



LONDON BOROUGH OF MERTON



MAIN REPORT

JULY 2005



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Executive Summary

Introduction

This document provides a Summary Overview of a comprehensive private sector stock condition survey carried out on behalf of London Borough of Merton by Fordham Research Ltd.

In stock condition surveys it is usual to describe the physical condition of the housing stock in terms of two main indicators: unfit and disrepair. For the purpose of the survey the fitness standard applied was that laid out in Section 604 of the 1985 Housing Act.

Additionally, the survey focuses considerable attention on various other elements relating to stock condition. Notably:

- Energy efficiency
- Decent homes
- The Housing Health and Safety Rating System (HHSRS)

Survey structure and response

The survey comprised a physical survey of dwellings and a short socio-economic interview of inhabitants. The survey set out to complete 1,000 inspections over the whole of the Borough in the private sector, including RSL stock; in total 996 were achieved.

The survey data was weighted by dwelling and household variables, mainly sub-area and tenure, so as to be representative of all dwellings in Merton. In total it is estimated that there are 76,452 dwellings in the Borough, of these 2,000 are vacant leaving a total of 74,452 occupied dwellings.

Profile of the housing stock

Some 78.1% of the private-sector housing stock is owner-occupied, another 16.0% is private rented, whilst the remaining 5.8% is rented from an RSL. The most common type of dwelling is the mid terrace house, which comprises 27.3% of the stock. Flats make up 33.3% of the stock, with converted flats alone accounting for 12.4% of all dwellings. The survey estimated that the stock is comparatively old, with over a quarter built before 1919, and an additional half built between 1919 and 1944. The survey also looked at the characteristics of households, and estimated that pensioner households make up 18.1% of those in the Borough, special needs households 12.1%, and vulnerable households 18.4%.

Disrepair

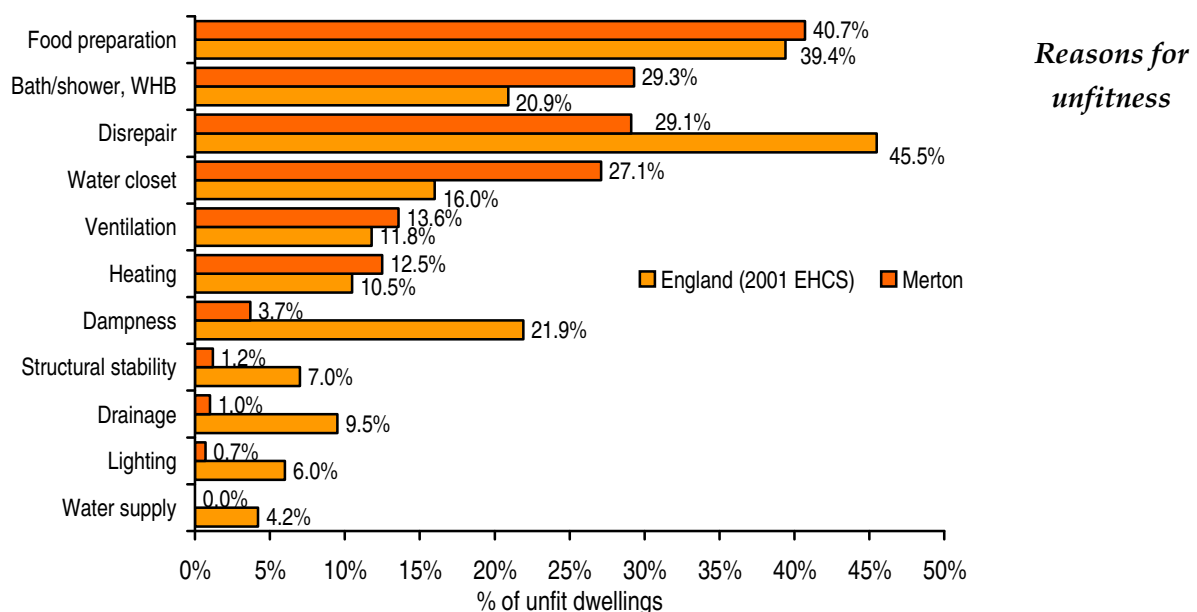
The survey studied faults to dwellings and associated repair costs. Repair costs are based on a standard schedule provided by the Building Cost Information Service (BCIS) and have been updated to a March 2005 base for the London region. Some of the main findings of the analysis were:

- The average cost per dwelling of urgent repairs (i.e. those needing to be done within the next year) was £1,179– this totals £90.1m Borough-wide
- The average cost per dwelling for basic repairs (i.e. all work needing to be done within the next 5 years) was £1,765– totalling £134.9 m Borough-wide
- The main problem areas (in terms of the amount needing to be spent) were 'External doors & Windows', 'Walls, fences, paved areas & outbuildings' 'Heating systems' and 'Roofs'
- Older dwellings showed the highest repair costs, as do detached houses
- Special needs and vulnerable households have considerably higher average repair costs

Unfitness

Under the provisions of Section 604 of the 1985 Housing Act (amended by the 1989 Local Government and Housing Act) a dwelling house is fit for human habitation unless it fails to meet at least one of a set of eleven requirements and, as a result of that failure, is not reasonably suitable for occupation.

