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# WYCHAVON DISTRICT COUNCIL

## HOUSE CONDITION SURVEY

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Final Report



September 2004

## Contents

<b>Executive Summary of Findings.....</b>	<b>4</b>
<b>1 Introduction.....</b>	<b>8</b>
1.1 Purpose of the survey.....	8
1.2 Nature of the survey.....	10
1.3 ODPM Guidance on house condition surveys.....	10
1.4 Comparative statistics.....	10
<b>2 Profile of the housing stock.....</b>	<b>11</b>
2.1 Size of the dwelling stock.....	11
2.2 Age of the dwelling stock.....	11
2.3 Dwelling type profile.....	12
2.4 Tenure.....	12
2.5 Tenure and age comparisons.....	13
2.6 Building Use and HMOs.....	14
2.7 Vacant dwellings.....	14
2.8 Conclusion.....	15
<b>3 Unfitness and Substantial Disrepair.....</b>	<b>16</b>
3.1 Requirement to remedy poor housing.....	16
3.2 Definitions for poor condition.....	16
3.3 Desire to remedy poor housing.....	17
3.4 Overall dwelling conditions.....	17
3.5 Accuracy levels at a small scale.....	18
3.6 Reasons for unfitness.....	18
3.7 Severity of unfitness.....	19
3.8 Construction date.....	20
3.9 Building type.....	20
3.10 Tenure.....	21
3.11 Targeting unfit and substantial disrepair dwellings.....	21
3.12 Targeting dwellings in substantial disrepair.....	21
3.13 Unfitness and substantial disrepair by area.....	22
3.14 Conclusions.....	22
<b>4 Housing Health and Safety.....</b>	<b>24</b>
4.1 Introduction.....	24
4.2 Definition of hazards.....	24
4.3 Hazards.....	24
4.4 Number of hazards.....	26
4.5 Serious Hazards.....	26
4.6 Serious hazards and general characteristics.....	26
4.7 Serious Hazards and unfitness.....	27
4.8 Targeting dwellings with serious hazards.....	27
4.9 Serious Hazards by area.....	28
4.10 Conclusions.....	28
<b>5 Repair and Renewal.....</b>	<b>29</b>
5.1 Improving the stock.....	29
5.2 Overall repair costs.....	29
5.3 Repair costs and general characteristics.....	29

5.4	Repair costs and building elements.....	32
5.5	The cost to remedy unfitness .....	32
5.6	Repairing unfit dwellings.....	33
5.7	Repairing substantial disrepair dwellings .....	33
5.8	The cost of repair dwellings with a serious hazard.....	34
5.9	Disabled facilities grants .....	34
5.10	Conclusion .....	35
<b>6</b>	<b>Energy efficiency .....</b>	<b>37</b>
6.2	Distribution of SAP ratings.....	37
6.3	SAP by general characteristics.....	38
6.4	Energy efficiency improvement.....	39
6.5	The cost and extent of improvement.....	40
6.6	Future improvement.....	40
6.7	Tackling fuel poverty .....	41
6.8	Work to remedy fuel poverty .....	41
6.9	The Warm front scheme and fuel poverty .....	43
6.10	Beyond fuel poverty.....	43
6.11	Targeting low efficiency dwellings .....	43
6.12	Achieving the 30% target.....	44
6.13	Energy Efficiency by area.....	44
6.14	Conclusions.....	44
<b>7</b>	<b>The Decent Homes Standard .....</b>	<b>46</b>
7.1	Introduction.....	46
7.2	General Characteristics .....	46
7.3	Reasons for non-decency .....	47
7.4	Numbers of failures per dwelling .....	48
7.5	Cost to Remedy.....	49
7.6	Occupiers and non-decency .....	49
7.7	Private sector vulnerable occupier base-line.....	50
7.8	Not decent dwellings by area.....	50
7.9	Conclusions.....	50
<b>Appendix A - Methodology.....</b>		<b>52</b>
<b>Appendix B – Survey Sampling .....</b>		<b>54</b>
	Sample Design .....	54
	Stock total .....	54
	Response rates.....	54
	Weighting the data .....	55
	Dealing with non-response .....	55
	Sampling error .....	57
<b>Appendix C Definition of a Non Decent Home.....</b>		<b>59</b>
	Measure of a decent home .....	59
	Applying the standard .....	59

## Executive Summary of Findings

The 2004 Wychavon District (private sector) House Condition Survey (HCS) was conducted in order to produce a comprehensive review of current stock conditions in the private sector and this report presents the findings of the HCS.

This report will examine what the conditions of dwellings within the District are like and what direction future private sector housing policies may need to take. The latter point is of particular importance as, under the new Regulatory Reform Order, local authorities will now be responsible for deciding what sources of funding to use and what schemes to set up, in order to tackle private sector housing problems, with an unprecedented degree of freedom.

The survey was carried out on 1,000 dwellings within the District. The total private sector housing stock of the District is an estimated 49,600 dwellings. The total is based on the weighted results of the survey and is an estimate at the time of the survey. Giving a precise figure to the dwelling is unnecessary as dwellings are constantly being converted and built, such that the total number of dwellings changes on an almost daily basis.

The age profile of the private sector stock in the District suggests that the stock is more modern than the position for England with a more post 1964 dwellings and fewer dwellings built in any period before this date. There are more detached houses in Wychavon District than is the case for England as a whole and a higher proportion of dwellings are owner occupied. A stock profile such as this would tend to suggest that better than average stock conditions would exist, as poor condition is strongly associated with age of dwelling, with houses converted into flats and with the privately rented sector.

The survey used a stratified sample in order to produce analysis at the sub-area level. The sample was therefore stratified into 5 parts to cover the three main towns within the District and rural portion of the District divided between North and South, a list of the areas and their associated stock totals is given:

**Summary Table 1: Areas of survey**

Area	Stock	Per Cent of Total Stock
Evesham	10,000	20%
Pershore	3,300	7%
Droitwich	10,100	20%
Rural South	13,200	27%
Rural North	13,000	26%
<b>Total</b>	<b>49,600</b>	<b>100%</b>

A wide variety of issues relating to the condition of dwellings in Wychavon District were collected from the survey and produced in subsequent analysis. The table overleaf summarises many of the key findings from the survey by the three main tenure types.

**Summary Table 2: Characteristics by tenure**

<b>Characteristic</b>	<b>Owner-occupied</b>	<b>Housing Association</b>	<b>Privately rented</b>	<b>All Stock</b>
<b>Dwellings</b>	37,600	8,700	3,300	49,600
<i>Per cent of stock</i>	76%	17%	7%	
<b>Unfit</b>	460	140	150	750
<i>Rate</i>	1.2%	1.6%	4.5%	1.5%
<b>Substantial Disrepair</b>	3,600	1,600	700	5,900
<i>Rate</i>	10%	18%	20%	12%
<b>Not Decent</b>	7,200	2,150	1,100	10,450
<i>Rate</i>	19%	25%	33%	21%
<b>Serious Hazards</b>	1,400	900	500	2,800
<i>Rate</i>	4%	11%	15%	5.7%
<b>In Fuel Poverty</b>	4,000	1,900	1,100	7,000
<i>Rate</i>	11%	19%	31%	14%
<b>Mean SAP</b>	50	52	45	50
<b>Residents over 60</b>	14,600	3,700	500	18,800
<i>Rate</i>	39%	42%	16%	38%

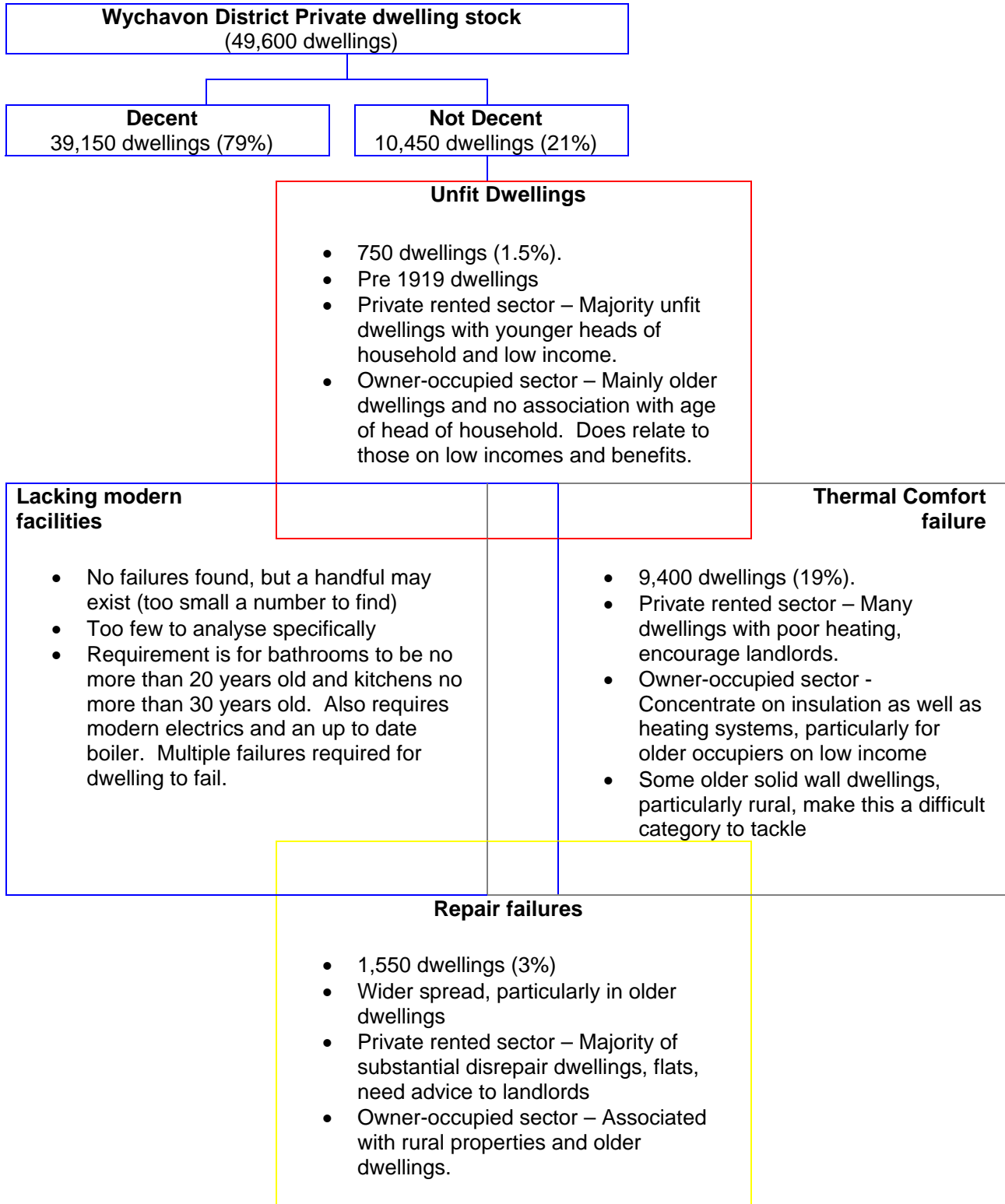
NB For the sake of simplicity all dwellings, including things like caretakers accommodation etc that are not part of the main three tenures, have been subsumed into the figures for the other three tenures.

The table above is useful for giving a summary of a wide variety of characteristics, but does not pinpoint where problems are most concentrated. To do this the relationship between different measures needs to be considered.

The number of dwellings classified as not decent is a useful measure for examining a variety of 'problems' that may exist (for a definition see appendix C – main report). The measure was produced by the ODPM for use by local authorities and housing associations, which must make all their dwellings decent under these criteria by 2010. For the private sector the only obligation at present is to ensure that 70% of dwellings occupied by a vulnerable resident (those on certain means tested benefits) are decent by 2010.

There are a number of factors determining the condition of a dwelling, but the decent homes amalgamates these into four key areas: is the dwelling fit for human habitation, is it in a reasonable state of repair, does it have adequate modern facilities, does it provide thermal comfort to its occupiers.

**Total numbers of dwellings affected by different combinations of house condition problems within the District**



The main chapters of the HCS report go in to greater detail in examining both the dwelling and social characteristics associated with these problems. They also give an indication of the likely cost of remedying these problems for different groups.

The total cost to make all dwellings decent within the District would be £35 million, an average of £3,400 per dwelling.

As mentioned earlier authorities are required to increase the proportion of vulnerable occupiers living in decent homes to above 70% by 2010. At present, in the private sector in Wychavon, the rate is 72% decent and as a consequence the authority already meets its requirements with regard to Decent Homes.

In general conditions in private sector housing in Wychavon are good with regard to unfit dwellings and serious hazards. There are, however, pockets of particularly poor condition dwellings as well as significant issues relating to heating and energy efficiency that may be difficult to resolve. Under the Regulatory Reform Order all local authorities are obligated to produce an evidence based private sector renewal strategy and the findings of this summary and report may indicate some of the areas that will need to be considered in any revision of this strategy.

