It should be considered that two factors will affect the £15.0 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 £15.0 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.

- 3.11.8 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.

### **3.12 Owner occupiers plans to repair their property**

- 3.12.1 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, how they would finance the proposed work and whether or not they would be interested in considering a low interest repayable loan/grant from the Council to undertake the works.

- 3.12.2 The great majority of owner occupied residents (95.5%) indicated that they were not aware of any defects requiring repair to their property. Some 2,900 (4.5%) said that they were. Table 3.6 shows the costs estimated by occupiers for the work put into cost bands:

**Table 3.6 Occupiers estimated cost of improvement works**

<b>Improvement Cost Band</b>	<b>Percentage</b>
£1 to £4,999	81.0%
£5,000 to £9,999	4.2%
£10,000 to £14,999	1.2%
£15,000 to £19,999	0.0%
£20,000 to £24,999	0.0%
£25,000 +	13.6%

*Source: 2010 House Condition Survey*

- 3.12.3 The vast majority (81.0%) said that the work would cost under £5,000, with a majority of the remainder saying the work would cost £25,000 or more (13.6%).

- 3.12.4 Table 3.7 illustrates the responses by owner occupied residents when asked if they would be interested in a range of funding options from the Council to assist their ability to undertake the remedial/improvements works.

**Table 3.7 Owner occupied residents prepared to consider funding from the Council**

<b>Option</b>	<b>Yes %</b>
Zero interest loan	23.2%
Flexible loan	24.7%
Equity share loan	8.5%

*Source: 2010 House Condition Survey*

3.12.5 Interest in the three options varied between 24.7% for the flexible loan option; 23.2% for the zero interest option and 8.5% for the equity share option.

3.12.6 7.6% of residents indicated that they had received a previous Council loan/grant.

### **3.13 Security**

3.13.1 Residents were asked if a range of security measures were present in their property. Table 3.8 gives a breakdown of residents' responses to these questions.

3.13.2 The two joint highest levels of provision were door deadlocks and window locks both at 87.4%. Alarms were only present in 13.6% of dwellings.

**Table 3.8 Security measures present in property**

<b>Secure Doors (Deadlock)</b>	<b>Door Viewers</b>	<b>Door Chains</b>	<b>Secure Windows (locks)</b>	<b>Alarms</b>
89,660	75,390	50,370	89,710	13,920
87.4%	73.5%	49.1%	87.4%	13.6%

*Source: 2010 House Condition Survey*

### **3.14 Ethnic origin, nationality and other social characteristics**

3.14.1 Residents were asked to specify the majority ethnic origin type within their household and the results are given in Table 3.9:

**Table 3.9 Ethnic origin**

<b>Ethnic Origin</b>	<b>Households</b>	<b>Per cent</b>
White: English/Welsh/Scottish/Northern Irish/British	35,310	35.48%
White: Irish	2,650	2.66%
White: Gypsy/Traveller	0	0.00%
White: Other	14,740	14.81%
Mixed: White and Black Caribbean	1,980	1.99%
Mixed: White and Black African	2,160	2.17%
Mixed: White and Asian	320	0.32%
Mixed: Any other mixed/multiple background	70	0.07%
Asian/Asian British: Indian	21,790	21.89%
Asian/Asian British: Pakistani	4,330	4.35%
Asian/Asian British: Bangladeshi	1,000	1.00%
Asian/Asian British: Chinese	910	0.91%
Asian/Asian British: Any other Asian background	6,630	6.66%
Black African/Caribbean/Black British: African	2,490	2.50%
Black African/Caribbean/Black British: Caribbean	2,390	2.40%
Black African/Caribbean/Black British: Any Other	0	0.00%
Other: Arab	470	0.47%
Other: Any other ethnic group	1,910	1.92%
Refused	380	0.38%
<b>Total</b>	<b>99,530</b>	<b>100%</b>

*Source: 2010 House Condition Survey*

3.14.2 There was a wide spread of ethnic origin responses with the largest group being White: English/Welsh/Scottish/Northern Irish/British (35.48%), with the proportion including White: Irish, White: Gypsy/Traveller and White Other increasing this to 52.95% compared with 91.8% in England as a whole. Asian/Asian British: Indian had the next highest rate (21.89%) followed by Asian/Asian British: Any other Asian background (6.66%).

### **3.15 Other social questions**

3.15.1 Additional social questions were included to provide information on sexual orientation; religion and the perception of the immediate neighbourhood within which residents live.

**Table 3.10 Sexual orientation**

<b>Sexual orientation</b>	<b>Proportion</b>
Heterosexual	98.1%
Gay or Lesbian	0.8%
Bisexual	0.0%
Prefer not to say	1.1%
<b>Total</b>	<b>100%</b>

3.15.2 The majority of heads of household considered themselves to be heterosexual (98.1%).

**Table 3.11 Religion**

<b>Religion</b>	<b>Proportion</b>
No religion	27.3%
Christian (All denominations)	35.6%
Buddhist	0.9%
Hindu	16.6%
Jewish	0.1%
Muslim	13.7%
Sikh	3.5%
Any other religion	0.2%
Refused	2.0%
<b>Total</b>	<b>100%</b>

*Source: 2010 House Condition Survey*

3.15.3 Religious belief showed a wide variation, with 35.6% considering themselves to be Christian (covering all denominations); 16.6% Hindu; 13.7% Muslim and 27.3% indicating no religious belief.

**Table 3.12 Perception of problems**

<b>Perception of specified areas of potential concern</b>	<b>Don't know/can't say</b>	<b>Not a problem</b>	<b>Not a very big problem</b>	<b>A fairly big problem</b>	<b>A very big problem</b>
Overcrowding	5.3%	63.6%	10.4%	18.1%	2.6%
Litter/Fly tipping	2.4%	65.1%	17.2%	10.4%	4.9%
Graffiti	2.4%	79.1%	13.0%	4.5%	1.0%
Unsocial behaviour	2.3%	53.2%	18.1%	20.7%	5.7%
Property crime	2.6%	57.5%	16.6%	17.7%	5.6%
Empty properties	8.7%	80.5%	8.1%	1.9%	0.8%

*Source: 2010 House Condition Survey*

3.15.4 Overall the majority of heads of household felt the issues raised were either not a problem or not a very big problem. The main issues that people had concerns about where they thought it was either a fairly big or a big problem was unsocial behaviour (26.4%); property crime (23.2%) and overcrowding (20.7%).

**Table 3.13 Condition of immediate neighbourhood**

<b>Perception of change to immediate Neighbourhood over the last 5 years</b>	<b>Proportion</b>
Declined	22.8%
Improved	21.4%
Remained the same	55.8%
<b>Total</b>	<b>100.0%</b>

3.15.5 Heads of household were asked if they had noticed any changes to their immediate neighbourhood (within a 10 minute walking distance) over the past 5 years. Only 22.8% thought it had declined with 55.8% thinking that it had remained the same and 21.4% that it had improved.

### **3.16 Overcrowding**

3.16.1 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".

3.16.2 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 Ealing.

3.16.3 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.

3.16.4 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.

3.16.5 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.

3.16.6 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**

	<b>Overcrowded</b>	<b>Not Overcrowded</b>
Acton	4.9%	95.1%
Central	4.2%	95.8%
Southall	13.7%	86.3%
Greenford	3.9%	96.1%
Northolt	1.7%	98.3%
<b>Ealing</b>	<b>5.6%</b>	<b>94.4%</b>

*Source: 2010 House Condition Survey*

3.16.7 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**

<b>Area Name</b>	<b>Overcrowded</b>	<b>Not overcrowded</b>
Acton	8.9%	91.1%
Central	9.2%	90.8%
Southall	19.1%	80.9%
Greenford	11.4%	88.6%
Northolt	7.1%	92.9%
<b>Ealing</b>	<b>11.1%</b>	<b>88.9%</b>

*Source: 2010 House Condition Survey*

3.16.8 The bedroom standard (11.1%) had a higher overall rate than the statutory standard (5.6%) 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 5,760 and 11,350 overcrowded dwellings within the Council. However, all the data relating to overcrowding should be treated with caution.

3.16.9 For the bedroom standard, the Southall sub-area had the highest rate as was the case under the statutory standard.

3.16.10 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. It is estimated that there were 1,600 HMOs found to be overcrowded that were not licensable.

3.16.11 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. No dwellings 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, the percentage of vulnerable households in decent homes in the private sector remained part of CLG's Departmental Strategic Objectives (DSO2, 2.8)

- 4.1.6 Due to this, the Ealing 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 40,030 dwellings (39.0%) were classified non-decent. In England as a whole the rate was 34.4% (owner occupied and privately rented stock) making the Ealing rate just above the national average. The all England figure was taken as the proportion of non-decent private sector dwellings from the EHS 2008/2009. 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 2008/2009)
Category 1 hazard dwellings	22,150	55.3%	21.6%	23.6%
In need of repair	7,950	19.9%	7.7%	6.5%
Lacking modern facilities	1,150	2.9%	1.1%	2.9%
Poor degree of thermal comfort	20,080	50.2%	19.6%	13.2%
<b>Non-decency total</b>	<b>40,030</b>		<b>39.0%</b>	<b>34.4%</b>

*Source: 2010 House Condition Survey & EHS 2008/2009*

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.

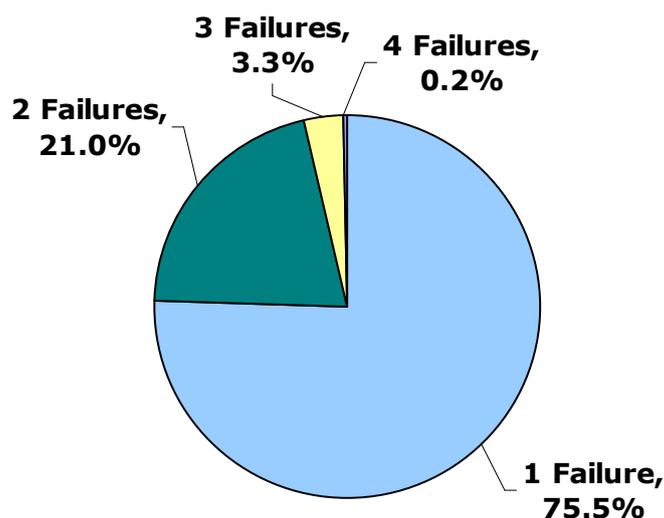
4.4.4 In Ealing, the hierarchy of reasons for failure follows the national profile with a higher rate of failure for Category 1 Hazards than thermal comfort. Two of the failure rates were lower than the national comparators; Category 1 Hazards and lacking modern facilities with both disrepair and thermal comfort failure being higher.

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**



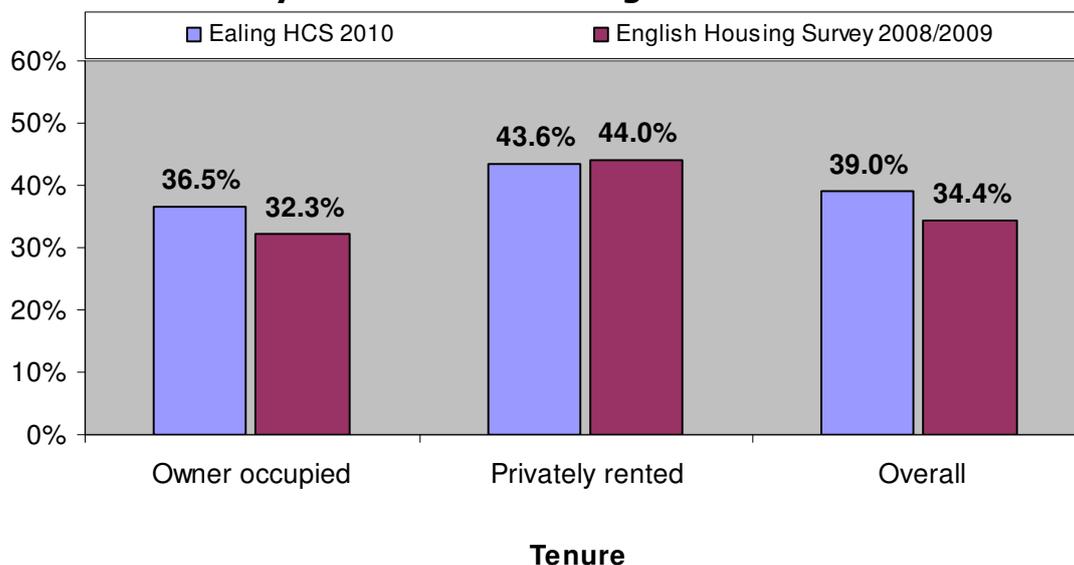
*Source: 2010 House Condition Survey*

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 24.5%. Realistically in the majority of cases this will have been 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 (43.6%) being higher than that found in the owner occupied sector (36.5%).