An estimated 4,093 dwellings are unfit, accounting for 5.4% of the housing stock, this compares to an unfitness rate of 4.2% nationally and 5.6% in London (2001 EHCS). The most common reasons for unfitness in Merton are *food preparation* – 1,666 dwellings (40.7% of unfit dwellings) and *bath/shower, wash hand basin* – 1,198 dwellings (29.3%).



The following were some of the main findings in relation to unfitness in Merton:

- The average cost to make unfit dwellings just fit is £3,959 per dwelling. As the number of items on which a dwelling fails increases, so do the associated costs.
- Private rented dwellings are most likely to be unfit as are pre-1944 dwellings and converted flats
- Households with children, special needs and vulnerable households are more likely to live in unfit housing
- An additional 11,463 dwellings are estimated to be 'fit but defective' (representing 15.0% of the private sector dwelling stock), most commonly owing to reasons of '*food preparation*' and '*disrepair*'

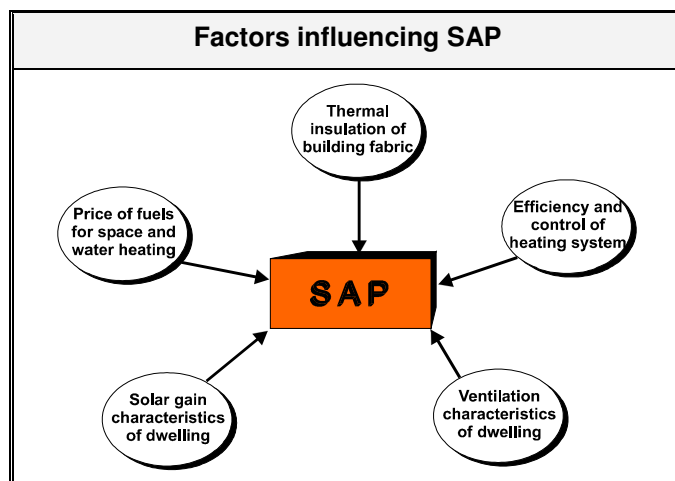
Energy efficiency

An important part of any stock condition survey is the measurement of energy efficiency. The Standard Assessment Procedure (SAP) is the Government's recommended system for home energy rating – where a high score (on a scale from 1 to 120) means a dwelling is more energy efficient.

Definition of 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 1-120 scale. The higher the number the better the standard.

The individual energy efficiency Standard Assessment Procedure (or SAP) rating of a dwelling depends upon a range of factors that contribute to energy efficiency. These are shown on the diagram below.



The average (mean) SAP rating for all private sector dwellings in Merton is estimated to be 52. This compares with the national average (2001) of 51 and the average for London (53).

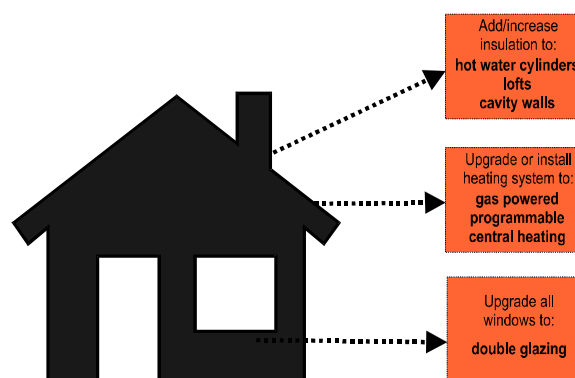
Additionally:

- 95.9% of dwellings have central or programmable heating
- 77.5% of dwellings have some double glazing
- Detached, owner-occupied (no mortgage) and pre-1919 dwellings showed the lowest mean SAP ratings
- Households living in dwellings with particularly low SAP ratings also appear to show quite distinct characteristics and are likely to be single person households or a vulnerable household, and with lower incomes

Additionally, it is estimated that households' current heating systems make for an average (mean) requirement to spend £452 on space and water heating and that the average dwelling produces 5.52 tonnes of CO₂ per year

Improving energy efficiency

The survey also suggested ways of improving energy efficiency in the Borough. This is both in terms of improving SAP ratings and reducing the amount required to be spent on fuel. In looking at fuel costs, it is possible to calculate a 'payback' period, which is simply calculating the amount of time it would take for the cost of improvements to equal the cost savings. There are three main ways in which the energy efficiency of dwellings can be improved, these are shown in the diagram below.