# 1 Introduction

## 1.1 Purpose of the survey

- 1.1.1 Local Authorities have a duty, under section 605 of the Housing Act 1985, as amended by the Local Government and Housing Act 1989, 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 renewal. At the end of 2003 Wychavon District Council commissioned a comprehensive House Condition Survey to address this legal requirement, and also to inform the housing strategy and other housing policies.
- 1.1.2 The Office of the Deputy Prime Minister (ODPM) has also issued statutory and non-statutory guidance to Local Authorities following the introduction of the Regulatory Reform (Housing Assistance) (England and Wales) Order 2002. This Order (effective from 18th July 2002) required that Local Authorities prepare a housing renewal strategy drawing on a robust "evidence base" upon which they must decide local priorities, appropriate forms of assistance and the policy tools necessary to address issues in their area.
- 1.1.3 More recently the ODPM published guidance under Circular 05/2003 that states:
- "Local authorities have extensive powers to intervene where they consider housing conditions in the private sector to be unacceptable. In some cases they may be required to consider formal enforcement action under fitness legislation, whether or not they go on to offer forms of assistance.
- Enforcement powers currently derive from the Housing Act 1985, however, the housing fitness regime is based on criteria first introduced 80 years ago and there is wide support for modernisation. The Government proposes to replace the housing fitness standard with the housing health and safety rating system, which will enable local authorities to address more effectively the hazards found in dwellings. A draft Housing Bill was published for consultation in March 2003. Beyond that a firm timetable for reform cannot yet be given, and in the meantime the housing fitness standard remains the basis for enforcement action, although authorities are encouraged to use the rating system informally alongside it in order to gather information about hazards present in the stock."
- 1.1.4 The guidance also goes on to state that much of the Housing Grants, Construction and Regeneration Act 1996 is repealed by the Regulatory

Reform Order, in particular the following grants: Renovation, Common Parts, HMO, Group Repair and Home Repair Assistance.

- 1.1.5 At present, however, many duties from the 1985 Housing Act and subsequent Acts and amendments remain, and it is likely that many of the concerns addressed by these Acts will inform the new changes in legislation. It is worth considering, therefore, some of the duties presented by current legislation.

### ***Mandatory duties***

- Unfit houses (Housing Act 1985) - to take the most satisfactory course of action being either renovation, closure/demolition or clearance
- 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
- Overcrowding - (Housing Act 1985) - to inspect and report on overcrowding
- 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 of the adoption of energy efficiency measures and to work towards specified Government targets to reduce fossil fuel use.
- Deferred Action – (Housing Act 1985) to defer taking action on unfit dwellings until such time as resources are available

### ***Non- Mandatory Duties***

- Repair of houses (Housing Act 1985) - to secure the repair of houses (which are not unfit)
- Houses in Multiple Occupation (Housing Act 1985) - to inspect premises and require closure of part of the premises, limit the number of occupants; prosecute for failure to comply with regulations, to make a registration scheme etc.
- Overcrowding - (Housing Act 1985) - to prosecute, control and abate overcrowding
- Home Repair Assistance (Housing Grants, Construction and Regeneration Act 1996) - to give assistance to help people remain in their home or to achieve other policy objectives

- Make available advice (Housing Grants, Construction and Regeneration Act 1996) - to allow a Council to provide technical and other services to encourage owners and occupiers to carry out works

1.1.6 There is a certain degree of overlap between the mandatory and non-mandatory duties, but clearly, the first category is of highest priority as this represents obligations that the authority has under law.

1.1.7 This report will form the basis of much of the evidence required under the RRO and the aforementioned circular, and can help inform strategy and policy for housing works when the next House Condition Survey should be carried out.

## **1.2 Nature of the survey**

1.2.1 The survey was based on a simple random sample of addresses in the District in order to gain a representative picture. A total of 1,850 addresses were selected during sampling, from which 1,000 surveys were to be achieved, but in practice 1,011 were actually surveyed.

## **1.3 ODPM Guidance on house condition surveys**

1.3.1 The publication of comprehensive guidance on local authority house condition surveys, which dates from 1993, includes a methodology that comprises a detailed survey form in a modular format and which is close to a step-by-step guide to implementing a survey (Local House Condition Survey Guidance Manual 1993 DOE).

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 2004 Wychavon District HCS followed the 2000 guidance.

1.3.3 pps Plc's own survey software 'CLASSIC' (Comprehensive Local Authority Stock Survey Information Collation) system was used in order to analyse the results of the survey and produce the outputs required from the survey data in order to write this report.

## **1.4 Comparative statistics**

1.4.1 Comparisons to the position for all England are drawn from the 2001 English House Condition Survey, published by the ODPM and available as a download document from their website.

## 2 Profile of the housing stock

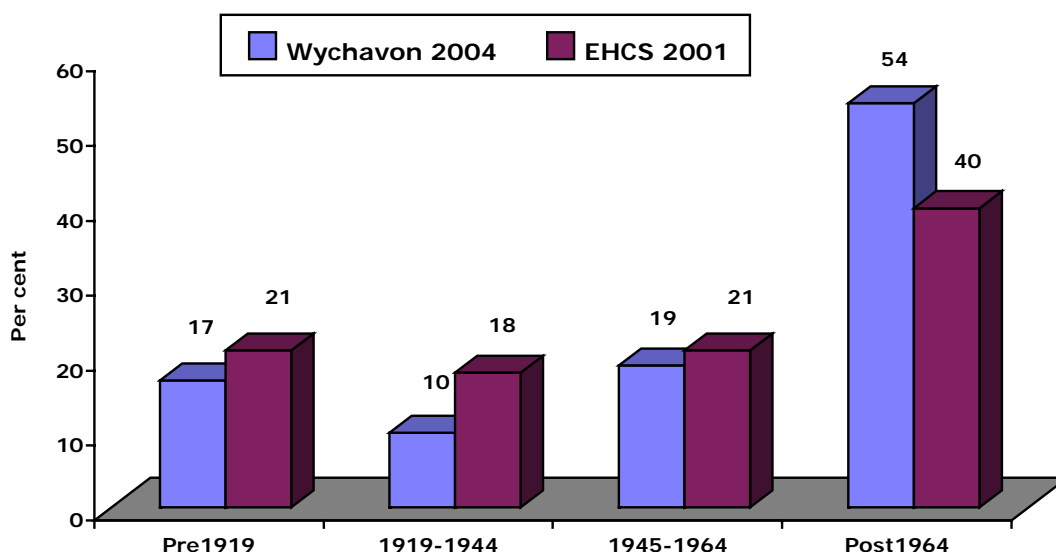
### 2.1 Size of the dwelling stock

2.1.1 In the year 2004 there are an estimated 49,600 dwellings (including housing association dwellings) in the Wychavon District. The 49,600 total for the stock is derived from weighting the results for all dwellings surveyed. Weights are applied to each individual record such that each survey represents a specific number of dwellings in the District, given 1,000 surveys the average weight would be 24, thus these 1,000 surveys then represent the 49,600 dwellings in the District. The total is lower than the original sample frame record as it takes into account properties that are ineligible as they are non-residential, or where dwellings have been demolished or converted to other uses. Details of this estimate are contained in Appendix A Methodology.

### 2.2 Age of the dwelling stock

2.2.1 The age profile of the total stock of 49,600 dwellings in Wychavon District is much more modern than is the case in England, with fewer dwellings built in all three age bands before 1964 and more built after this date. A total of 17% of the stock was constructed before 1919, which is below the position for England (21%), and there are 54% of dwellings built after 1964 compared to 40% for England. The most under-represented group is the interwar stock as only 10% of dwellings fall into this category. (Gen Output A)

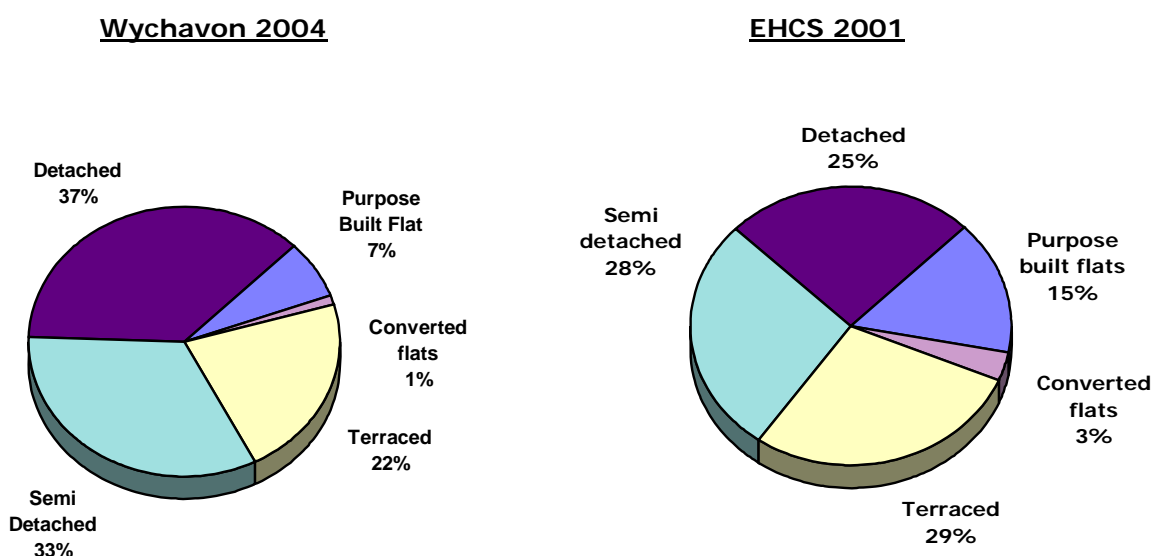
Figure 2.1 Dwelling age profile England and Wychavon District



## 2.3 Dwelling type profile

2.3.1 The building type profile in Wychavon District is different to that found across England as a whole. Detached houses are found at a much higher rate, 37% compared to 25% for England as are semi-detached houses at 33% compared to 28% for all England. Terraced houses occur at a lower rate 22% compared to 29% for all England. There are very few converted flats (1%), and relatively few purpose built flats in Wychavon (7%).(Gen Output B)

**Figure 2.2 Dwelling type profile England and Wychavon District**



## 2.4 Tenure

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

2.4.2 Figures for local authority stock and housing association dwellings should be combined when looking at EHCS figures as Wychavon's stock was transferred and is therefore represented under the housing association category.

**Table 2.1 2001 EHCS and Wychavon District tenure proportions**

	Wychavon District 2004		England 2001
<b>Owner occupied</b>	37,600	76%	70%
<b>Housing association (RSL)</b>	8,700	17%	7%

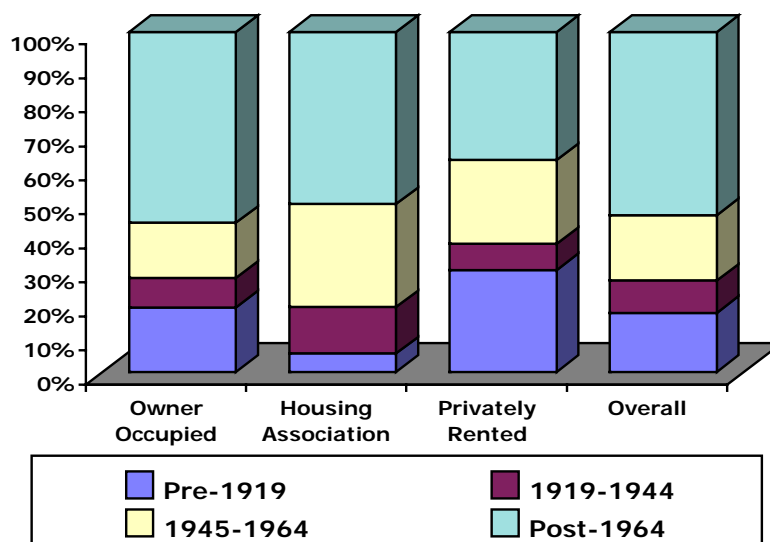
<b>Privately rented</b>	3,300	7%	10%
<b>Local Authority</b>	-	-	13%

2.4.3 Approximately 1% (450) of dwellings did not fall into the main three tenures: owner-occupied, privately rented and housing association. This 1% represents other types of private dwelling such as caretaker's accommodation or job related residences, however, for the sake of simplicity these have been added to the private rented sector figures. It also includes other public sector dwellings, which, for the sake of convenience, have been included with the housing association properties. (Gen Output C)

## 2.5 Tenure and age comparisons

2.5.1 Figure 2.3 illustrates the differing dwelling age profile between the main tenures.

**Figure 2.3 Tenure by date of construction**



2.5.2 The Owner Occupied stock constitutes the majority of private sector dwellings and has the greatest impact on all aspects of the survey. As might be expected, therefore, the owner occupied stock has a very similar age profile to the overall stock position. For the housing association stock, 51% of dwellings are post 1964 and there are few dwellings constructed pre 1919, which would lead to expectations of good housing conditions for this tenure. The privately rented sector has a higher proportion of pre 1919 dwellings with 30% built before this date. The general picture of age of dwelling by tenure is fairly typical and similar to the position found across England. (Gen Output D)

## **2.6 Building Use and HMOs**

- 2.6.1 As described earlier, dwellings may be of different building types, however these types may have different uses, for example a semi-detached house may have been converted into flats or be occupied as an HMO.
- 2.6.2 Most dwellings (91%) are occupied by a single-family group and are occupied as built. Converted, purpose built and flats above shops constitute just over 7% of dwellings, but the remaining 0.7% are Houses in Multiple Occupation (HMOs), in England as a whole 0.4% of dwellings fall into this category. (Gen Output N)

## **2.7 Vacant dwellings**

- 2.7.1 There are approximately 980 (2%) vacant dwellings within Wychavon District, compared to 3% for England as a whole. The figure for vacant dwellings is based on the authority's own figures as Wychavon District Council maintains accurate records of the number of vacant dwellings. Where accurate records of vacant dwellings exist it is always preferable to cite these, as by the very nature of vacant dwellings, they are difficult to identify during a survey.
- 2.7.2 Of the 980 vacant dwellings 470 had been vacant for less than 6 months and such dwellings represent the general turnover of the stock as people move and dwellings are converted, modernized etc. Of greater concern are the 510 dwellings that have been vacant for over 6 months. Some of these dwellings are associated with particular groups such as charities and the clergy and will not present condition issues, but the majority is likely to be privately owned vacant dwellings that could usefully be returned to the general stock.
- 2.7.3 Of the 510 mid to long term vacant dwellings around 100 are classified as 'actionable', which is to say that the condition of the dwelling and/or the length of its vacancy are of sufficient concern that the authority intends to take action to bring the dwelling back into use or have the dwelling demolished. This will usually involve contacting the owner of the dwelling in order to establish a course of action for each individual dwelling.