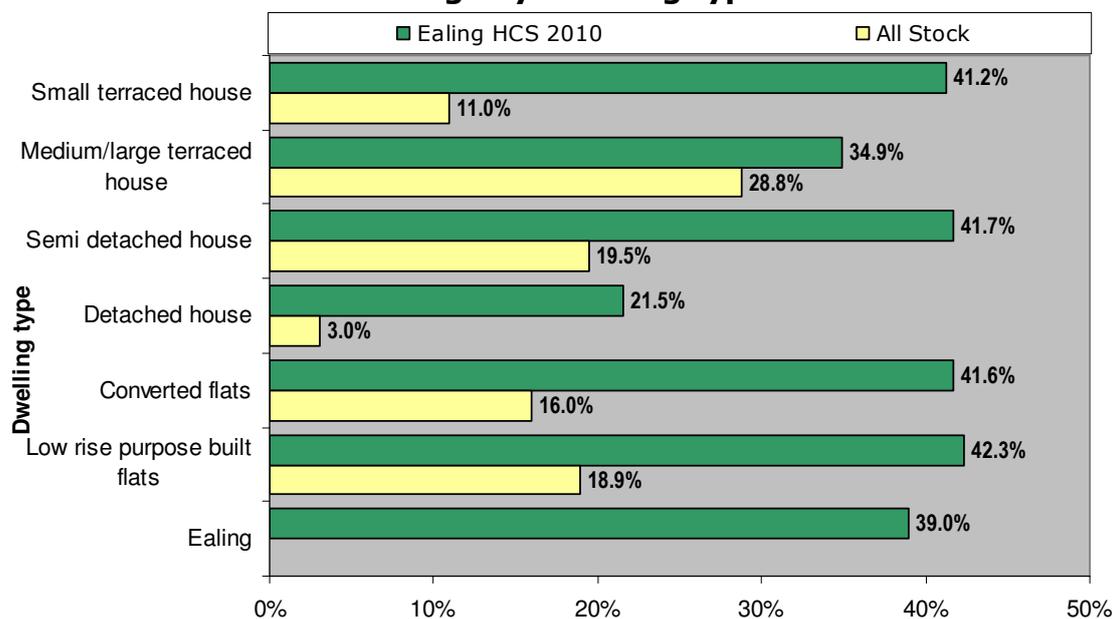
**Figure 4.2 Tenure by non-decent dwellings**



Source: 2010 House Condition Survey & EHS 2008/2009

4.6.2 Figure 4.3 examines decent homes failures by dwelling type.

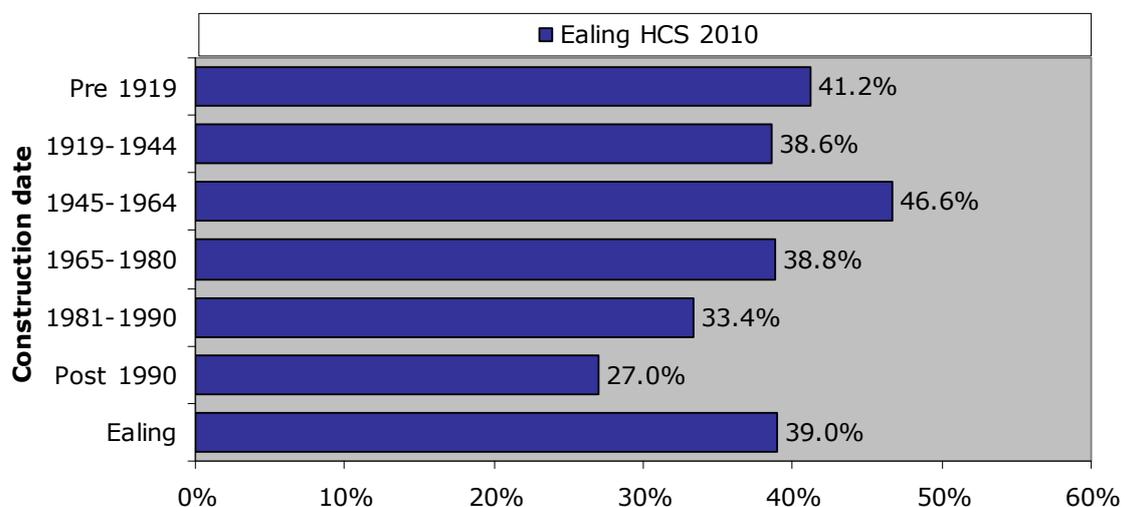
**Figure 4.3 Non-decent dwellings by dwelling type**



Source: 2010 House Condition Survey

4.6.3 By a small margin, the highest rate of non-decency was found in low rise purpose built flats (less than 6 storeys) at 42.3%, followed very closely by semi-detached houses (41.7%), converted flats (41.6%) and small terraced houses (less than 70m<sup>2</sup>) at 41.2%. The lowest rate was found in detached houses (21.5%).

**Figure 4.4 Non-decent dwellings by date of construction**

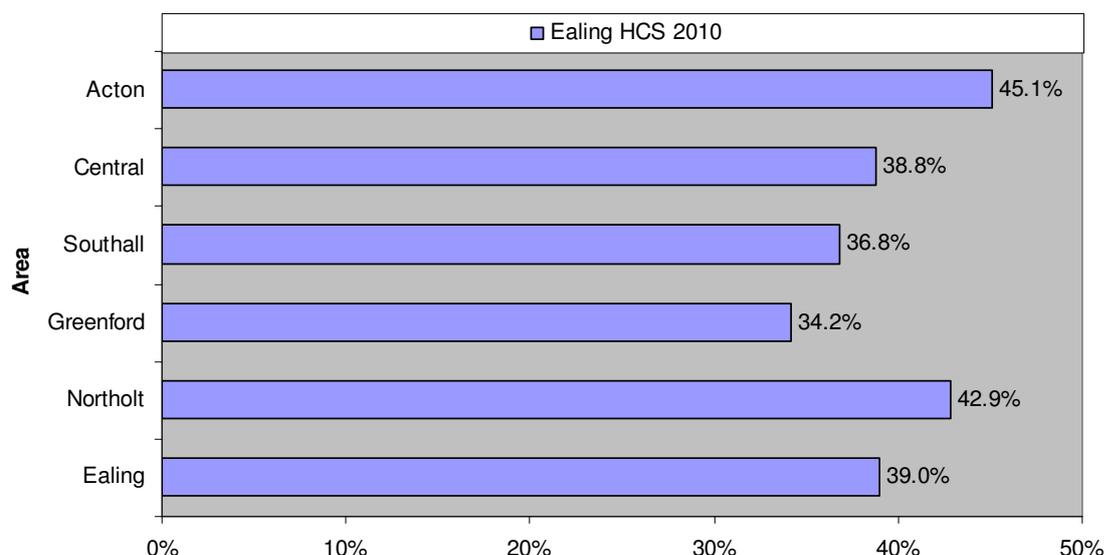


*Source: 2010 House Condition Survey*

4.6.4 It is usually the case that rates of failure of the Decent Homes Standard follow a trend of increasing failure with dwelling age. Whilst this is generally true in Ealing, the highest rate was found in the 1945 to 1964 age band (46.6%) which was above the usual trend line, largely due to a high rate of Category 1 Hazard failure (mainly excess cold and falls on stairs), disrepair and thermal comfort failure, which will be reflected in later chapters of this report. As is generally the case, the lowest rate was found in dwellings built Post-1990 at 27.0%, reflecting a high rate of Category 1 Hazards and thermal comfort failure due to storage and room heating coupled with poor insulation.

4.6.5 The distribution by sub-area is shown in Figure 4.5. The highest rate was recorded in the Acton sub-area (45.1%) followed by the Northolt sub-area (42.9%). The lowest rate was found in the Greenford sub-area at 34.2%.

**Figure 4.5 Non-decent dwellings by sub-area**



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 4.2 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 4.2 Repair cost by non-decency reason (HHSRS)**

Reason	Total Cost (£ million)	Average cost per dwelling (£)*
Category 1 Hazard	£26.2	£1,180
Repair	£21.2	£2,670
Amenities	£16.4	£14,280
Thermal comfort	£27.3	£1,360
<b>Total</b>	<b>£91.1</b>	<b>£2,280</b>

\* Rounded to nearest £10

Source: 2010 House Condition Survey

**Table 4.3 Repair cost in non-decent pre-1945 dwellings**

Reason Pre-1945 dwellings	Total Cost (£ million)	Cost per dwelling (£)
Category 1 Hazard	£18.7	£1,100
Repair	£16.5	£2,600
Amenities	£10.8	£9,630
Thermal comfort	£14.6	£1,230
<b>Total</b>	<b>£60.5</b>	<b>£1,660</b>

\* Rounded to nearest £10

Source: 2010 House Condition Survey

#### **4.8 Non-decency and HMO dwellings**

4.8.1 There were 2,780 HMOs that failed the decent homes standard with Table 4.4 providing a breakdown by non-decency criteria and by HMO type.

**Table 4.4 Reasons for failure of HMO dwellings as a decent home**

HMO Type	Category 1 Hazards	Disrepair	Non-Modern	Thermal comfort failure	Non-decent
HMO	23.0%	3.1%	1.0%	32.1%	51.7%
Licensable HMO	24.0%	4.9%	0.0%	39.8%	51.5%
<b>Ealing</b>	<b>23.1%</b>	<b>3.4%</b>	<b>0.9%</b>	<b>33.1%</b>	<b>51.7%</b>

Source: 2010 House Condition Survey

4.8.2 Overall, the rate of non-decency within HMOs was 51.7% with the distribution by type being very similar. Licensable HMOs had the highest rates for Category 1 Hazards; disrepair and thermal comfort failure.

4.8.3 The total cost to remedy non-decency in HMO dwellings was just under £5.9 million an average of £2,120 per dwelling. This compares with an average of £2,280 in the overall private sector stock. Table 4.5 provides a breakdown of cost.

**Table 4.5 Repair cost by non-decency reason (HMO)**

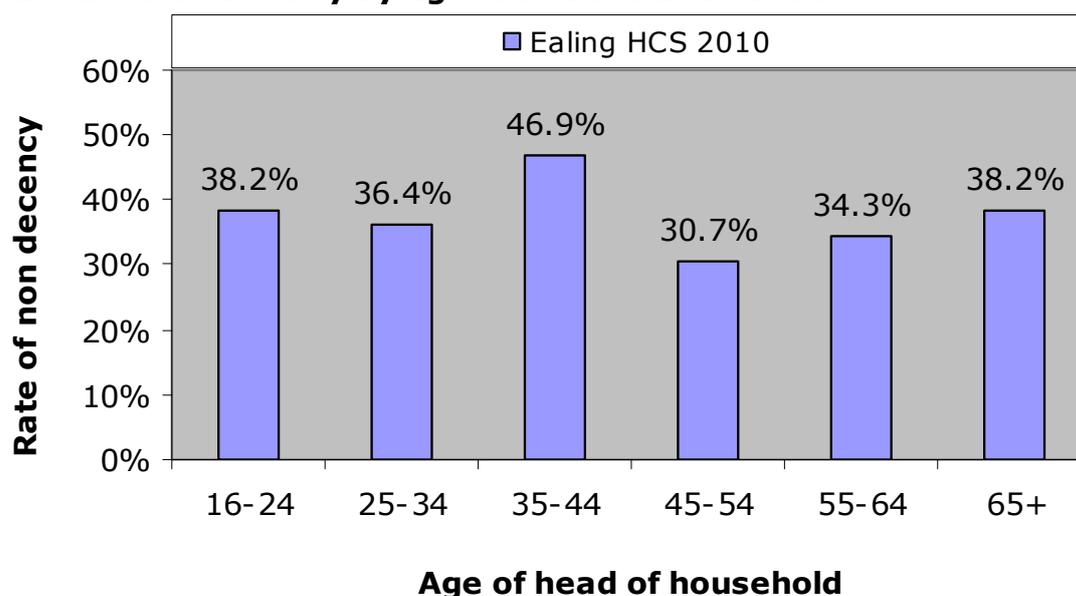
Reason	Total Cost (£ million)	Cost per dwelling (£)
Category 1 Hazard	£3.0	£2,410
Repair	£0.6	£3,530
Amenities	£0.8	£17,160
Thermal comfort	£1.5	£830
<b>Total</b>	<b>£5.9</b>	<b>£2,120</b>

Source: 2010 House Condition Survey

#### 4.9 **Age of Head of Household and non-decency**

- 4.9.1 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).
- 4.9.2 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.
- 4.9.3 Figure 4.6 illustrates the relationship between the age of head of household and levels of non-decency. Within age groups, the highest rate of non-decency occurred where the age of head of household was between 35 and 44 years (46.9%) followed jointly, by heads of household aged between 16 and 24 and those aged 65 and over both at 38.2%. The lowest was found in the 45 to 54 age band (30.7%).