The analysis looked at the costs and savings of each of these measures in isolation as well as in combination. The main aims of improving energy efficiency considered by the survey were:

1. Action required and costs of improving average SAP ratings to 60
2. Action required and costs of improving average SAP ratings by 30%

A 30% improvement in energy efficiency for the stock appears difficult to achieve. A full range of measures will increase the mean SAP rating of dwellings from 52 to 64 (an improvement of 22.6%), however the total cost of this is estimated to be £197.2m. A more realistic aim might be to look at upgrading or installing heating systems to more efficient central heating systems along with a programme of insulation; these two measures would increase the mean SAP rating from 52 to 62 (an improvement of 19.4%) at a total cost of £75.5m. It can be seen therefore that there is a clear trade-off between further improvements to energy efficiency and the cost of bringing about these improvements.

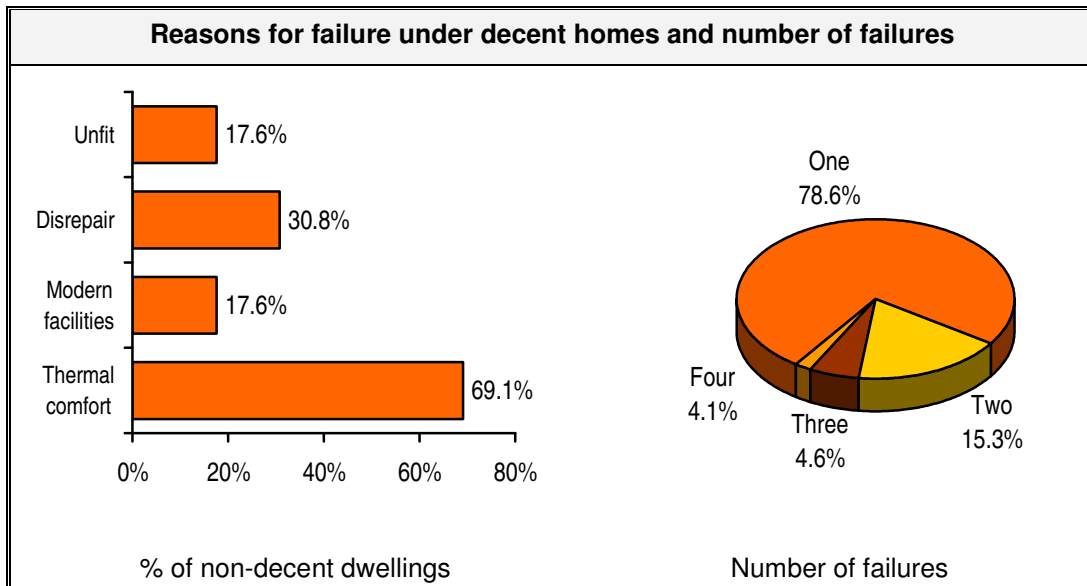
Decent homes

The government's housing objective is "to ensure that everyone has the opportunity of a decent home and so promote social cohesion, well being and self-dependence". In 2000 the Government set a standard for 'decent homes' whereby housing should:

- i) Meet the current statutory minimum standard for housing (i.e. not unfit)
- ii) Be in a reasonable state of repair
- iii) Have reasonably modern facilities and services
- iv) Provide a reasonable degree of thermal comfort

The results suggested that 30.4% of dwellings failed the standard under one or more of these headings. This figure compares with a national estimate (for all dwellings) of 33.1%. Some of the main findings relating to 'non-decent' homes were:

- The main reason for failure was thermal comfort, 69.1% of non-decent homes failed under this heading. This is also the main reason nationally
- Around three quarters of 'non-decent' homes fail on only one of the four factors
- Groups with high levels of 'non-decency' included: private rented, pre-1919 dwellings, and converted flats
- Households that show high levels of non-decency include single pensioner, special needs, and vulnerable households
- The Borough-wide cost of remedying non-decent homes is £69.3m



Houses in Multiply Occupation

The survey followed as closely as possible Chartered Institute of Environmental Health definitions and in total it was estimated that there were 5,062 buildings acting as HMOs at the time of the survey. The following are some of the main characteristics of HMOs:

- A large proportion of HMOs were found to be in the private rented sector (45.5%) – this compares with 16.0% of all dwellings
- HMOs were more likely to be built pre-1919 (70.6%) – this compares with 29.2% of all dwellings
- HMOs were more likely to be converted flats (70.8%) – this compares with 12.4% of all dwellings

Generally HMO buildings had higher repair costs than other dwellings and HMOs show above average levels of unfitness. Almost all HMO buildings have the use of all basic amenities however a number share facilities up to and worse than a ratio of 1:5, and a third were categorised as inadequately or poorly managed.

Housing Health and Safety Rating System

The Housing Health and Safety Rating System is an alternative method for looking at the condition of dwellings in an area taking into account the potential hazards of a dwelling in relation to any persons using it rather than a study of the fabric condition of the home.