## **2.8 Overcrowding**

- 2.8.1 There are an estimated 810 (1.7%) dwellings that are overcrowded, that is to say where there is an average of more than one person per habitable room. This level of occupancy is regarded as unacceptably high and where such dwellings are found to exist the authority is seeking to take action to reduce the occupancy to a safe and comfortable level.

## **2.9 Conclusion**

- 2.9.1 There are substantial differences between the age, building type and tenure profiles for England compared to those found in Wychavon District. In general the stock is more modern with more post 1964 dwellings. The District has notably fewer purpose built flats and flats in general than average. There are a much high proportion of detached houses, well above the average for England.
- 2.9.2 The majority of private sector dwellings (76%) are owner occupied and the distribution of dwellings by tenure is similar to that found in England, but with a greater dominance of the owner-occupied stock. Overall the balance of building characteristics is typical of authorities where better than average conditions are found.

## **3 Unfitness and Substantial Disrepair**

### **3.1 Requirement to remedy poor housing**

- 3.1.1 The overall condition of dwellings can be expressed in terms of them either providing satisfactory accommodation for their residents or not. The dwellings that are not satisfactory can be further divided into those dwellings that are unfit for human habitation, according to the housing fitness standard, and those dwellings that whilst not unfit are in substantial disrepair. Dwellings that are unfit or are in substantial disrepair can be considered to be in 'poor condition'.
- 3.1.2 Under the 1985 Housing Act, local authorities have a statutory duty to take: 'The most satisfactory course of action', with regard to dwellings in poor condition, starting with unfit dwellings and the Act is supported by relevant statutory guidance. Given the buoyancy of the housing market closure or demolition are unlikely to be viable in all but the most severe cases and some financial assistance will be the preferred option, particularly in owner-occupied dwellings where occupiers are on low incomes. A different approach is likely to be necessary in the private rented sector and may need to include enforcement action.
- 3.1.3 Dealing with dwellings in substantial disrepair, although a lower priority, also falls under the most satisfactory course of action.

### **3.2 Definitions for poor condition**

- 3.2.1 Two terms to describe dwellings in poor condition are used within this chapter: unfit dwellings and dwellings in substantial disrepair. Unfit dwellings are those dwellings where one or more of eleven key elements (given in figure 3.2) are either missing or in such poor condition as to be primarily a health and safety hazard, but also cause discomfort, inconvenience or be inefficient.
- 3.2.2 Dwellings in substantial disrepair are those that have one or more repair items, be they internal or external, that require urgent and extensive repair work, but are not so serious as to make a dwelling unfit.
- 3.2.3 For both unfitness and substantial disrepair, an accumulation of smaller items can constitute a failure. The Housing Fitness Standard is a whole house standard and contains guidance regarding the necessary extent of failure, throughout the dwelling, for any given fitness item, required to make a dwelling unfit.

### **3.3 Desire to remedy poor housing**

3.3.1 Beyond the authority's statutory obligation to remedy poor condition housing, is the wider consideration of wishing to improve housing conditions so as to improve the quality of life of residents in the District. This ambition is best achieved by having an integrated strategy such as that which is required under the new Regulatory Reform Order. This strategy should bring together any number of issues and may be concerned with some or all of the following:

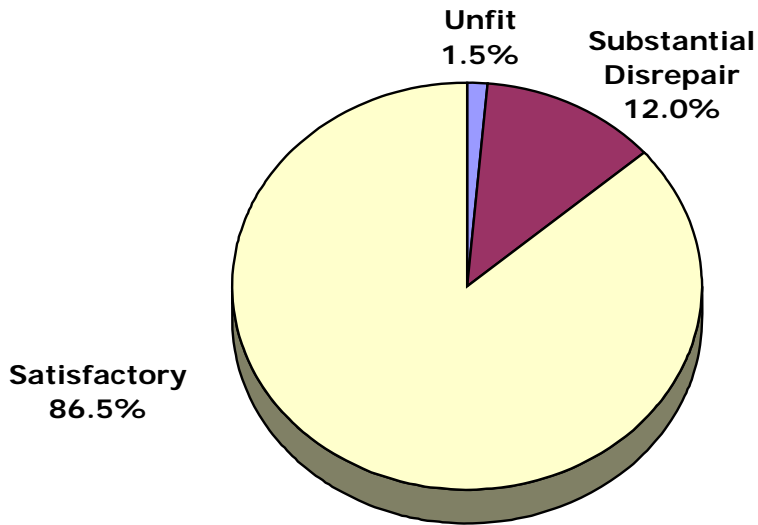
- Homes and housing
- Health and safety of residents
- Environment and sustainability
- Older people and vulnerable occupiers
- Social cohesion
- Community safety

3.3.2 All of these themes have a relationship to housing and thus remedying poor conditions in this housing stock will have a positive impact in all these areas.

### **3.4 Overall dwelling conditions**

3.4.1 The overall unfit rate for Wychavon District is 1.5%, which is below the rate for England of 4.3% (2001 EHCS) and a reduction from just over 3% at the time of the last survey of private sector stock. There are currently 750 unfit dwellings of which 100 (13%) are flats and 650 (87%) are houses. A further 12% of the housing stock in Wychavon is in substantial disrepair, which represents 5,900 dwellings in this condition. (Unfit output A & S1)

### **Figure 3.1 Unfit and Substantial Disrepair Dwellings**



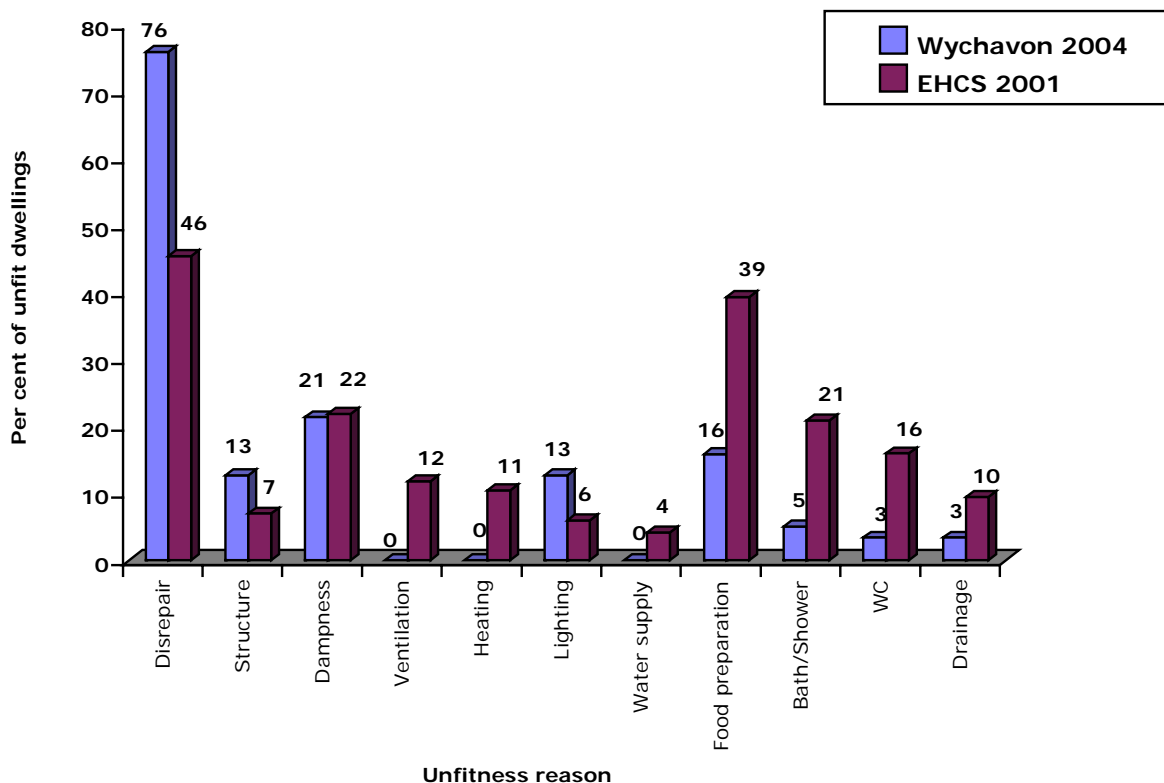
### **3.5 Accuracy levels at a small scale**

3.5.1 Before considering the findings within the rest of this chapter it is worth considering the implication of a very low unfitness level on these findings. The 1.5% unfitness rate is actually based on only 15 surveys of dwellings found to be unfit of the 1,011 surveyed in total. Whilst this produces a good picture of the overall level of unfitness it means that dividing these figures further is likely to produce some unusual results. It is therefore advised the remaining figures in this chapter be treated with caution.

### **3.6 Reasons for unfitness**

3.6.1 The fitness standard describes eleven different criteria on which a dwelling can fail to be fit. The graph below gives a distribution of the reasons for unfitness, but due to the very small sample size it is difficult to suggest that it is accurate. The one figure that does clearly stand out, however, is that 76% of unfit dwellings fail on disrepair. The distribution of failures tends to indicate the work of the authority has gone a long way to reducing unfitness, but that a small core of problem dwellings still persists. (Unfit Output B)

**Figure 3.2 Unfit dwellings by reason for unfitness**



3.6.2 The percentages given in figure 3.2 are as a percentage of all unfit dwellings, in other words food preparation failures account for 16% of the 750 unfit dwellings. The total percentage for all categories combined is greater than 100 as some dwellings will fail the fitness standard on more than one criterion.

3.6.3 The most common causes of failure of the fitness standard across England are disrepair, dampness and food preparation, which is the same as the profile for Wychavon but in Wychavon the latter two categories are at much lower levels. (Unfit Output B)

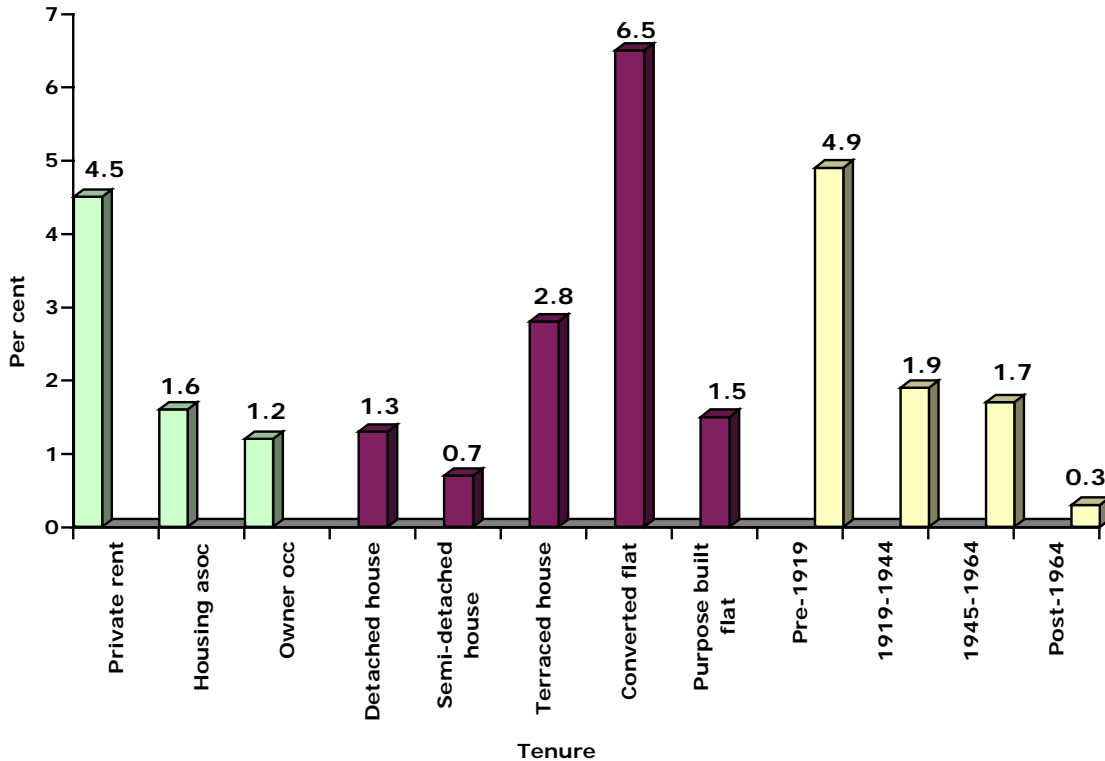
3.6.4 Across England the least frequent causes of failure of the fitness standard are lighting, drainage and water supply, reflecting the very basic requirements for these items and these are also at low rates in Wychavon.