**Figure 4.6 Non-decency by age of head of household**

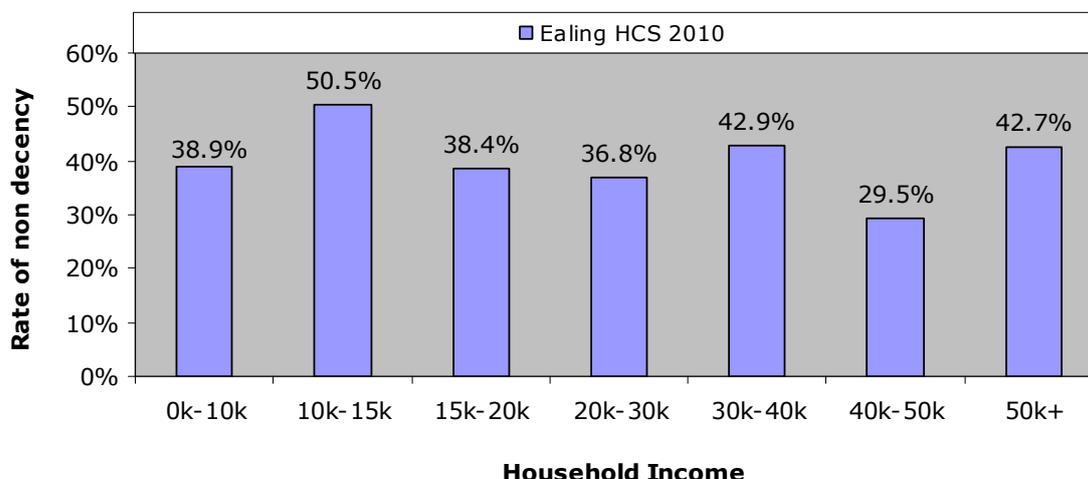


*Source: 2010 House Condition Survey*

#### 4.10 **Household income and non-decency**

- 4.10.1 The relationship between income and non-decency can be analysed by combining household income figures with failures under the Decent Homes Standard. The income band with the largest proportion rate found to be non-decent were occupied by households with an annual income of between £10k and £15k (50.5%) followed by those with an income of £30k to £40k (42.9%). The overall rate for those with an income of less than £15k was 43.9%. The lowest rate was found where household income was between £40k and £50k (29.5%).

**Figure 4.7 Non-decency by annual household income band**



Source: 2010 House Condition Survey

#### **4.11 Private sector vulnerable occupier base-line**

4.11.1 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. As indicated previously, although the PSA7 target no longer exists, it is still a CLG Departmental Strategic Objective under DSO2, 2.8).

4.11.2 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]

- 4.11.3 In Ealing, there were 18,830 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 7,350 were classified non-decent, which represents 39.0% of dwellings occupied by a vulnerable resident. Conversely this means that 61.0% were decent. The EHS 2008/2009 found that 33.1% of vulnerable households were living in non-decent homes.
- 4.11.4 On this basis Ealing failed to meet the national target for 2006/07 of 65% of vulnerable households to be living in decent homes and falls short of the 70% target for 2010/11 by 1,690 dwellings.
- 4.11.5 The proportion of non-decent dwellings by sub-area has already been considered earlier. Table 4.6 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.
- 4.11.6 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 with a minus figure indicating that the target has already been met. The Northolt sub-area had the highest proportionate rate (46.7%) and the Central sub-area the highest numerical shortfall (670 dwellings).

**Table 4.6 Non-decent dwellings with vulnerable households**

Area	Vulnerable households in non-decent dwellings	Percent vulnerable households in decent dwellings	Percent vulnerable households in non-decent dwellings	Shortfall for vulnerable occupiers
Acton	1,320	61.7%	38.3%	290
Central	2,030	54.8%	45.2%	670
Southall	1,920	57.0%	43.0%	580
Greenford	940	76.5%	23.5%	-260
Northolt	1,140	53.3%	46.7%	410
<b>Total</b>	<b>7,350</b>	<b>61.0%</b>	<b>39.0%</b>	<b>1,690</b>

*Source: 2010 House Condition Survey*

- 4.11.7 The rates by tenure show the owner occupied sector with a decency rate of 65.3% (i.e. below the 70% target figure with a shortfall of 510 dwellings) and the private rented sector where the figure for vulnerable households in a decent home was 55.1%, a shortfall of 1,180 dwellings needing to be made decent in order to meet the 70% target figure.

## **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**

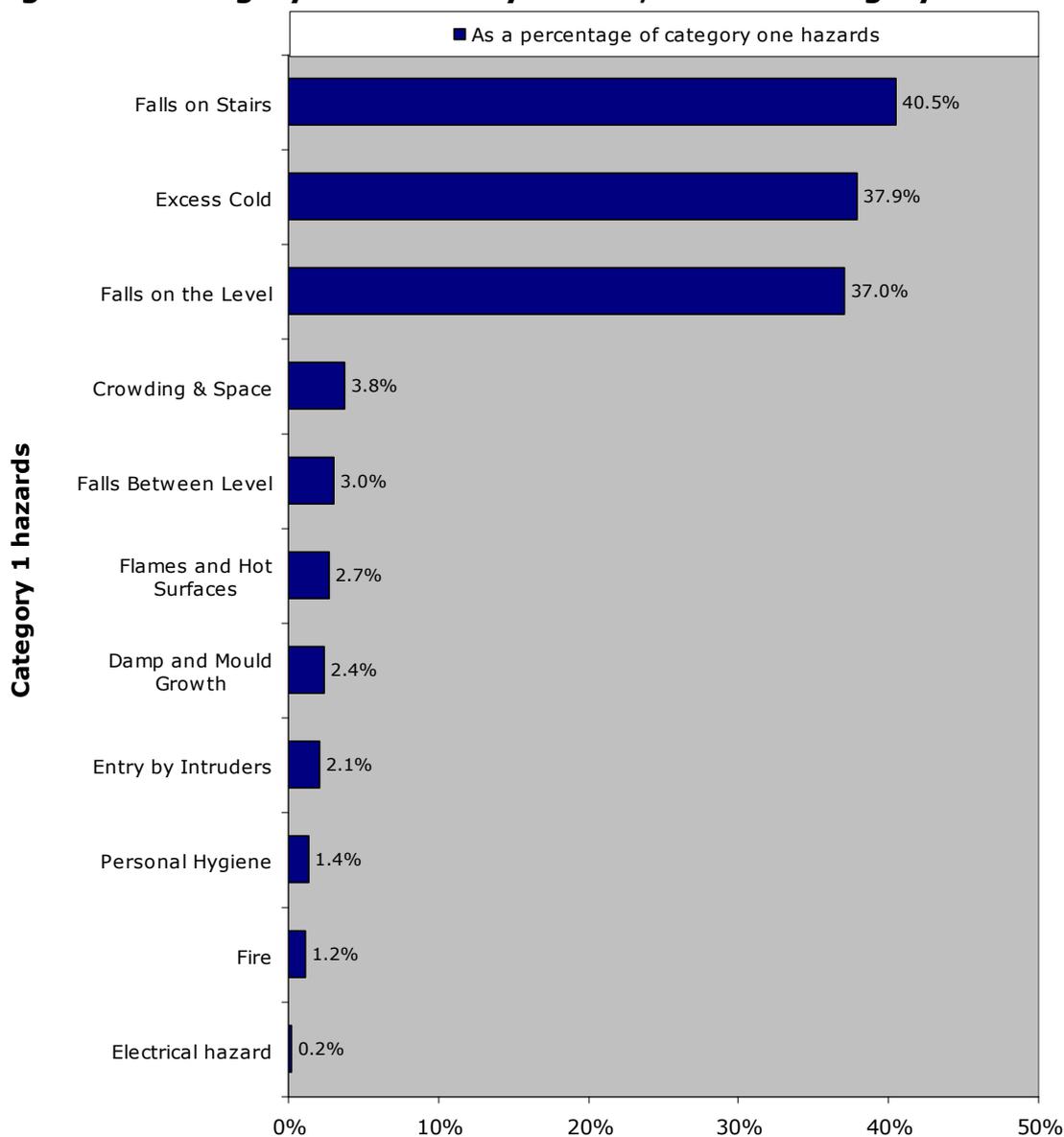
5.3.1 The overall proportion of dwellings with a Category 1 Hazard was 21.6% compared with 23.6% (owner occupied and privately rented

dwellings) found in the EHS 2008/2008. This represented 22,150 dwellings across Ealing with 13,640 being houses and 8,510 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 follows the national pattern with falls on stairs having the highest rate followed by excess cold and falling on level surfaces.

## 5.5 Severity of Category 1 Hazards

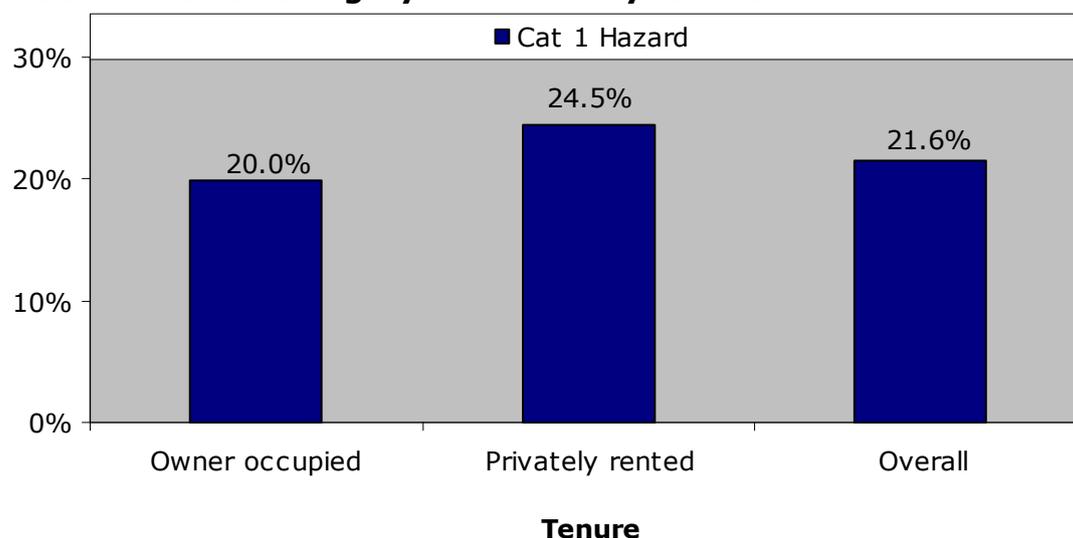
5.5.1 One indication of the severity of Category 1 Hazard failure is the number of items that a dwelling fails the standard on. Overall, only 23.5% (5,200 dwellings) had two or more Category 1 Hazards.

## 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 that the highest rate of Category 1 Hazard failure was found in the privately rented stock (24.5%) with the owner occupied stock being lower at 20.0%.

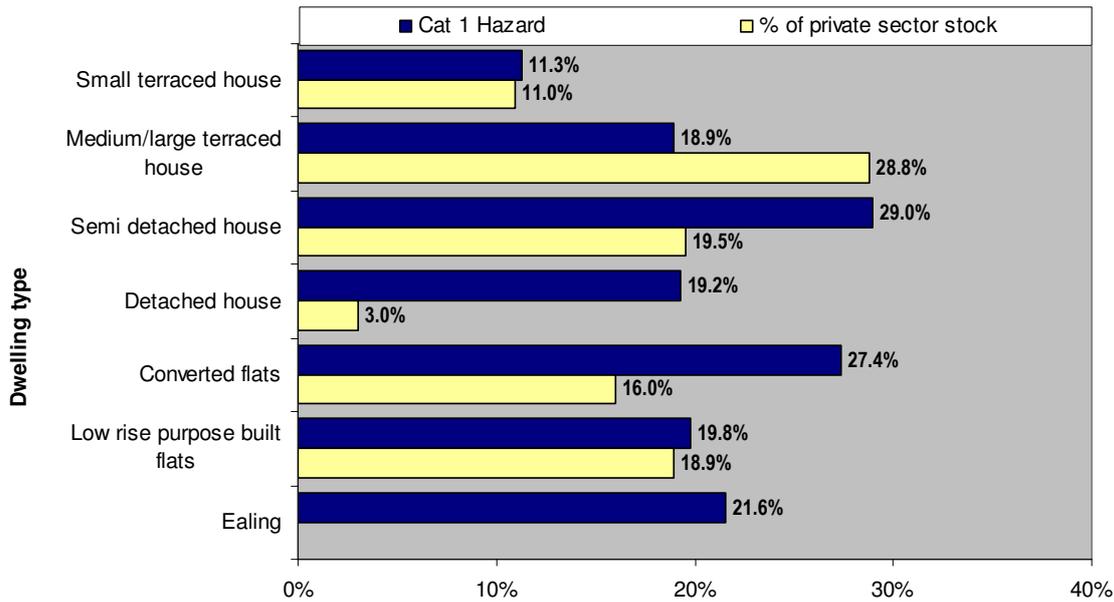
**Figure 5.2 Rates of Category 1 Hazards by tenure**



*Source: 2010 House Condition Survey*

5.6.3 Figure 5.3 shows the rates of Category 1 Hazards by build type. Semi-detached houses had the highest proportionate failure rate (29.0%) followed by converted flats (27.4%) and low rise purpose built flats (less than 6 storeys) at 18.9%. The lowest rate was found in small terraced houses (less than 70m<sup>2</sup>) at 11.3%.