It is estimated that around 7.0% of dwellings require a mandatory response, which is significantly higher than the estimated level of unfitness in the Borough of 5.4 %. Below are some characteristics of 'hazardous' homes:

- The main hazards in Merton relate to excessive cold and falls on stairs
- Owner-occupied (no mortgage) and pre-1919 dwellings appear particularly likely to be 'hazardous'; special needs households are particularly likely to live with a hazard
- There is some link between unfitness and the hazard rating although a number of dwellings fail on only one of the two measures

Intervention and financial assistance

One important issue in the stock condition survey was to consider to what extent households are able to fund any necessary improvements. The analysis looked at the total costs of repairs and energy efficiency improvements required. Some of the main findings were:

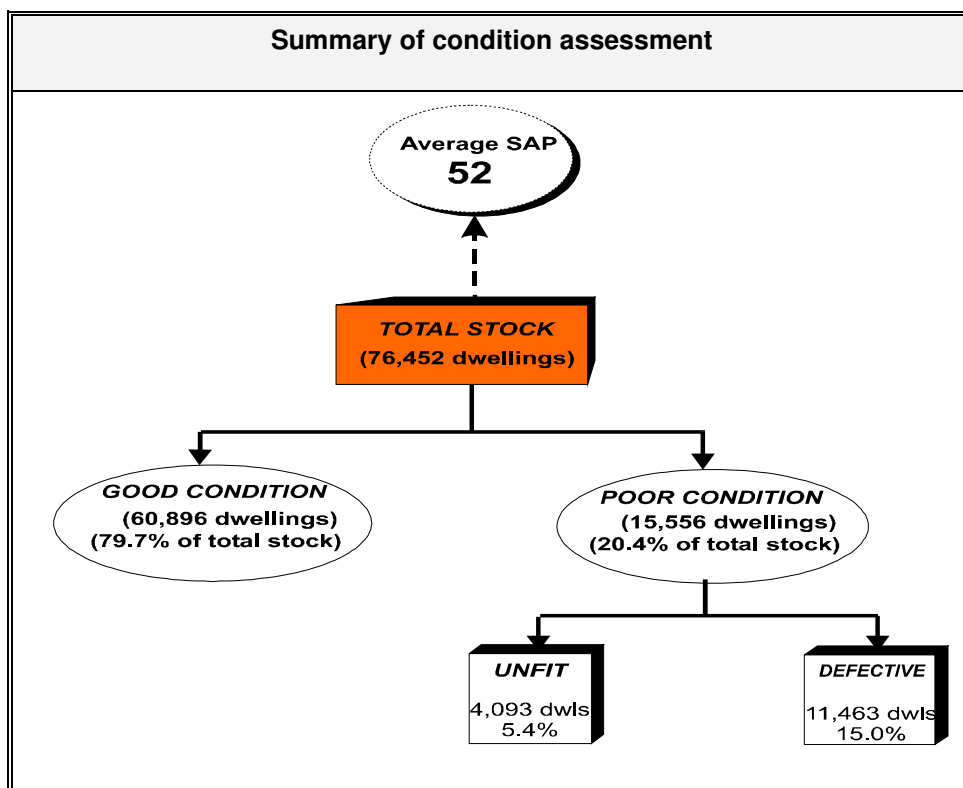
- To carry out all urgent repairs required to owner-occupied dwellings (occupied dwellings) would cost an estimated £63.0m
- Households' income levels could reduce this figure to a potential demand for financial assistance of £29.0m whilst including the scope for equity release would reduce this figure to £20.2m
- To carry out all comprehensive repairs required to owner-occupied dwellings (occupied dwellings) would cost an estimated £286.4m. Again, this figure could be reduced dramatically when taking into account households income and equity levels to £118.7m and £90.7m respectively
- In the private rented sector the total bill for carrying out all urgent repairs comes to £54.0m, whilst RSL dwellings show a total bill for carrying out all urgent repairs of £23.2m

Conclusions

The Stock Condition Survey in Merton generally shows worse dwelling conditions than those found nationally (2001 EHCS), but more polarised levels of condition when looking at individual groups. The costs of making the necessary improvements to dwelling conditions and the suggested improvements to energy efficiency may, be quite prohibitive. The Council will therefore need to consider a wide range of measures (including finance from the local authority and the use of landlords'/owners' own finances, as well as advice) to achieve considerable improvements to the housing stock and, importantly, to prevent further deterioration.

In determining a strategy to implement an appropriate package of measures, account could be taken of those categories where the highest incidence of unfitness/disrepair/low energy efficiency was identified, i.e.

- Private rented dwellings
- Vacant dwellings
- Pre-1919 stock dwellings
- Vulnerable households
- Pensioner households



Section A: Context of the study

This report is the result of a Housing Stock Condition Assessment undertaken by Fordham Research on behalf of London Borough of Merton. It provides an overview of the housing situation in Merton, as well as calculating an estimate of the standards of housing stock condition in terms of disrepair, unfitness, energy efficiency, decency, and severity of hazards.

Data collection and analysis for the assessment has been implemented in line with ODPM guidance, which was published in 2000 in an attempt to standardise Housing Stock Condition Assessments. These assessments are a key piece of research for Local Authorities, informing the development of housing policies.