### 3.7 Severity of unfitness

3.7.1 One indication of the severity of unfitness is the number of items on which a dwelling fails the fitness standard. In Wychavon District a lower proportion of dwellings fail for multiple reasons of unfitness (25% compared to 45% across England). Dwellings that exhibit multiple fitness

failures tend to be those in particularly poor condition, rather than dwellings that have a specific, individual problem. As a consequence not only are there fewer unfit dwellings than nationally, but these have specific unfitness problems rather than a broad range of issues. (Unfit Output C)

**Figure 3.3 Unfitness by building characteristics**



### **3.8 Construction date**

3.8.1 Unfitness is usually strongly associated with age; this relationship is shown in Wychavon as the highest rate of unfitness is in the pre1919 stock. Many recent studies have shown that because many building components of dwellings in the inter-war stock are reaching the end of their natural life, dwellings from this period are more unfit, as older dwellings have often been renovated. This pattern does not exist in Wychavon where the pre1919 stock has a higher rate of unfitness than the 1919-1944. The relatively small number of unfit dwellings is likely to have had an impact on these results, which will be subject to some statistical variance as a consequence. (Unfit Output D)

### **3.9 Building type**

3.9.1 Converted flats return the highest rate of unfitness by building type at 6.5%, and the second highest rate of unfitness is for terraced houses at 2.8%, which is typical of the pattern found across England. Purpose built flats, detached and semi-detached houses have the lowest rates of unfitness in England and in Wychavon. (Unfit Output A)

### **3.10 Tenure**

3.10.1 The trend of unfitness by tenure again generally follows the England average: privately rented dwellings have the highest rate at 4.5. Unusually the housing association stock has a slightly higher rate of unfitness than the owner-occupied stock 1.6% compared to 1.2%, but this may be due to the inclusion of transferred stock, as local authority dwellings have traditionally been associated with poorer conditions. It should be noted that, given the small size of the housing association sector, this figure may be subject to a large degree of variance. (Unfit Output E)

### **3.11 Targeting unfit and substantial disrepair dwellings**

3.11.1 Having examined some of the characteristics of unfit dwellings it is useful to consider how best to identify unfit dwellings by key characteristics and to consider how to prioritise this action. Whilst higher than the England average, the relatively small proportion of unfit dwellings in Wychavon District, however, makes it impossible to give too much detail from the survey and patterns can only be identified in a more general way.

3.11.2 Unfit dwellings are most strongly associated with oldest and youngest heads of household as is the case for England as a whole. Both those households where the head was under 21 years of age and where they were over 75 years of age returned above average levels of unfitness. In the case of younger heads of household this is due to an association with privately rented accommodation. In the case of the oldest heads of household the association is usually between inability to carry out or afford repairs. (Unfit Output F)

3.11.3 Unfit dwellings are heavily associated with residents on low income as 16% of residents have a household income below £10,000 per annum, but 41% of all unfit dwellings are found within this group. (Unfit Output G)

3.11.4 Unfitness is further associated with residents on benefits as of the 36% of dwellings where a means tested benefit is received 2.5% are unfit. When considering only those dwellings where income support is received the figure is 8%. (Unfit Output H2)

### **3.12 Targeting dwellings in substantial disrepair**

- 3.12.1 The larger proportion of dwellings in substantial disrepair, compared to those that are unfit, allows for greater flexibility in the analysis of such dwellings.
- 3.12.2 There is an association between substantial disrepair and younger heads of household as with unfitness. Where the head of household is below the age of 21 the rate of substantial disrepair is 29% and where the head of household is between 21 and 30 the rate is also 29%. The relationship between poor condition and older heads of household that was evident for an unfit dwelling does not appear to exist. (Unfit output Fa)
- 3.12.3 Unlike unfitness there is no association between low incomes and substantial disrepair. This may be due to a wider distribution of substantial disrepair dwellings, which is not unusual, or it may be due to the small sample sizes involved. (Unfit Output Ja)
- 3.12.4 There is, however, a link between benefit receipt and substantial disrepair, as was the case for unfit dwellings, with a rate of 22% in substantial disrepair, where a means tested benefit is received. (Unfit Output Hx)

### **3.13 Unfitness and substantial disrepair by area**

- 3.13.1 There is no statistically significant difference between areas with regard to unfitness. For substantial disrepair dwellings the highest rate was found in Evesham where 17% of dwellings are in substantial disrepair compared to 12% overall. For the other four areas substantial disrepair was found at levels that were not significantly different from the average. (Unfit output S)

### **3.14 Conclusions**

- 3.14.1 The overall rate of unfitness of 1.5% across the Wychavon District is below the proportion of unfit dwellings in England (4.3%).
- 3.14.2 The pattern of reasons for failure of the fitness standard generally resemble those found for England as a whole, but with certain figures having a larger variation due to the small number of unfit dwellings found. The most common reason for failure of the standard is disrepair.
- 3.14.3 Multiple fitness failures i.e. failures on more than one grounds of unfitness category, occur at a much lower rate (25%) than the average for England (45%) indicating that problems with unfit dwellings in Wychavon are associated with specific disrepair problems and not a wider distribution of problems.

- 3.14.4 The pre 1919 stock along with converted flats and the private rented sector has the highest rate of unfit and this is again similar to the position for England as a whole, but at a much lower level.
- 3.14.5 Priorities for action should logically follow from the dwellings in poorest condition through to those with fewest problems. For unfit dwellings the association with the youngest and oldest occupiers was evident, as was it for low incomes (those with an annual household income below £10,000) and an association with benefit receipt. Substantial disrepair is particularly associated with same social characteristics as unfit, except for low incomes where no association exists.
- 3.14.6 There is no evidence to suggest a logical area for priority action, as there is no significant difference between geographical areas with regard to unfit. With regard to substantial disrepair, however, Evesham has a significantly higher level than average.

## 4 Housing Health and Safety

### 4.1 Introduction

- 4.1.1 The Housing Health and Safety Rating System (HHSRS) was introduced in a trial form nearly three years ago. It is intended to be a replacement for the fitness standard and gives scores for individual hazards rather than giving a simple fit/unfit judgment. At present there is no set date for when the system will be introduced, and early findings are currently under review. The results from this survey will give an indication of likely future problems and will provide a useful comparative tool.
- 4.1.2 The HHSRS scoring system combines the probability that an accident will occur with the spread of likely outcomes, thus if an accident is very likely to occur and the outcome is likely to be serious (e.g. a major or fatal injury) then the score will be very high.
- 4.1.3 The approach adopted for this survey mirrors the EHCS 2001 methodology whereby the most common 7 hazards are examined. These are: falls on stairs, falls on the level, falls between levels, fire, hot surfaces and materials, damp & mould growth and excessive cold. The surveyor records the first five of these hazards during the inspection. The remaining two hazards (excessive cold and damp & mould growth) are modelled, based on the energy data and condensation information collected.

### 4.2 Definition of hazards

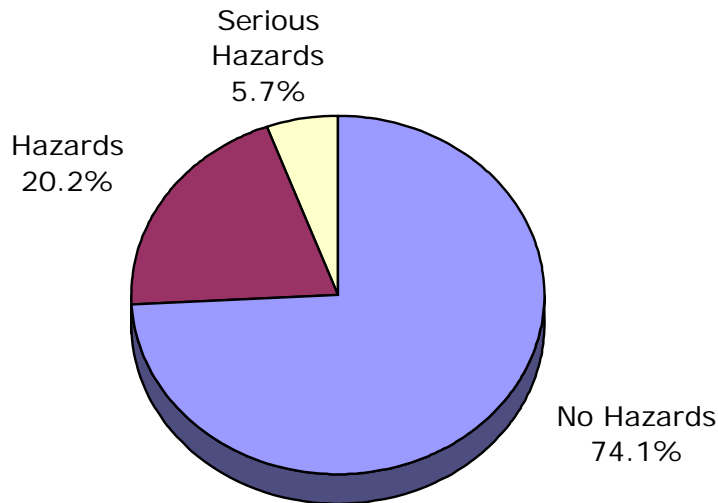
- 4.2.1 All dwellings contain certain aspects that can be perceived as hazards such as loose paving, steps leading to the front door and in the garden; staircases and banisters; stoves and cookers; combustible materials and lack of adequate heating to keep the dwelling warm. These are just some examples and not all will apply to all dwellings.
- 4.2.2 All dwellings that do not contain faults will generally have a range of minor hazards. For the purpose of this survey only those dwellings where hazards were beyond what might normally be found, had hazards recorded.

### 4.3 Hazards

- 4.3.1 A total of 12,900 dwellings (26% of the stock) were found to have a hazard, with some dwellings having more than one hazard, resulting in a total of 16,800 hazards within the 12,900 dwellings with hazards. The

distribution of dwellings with hazards and with serious hazards is given below. (HHSRS Output A)

**Figure 4.1 Hazard dwelling distribution**



4.3.2 The distribution of hazards by type is given below:

**Table 4.1 Occurrence of Hazards by type**

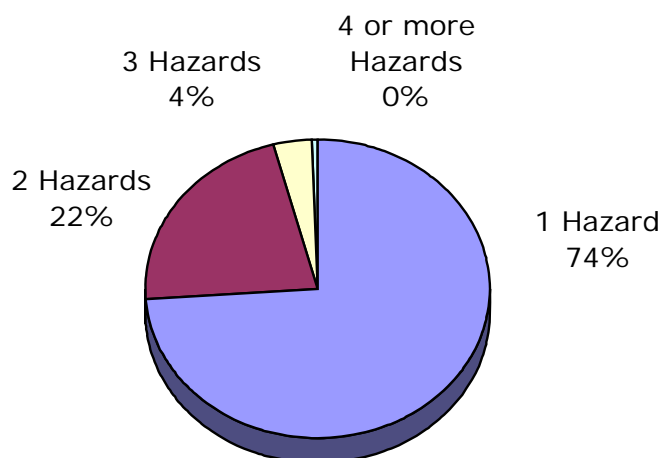
Hazard	Hazards less than 1000		Hazards over 1000 (Serious)		All Hazards
	Hazards	Per cent	Hazards	Per cent	
Damp and Mould Growth	380	20%	1,490	80%	1,870
Excessive Cold	3,210	82%	720	18%	3,930
Falls Between Levels	510	100%	0	0%	510
Falls on Stairs	3,130	92%	260	8%	3,390
Falls on the Level	3,890	91%	400	9%	4,290
Fire	2,160	96%	100	4%	2,260
Hot Surfaces and Materials	560	100%	0	0%	560

4.3.3 The figures given are based on total hazards; some dwellings will have more than one hazard so the totals are greater than the number of dwellings. (HHSRS Outputs A & B)

#### 4.4 Number of hazards

4.4.1 The distribution of total number of hazards per dwelling is given below (note that where there are 4 or more hazards the figure of 0% actually represents the fact that fewer than 0.5% have 4 or more hazards, rather than none):

**Figure 4.2 Number of hazards per dwelling**



4.4.2 The number of hazards on which a dwelling fails indicates how 'generally' hazardous a dwelling is. Compared to unfitness roughly the same proportion (26%) of dwellings have multiple, hazards, but the majority of these have only two hazards with only an estimated 530 having 3 or more hazards. (HHSRS Output E)

#### 4.5 Serious Hazards

4.5.1 The total number of dwellings with a serious hazard is 2,800 (5.7%), which is considerably higher than the 1.5% figure for unfitness. The initial expectation from the ODPM was that serious hazards would be found at a slightly higher rate than unfit dwellings in most cases.

4.5.2 The most common serious hazards are: damp & mould growth 1,490 (53%) and excessive cold 720 (26%).

#### 4.6 Serious hazards and general characteristics

4.6.1 The distribution of serious hazards by construction date does follow the trend found for unfitness, but with the exception that the highest level of serious hazards is for the pre 1919 stock. In the pre-1919 stock 11% of dwellings had a serious hazard and in the most modern post-1964 stock has a rate of 2%. (HHSRS Output C)

4.6.2 Serious hazards by building type follow some of the trends as for unfitness with the second highest rate being for converted flats at 43%. The lowest rate is for detached houses with just 4% having a serious hazard. (HHSRS Output D)

4.6.3 There is also a degree of similarity with unfitness for serious hazards by tenure as the private rented sector has the highest rate (15% with a serious hazard), followed by housing association dwellings at 11%. The privately rented stock has a lower rate than dwellings from the other tenures at just 4%. (HHSRS Output F)

#### **4.7 Serious Hazards and unfitness**

4.7.1 Similarities and variations between unfitness and serious hazards, with regard to general characteristics, can be understood if the relationship between the two condition measures is examined.

4.7.2 For serious hazards (those with a hazard, which scores over 1,000) there is a 10% overlap with unfit dwellings. In other words of all the dwellings found to have a serious hazard only 10% also fail the current housing fitness standard, the remaining 90% have a serious hazard, but no corresponding fitness failure. This does present an important issue for local authorities, as given that 90% of dwellings with a serious hazard are not unfit, they will present a whole new set of 'problem' dwellings upon adoption of the hazard rating as the new measure of poor condition. The main reason for this is the new hazard rating system looks more closely at the health and safety of occupiers rather than the condition of the dwelling. Only if unfitness items cause a potential hazard will they score under the HHSRS.