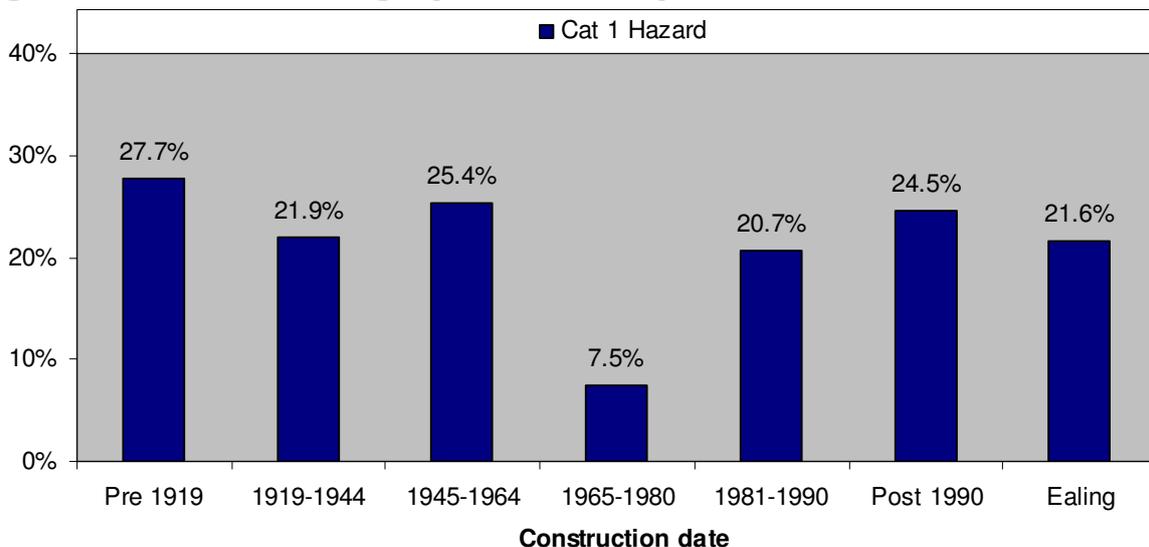
**Figure 5.3 Rates of Category 1 Hazards by building type**



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. This is clearly shown in the Category 1 Hazard rate distribution by construction date. Whilst the highest rate was found in pre-1919 dwellings (27.7%), the remaining age bands move downwards and upwards and it is particularly marked in the 1965 to 1980 age band where the rate is 7.5%, well below that for the remaining age bands, from 1981 onwards.

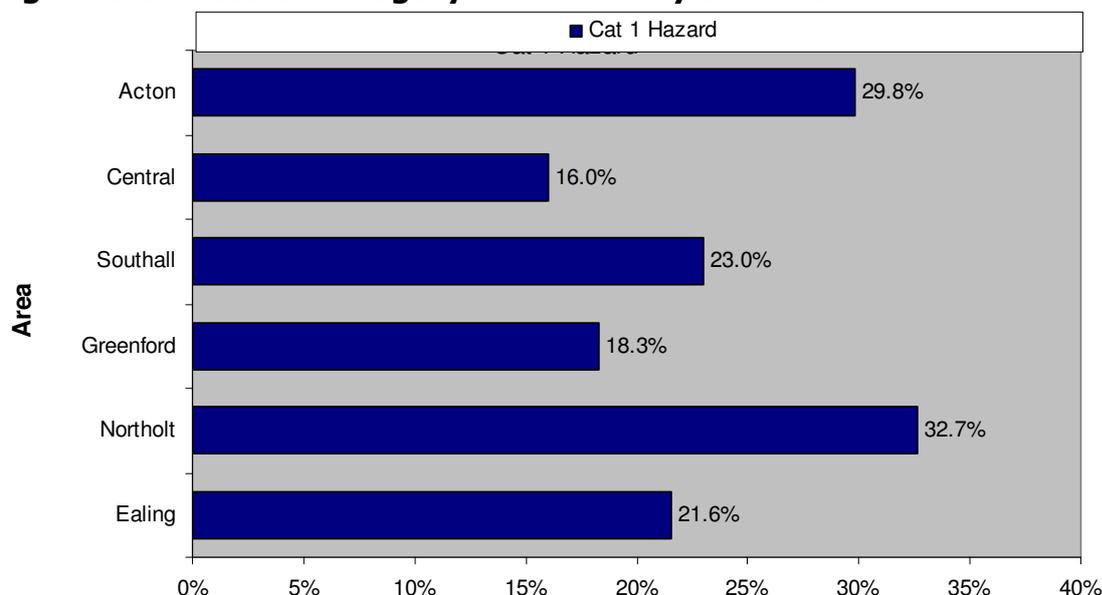
**Figure 5.4 Rates of Category 1 Hazards by construction date**



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 Northolt sub-area at 32.7%, followed by the Acton sub-area (29.8%). The lowest rate was found in the Central sub-area (16.0%).

**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 than the Council average of 21.6%, substantially so in the case of residents with a disability. The only exception was for those aged under 25 (20.2%), just below the Council average.

**Table 5.1 Category 1 Hazards by social characteristics**

Group	Category 1 Hazard
Income under £10k	23.4%
On Benefit	29.6%
Under 25	20.2%
Over 65	25.8%
Resident with disability	32.0%
<b>Ealing average</b>	<b>21.6%</b>

Source: 2010 House Condition Survey

## 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. 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 The total cost just to rectify Category 1 Hazards was an estimated £26.5 million at an average cost per dwelling overall of £1,200. The average cost per dwelling was slightly higher in privately rented dwellings at £1,400 compared with £1,000 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 Ealing was an estimated £182.4 million, an average of £8,200 per dwelling, with the owner occupied stock having the highest average cost at £9,900 compared with £5,800 in the private rented sector.

**Table 5.2 Repair costs in Category 1 Hazard dwellings by tenure**

Tenure	Remedial	Urgent <sup>2</sup>	5 year <sup>2</sup>	Comprehensive <sup>2</sup>
<b>Owner occupied (£m)<sup>1</sup></b>	<b>13.5</b>	<b>32.2</b>	<b>45.5</b>	<b>130.7</b>
<i>Average (£s)</i>	<i>1,000</i>	<i>2,400</i>	<i>3,400</i>	<i>9,900</i>
<b>Privately Rented (£m)<sup>1</sup></b>	<b>12.6</b>	<b>21.6</b>	<b>22.3</b>	<b>51.7</b>
<i>Average (£s)</i>	<i>1,400</i>	<i>2,400</i>	<i>2,500</i>	<i>5,800</i>
<b>All tenures (£m)<sup>1</sup></b>	<b>26.2</b>	<b>53.8</b>	<b>67.8</b>	<b>182.4</b>
<i>Average (£s)</i>	<i>1,200</i>	<i>2,400</i>	<i>3,100</i>	<i>8,200</i>

1. Figures given in millions of pounds sterling

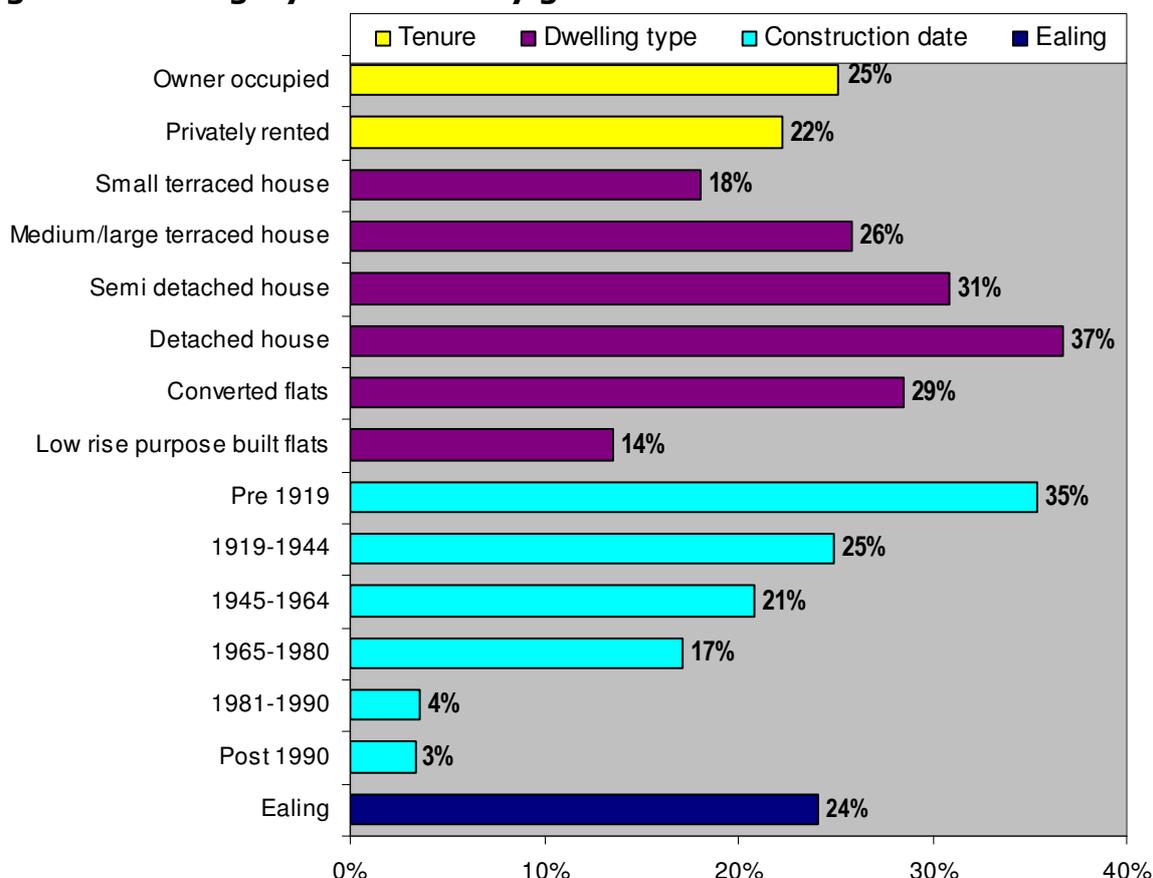
2. Figures are cumulative and therefore include the previous column

Source: 2010 House Condition Survey

## 5.9 Category 2 Hazards in bands D and E

- 5.9.1 There were an estimated 24,700 (24.1%) dwellings in Ealing that had at least one Category 2 Hazard (Bands D and E). Of those 19,800 (79.9%) 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.

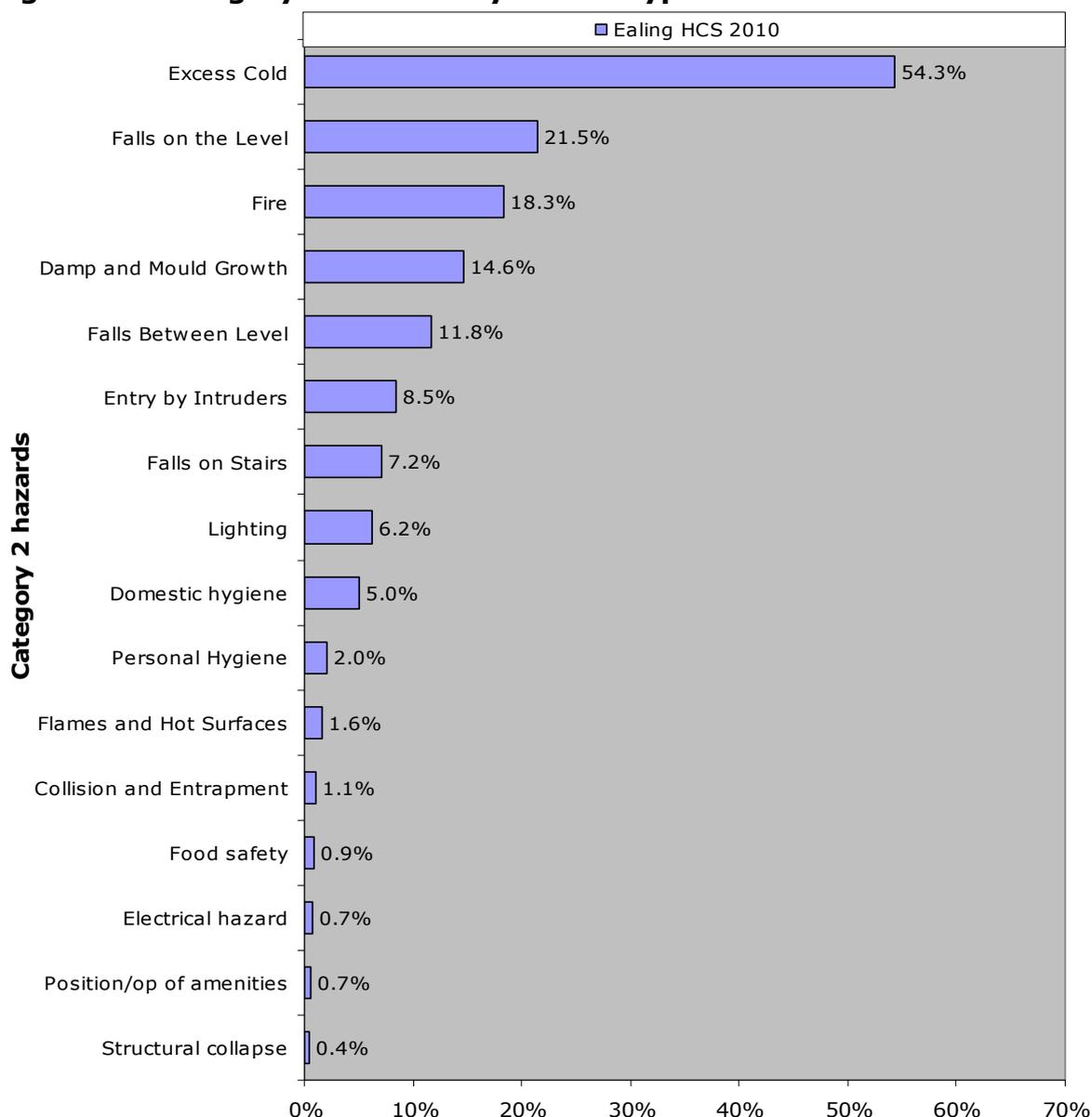
**Figure 5.6 Category 2 Hazards by general characteristics**