The report is divided into five sections. The first discusses the methodology and structure of the survey. An initial profile of the key characteristics of the Borough's households and dwellings is also laid out. The second section examines the general condition of the housing stock, according to the standards of 'unfitness' and 'disrepair'.

The third section assesses the energy efficiency of the Borough's housing stock, and examines the most cost-effective way of improving this. The fourth section considers emerging areas of policy and housing condition standards, looking at the decent homes standard when applied to dwellings in the area, studying houses in multiple occupation (HMOs), and providing an assessment of hazards according to the Housing Health and Safety Rating System (HHSRS). In the final section, the study considers the implications of the main findings for policy, and how improvements can best be achieved.

It is important to note that the data in some of the tables in this report may not necessarily add up to the totals presented, or alternatively some of the percentage figures may not sum to 100%. This is due to the rounding of the survey data during the analysis.

1

1. Introduction

This report provides the account of a private sector stock condition survey carried out on behalf of London Borough of Merton by Fordham Research. The survey was carried out in conjunction with a full housing needs survey interview, in order that a number of analytical links between dwellings and their occupants could be established.

The comprehensive survey is required to inform and support the Council's private sector housing and Home Energy Conservation Act (HECA) strategies, as well as other Governmental submissions. The survey fully complies with the ODPM Good Practice Guidance: "Collecting, Managing and Using Housing Stock Information" volumes 1, 2 and 3 (2000), and uses other Government publications for analysis, for which the principles are discussed below. Comparisons with the 2001 English House Condition Survey (EHCS) findings are also made.

1.1 The basis for carrying out a condition survey

The duty to regularly consider the condition of the housing stock was consolidated in the 1985 Housing Act. Stock Condition Surveys are one of the most satisfactory means of fulfilling that duty. Public sector surveys, which have been quite rigorously carried out, have evolved quite differently from the private sector condition surveys, which have not. The latter were not treated so seriously by local authorities, and as a result their quality has been somewhat variable.

The first 'good practice' guidance on this topic: three volumes are collectively entitled *Collecting, Managing & Using Housing Stock Information – A Good Practice Guide*, was published by the Office of the Deputy Prime Minister (ODPM) in August 2000.

ODPM Guide	<i>'...Information about the housing stock has been collected by local authorities for many years, and for a wide variety of purposes...' [Volume 1, Page 5]</i>
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A broad summary of the basic reasons for a condition survey is provided in the good practice Guide (Volume 3, Para 2.9) and reproduced below. In summary, stock condition surveys are useful in a variety of ways:

- Providing a key component of an asset management strategy of the Council's own stock, including a range of possible stock options
- Providing an authority-wide picture of housing conditions as part of a strategic survey of housing demand and supply within the authority's 'enabling' role
- Assessing the need for an 'intervention' role by the authority, for example through renovation grants
- Ascertaining the stock condition element of a local regeneration initiative;
- Meeting information needs on specific stock, such as HMOs

This amounts to a quite demanding set of requirements. A series of tests have been developed to enable measures comparable across different local authority areas to be derived.

1.2 The basic assessment of stock condition

The fitness standard (as set out in Section 604 of the *1985 Housing Act* and amended by the *1989 Local Government and Housing Act*) details a list of criteria which must be met if the dwelling is to be considered fit for human habitation. A dwelling-house is unfit for human habitation if it fails to meet one or more of the requirements listed below and by reason of that failure is not reasonably suitable for occupation.

Box 1.1 Fitness standard (1985 Housing Act as amended by 1989 Local Government and Housing Act)

Under the provisions of Section 604 of the Housing Act 1985 a dwelling house is fit for human habitation unless it fails to meet one or more of the following requirements and as a result of that failure, is not reasonably suitable for occupation:

- Structural stability
- Free from serious disrepair
- Free from serious dampness prejudicial to the health of the occupants (if any)
- Adequate provision for lighting, heating and ventilation
- Adequate piped supply of wholesome water
- Satisfactory facilities in the dwelling house for the preparation and cooking of food, including a sink with a satisfactory supply of hot and cold water
- Suitably located WC for exclusive use of occupants (if any)
- Suitably located fixed bath or shower and wash-hand basin, each of which is provided with a satisfactory supply of hot and cold water for the exclusive use of the occupants (if any)
- Effective drainage system for waste and surface water

In addition, a flat may be not reasonably be suitable for occupation if the building in which it is located fails to meet one or more of the following requirements:

- Structural stability of the building or part of the building
- Free from serious disrepair
- Free from dampness
- Adequate provision for ventilation
- Effective drainage system for foul waste and surface water

Although this appears quite a simple list, the process of assessing fitness is quite complex. In the first instance all the items stand or fall individually: they are not cumulative. In some cases (e.g. serious disrepair) the various problems which make it up can however be cumulative.