4.7.3 The implications are that when the revised version of the HHSRS is finally adopted as the 'new fitness standard' the emphasis for local authorities will shift, to some extent, to new categories. Those dwellings that are currently unfit, however, still represent the best targets for action for, as has been demonstrated, such dwellings are still far more prone to having serious hazards than any other dwelling types (HHSRS Output G).

#### **4.8 Targeting dwellings with serious hazards**

4.8.1 The severity of hazards, when scored, takes into account the age of the dwelling, but also takes into account the most vulnerable group for that hazard. Thus, if a dwelling has a 'falls on the level' hazard, it is scored on the basis of elderly occupiers. The HHSRS differs from the fitness standard in this respect as it is concerned with the likely dangers to the actual types of occupiers that could potentially be present.

4.8.2 As with unfitness the strongest association between serious hazards and age of head of household is for those where the head is under the age of 21, with 24% of dwellings having a serious hazard. (HHSRS Output F1)

4.8.3 There is not a particularly strong association between income and dwellings with serious hazards, but there is a slight association with a 6% rate where household income is below £10,000 per annum. (HHSRS Output F2)

4.8.4 Where residents are in receipt of a means tested benefit there is a reasonable degree of association with 8% of dwellings having a serious hazard compared to 4% where residents are not in receipt of benefit. (HHSRS Output F3)

#### **4.9 Serious Hazards by area**

4.9.1 It was found for unfit dwellings that no significant differences exist between areas in terms of rate of unfit. The same is true for serious hazards with the possible exception of the rural south part of the district where serious hazards occur at a rate of 7.2% compared to 5.7% across the whole of Wychavon. It should be cautioned, however, that this finding is on the margin of significance and may simply be a statistical anomaly.

#### **4.10 Conclusions**

4.10.1 A hazard is found in 12,900 (26%) dwellings. Serious hazards (those with a score of 1,000 or more – equivalent to being unfit under the current standard) are found in 2,800 (5.7%) dwellings. Dwellings with serious hazards represent those that would need most urgent attention under the HHSRS and will be likely to represent the same sorts of issues with regard to action that unfit properties currently represent.

4.10.2 The higher number of serious hazard dwellings mean that there are notable differences in the distribution of dwellings with serious hazards. The private rented sector, converted flats and pre 1919 dwellings are most strongly associated with serious hazards.

4.10.3 The most common forms of serious hazard are excessive cold and damp & mould growth. Excessive cold is usually strongly featured among serious hazards and can have major impact on health particularly in relation to asthma, pneumonia and other respiratory problems.

4.10.4 Serious hazards, as with unfit, are associated with younger heads of household and benefit receipt, but not necessarily with dwellings where household income is low.

4.10.5 There is a great enough difference between serious hazards and unfit to mean that targeting hazards will need to concentrate on different areas from unfit even if the dwelling types themselves are fairly similar.

## 5 Repair and Renewal

### 5.1 Improving the stock

5.1.1 Having considered the extent and nature of unfit dwellings and dwellings in substantial disrepair, this chapter seeks to examine the extent of work required to rectify defects in housing. In order to do this three key questions must be considered.

- What is the cost of carrying out repairs and renewal?
- Where are the problems concentrated: what types of dwelling; which tenures; what ages of dwellings and what geographical areas?
- What types of resident occupy these dwellings, and having answered this, can they afford to carry out these works?

### 5.2 Overall repair costs

5.2.1 The cost of repair for individual dwellings varies depending on what approach to repairs is taken. At the most basic level one approach might be to deal with urgent items of repair and items that make a dwelling unfit. A more practical approach is to carry out these urgent works, but at the same time tackle other less serious items that might cause problems in the future. The most comprehensive approach would be to carry out all repairs and replace older items bringing the whole dwelling up to a good, modern standard.

5.2.2 The different cost types are examined in detail in the appendix to this report. For the purposes of the analysis below the report will concentrate on urgent repairs and repairs to remedy unfitness combined with a general level of repair to bring dwellings up to a good standard, such that further work will not be required for up to ten years. These are referred to as: 'comprehensive costs'.

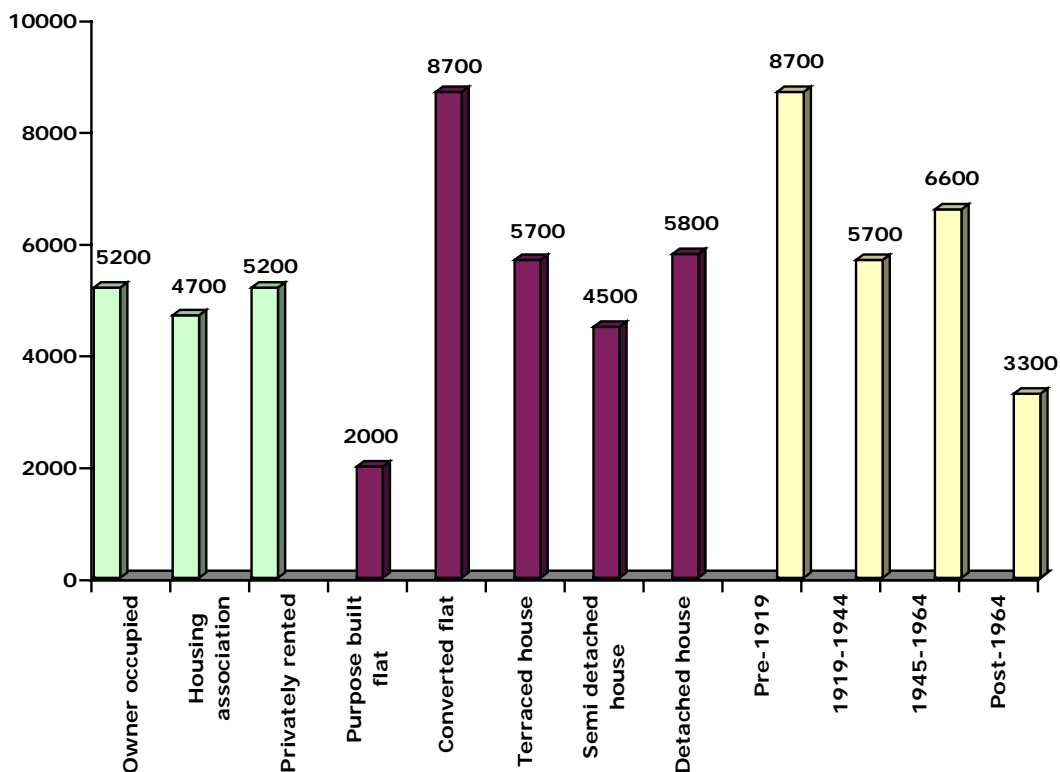
5.2.3 The total comprehensive cost for all dwellings in Wychavon District is £254 million, an average of £5,000 per dwelling. This average is based on some dwellings, which will have no repair requirements, for example the most modern dwellings, and other dwellings, such as unfit dwellings, which will have major repair costs. Repair costs for the dwellings in poorest condition are covered later in this chapter. (Cost Output A)

### 5.3 Repair costs and general characteristics

5.3.1 As with unfitness, repair costs vary depending on the age, type and tenure of dwellings. The following section gives a breakdown of comprehensive costs by a number of key variables.



**Figure 5.1 Repair cost by general characteristics**



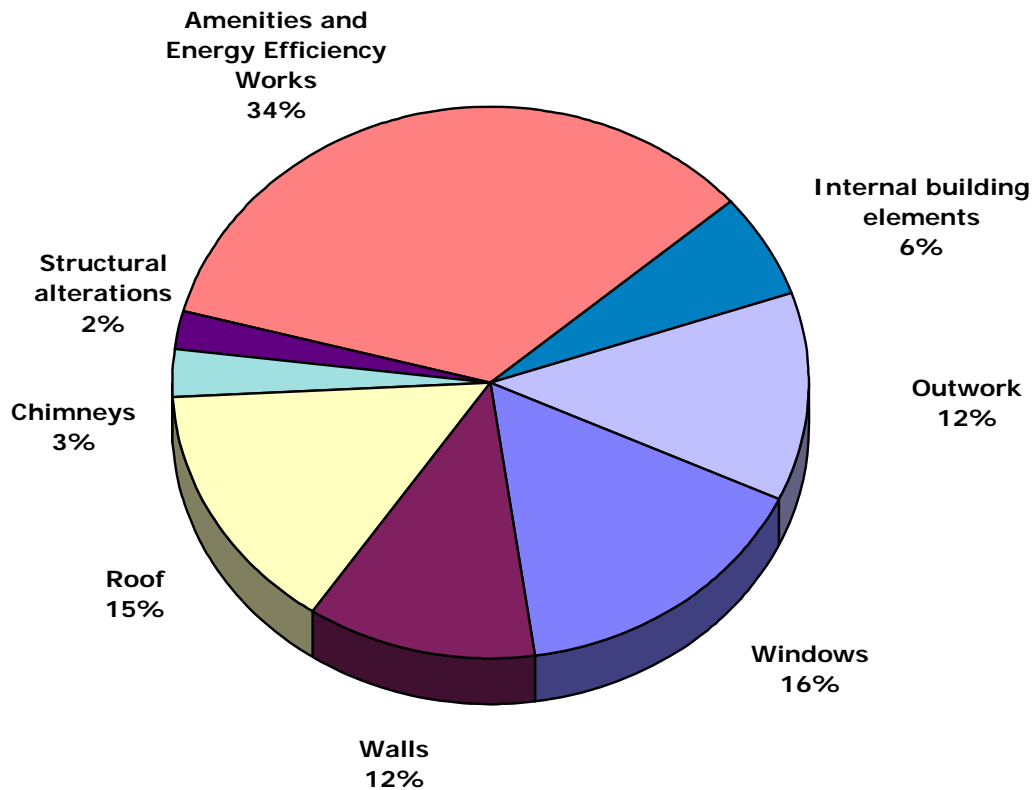
(Cost Outputs A, C and D)

- 5.3.2 The highest cost by age of dwelling is for the pre1919 stock with an average comprehensive cost of £8,700 per dwelling. Many recent studies have found that the 1919-1944 age band often has higher repair cost than the pre 1919 stock as many of the building elements for dwellings of this age are reaching the end of their natural life. This pattern does not exist in Wychavon, however, as the highest costs are for the pre 1919 age band. (Cost Output C)
- 5.3.3 The highest cost by building type is for converted flats, which is mainly due to the generally poor conditions associated with this dwelling type. Detached houses have the next highest cost, but in this case it is down to their large size and association with older stock. (Cost Output D)
- 5.3.4 Privately rented dwellings usually have the highest mean cost by tenure and this is the case in Wychavon District where the average repair costs is £5,200. Owner-occupied dwellings, however, also have the same average repair cost of £5,200 with housing association dwellings having the lowest repair costs of £4,700 due to the high proportion of modern dwellings. (Cost Output A)

## 5.4 Repair costs and building elements

5.4.1 A slightly lower proportion of costs in Wychavon (60%) than in England as a whole relate to the exterior fabric of the dwelling. One would normally expect exterior costs to be higher where poorer conditions exist as in Wychavon the relatively modern stock means that there is not a great deal of work required to the exterior of buildings.

**Figure 5.2 Repair costs by building element**



*Outworks represent all repairs to boundary walls, fences, paths, yards and outbuildings*

5.4.2 At the all England level (discounting the amenities group) repairs to windows, external walls and roofs have the highest proportion of individual costs and Wychavon has a similar breakdown. (Cost Output E)

## 5.5 The cost to remedy unfitness

5.5.1 At the most basic level the cost to remedy unfitness is the cost to put right any individual elements to the dwelling that are causing it to fail on one or more of the eleven items of the fitness standard, outlined in the previous chapter.

5.5.2 The total cost of bringing unfit dwellings up to a good habitable standard is £14 million or an average of £18,700 per dwelling, which is based on the comprehensive cost standard in unfit dwellings. For the same cost profile in England, the average cost of repair in unfit dwellings is £10,100. The difference in cost is likely to be associated with the small number of unfit dwellings, as just one or two particularly poor properties could be capable of skewing the results. In addition we have seen earlier that in spite of there being fewer unfit dwellings, those that are unfit are, on average, in poorer condition. (Unfit Output C)

5.5.3 The repair costs for dwellings in substantial disrepair totals £55 million or £9,400 per dwelling, which is again based on the comprehensive cost standard. (SD Output B)

## **5.6 Repairing unfit dwellings**

5.6.1 In the previous chapter unfit dwellings were identified as being those most logically determined to be urgent priorities for work. It is therefore useful to understand what the potential repair cost implications are and what the likely contribution from occupiers will be.

5.6.2 Determining the likely potential contribution level from occupiers of unfit dwellings is difficult given the relatively small number of such dwellings that were identified during the survey. It is not possible to break these figures down by age of occupier or sub-area of the District, only to give a general indication of the income levels of occupiers in unfit dwellings in relation to likely repair costs.