*Source: 2010 House Condition Survey*

- 5.9.3 The rate of Category 2 Hazards (Bands D and E) in the owner occupied sector at 25% was higher than that in the privately rented sector at 22%.
- 5.9.4 By build type, detached houses had the highest rate (37%), followed by semi-detached houses (31%). The lowest rate was found in low rise purpose built flats (less than 6 storeys) at 14%.
- 5.9.5 The pattern of decreasing incidence with age is followed, with the highest rate in pre-1919 dwellings (36%) and the lowest in post-1990 dwellings (3%).
- 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**

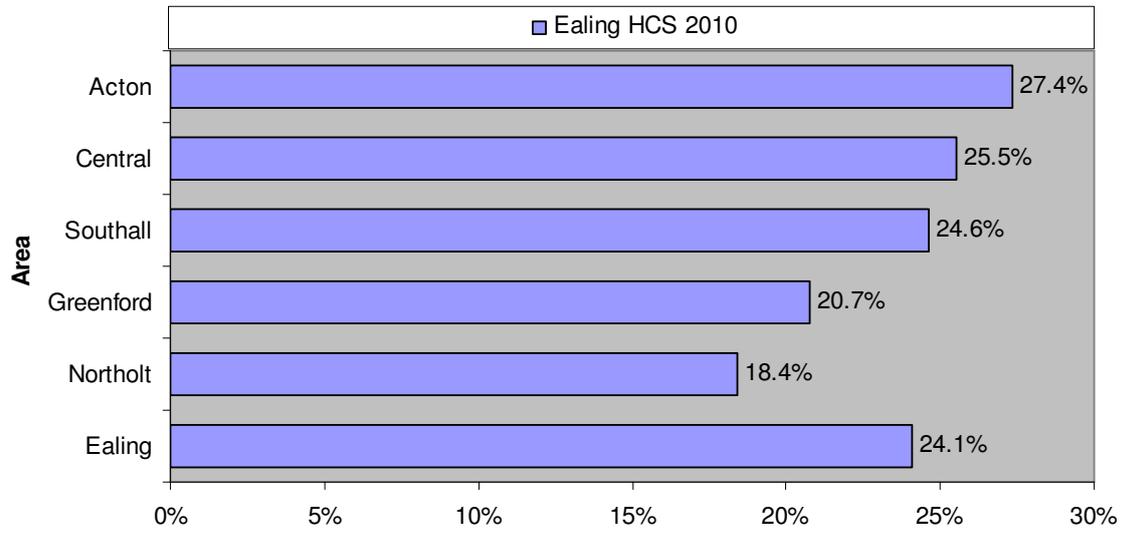


*Source: 2010 House Condition Survey*

5.9.7 Unlike with Category 1 Hazards, the most common hazard was excess cold followed by falling on level surfaces and then fire. Damp and mould growth also featured prominently. Again hazards with a nil return were not shown.

5.9.8 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 Acton sub-area (27.4%) followed by the Central sub-area (25.5%) and the Southall sub-area (24.6%), all of which were above the Council rate (24.1%).

**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)**

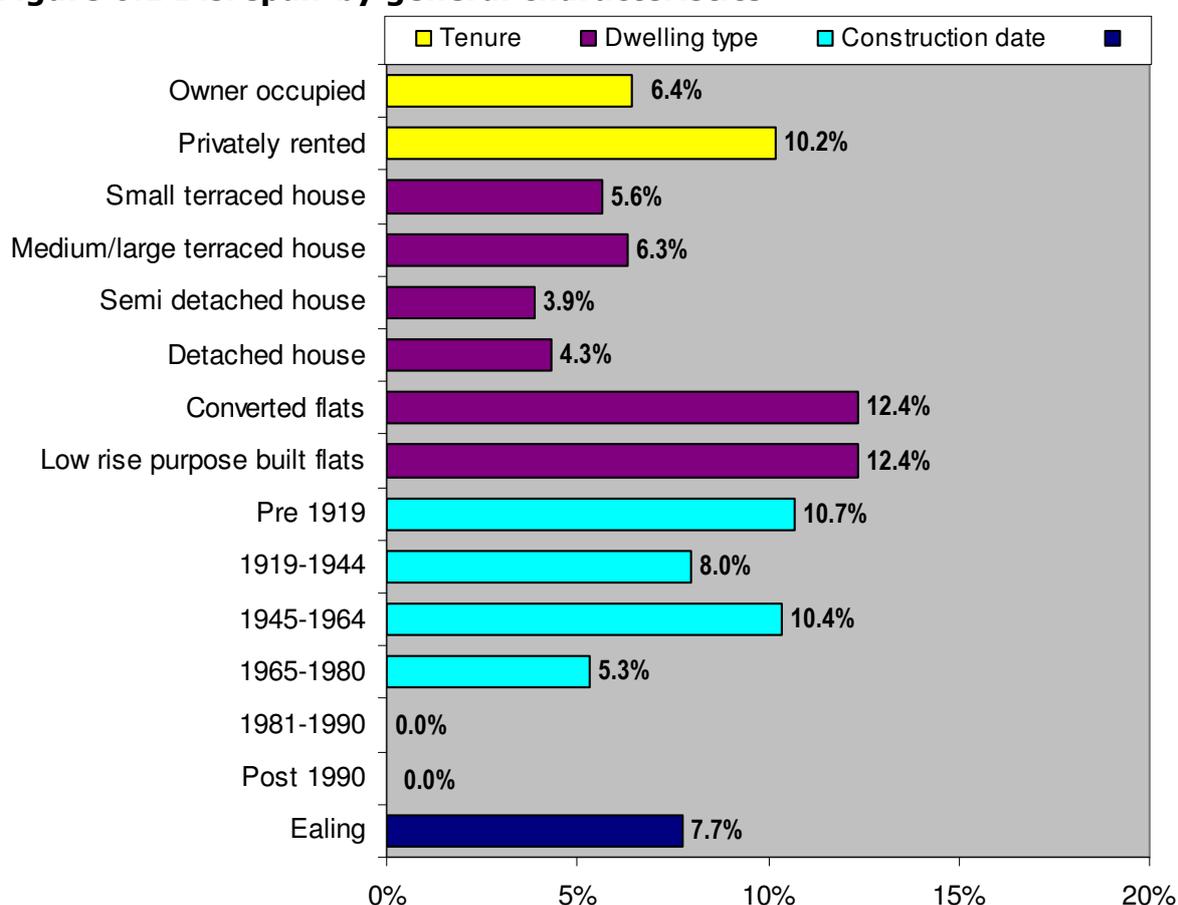
Element	Age to be considered old
Kitchen (Major repair or replace 3+ items)	30
Bathroom (Replace 2+ items)	40
Central heating distribution (Major Repair)	40
Other heating (Major Repair)	30

## 6.2 Disrepair and general characteristics

6.2.1 In Ealing 7,980 dwellings failed this criterion. At 7.7%, the rate of failure was above the national rate of 6.5%.

6.2.2 The overall repair cost within Ealing was £21.2 million, an average of £2,670 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.) The following section gives a breakdown of repair failure by a number of key variables.

**Figure 6.1 Disrepair by general characteristics**



*Source: 2010 House Condition Survey*

6.2.3 The rate in the private rented sector at 10.2% was above that for the owner occupied sector at 6.4%.

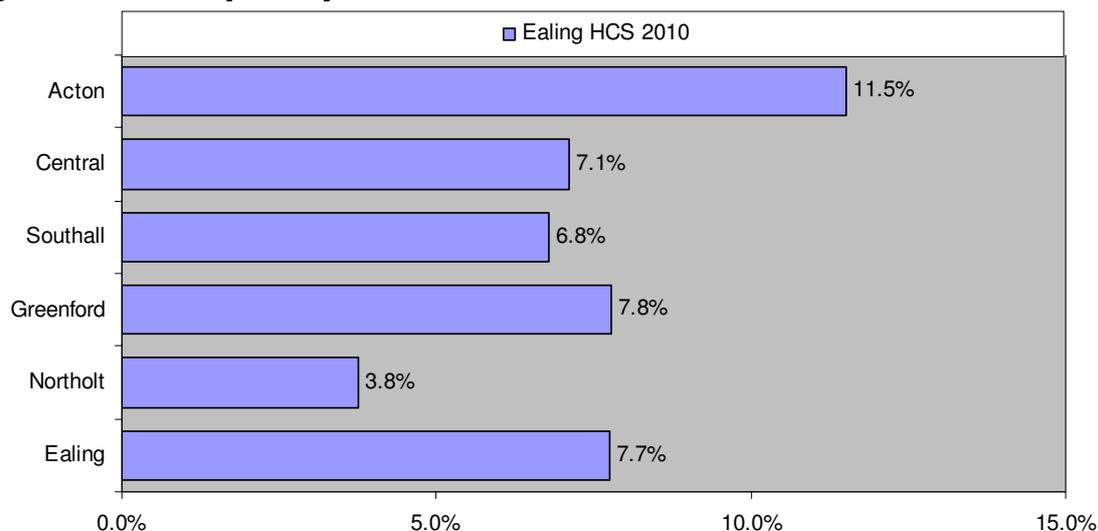
6.2.4 By dwelling type, the highest rates was found, jointly, converted flats and low rise purpose built flats (less than 6 storeys) at 12.4%, followed by medium/large terraced houses (6.3%). The lowest rate was found in semi-detached houses (3.9%).

6.2.5 The proportionate rate of repair failure by construction date usually increases with property age and whilst the results generally follow that pattern the 1945 to 1964 age band bucks that trend. No disrepair was found in dwellings constructed after 1980.

### 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 Acton sub-area (11.5%), followed by the Greenford sub-area (7.8%). The lowest rate was found in the Northolt sub-area (3.8%).

### 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 6.3.

6.4.2 Two of the variables had rates that were above the average Council rate (7.7%); those with an income under £10,000 and residents with a disability. All of the other rates were lower than the Council rate, particularly so in the case of those aged under 25.

**Table 6.3 Disrepair by social characteristics**

<b>Group</b>	<b>In disrepair</b>
Income under £10k	10.9%
On Benefit	6.8%
Under 25	2.5%
Over 65	7.5%
Resident with disability	11.7%
<b>Ealing average</b>	<b>7.7%</b>

*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 Ealing, the rate was lower than the national average with 1,150 (1.1%) dwellings failing for this reason. The low level of failure nationally, and in Ealing, 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

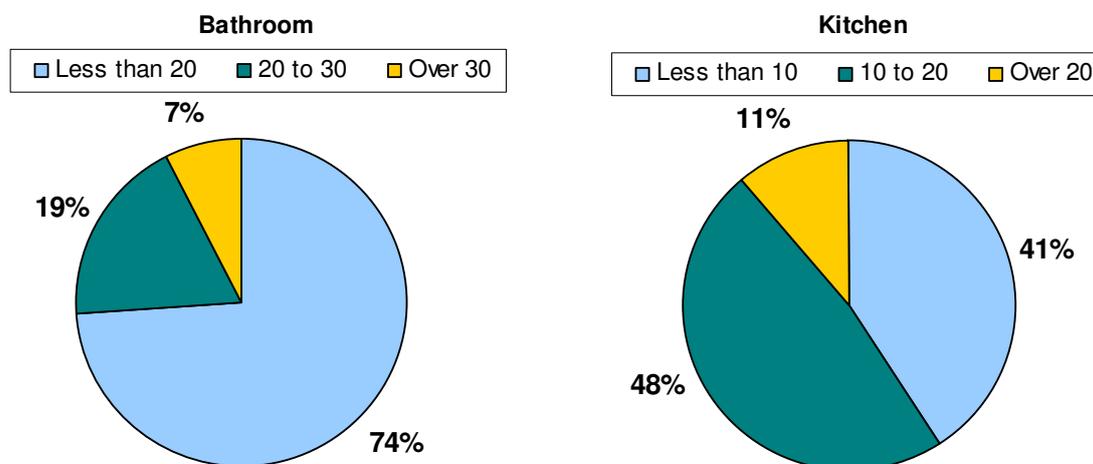
7.1.3 For example, if a dwelling had a kitchen and bathroom older than the specified date, it would not fail unless the kitchen had a poor layout or the bathroom was not properly located.