In practice, a large proportion of unfitness is attributable to a small group of these headings, notably '*serious disrepair*' and '*facilities for the preparation and cooking of food*'. Other possible causes of unfitness are in practice less common. Nevertheless all causes of unfitness have been examined during the course of this survey.

1.3 Energy efficiency

The 1995 *Home Energy Conservation Act* has, for the first time, required local authorities to develop a strategy for energy conservation. An important prerequisite to developing such a strategy is the existence of suitable methods of measuring energy efficiency. The present survey therefore includes a technical assessment of the energy efficiency of dwellings.

In addition to providing meaningful data on energy efficiency, estimates of carbon dioxide arising from domestic fuel consumption can be produced. This allows a baseline against which targets for reductions in energy use and carbon dioxide emissions can be set and for the development of strategies to achieve them. We have followed the Guide approach in addressing energy efficiency measurement.

ODPM Guide	<p>A domestic energy audit will normally be conducted in furtherance of the authority's broad environmental aims as presented in the Corporate Plan. There might also be related social aims, for example, to bring reasonable thermal comfort within the reach of all households</p> <p>.</p> <p>In housing terms, you will need to express these aims slightly differently:</p> <ul style="list-style-type: none">• to reduce the need for domestic energy usage or at least maintain it at a constant level;• to reduce the emission of greenhouse gases and pollutants from domestic energy use;• to reduce the wastage of energy in the home;• to ensure that all dwellings within the area can be adequately heated at a cost which occupants on low incomes can afford; <p>to ensure compliance with the Home Energy Conservation Act 1995. [Volume 2, Paras 5.2 & 5.3]</p>
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1.4 Decent Homes

The government's housing objective is "to ensure that everyone has the opportunity of a decent home and so promote social cohesion, well being and self-dependence". In 2000 the Government set a standard for 'decent homes' whereby housing should:

- i) Meet the current statutory minimum standard for housing (i.e. not unfit)
- ii) Be in a reasonable state of repair
- iii) Have reasonably modern facilities and services
- iv) Provide a reasonable degree of thermal comfort

Although the Decent Homes standard was initially intended to be for the public sector housing stock only, it has more recently become an important issue in the private sector. A public service agreement (PSA) was set out by the ODPM in 2002. Of note from this document is PSA target 7 (PSA7) which deals with decent homes. The PSA target is '*By 2010, bring all social housing into a decent condition with most of this improvement taking place in deprived areas, and for vulnerable households in the private sector, including families with children, increase the proportion who live in homes that are in decent condition.*' It has been clarified by the ODPM that this definition does not include all families with children but that vulnerable households will include families with children.

For the private sector, the PSA has set targets for the proportion of vulnerable households achieving the decency standard by 2005, 2010 and beyond. Additionally, the 2001 EHCS applies the Decent Homes standard to all dwellings. In this report we study each of the above criteria to ascertain the number of homes which are 'non-decent' and the reasons why.

1.5 Housing Health and Safety Rating System

In July 2001, the ODPM published a report on the Housing Health and Safety Rating System (HHSRS). The HHSRS will be a replacement for the current fitness standard under the 1985 *Housing Act*. The current housing fitness regime is based on ancient criteria: the term 'unfit for human habitation' was first introduced in the 1868 *Artisans' and Labourers' Dwellings Improvement Act* and its current 1985 Act definition owes a lot to that heritage. Nevertheless, major risks to health and safety (such as cold, fire risk, falls on stairs and exposure to radon) are either not covered at all, or, in the case of fire risk, are covered for HMOs only. Adding new requirements to the fitness standard would not resolve this problem, since they would not identify the likelihood or severity of harm.

The newly issued Housing Act (December 2004) enforces the HHSRS, with its version 2 of the guidance, to replace the fitness standard. It is expected that the HHSRS will not replace the fitness standard until late 2005. In the meantime therefore local authorities will continue to use the current fitness standard (as used in this report).

In the case of Merton the survey was begun and survey forms agreed whilst version II of the HHSRS was in consultation, although it has since been published. The survey has been able to cover the requirements of the new system. We have therefore included a section about the HHSRS although this has not been designed at this stage to replace the fitness standard calculations which are still taken to be the main measure of stock condition. The 2004 Housing Act provides for the imminent replacement of the fitness standard with the HHSRS.

1.6 Summary

Although stock condition surveys have a long history, their quality has been rather variable. The ODPM has now issued a series of guides which should raise the standard of the research carried out. The central measure is still the Fitness Standard. However this is supported by more attention to checking the primary survey data collected (Quality Assurance). The main elements of the stock condition survey can be summarised as:

- Assessment of repair costs
- Unfitness
- Energy efficiency
- Decent homes
- Housing health and safety
- Financial assistance implications

2

2. Survey structure and response

2.1 Introduction

The survey comprised two related surveys completed simultaneously: an Interview Survey of households and a Physical Survey of dwellings. The survey only covered private sector dwellings in Merton (i.e. owner-occupied, RSL and private rented dwellings only). This chapter reports on the survey fieldwork, responses and weighting of data to ensure results produced are representative of all private sector dwellings in the Borough.