5.6.3 The average incomes of occupiers of poor condition dwellings in Wychavon District results in demand being concentrated in the lowest, sub £10,000 per annum, income band. In the owner-occupied sector nearly 90% of all comprehensive repair costs are for dwellings where occupiers have household incomes of below £10,000 per annum, which represents just over £11 million. Clearly this creates an issue of affordability, as does the fact that in the private rented sector a similar situation exists.

## **5.7 Repairing substantial disrepair dwellings**

5.7.1 Dwellings that are not unfit but are in substantial disrepair present further repair cost issues. The total cost of repair for substantial disrepair dwellings is £55 million and as with unfit dwellings we can examine the repair costs associated with these dwellings in relation to the characteristics of their occupiers.

5.7.2 The cost of repair for substantial disrepair dwellings is not as strongly associated with low incomes, and the highest level of need in the owner occupied sector is actually where household incomes are above £25,000

per annum with £18.5 million (51%) of comprehensive costs being associated with this group.

5.7.3 For those on the lowest incomes loans or equity release schemes are unlikely to be viable as such occupiers will have no means to repay these. For those on middle and higher incomes loans or equity release could prove a viable option and as there are significant proportions of substantial disrepair dwellings with occupiers in the middle and higher income groups, such schemes may prove viable.

## **5.8 The cost of repair dwellings with a serious hazard**

5.8.1 The total cost of repair works to all dwellings with a serious hazard is £34 million, an average of £12,200 per dwelling with a serious hazard. (HHSRS Output Z)

## **5.9 Disabled facilities grants**

5.9.1 Since the introduction of the Regulatory Reform order only Disabled Facilities Grants have remained mandatory. It will be necessary, therefore, for local authorities to consider the potential level of demand for adaptations and the likely cost of installing such adaptations. Disabled facilities grants are means tested, so the costs given below are the total potential before means testing.

5.9.2 It should be noted that for the purposes of the survey a very broad definition of disabled is taken and that this includes elderly frail residents. Whether an occupational health worker would determine a requirement for an adaptation has not been considered and therefore the figures given below are maximums from which the real figure would be derived.

5.9.3 A variety of adaptations were recorded on the basis of whether they were needed and whether they were already present. Based upon the requirements of the 8,400 (17%) dwellings with disabled residents, 6,630 adaptations are required.

5.9.4 A breakdown of adaptations is given below.

**Table 5.1 Adaptations for the disabled**

<b>Adaptation</b>	<b>Needed</b>
Wider doorways	270
Stair lift / lift	770
Ramp	400
Grab rails / handrail	910
Hoist	460
Redesigned kitchen	420
Redesign / relocation WC	420
Redesign / relocation bath	960

Door answering / opening	530
Emergency Alarm	560
Other adaptation	930
<b>Total</b>	<b>6,630</b>

5.9.5 The 3,620 adaptations identified are required in a total of 1,400 dwellings, which is 6% of the stock and 37% of dwellings occupied by a resident with a disability. (Gen Output R)

5.9.6 Having established the demand for adaptations the estimated cost of carrying out those adaptations is given in the table below.

**Table 5.2 Cost of adaptations for the disabled**

<b>Adaptation</b>	<b>Cost <i>£millions</i></b>
Wider doorways	0.3
Stair lift / lift	2.3
Ramp	1.0
Grab rails / handrail	0.5
Hoist	0.9
Redesigned kitchen	2.5
Redesign / relocation WC	1.1
Redesign / relocation bath	2.9
Door answering / opening	0.5
Emergency Alarm	0.3
Other adaptation	-
<b>Total</b>	<b>12.3</b>

5.9.7 The implications of this table are clear with a total potential demand of £12.3 million if all adaptations to all dwellings that require them were carried out, but again it should be emphasised that many of these adaptations may not be eligible under DFG criteria. (RRO Output V)

## **5.10 Conclusion**

5.10.1 As a mechanism for dealing with unfit owner occupied dwellings, the use of renovation grants has traditionally been a key tool for local authorities. Under the Regulatory Reform Order (RRO) offering such grants has become optional and individual authorities will have the freedom to decide whether to offer grants and what other schemes such as loans and equity release it may wish to promote.

5.10.2 Whilst authorities will have a much broader choice in how they promote improvement in the stock, their statutory obligation under the 1985 Housing Act to remedy unfitness remains, thus taking no action will not be an option. Improving the repair condition of unfit and substantial disrepair dwellings is also key requirement of the new Decent Homes

Standard, which applies to housing association dwellings, but has also recently been expanded to all dwellings in the private sector where a vulnerable occupier lives.

- 5.10.3 The total requirement for comprehensive repair in all unfit and substantial disrepair dwellings is £29.5 million. The majority of these costs are associated with dwellings where household income is below £10,000 per annum.
- 5.10.4 Under the Regulatory Reform Order Home Repair Assistance grants are no longer mandatory. These grants were designed to help vulnerable older persons with urgent repair requirements. It will now be up to individual authorities to determine how best to assist such residents with repairs they cannot themselves carry out.
- 5.10.5 Since the introduction of the Regulatory Reform Order, Disabled Facilities Grants are now the only mandatory grants. The total potential requirement for 6,630 adaptations highlighted by the survey will place considerable demands on the authority to implement, with a total potential cost (before means testing and assessment by an occupational therapist) of £12.3 million.

## 6 Energy efficiency

6.1.1 The standard assessment procedure or SAP is a government rating for energy efficiency and is described in box 6.1 below. 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.

### Box 6.1 Definition of SAP rating

**SAP rating:** This is a government-specified energy rating for a dwelling. It is 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 does not strongly affect the result, which is expressed on a 0-120 scale. The higher the number the better the standard.

### 6.2 Distribution of SAP ratings

6.2.1 The average SAP rating for a dwelling in Wychavon District is 50, which compares to an average for all dwellings in England of 51. (Energy Output A)

6.2.2 Figure 6.1 shows the distribution of SAP ratings.

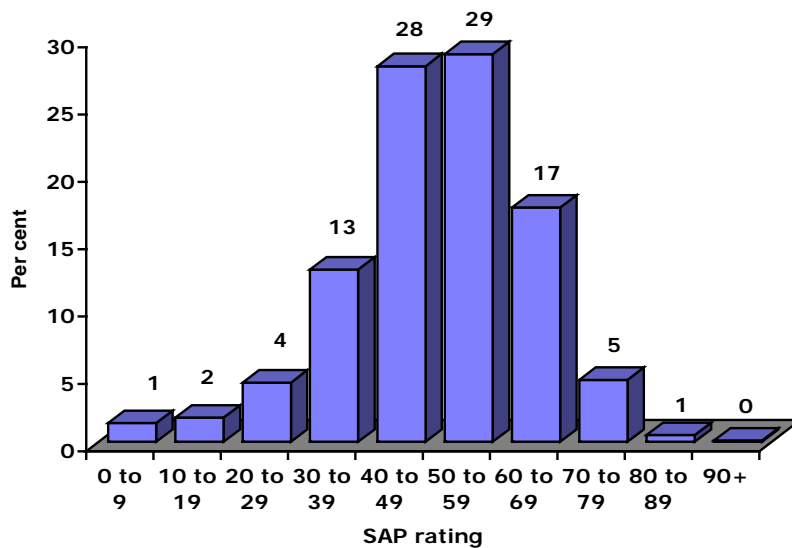


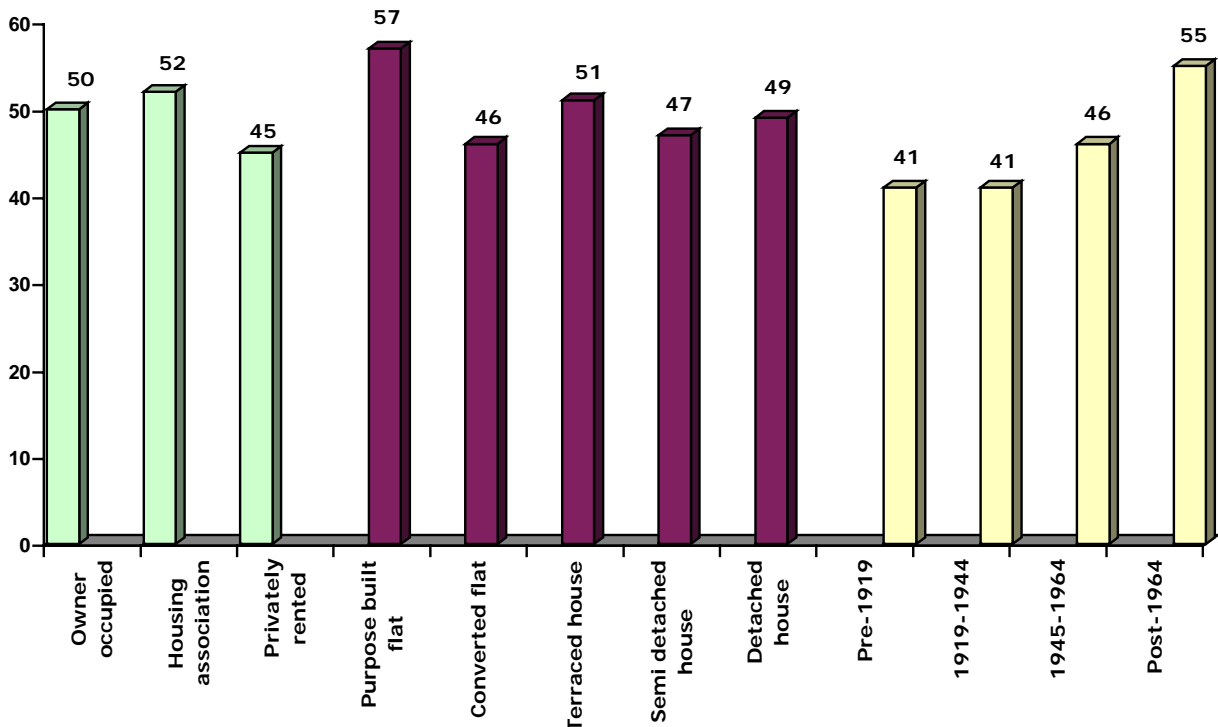
Figure 6.1 Frequency distribution of SAP

6.2.3 The majority of dwellings (74%) have a SAP rating between 40 and 70, which is slightly above the average for England that fall in this range. Across England 9% of dwellings have a SAP of less than 30, which is slightly above the proportion that fall in this range across Wychavon (8%). There are 1,630 (3%) of dwellings that have a SAP rating of less than 20, which is slightly lower than the all England figure of 5%.

### 6.3 SAP by general characteristics

6.3.1 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 will affect the overall heat loss and therefore the efficiency, thus different types and ages of dwellings will have different energy characteristics.

**Figure 6.2 SAP by general characteristics**



6.3.2 Increases in SAP are usually associated with a reduction in dwelling age; thus the most modern stock has the highest SAP. This is true of Wychavon District with a mean SAP of 55 for the most modern age band in the post 1964 era. (Energy Output B)

6.3.3 When examining SAP ratings by built form converted flats have the lowest average SAP, which is due to a poor provision of insulation and

inefficient heating systems and an association with the oldest stock. Detached and semi-detached houses have the next lowest mean SAP, which in this case is due to the degree of external exposure of these dwelling types. Purpose built flats have the highest average SAP at 57 and this is again typical of the position found across England. (Energy Output C)

- 6.3.4 Housing Association dwellings have a mean SAP of 52 compared to 50 for owner occupied dwellings and 45 for the privately rented sector, but this is largely to do with the building type distribution for these tenures. The housing association stock is more modern and includes larger proportions of more efficient building types so it is easy to understand why it should have the most efficient stock. (Energy Output D) The impact of heating and insulation will also have an effect and this will be discussed later in the chapter.
- 6.3.5 Age and building type, therefore, are helpful to establish the potential efficiency of the stock but insulation and heating provision need to be examined to give a full picture.
- 6.3.6 A combination of insulation and heating systems can also have a dramatic effect on SAP and account for the variations in the typical age and type distributions.

#### **6.4 Energy efficiency improvement**

- 6.4.1 The 1995 Home Energy Conservation Act (HECA) aims to improve the energy efficiency of dwellings across the country. The act is part of a broader government strategy to reduce the consumption of fossil fuels and thereby reduce the impact of energy expenditure on the environment. By giving dwellings better insulation and more efficient heating systems, such as modern gas boilers, the amount of fuel that must be burnt to heat a dwelling and produce hot water can be reduced.
- 6.4.2 The target local authorities were asked to achieve was a 30% reduction in energy consumption over 10-15 years (1996 to 2011 at the latest). As a part of this strategy local authorities were required to implement schemes that would encourage and assist with measures to reduce energy usage, and to submit an annual return detailing the amount of energy being consumed by dwellings in their District and to indicate how much of a reduction in consumption has occurred. The energy audit component of the HCS will provide a useful evidence base to determine if measures have been successful and identify new areas that can be tackled in future.
- 6.4.3 Given the variation in levels of energy efficiency between dwellings it is possible to conceive that improvements to dwellings could lead to warmer, better homes, both in terms of the overall energy efficiency of the stock as measured by the SAP rating, and in terms of reduction in

energy use and CO<sub>2</sub> emissions. Energy consumption is measured in kWh (kilo-Watt-hours), mWh (mega-Watt-hours, which equate to 1,000 kWh), and in Gjoules (Gigajoules).