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 Ealing.

**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 (74%) were less than 20 years old but slightly greater with kitchens as 59% 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 Ealing 20,080 dwellings (19.6%) failed the thermal comfort criterion, which was above the national average of 13.2%.

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

- 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**

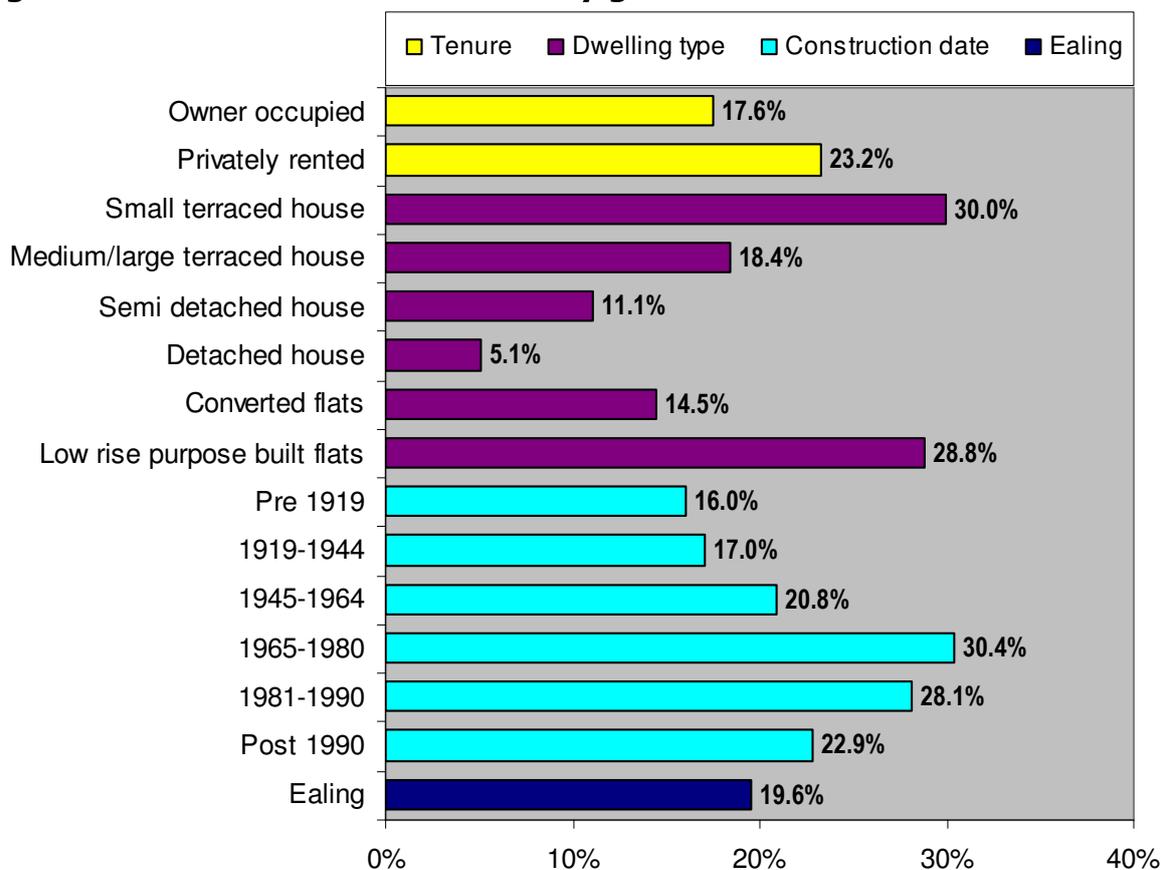
8.2.1 Figure 8.1 below shows the distribution of thermal comfort failure by tenure, building type and age.

8.2.2 The rate of failure in the private rented sector at 23.2% was above the rate of 17.6% in the owner occupied sector.

8.2.3 Small terraced houses had the highest failure rate (30.0%) followed by low rise purpose built flats (less than 6 storeys) at 28.8%. The lowest rate was found in detached houses (5.1%).

8.2.4 Thermal comfort failure rates usually increase with dwelling age. However, in Ealing, there is a reverse trend with pre-1919 dwellings having the lowest rate and the highest rates being found in the 1965 to 1980 and the 1981 to 1990 age bands which have poor insulation issues.

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

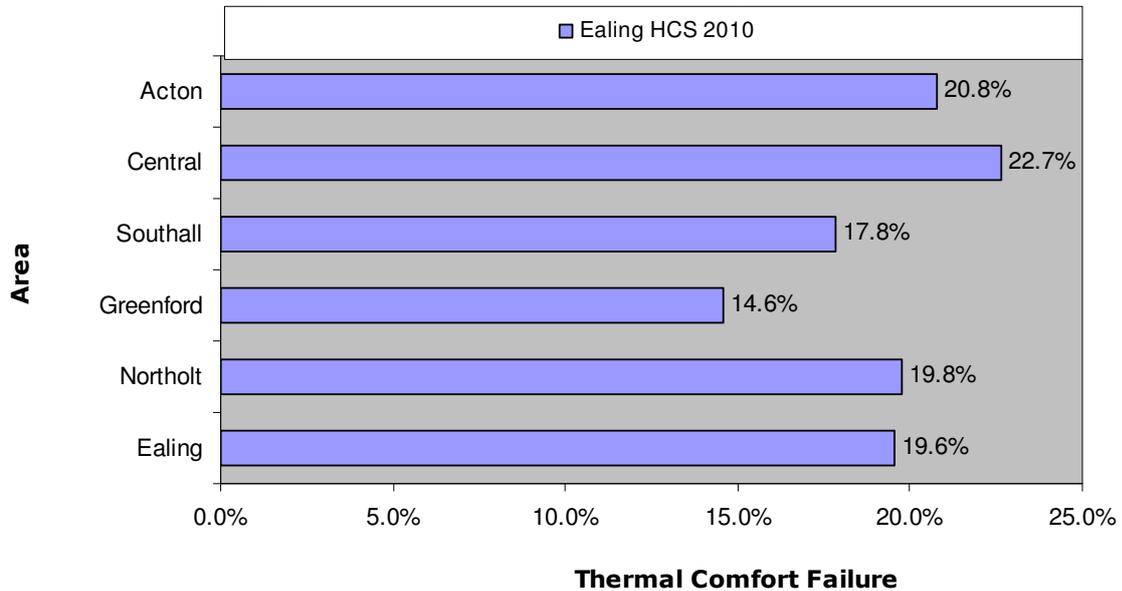


Source: 2010 House Condition Survey

### 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 Central sub-area at 22.7%, followed by the Acton sub-area (20.8%). The lowest rate was found in the Greenford sub-area (14.6%).

## 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<sub>2</sub> 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 Ealing for private sector dwellings was 55, compared to an average SAP rating of 50 nationally (for private sector dwellings only), based on the findings of the EHS 2008/2009, 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 2008/2009. The majority for each tenure group were contained within the 39 to 68 bandings, being 82.6% for owner occupied dwellings and 68.6% for the privately rented stock. The overall stock rate was 77.7% within those bands, which was above the national rate (73.8%).

**Table 9.1 Energy performance SAP banded**

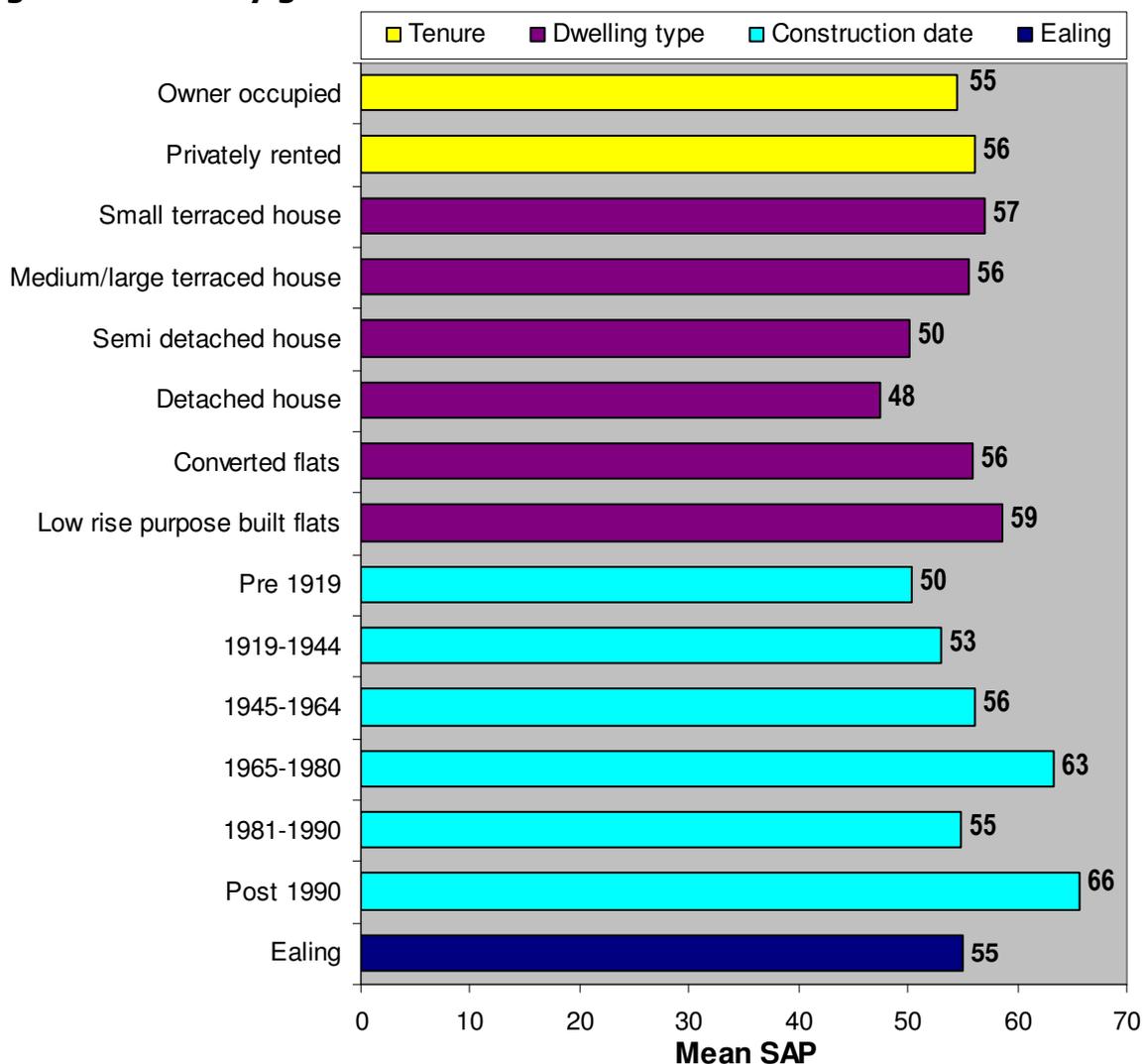
<b>EPC SAP Range Banded</b>	<b>Owner occupied</b>	<b>Privately rented</b>	<b>Whole Stock</b>	<b>EHS 2008/2009</b>
<b>Band A/B (81-100)</b>	2.6%	5.4%	3.6%	0.2%
<b>Band C (69-80)</b>	8.4%	14.6%	10.6%	7.0%
<b>Band D (55-68)</b>	43.4%	39.1%	41.9%	33.3%
<b>Band E (39-54)</b>	39.2%	29.4%	35.8%	40.5%
<b>Band F (21-38)</b>	4.3%	9.0%	5.9%	15.1%
<b>Band G (1-20)</b>	2.1%	2.5%	2.2%	3.9%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

*Source: 2010 House Condition Survey & EHS 2008/2009*

### **9.3 SAP 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 owner occupied dwellings was 55 and for the private rented sector it was 56 compared with the 50 found within each tenure group under the EHS 2008/2009.
- 9.3.4 When examining SAP ratings by built form, detached and semi-detached houses had the lowest SAP ratings at 48 and 50 respectively. Low rise purpose built flats had the highest mean SAP (59), followed by small terraced houses (57). The remaining dwellings types had mean SAP ratings close to the Council average (55).
- 9.3.5 Increases in SAP tend to be associated with a reduction in dwelling age; the most modern stock having the highest SAP. This pattern was generally followed in Ealing; the lowest mean SAP was for pre-1919 dwellings at 50 and the highest in post-1990 dwellings at 66.