The survey sample was drawn from the Council Tax Register. Addresses were selected on a simple random basis stratified by ward (i.e. each address in each ward had an equal probability of being selected). The survey set out to complete 1,000 inspections over the whole of the Borough and in total 996 were achieved.

2.2 Fieldwork

All fieldwork staff were fully briefed by Fordham Research and followed our own survey practices which are summarised below. In addition, stringent back-checking of surveyors' work was used to ensure the accuracy of the inspection.

Surveyor instructions (conduct/customer care)

- Always use the photographic identification card provided
- Interviews may only be undertaken with the head of household or their partner

Record keeping

- Surveyors issued with pre-selected address lists (addresses not on list will not be visited)
- All addresses have an outcome (refusals are entered onto address database)
- Surveyors return all completed work weekly (including non-responses)

Quality assurance

- All surveyors are trained and briefed for each individual Local Authority survey
- A proportion of fieldwork re-inspected by field managers
- Desktop checks (all forms checked for completeness)
- Telephone/written checks (on a sample of all surveyors work)
- Written comments provided to all surveyors regardless of their level of experience
- Regular meetings with field managers

Allocations and appointments

- Addresses allocated in batches of 21 (avoids surveyors being able to pick the easiest addresses)
- Expect minimum of 60-65% access rate
- Addresses visited minimum 5 times (including at least two calls outside of normal office hours and on different days)

2.3 Base figures

There are a number of sources that can be drawn upon in assessing the number of dwellings and households in the Borough. These include the Council Tax Register provided by the Council and additionally the 2004 H.I.P. return and 2001 Census information. The aim is to provide an estimate of the number of dwellings and occupied dwellings at the time of the survey. Hence we estimate the following bases for analysis:

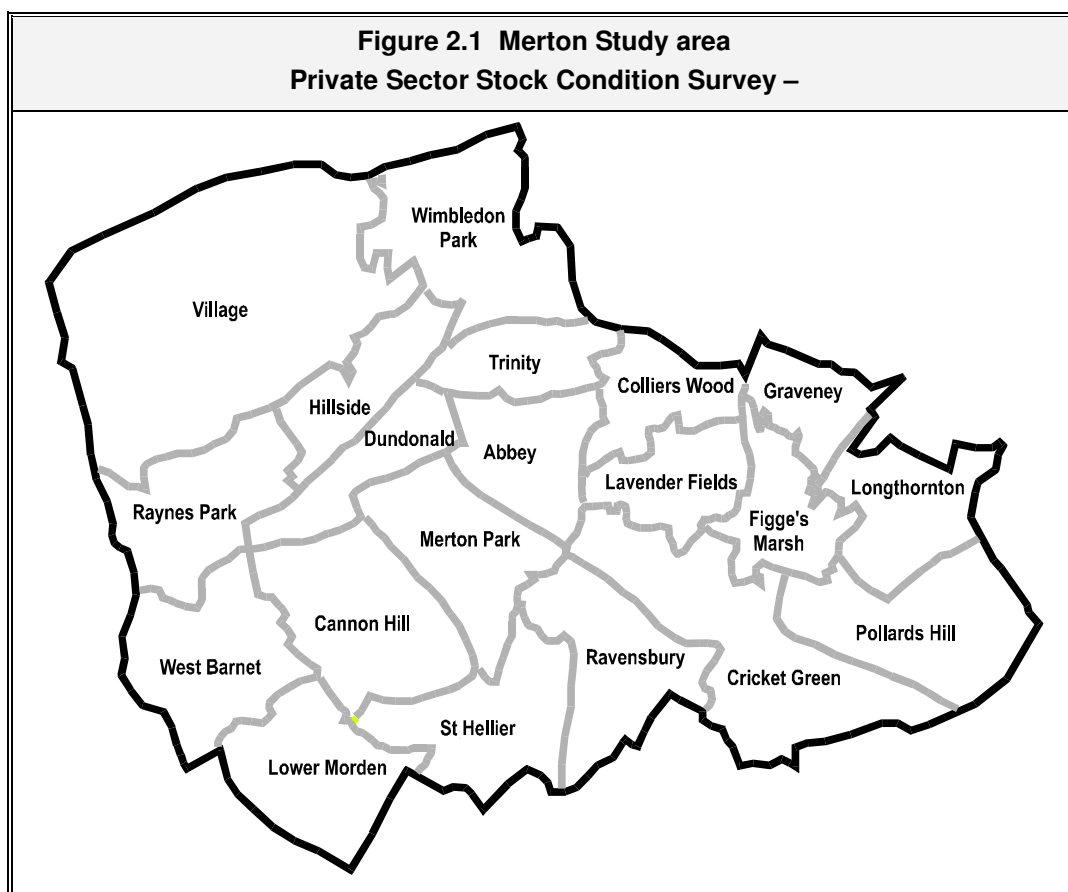
Total number of private sector dwellings = 76,452.