- 6.4.4 The system is capable of calculating revised energy efficiency figures based on applying models to the data for different packages of measures and for different groups. The effect of these measures can also be given, allowing payback periods for these improvements to be calculated.
- 6.4.5 It should be noted at this point that improving energy efficiency does not necessarily equate to a reduction in energy consumption. In the majority of cases it will do, but, for example, where a dwelling is being tackled because its occupants are in fuel poverty, energy consumption may well go up. This is because in such dwellings the occupiers are under heating the dwelling with expensive fuel. Consumption of cheaper fuels can create affordable warmth, but does not improve energy efficiency due to the net increase in fuel use.

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

- 6.5.1 The following figures are based on modelling changes in energy efficiency bought about by installing combinations of items listed in box 6.2 below. These are based on measures that have been provided by various local authorities and are loosely based on the Warm Front scheme.

### **Box 6.2 Energy efficiency improvement measures**

Loft insulation to 200mm  
Cylinder insulation to 50mm 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

- 6.5.2 Different combinations would be required for different dwellings depending on the current provision of these items in each case.

## **6.6 Future improvement**

- 6.6.1 If all combinations of improvements listed in box 6.2 above were carried out to all dwellings, the total cost would be £45 million, an average of £900 per dwelling. Replacement boilers and the installation of central heating systems are clearly the most expensive items. Considering only those dwellings requiring a replacement or addition of a boiler, the average total cost of all measures per dwelling is £1,750. The total potential requirement for installation of all measures, where a gas boiler is required, is only £9 million, as few of those in need of energy efficiency measures require the provision of efficient heating systems. (Energy Update Outputs E and F)

## **6.7 Tackling fuel poverty**

- 6.7.1 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 in fuel poverty represent energy inefficient dwellings, they are, by definition, occupied by residents who are least likely to be able to carry out improvements due to low incomes.
- 6.7.2 There are an estimated 6,900 (14%) dwellings in fuel poverty in Wychavon District; however, there are no comparative figures available from the 2001 English House Condition Survey. The privately rented sector has the highest rate of fuel poverty at 31% and owner occupied dwellings have the lowest rate at 11%, with the housing association sector at 19%. (Energy Output V1)
- 6.7.3 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 works, to dwellings in fuel poverty, in the owner-occupied sector is just under £5 million. This expenditure requirement is distributed between the 4,000 owner-occupied dwellings in fuel poverty. (Energy Output V2)
- 6.7.4 Fuel poverty is also focused in dwellings occupied by older household (head of household over the age of 65), which are more likely to be in fuel poverty than dwellings with younger residents (21% compared to 11%). (Energy Output V3)

## **6.8 Work to remedy fuel poverty**

- 6.8.1 In order to remedy fuel poverty it is necessary to make dwellings more energy efficient. In order to do this one needs to consider what elements are making dwellings inefficient. It is not possible to alter the construction type or age of a dwelling, therefore, working with the heating systems and insulation of dwellings are the best way of improving energy efficiency.
- 6.8.2 The privately rented sector has the highest proportion of dwellings with room heaters (13%), which represents 440 dwellings. This compares to 4% of all dwellings across all tenures in need of efficient heating systems. (Energy Output V6)
- 6.8.3 The survey found that 13% of dwellings with lofts have no loft insulation at all and only 48% of dwellings have over 140mm of loft insulation (bearing in mind that current building regulations for new build properties require 200mm of insulation to be installed). In all 28% of dwellings have loft insulation of 90mm or less, a level that is generally considered

as a minimum below which replacement or installation would be required.  
(Energy Output E)

- 6.8.4 Cavity wall insulation follows a slightly different pattern than that found for loft insulation. Need is highest in the privately rented sector where only 24% of dwellings with cavity walls have insulation. (Energy Output V5)
- 6.8.5 Having identified patterns in the stock with regard to fuel poverty it is possible to summarise how one might target these dwellings to reduce fuel poverty, and the options are examined below.

## **6.9 The Warm front scheme and fuel poverty**

- 6.9.1 The Warm front scheme replaced the HEES and HEES plus scheme as a means for providing energy efficiency improvement works for those least able to afford them. The scheme, however, was never designed to pick up all dwellings that are in fuel poverty, but rather to deal with those where residents were on benefit and least able to help themselves.
- 6.9.2 Much of the work outlined above can be carried out under Warm Front, but it will be of particular interest to the authority to examine those dwellings that fall outside the scheme, but in fuel poverty. There are 1,800 dwellings in Wychavon District ineligible under the Warm Front scheme, but in fuel poverty. (Energy Update Output B)
- 6.9.3 The average cost of improvement works in these dwellings is £1,000 and the expenditure would take, on average, 4.7 years to be recouped by the saving on fuel bills.

## **6.10 Beyond fuel poverty**

- 6.10.1 Tackling dwellings in fuel poverty helps those least able to afford either the improvement works necessary and least able to afford to heat their homes properly, and as such, this group is a good starting point for carrying out works.
- 6.10.2 Beyond fuel poverty, however, the authority has a duty under the Home Energy Conservation act to help reduce energy consumption in dwellings within the District.

## **6.11 Targeting low efficiency dwellings**

- 6.11.1 The cost of carrying out all works to all dwellings not in fuel poverty, but that could potentially have improvements made, is £34.6 million. This represents an average expenditure of approximately £810 in 42,600 dwellings. (Energy Output V11)
- 6.11.2 Targeting all these dwellings would not involve selecting any specific areas or types as it involves the majority of the stock. Perhaps the best targets are likely to be those most in need of improvement, in particular those dwellings that are the least energy efficient at present.
- 6.11.3 There are 3,170 dwellings that are not in fuel poverty, but that do have a mean SAP of less than 30 and to carry out all improvement works required for these dwellings would cost £3 million, with almost all of this being required for the owner-occupied stock. The mean cost per dwelling in the owner-occupied stock would be just over £1,000 and for the privately rented stock just under £1,000. (Energy Output V12)

## **6.12 Achieving the 30% target**

6.12.1 Improvements will have been made in reducing energy consumption since 1996 and these will need to be taken into account when considering what further improvements can be made.

6.12.2 The extensive range of measures required to improve further would result in a total expenditure necessary of under £45 million, a sum that is unlikely to be obtainable even with resident's expenditure and local authority schemes combined as this represents an average expenditure of over £900 for every dwelling in the District. Carrying out all these measures would, in theory, reduce energy consumption by a further 21%. (Energy Update Output E)

6.12.3 Given the work that has already been carried out on reducing energy consumption since 1996, the target of 30% is achievable, though very difficult. The main hurdle is the combination of already high levels of efficiency in the urban, modern stock coupled with the difficult of dealing with the older rural properties many of which may not have a mains gas supply and/or have solid walls.

6.12.4 To achieve a total reduction in energy consumption of 30% by 2011 will require a fully comprehensive range of measures to most dwellings where this is possible. It is likely to prove difficult to locate sufficient dwellings to carry out these works and any strategy, therefore, will need a great deal of assistance from, and education of, residents.

## **6.13 Energy Efficiency by area**

6.13.1 The table below gives the distribution of mean SAP and of fuel poverty by the five sub-areas of the survey:

**Table 6.1 SAP and fuel poverty by area**

<b>Area</b>	<b>Fuel Poor</b>		<b>Mean SAP</b>
Evesham	1,250	12%	52
Pershore	900	26%	50
Droitwich	550	5%	51
Rural South	2,200	17%	47
Rural North	2,000	17%	49
<b>Total</b>	<b>6,900</b>	<b>14%</b>	<b>50</b>

6.13.2 The figures do not suggest that there is a great deal of difference between areas with regard to mean SAP, however, Pershore has a significantly higher level of fuel poverty at 26%, than any of the other areas.

## **6.14 Conclusions**

- 6.14.1 Tackling fuel poverty is a key target for the authority as it aids those residents most in need as well as improving thermal comfort (required under the decent homes standard) and potentially reduces the number of dwellings that are unfit due to heating. Focusing particularly on dwellings with older heads of household, dwellings with benefit recipients and on low incomes and the privately rented stock will have the biggest impact. The authority will have to consider how to encourage landlords to improve the energy efficiency of their dwellings in the private rented sector. For housing association dwellings, the Decent Homes Standard will require that all dwellings in this tenure be raised to a higher standard.
- 6.14.2 Moving beyond fuel poverty, the least efficient dwellings (those with a SAP below 30) are most concentrated across the District and are more associated with houses, the older stock and the owner-occupied sector. Many of these dwellings have low mean SAP ratings due to a lack of decent heating as well as, potentially in the rural areas, solid walls, which are more difficult to insulate.
- 6.14.3 Achieving targets for reducing energy efficiency are likely to be extremely difficult, though possible, but will need to involve all dwellings that can have improvements made.
- 6.14.4 In terms of tackling fuel poverty the rural area of the District has the highest rate and greatest total number of dwellings, but it is likely to prove difficult to identify such dwellings without the help of the occupiers, thus any policy must involve residents in being aware of the problem.

## 7 The Decent Homes Standard

### 7.1 Introduction

- 7.1.1 The ODPM has set forth the aim of allowing everybody to live in a 'Decent Home'. In order to determine whether a home is 'decent' the ODPM have created a standard with a set of criteria, which are discussed in greater depth below. If a dwelling fails any one of these criteria it is considered to be 'not decent'. A detailed definition of the criteria and their sub-categories are described in the ODPM circular: "Housing Transfer Guidance 2002 Programme – Annex A".
- 7.1.2 More recently the new publication: "A Decent Home: the revised definition and guidance for implementation" has been published by the ODPM (2002). This guidance does not substantial change the criteria for decent homes, with the exception of providing thermal comfort, which has changed from a calculated, energy efficiency based approach to a simpler, but more practical system using the heating systems, fuel and insulation in a dwelling to determine if it provides adequate thermal comfort.
- 7.1.3 With regard to social housing, it will now become the responsibility of local authorities and housing associations to monitor their stock to determine what proportion of dwellings are not decent, and rectify the causes of such failures.
- 7.1.4 Until recently obligations under the Decent Homes standard were directed solely at the social housing sector. This year, however, the government has expanded the targets for making dwellings decent:
- "The government target for private sector housing is to reduce the proportion of vulnerable households living in non-decent homes. 'Vulnerable' households are defined as those in receipt of income or disability related benefits."  
[p58, English House Condition Survey 2001, HMSO 2003]
- 7.1.5 The English House Condition Survey 2001 places a great deal of emphasis on the Decent Homes Standard and it seems likely that the standard will become the primary measure of housing conditions for all tenures in future. It is for this reason that the 2003 Wychavon survey collected sufficient data to examine not decent dwellings across all tenures.

### 7.2 General Characteristics

- 7.2.1 Based on the House Condition Survey data, 10,450 dwellings (21%) can be classified not decent compared to 33% in England as a whole. (ND Output 1)
- 7.2.2 The building types with the highest proportion of not decent dwellings are purpose built flats, which have a rate of 47% classified not decent. The lowest proportion found was for detached houses at 11%. The high proportion for purpose built flats is not unusual as most of these will fail on thermal comfort grounds as the criteria are not sensitive enough to deal with the insulation and heating systems often used in flats. (ND Output 1)
- 7.2.3 The highest proportion of not decent homes by age of dwelling was for the 1945-1964 stock at 36%. This finding differs considerably from other condition variables such as unfitness and hazards, but it is not an unusual finding. As mentioned in the previous paragraph a high proportion of purpose built flats fail on thermal comfort, as do other modern dwellings. The thermal comfort standard simply states that if a dwelling uses electric storage heaters it must have cavity wall insulation where cavity walls exist, thus a dwelling can meet current building regulations, but still be not decent. (ND Output 2)
- 7.2.4 The highest proportion of not decent dwellings by tenure is found in the private rented sector where 33% are not decent and the lowest proportion is for owner-occupied dwellings where 19% are not decent. Housing association dwellings return a rate of 25% classified as not decent. (ND Output 11)

### 7.3 Reasons for non-decency

- 7.3.1 Since the decent homes standard is divided into 4 criteria it is possible to give a breakdown of the reasons why dwellings fail the standard. The table below gives such a breakdown:

**Table 7.1 Reasons for failure of dwellings as a decent home**

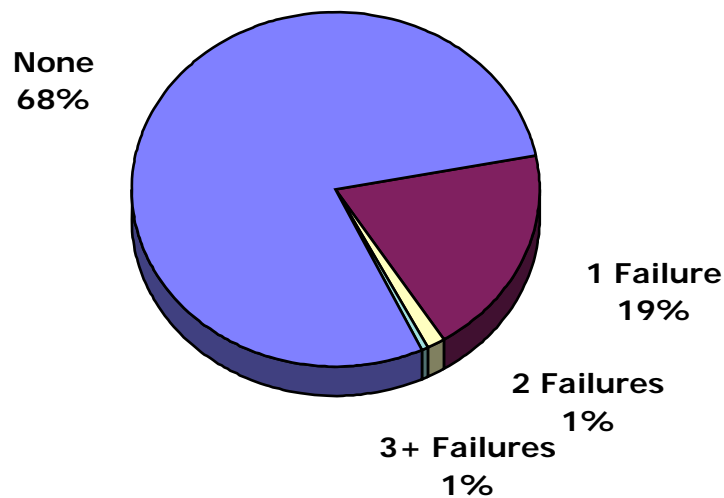
Reason	Dwellings	Per cent (Of not decent)	Per cent (Stock)	Per cent (Stock) EHCS 2001
Unfit dwellings	750	7%	1.5%	4.2%
In need of repair	1,550	15%	3%	8.8%
Lacking adequate facilities	0	-	-	2.4%
Poor degree of thermal comfort	9,400	90%	19%	26.3%

- 7.3.2 As can be noted the percentages by not decent do not total 100%, this is due to the fact that the categories are not mutually exclusive, though a dwelling can fail on just one category, it may actually fail on more. (ND Output 3)

- 7.3.3 A poor degree of thermal comfort is the primary cause of failure of the Decent Homes Standard, both in Wychavon District and in England. Failures in this category will be reducing continually as initiatives under HECA tackle dwellings with poor energy efficiency.
- 7.3.4 Failures due to Repair and failures due to amenity provision can be subdivided into smaller categories based on the exact reasons for failure. Unfortunately, however, to do this would result in sample sizes that are too small to give an accurate picture.
- 7.3.5 No failures due to lack of adequate facilities were found, however this may be due to the criteria for this category as in most surveys very few indeed are found. For example, even if a kitchen or bathroom had an item older than the specified period it would not fail unless there were multiple items over the specified age.