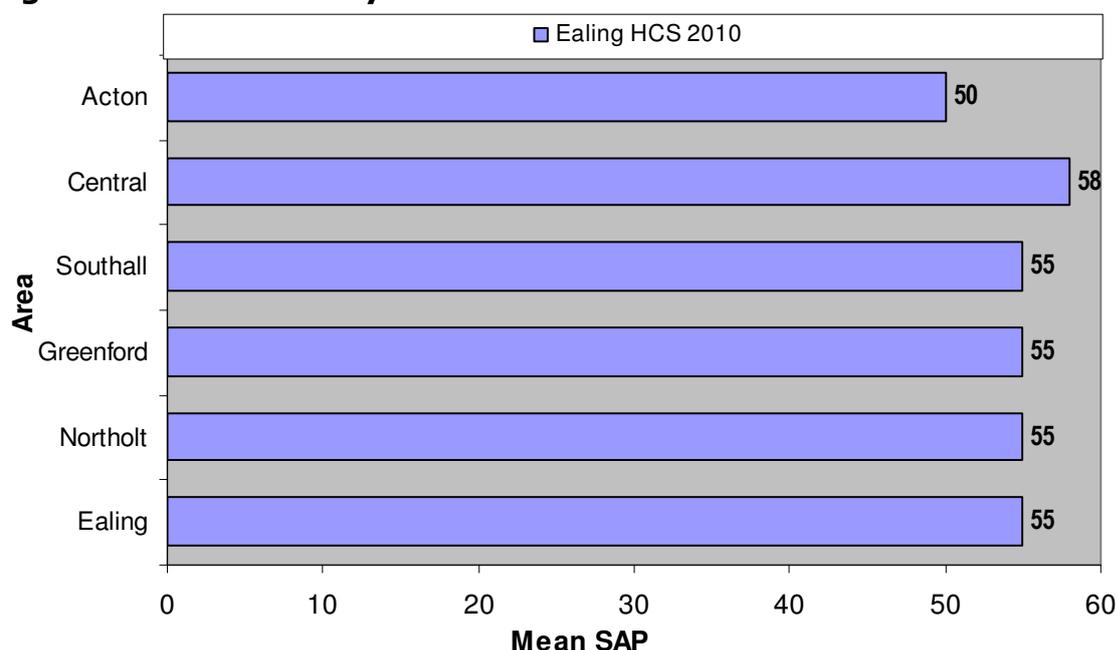
**Figure 9.1 SAP by general characteristics**



*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 by sub-area**



*Source: 2010 House Condition Survey*

9.3.7 The lowest mean SAP was found in the Acton sub-area (50) and the highest in the Central sub-area (58). Although the Central sub-area had the highest rate of failure under the Thermal Comfort criterion of the Decent Homes Standard, this was due to dwellings having loft insulation below the minimum requirement but the majority of dwellings had very efficient modern boilers (80.7%), with 65.5% being condensing boilers. The remaining sub-areas all had the same mean SAP rating (55), the same as the Ealing average.

## **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<sub>2</sub>) emissions in the Local Authority area and the tackling of fuel poverty.

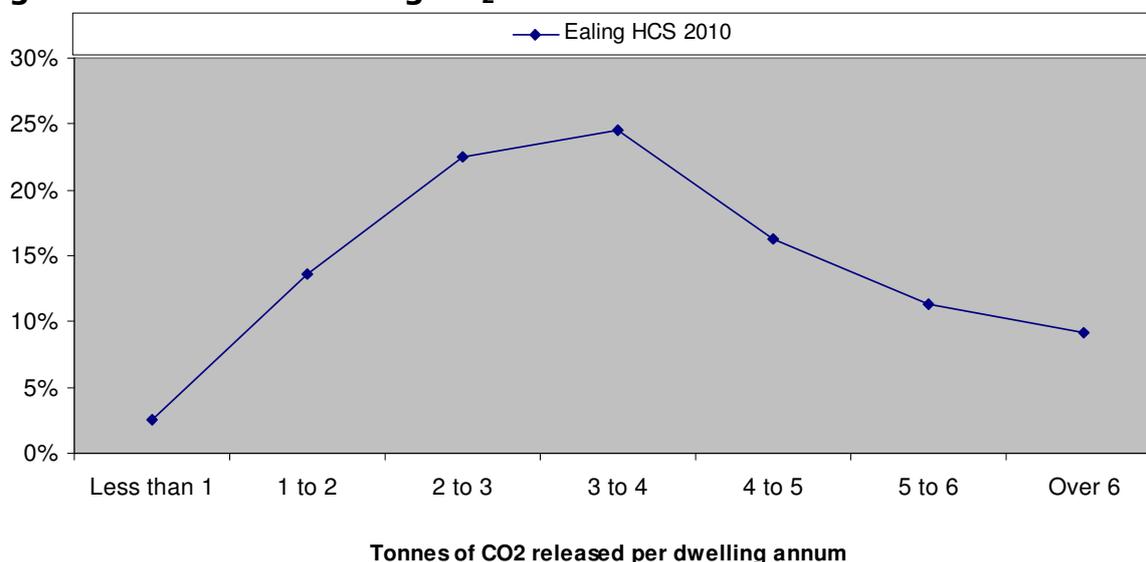
9.4.2 PSA Delivery Agreement 27 (Lead the global effort to avoid dangerous climate change) stated that "The overall framework for the Government's domestic action is set out in the Climate Change Bill for which Parliamentary approval will be sought". This was subsequently passed into legislation on 26 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<sub>2</sub> 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<sub>2</sub> 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 government's 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<sub>2</sub> 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 Government's strategy for saving energy and decarbonising heating both now and into the future, has 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. This to help during the current economic downturn and over the longer term.
- 9.4.7 By 2015, it is the government's aim 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 is proposed to retain the current Carbon Emissions Reduction Target (CERT) until 2012, when it is 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 is piloted under a new Community Energy Savings Programme (CESP), launched in September 2009.
- 9.4.9 Ealing had 22 Lower Super Output areas contained within the list of areas of low income that the Government proposes qualify for the Community Energy Saving Programme.
- 9.4.10 The CO<sub>2</sub> data provided as part of this survey indicated that emissions within the private sector stock of Ealing were 383,100 tonnes per annum an average of 3.7 tonnes per annum per property or 1.4 tonnes per capita. The EHS 2008/2009 reported total CO<sub>2</sub> emissions of 124 million tonnes per annum within private sector dwellings or mean emissions of 7.0 tonnes per dwelling (owner occupied dwellings) and 5.7 tonnes per dwelling (privately rented)
- 9.4.11 Figure 9.3 shows the range of dwelling CO<sub>2</sub> emissions released per annum. The majority of dwellings (63.4%) had emissions of between 2 and 5 tonnes per annum, with 20.5% having annual emissions above this. 9.2% of dwellings had emissions above 6 tonnes per annum.

**Figure 9.3 Annual dwelling CO<sub>2</sub> emissions**



*Source: 2010 House Condition Survey*

- 9.4.12 Emissions per main fuel type are given in Table 9.2; off-peak electricity had the highest average at 4.8 tonnes, followed by Oil (4.3 tonnes).

**Table 9.2 Main fuel CO<sub>2</sub> emissions**

Fuel main	CO <sub>2</sub> (tonnes)	Average CO <sub>2</sub> per property
Mains Gas	346,399	3.7
LPG/Bottled Gas	0	0.0
Oil	143	4.3
Coal/Wood	0	0.0
Anthracite	0	0.0
Smokeless Fuel	0	0.0
On Peak Electricity	11,770	3.6
Off Peak Electricity	24,826	4.8

*Source: 2010 House Condition Survey*

9.4.13 Table 9.3 examines the total CO<sub>2</sub> emissions by each of the survey sub-areas as well as the average CO<sub>2</sub> emissions per dwelling within each area.

**Table 9.3 Areas CO<sub>2</sub> emissions**

Area	CO <sub>2</sub> (tonnes)	Average CO <sub>2</sub> per property
Acton	85,400	4.5
Central	120,500	3.3
Southall	67,700	4.0
Greenford	81,900	3.7
Northolt	27,600	3.3
<b>Ealing</b>	<b>383,100</b>	<b>3.7</b>

*Source: 2010 House Condition Survey*

9.4.14 The Acton sub-area had the highest average emissions (4.5 tonnes) followed by the Southall sub-area at (4.0 tonnes). The Central and Northolt sub-areas, jointly, had the lowest The lowest average emissions average emissions (3.3 tonnes).

## **9.5 SAP and National Indicator 187**

9.5.1 Following the 2007 comprehensive spending review guidance was issued on a change in measuring local authority performance through a revised set of indicators. There were 188 indicators covering every aspect of a Councils' responsibilities. The coalition government abolished Local Area Agreements and the associated National Indicator sets, with data for the remaining Indicator sets continuing until they were specifically removed.

9.5.2 NI187 required local authorities to measure the proportion of households on an income related benefit living in dwellings with SAP ratings below 35 and 65 and above; the intention being to decrease the former and increase the latter. The indicator referred to 'fuel poverty' but the measure was actually a surrogate for fuel poverty (see 9.9). In

January 2011, the National Audit Office announced that NI187 was being deleted, with no further need to report on it to central government. However, as it can still be used as a measurement by an authority, if it chooses, information is provided here from the data collected as part of the survey.

- 9.5.3 Table 9.4 gives a breakdown of dwellings with SAP ratings below 35 and 65 and over, as well as combining this with information on income related benefit receipt. **Note that since this is income related benefits the total is lower than that for all benefit receipt as described in Chapter three.** This information can be used as a baseline for NI187 against which future progress can be measured.

**Table 9.4 SAP bands and NI187**

<b>Ealing HCS 2010</b>			
	<b>Dwellings total</b>	<b>Households with an income benefit recipient</b>	<b>Rate</b>
SAP less than 35	5,740	1,000	17.4%
	5.6%	<b>5.7%</b>	
SAP 35 to 64	75,910	13,600	17.9%
	74.0%	77.7%	
SAP 65 and over	20,990	2,900	13.8%
	20.5%	<b>16.6%</b>	
	<b>102,640</b>	<b>17,500</b>	<b>17.0%</b>

*Source: 2010 House Condition Survey*

- 9.5.4 The figures given in red are those required under NI187. They illustrate that 5.7% of households in receipt of an income related benefit lived in a dwelling with a SAP rating below 35 and that 16.6% lived in a dwelling with a SAP of 65 and over.

## **9.6 Energy efficiency improvement**

- 9.6.1 The great majority of dwellings (95.2%) had mains gas. The survey found that 91.4% of dwellings had a central heating system, above the 89.7% found in the EHS 2008/2009.
- 9.6.2 Table 9.5 shows the heating type found by dwelling type. Low rise purpose built flats (77.2%) had the lowest rate of central heating provision, but with the highest proportion of storage heating or room heaters (22.8%). The highest central heating provision were found in detached houses and small terraced (100.0% and 99.3% respectively).

**Table 9.5 Heating type by dwelling type**

Heating Type	Small terraced house	Medium /large terraced house	Detached house	Semi detached house	Converted flats	Low rise purpose built flats
Central Heating	99.3%	96.6%	100.0%	96.2%	91.0%	77.2%
Storage Heaters	0.7%	2.5%	0.0%	3.0%	3.9%	9.4%
Room Heaters	0.0%	0.9%	0.0%	0.9%	2.2%	1.8%
Portable Heating Only	0.0%	0.0%	0.0%	0.0%	3.0%	11.6%

Source: 2010 House Condition Survey

9.6.3 Table 9.6 shows the extent of insulation by dwelling type:

**Table 9.6 Level of insulation by dwelling type**

Dwelling Type	No Loft Insulation	Less than 50mm	50mm to 100mm	100mm to 150mm	150mm to 200mm	200mm or more	No Loft
Small terraced house	5.4%	11.3%	13.7%	21.4%	11.6%	36.5%	0.0%
Medium/large terraced house	2.8%	8.9%	8.3%	15.2%	30.2%	34.5%	0.0%
Semi detached house	1.4%	1.7%	8.9%	11.6%	20.3%	56.1%	0.0%
Detached house	0.0%	4.0%	9.9%	23.3%	29.7%	33.1%	0.0%
Converted flats	4.1%	2.8%	8.4%	13.2%	6.9%	12.2%	52.3%
Low rise purpose built flats	2.4%	0.0%	3.8%	2.3%	6.9%	10.2%	74.4%
<b>Ealing</b>	<b>2.8%</b>	<b>4.8%</b>	<b>8.1%</b>	<b>12.4%</b>	<b>17.5%</b>	<b>30.1%</b>	<b>24.3%</b>
<b>EHS 2008/2009</b>	<b>3.4%</b>	<b>2.7%</b>	<b>21.1%</b>	<b>32.6%</b>	<b>12.5%</b>	<b>20.0%</b>	<b>7.7%</b>

Source: 2010 House Condition Survey

9.6.4 Table 9.6 shows the breakdown of loft insulation provision within each dwelling type, including where there was no loft to insulate. Within Ealing, 54.5% 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 2008/2009. The dwelling types with the highest rate of lofts with less than 200mm of insulation were found in detached houses (66.9%); medium/large terraced houses (65.5%) and small terraced houses (63.5%).