**7.4 Numbers of failures per dwelling**

- 7.4.1 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 7.1 Degree of failure of the Decent Homes Standard**

- 7.4.2 It is clear that the majority of dwellings that fail only fail on one measure of being not decent (90%), but for England as a whole 79% fail for only one reason, thus in Wychavon District a dwelling that is not decent is less likely to have failed for multiple reasons. (ND Output 9)

## 7.5 Cost to Remedy

- 7.5.1 Having determined the reasons for dwellings being classified as not decent, it is possible to indicate what level of repairs / improvements would be needed to make all dwellings decent.
- 7.5.2 Cost analysis has to be broken down into two parts: the cost of remedying unfitness, repairs and amenity provision; and the cost of making dwellings thermally efficient so they provide adequate comfort for the occupiers.
- 7.5.3 Two levels of repair costs were examined for unfitness, repairs and amenities. The urgent cost of repair (the cost of dealing with items that will need repair in the next year) totals £1.7 million, £160 per dwelling. The Comprehensive cost of repair (the cost of dealing with items that will need repair over the next 10 years, and including energy improvement works) is £35 million, £3,400 per dwelling. The table below gives a breakdown of the comprehensive cost.

**Table 7.2 Repair cost by non-decency reason**

Category	Comprehensive Cost	Cost per dwelling
Unfitness	£6 million	£8,000
Repair	£18 million	£11,600
Amenities	-	-
Thermal comfort	£11 million	£1,200
<b>Total</b>	<b>£35 million</b>	<b>£3,400</b>

- 7.5.4 The repair costs are based on the assumption that only the items that cause dwellings to be not decent are tackled. Comprehensive repairs most closely resemble renovation grant costs, but the costs given here are lower than they would be for renovation grants because they only tackle failing items and not all repair issues. (ND Output 5)
- 7.5.5 Remedying the problems of thermally inefficient dwellings is more complex. Individual improvements to dwellings would move some in to thermal comfort, whereas others would require multiple improvements. For the sake of simplicity, the three main factors in energy efficiency have been analysed here.

## 7.6 Occupiers and non-decency

- 7.6.1 There is a strong relationship between income and non-decency as is found for unfit or serious hazard dwellings. Whilst the lowest rate of not decent dwellings is found where household incomes are over £40,000 per annum (5%), the highest rate (32%) is for those dwellings where income is below £10,000 per annum. (ND Output 10)

7.6.2 Not decent dwellings do not tend to follow the trend for unfitness in relation to age of head of household. The highest rates of non-decency are for households where the age of head of household is over 65 where 27% of dwellings are not decent and where the head is under the age of 21 (28% not decent). (ND output 8)

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

7.7.1 At present the only government target set for achieving decency standards in the private sector is that 70% all dwellings occupied by vulnerable residents should be made decent by 2010. Vulnerable occupiers are defined as those in receipt of certain means tested benefits.

7.7.2 In Wychavon at present there are 10,900 dwellings occupied by residents in receipt of a means tested benefit (this only includes owner-occupied and privately rented dwellings). Of these 3,100 are classified not decent, which represents 28% of dwellings occupied by a vulnerable residents. Conversely this means that 72% are decent and therefore Wychavon meets the government's target with regard to decency in the private sector. It should be noted that the target is likely to be steadily increased after 2010 and it may be worth considering action now to lessen the impact over time.

## **7.8 Not decent dwellings by area**

7.8.1 As with all other stock condition survey characteristics, non-decency can be considered in relation to geographical areas, based on the survey sampling techniques used.

**Table 7.3 Not decent dwellings by area**

<b>Area</b>	<b>Not Decent</b>	
Evesham	2,700	27%
Pershore	700	21%
Droitwich	1,850	18%
Rural South	2,100	16%
Rural North	3,100	24%
<b>Total</b>	<b>10,450</b>	<b>21%</b>

7.8.2 There are not massive differences between areas with regard to the proportion of not decent dwellings; however, Evesham does have the highest level at 27% not decent.

## **7.9 Conclusions**

7.9.1 A total of 10,450 dwellings in Wychavon, are not decent, representing 21% of the stock.

7.9.2 The majority of dwellings are not decent due to poor thermal efficiency. Unfit dwellings are automatically determined to be not decent (750

dwelling) and 1,550 fail that are in need of repair, but no dwellings appear to fail because the facilities are inadequate.

- 7.9.3 In general not-decent dwellings follow a similar pattern to other indicators of poor housing. Not decent dwellings are associated with older dwellings, with the private rented sector, and with occupiers on the lowest incomes as well as those over 65 and under 21 years of age.
- 7.9.4 To remedy all the items that make dwellings not decent in Wychavon would cost an estimated £35 million.
- 7.9.5 Wychavon meets the minimum standard outlined by the government for the private sector of 70% decency where vulnerable occupiers live. The target is likely to be steadily increased after 2010, however, and it may be worth considering action now to lessen the impact over time

## Appendix A - Methodology

- A.1 The survey used a stratified random sample of 1,850 dwellings from an address file supplied by Wychavon District Council. The sample was a simple random sample to give representative findings across the District.
- A.2 The sample size was selected in order to ensure that at an access rate of 55%, a total of 1,000 full inspections would be achieved and in practice 1,011 full surveys were actually achieved.
- A.3 The survey incorporates the entire stock, including registered social landlords (housing association) properties, which includes the transferred stock, formerly belonging to the council.
- A.4 Each dwelling selected for survey was visited a minimum of three times and, where access failed basic dwelling information was gathered including a simple assessment of condition. 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 to 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.
- A.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.
- A.6 The house condition survey form is based on the survey schedule published by the DOE in the 1993 guidelines (Local House Condition Surveys 1993 HMSO ISBN 0 11 752830 7).
- A.7 The data was weighted using the CLASSIC Reports software. Two approaches to weighting the data have been used.
- A.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.

- A.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 Appendix B, but a short description is offered here.
- A.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.
- A.11 With an access rate of 55% 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.
- A.12 Only those dwellings where a full survey of internal and external elements, energy efficiency, fitness, housing health and safety and social questions were used in the production of data for this report. A total of 1,000 such surveys were produced with a further 850 external only 'front sheets' being used only for the assessment of number of vacant dwellings and to check for survey bias and response.
- A.13 The use of a sample survey to draw conclusions about the stock of the two areas 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 reading, the data are presented as single figures rather than as ranges. A full explanation of these confidence limits is included in Appendix B.

## Appendix B – Survey Sampling

### Sample Design

- B.1 The sample was drawn from the Wychavon address file. The total number of dwellings on the list was in the region of 50,000. This total constituted all dwellings including RSLs.
- B.2 The target number of complete surveys was 1,000. This was to be met at an access rate of 55%.

### Stock total

- B.3 The stock total is based initially on the address list; this constitutes the sample frame from which a proportion (the sample) is selected for survey. Any non-dwellings found by the surveyors are marked as such in the sample; these will then be weighted to represent all the non-dwellings that are likely to be in the sample frame. The remaining dwellings surveyed are purely dwellings eligible for survey. These remaining dwellings are then re-weighted according to the original sample fractions and produce a stock total.
- B.4 In producing the stock total the amount by which the total is adjusted to compensate for non-dwellings is estimated, based on how many surveyors found. With a sample as large as the final sample of 1,850 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 49,600 figure reported. sampling error is discussed later in this section.

- B.5 Table B.2 shows the response rates to the survey.

### Response rates

**Table B.1 Response rates**

	<b>Dwellings</b>	<b>Per cent of addresses issued</b>	<b>Per cent of traceable eligible dwellings</b>
<b>Addresses issued</b>	1,850	100	N/A
<b>Non-residential</b>	2	<1	N/A
<b>Untraceable</b>	15	<1	N/A
<b>Believed demolished</b>	3	<1	N/A
<b>Demolished</b>	-	-	N/A
<b>Traceable eligible dwellings</b>	1,830	99	100

<b>External data collected</b>	1,734	94	94
<b>Vacant dwellings</b>	39	2	2
<b>Internal data collected</b>	1,011	55	55

B.6 The Survey achieved a response rate of 55%, which compares favorably to 43% rate for the 2001 English House Condition Survey (EHCS). The EHCS excluded 3.4% of dwellings, but just over 1% was excluded in Wychavon. The survey therefore compares creditably with the English survey with regard to overall response.

#### Weighting the data

B.7 The original sample was drawn from a Wychavon 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

B.8 Where access fails at a dwelling selected for survey the easiest strategy for a surveyor to adopt is to seek access at a neighboring 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.

B.9 The methods used in this survey are 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.

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

B.11 Where access failed this normally resulted in a brief external assessment of the premises. Among the information gathered was the surveyor's first impression of condition. This is an appraisal of the likely condition of the dwelling based on the first impression the surveyor receives of the dwelling on arrival. It is not subsequently changed after this, whatever conditions are actually discovered. The first impression groups and descriptions are listed in table B.2.

**Table B.2 First impression groups and description**

<b>First Impression Group</b>	<b>Short Description</b>	<b>Full description</b>
<b>1</b>	<b>Seriously defective</b>	Exterior condition suggests that dwelling/module is probably unfit.
<b>2</b>	<b>Defective</b>	Dwelling/module has serious problems and is likely to be 'borderline fit'.
<b>3</b>	<b>Defective</b>	Dwelling/module has major problems but is unlikely to be unfit. Dwelling/module in need of fairly major/extensive repairs.
<b>4</b>	<b>Just Acceptable</b>	Dwelling/module is in generally poor condition with some faults but with no major problems. Dwelling/module in need of several minor repairs.
<b>5</b>	<b>Just acceptable</b>	Dwelling/module is in reasonable condition with a few minor repairs needed.
<b>6</b>	<b>Satisfactory</b>	Dwelling/module is in good condition with enhanced maintenance only required.
<b>7</b>	<b>Satisfactory</b>	Dwelling/module is in excellent condition and well maintained.

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

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

### Sampling error

B.14 Results of sample surveys are, for convenience, usually reported as numbers or percentages when in fact the figure reported is at the middle of a range in which the true figure for the population will lie. 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.

B.15 For this survey the estimate of unfit dwellings is 1.5% and the 95% confidence limits are + or – 0.9%. In other words one can say that 95% of all samples chosen in this way would give a result in the range between 0.6% and 2.4%.

**Table B.3 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
<b>10</b>	5.9	4.2	3.4	2.9	2.6	2.4	2.2	2.1	2	1.9
<b>20</b>	7.8	5.5	4.5	3.9	3.5	3.2	3	2.8	2.6	2.5
<b>30</b>	9	6.4	5.2	4.5	4	3.7	3.4	3.2	3	2.8
<b>40</b>	9.6	6.8	5.5	4.8	4.3	3.9	3.6	3.4	3.2	3
<b>50</b>	9.8	6.9	5.7	4.9	4.4	4	3.7	3.5	3.3	3.1
<b>60</b>	9.6	6.8	5.5	4.8	4.3	3.9	3.6	3.4	3.2	3
<b>70</b>	9	6.4	5.2	4.5	4	3.7	3.4	3.2	3	2.8
<b>80</b>	7.8	5.5	4.5	3.9	3.5	3.2	3	2.8	2.6	2.5
<b>90</b>	5.9	4.2	3.4	2.9	2.6	2.4	2.2	2.1	2	1.9

## Appendix C Definition of a Non Decent Home

### Measure of a decent home

C.1 A dwelling is defined as not decent if it fails any one of the following 4 criteria:

**Table C.1 Categories for dwelling decency**

A	It meets the current statutory minimum standard for housing – at present the fitness standard
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*

C.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 DLTR circular.

### Applying the standard

C.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.

C.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:

C.5 Criterion A is simply determined as whether or not a dwelling fails the current minimum standard for housing. At present this is the fitness standard. All dwellings surveyed were marked on the basis of the current fitness standard and if any one or more of the eleven elements of the standard failed the dwelling was deemed to be unfit. Under criterion A any dwelling that is unfit is automatically not decent.

### Criterion B:

C.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 not 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 not decent. The elements in question are as follows:

**Table C.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 C.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:**

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

**Table C.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

C.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:**

C.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 not 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.

C.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.

C.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:

C.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 cavity that can be insulated effectively).

C.13 For the purposes of this study the above definition will be used in calculating the proportion of dwellings that are considered not decent.