9.6.5 Table 9.7 looks at the same distribution of loft insulation provision but by tenure. This shows that the poorest levels of loft insulation are to be found in the owner occupied sector reflected in the lower mean SAP found earlier (see 9.3.3).

**Table 9.7 Level of insulation by tenure**

Dwelling Type	No Loft Insulation	Less than 50mm	50mm to 100mm	100mm to 150mm	150mm to 200mm	200mm or more	No Loft
Owner occupied	18.9%	2.1%	2.3%	7.3%	18.1%	19.8%	31.5%
Privately rented	42.4%	3.3%	1.6%	5.4%	15.1%	10.9%	21.3%

*Source: 2010 House Condition Survey*

9.6.6 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.

9.6.7 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.

## **9.7 The cost and extent of improvement**

9.7.1 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

9.7.2 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.

## 9.8 Future improvement

9.8.1 If all combinations of improvements listed above were carried out to all dwellings, the total cost would be just over £248.6 million, an average of £2,470 per dwelling, where improvements were required.

9.8.2 The total cost of improvements given above is distributed among 100,600 dwellings, 98.0% 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.

9.8.3 The following analysis looks at how many dwellings could have each type of measure applied.

**Table 9.8 All energy efficiency measures that could be carried out**

Measure	Dwellings	Percent of stock	Cost (millions)	Average cost per dwelling
Loft insulation	86,600	84.4%	£41.6	£480
Cavity wall insulation	32,000	31.2%	£20.8	£650
Double glazing	17,800	17.3%	£159.5	£8,970
Cylinder insulation	72,700	70.8%	£3.5	£48
New boiler	11,600	11.3%	£10.4	£900
New central heating	4,300	4.2%	£12.8	£3,000
<b>Any measures</b>	<b>100,600</b>	<b>98.0%</b>	<b>£248.6</b>	<b>£2,470</b>

*Source: 2010 House Condition Survey*

9.8.4 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.

## 9.9 Tackling fuel poverty

9.9.1 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

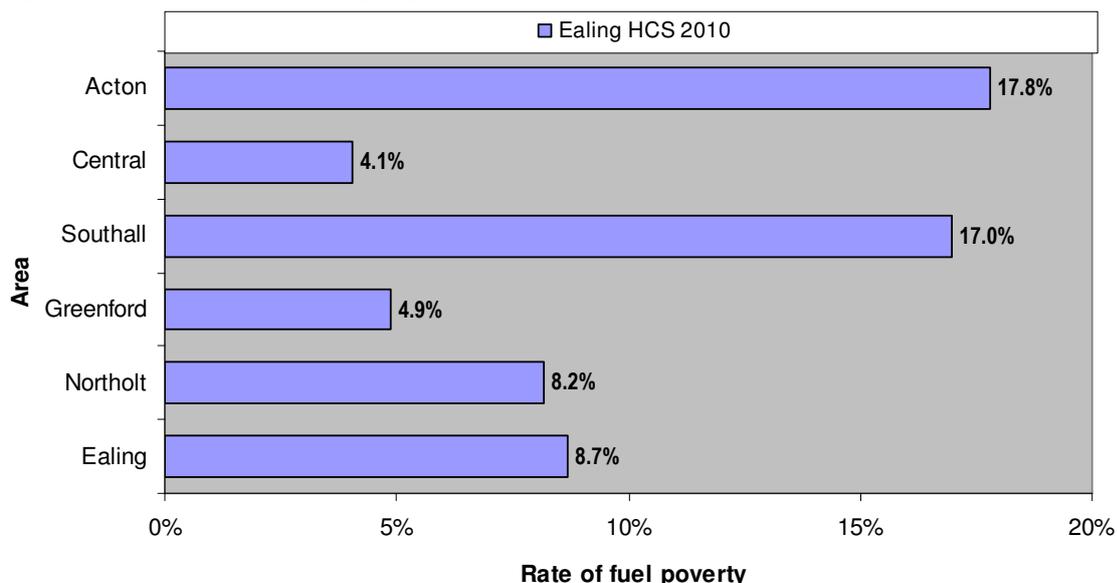
- dwellings with poor energy efficiency, they are, by definition, occupied by residents with low incomes least likely to be able to afford improvements. In "Fuel Poverty in England: The Government's Plan for Action" published in 2004, the government set a target for the total eradication of fuel poverty by November 2016.
- 9.9.2 There are an estimated 8,630 (8.7%) of occupied dwellings in fuel poverty in Ealing compared to approximately 15.6% based on the findings of the EHS 2008/2009, as reported in the Annual Report on Fuel Poverty Statistics 2010, published by the Department of Energy & Climate Change (DECC).
- 9.9.3 A lower proportion than the national average, the 8,630 dwellings still represent a significant number of households that are in fuel poverty and will present issues in terms of both energy efficiency and occupier health. The highest proportionate rate of fuel poverty was found in the private rented sector at 8.8% (3,090 households) compared with 8.6% (5,540 households) in the owner occupied sector.
- 9.9.4 Intervention programmes such as Warm Front (a government scheme) and West London Warm Zone, 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.
- 9.9.5 By the very nature of fuel poverty, it is almost always associated with those residents on the lowest incomes. 6,830 households (79% of the households in fuel poverty) were households with incomes below £10,000 per annum, with the remaining 1,800 (21%) having incomes above £10,000 per annum. This means that the rate of fuel poverty in the 6,830 households with an income below £10,000 was 49.0%.
- 9.9.6 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 Ealing fuel poverty was found in 5,590 households (65% of households in fuel poverty) where a benefit was received, compared with 1,800 households (35% of households in fuel poverty) where occupiers did not receive benefit. This means that 29.7% of households in receipt of benefit were in fuel poverty.
- 9.9.7 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 £13.4 million. This expenditure requirement is distributed between the 5,540 owner-occupied dwellings in fuel poverty where works were possible at an average cost per dwelling of £2,500. Within the private rented sector, the cost of energy efficiency improvements to dwellings in fuel poverty was just under £11.3 million

an average of £3,600 in 3,090 privately rented dwellings in fuel poverty.

## 9.10 Area focus on fuel poverty

9.10.1 Figure 9.4 shows the rate of fuel poverty by sub-area. The highest rate was found in the Acton sub-area (17.8%), followed by the Southall sub-area (17.0%). The Central sub-area had the lowest rate at 4.1%.

**Figure 9.4 Fuel poverty by sub-area**



*Source: 2010 House Condition Survey*

## 9.11 Energy efficiency works to all other dwellings

9.11.1 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 £223.6 million. This represents an average expenditure of approximately £2,500 per dwelling in 90,900 dwellings.

9.11.2 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. Perhaps the best targets are those most in need of improvement, in particular those dwellings that are the least energy efficient at present.

9.11.3 There were 4,200 dwellings where the household was not in fuel poverty but where the mean SAP is less than 35. To carry out all improvement works required for these dwellings would cost just over £23.9 million, with the cost for owner occupied dwellings being just over £9.3 million and for the privately rented sector just under £14.6 million. The mean cost per dwelling in the owner-occupied stock was £4,200 and in the private rented sector it was £7,300, with the overall mean cost being £5,700. 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 above 35.

- 9.11.4 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 9.9 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 do however, show that just under 63% of dwellings have more than a half of rooms fitted with low energy light bulbs, with just under 29% of dwellings having 75% or more of their rooms fitted with low energy light bulbs.

**Table 9.9 Low energy light bulb provision**

Range of rooms with low energy light bulbs	Proportion within range
1% to 24%	10.9%
25% to 49%	17.5%
50% to 74%	34.2%
75% to 100%	28.6%
None	8.7%

*Source: 2010 House Condition Survey  
 For notes on statistical variance & small sample sizes see appendix C*

- 9.11.5 As far as other provision is concerned, Table 9.10 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 9.10 Other energy measures**

Photo Voltaic Cells	Solar Water Heating	Other Renewables
0.3%	0.8%	0.0%

*Source: 2010 House Condition Survey  
 For notes on statistical variance & small sample sizes see appendix C*

## Appendix A- Index of tables and figures

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## Appendix B- Methodology

- B.1 The survey used a stratified random sample of 2,000 dwellings from an address file supplied by Ealing Council. The sample was a stratified random sample 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 the 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  $10/1 \times 10/5 = 20$ . 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 977 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 Ealing address file derived from Council Tax records. The total number of dwellings on the list, after social rented housing was removed, was just over 102,640. These totals constituted all addresses within the Local Authority boundaries. The Council Tax register contains a reference for each individual address, whether or not it is occupied. In addition, there will be a number of dwellings with multiple addresses, such as certain houses in multiple occupation (HMOs), and non-residential address within the register.

### Stock total

C.2 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.3 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 977 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 102,640 private sector dwellings reported. Sampling error is discussed later in this section. Table C.1 shows the response rates to the survey.

### Weighting the data

C.4 The original sample was drawn from Ealing 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.

### Dealing with non-response

- C.5 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.6 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.7 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.8 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.9 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.10 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.11 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 larger 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.12 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 1 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.13 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 :

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

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 1 Hazards.

C.14 This formula can be used to calculate the confidence limits for the results of any attribute such as Category 1 Hazards. Table C.1 gives a number of sample sizes and the confidence limits for a range of different possible results.

C.15 For this survey the estimate of dwellings with a Category 1 Hazard was 21.6%. 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 - 2.6%. In other words one can say that 95% of all samples chosen in this way would give a result in the range between 19.0% and 24.2%.

C.16 The standard deviation figure of + or – 2.6%, however, would only stand true if this were a simple random sample. In other words, it would only be true if the 977 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.17 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 – 3.2%. In other words, we can be 95% confident that the level of Category 1 Hazards present in the private sector housing stock will fall somewhere between 18.4% and 24.8%.

C.18 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 1 Hazards.

**Table C.1 95% per cent confidence limits for a range of possible results and sample sizes**

Expected result as per cent	Sample size									
	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.19 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.20 In the case of the 2010 Ealing HCS, the average weight is approximately 54 (102,640 private sector dwellings divided by 977 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 105, 210 or 315 could be given, which if, in reality, there are 50 dwellings with a certain characteristic, is fairly inaccurate.
- C.21 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

- Energy Conservation (Home Energy Conservation Act 1995) - to have in place a strategy for the promotion and adoption of energy efficiency measures and to work towards specified Government targets to reduce fossil fuel use.

## 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**

<b>Amenity</b>	<b>Defined as</b>
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).

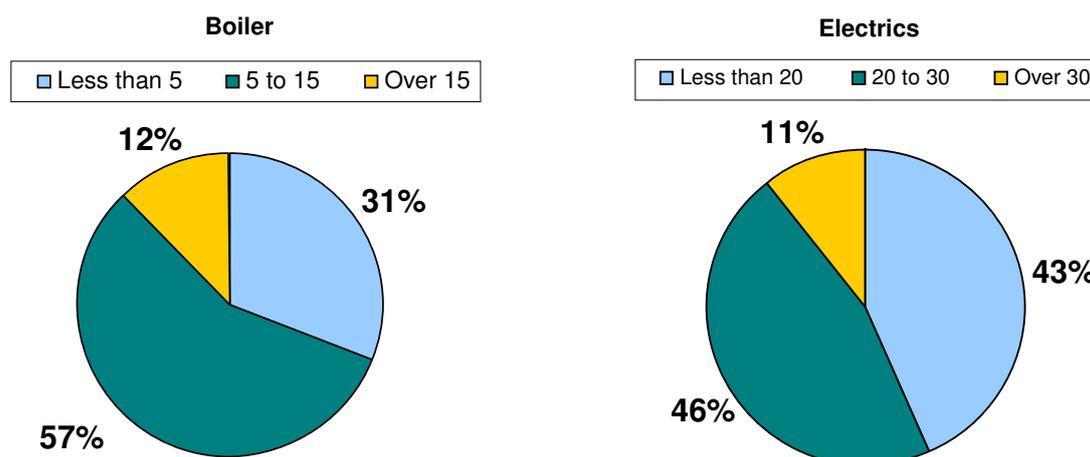
E.13 For the purposes of this study the above definition will be used in calculating the proportion of dwellings that are considered non-decent.

## 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 69% of boilers and 57% 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.