Total number of occupied private sector dwellings = 74,452

The figure of 74,452 will be referred to as the total number of 'households' for the remainder of this report. Please note that this does not strictly correspond to the total number of households – in effect HMO dwellings are counted as containing just one household.

2.4 Data weights

The survey data has been weighted to an estimated profile of the housing stock by a number of variables such as tenure and ward. The tables below show the estimated patterns for each of these groups. The number of dwellings in each ward is derived from the Council Tax Register provided by the Council.



The table below profiles the tenure of the households in the area, comparing the profiles of all dwellings, occupied dwellings, and the unweighted responses to the survey. Looking at the results for all dwellings it can be seen that 78.1%, an estimated 59,735 dwellings, are in the owner-occupied sector. A further 16.0% are in the private rented sector, and 5.8% reside in RSL dwellings.

Table 2.1 Number of dwellings in each tenure group						
Tenure	Dwellings		Responses		Occupied dwellings	
	Number	%	Number	%	Number	%
Owner-occupied (no mortgage)	23,585	30.8%	249	25.0%	22,963	30.8%
Owner-occupied (with mortgage)	36,150	47.3%	459	46.1%	35,334	47.5%
RSL	4,447	5.8%	78	7.8%	4,415	5.9%
Private rented	12,270	16.0%	210	21.1%	11,740	15.8%
Total	76,452	100.0%	996	100.0%	74,452	100.0%
Vacant dwellings	2,000	2.6%	22	2.2%	-	-

The survey analyses Merton's housing stock by ward. The table below shows that the population is relatively equally distributed between wards. Abbey is the most populous, with 5.9% of the Borough's dwellings, whilst St. Hellier has 4.4% of the Borough's dwellings.

Table 2.2 Number of dwellings in each ward						
Ward	Dwellings		Responses		Occupied dwellings	
	Number	%	Number	%	Number	%
Lower Morden	3,669	4.8%	67	6.7%	3,669	4.9%
St Hellier	3,385	4.4%	52	5.2%	3,385	4.5%
Colliers Wood	4,124	5.4%	48	4.8%	4,124	5.5%
Lavender Fields	3,887	5.1%	60	6.0%	3,887	5.2%
Cricket Green	3,468	4.5%	41	4.1%	3,016	4.1%
Ravensbury	3,475	4.5%	48	4.8%	3,475	4.7%
Graveney	3,700	4.8%	75	7.5%	3,588	4.8%
Figge's Marsh	3,643	4.8%	55	5.5%	3,643	4.9%
Longthornton	3,658	4.8%	42	4.2%	3,492	4.7%
Pollards Hill	3,613	4.7%	54	5.4%	3,608	4.8%
Village	3,699	4.8%	33	3.3%	3,681	4.9%
Raynes Park	3,839	5.0%	33	3.3%	3,629	4.9%
Hillside	4,463	5.8%	72	7.2%	4,223	5.7%
Wimbledon Park	3,801	5.0%	38	3.8%	3,677	4.9%
Trinity	4,156	5.4%	23	2.3%	3,897	5.2%
Dundonald	4,147	5.4%	55	5.5%	3,895	5.2%
Abbey	4,529	5.9%	60	6.0%	4,529	6.1%
Merton Park	3,844	5.0%	59	5.9%	3,844	5.2%
Cannon Hill	3,562	4.7%	38	3.8%	3,404	4.6%
West Barnes	3,787	5.0%	43	4.3%	3,787	5.1%
Total	76,452	100.0%	996	100.0%	74,452	100.0%

2.5 Other characteristics

Throughout this report many of the variables (e.g. unfitness) are tabulated along with tenure and sub-area. In addition, comparisons are also made with dwelling age and building type; the tables below show the number of dwellings in each of these groups. By dwelling type, mobile homes have been included in the detached category, whilst converted/purpose built flats include non-residential dwellings with a flat.

Table 2.3 Number of each type of dwelling						
Dwelling type	Dwellings		Responses		Occupied dwellings	
	Number	%	Number	%	Number	%
End terrace	12,576	16.4%	186	18.7%	12,192	16.4%
Mid terrace	20,860	27.3%	331	33.2%	20,483	27.5%
Semi-detached	12,744	16.7%	114	11.4%	12,414	16.7%
Detached	4,831	6.3%	43	4.3%	4,829	6.5%
Purpose-built flat	15,995	20.9%	216	21.7%	15,812	21.2%
Converted flat	9,446	12.4%	106	10.6%	8,722	11.7%
Total	76,452	100.0%	996	100.0%	74,452	100.0%

Table 2.4 Number of dwellings in each age group						
Dwelling age	Dwellings		Responses		Occupied dwellings	
	Number	%	Number	%	Number	%
Pre-1919	22,290	29.2%	272	27.3%	21,385	28.7%
1919-1944	34,055	44.5%	450	45.2%	33,507	45.0%
1945-1964	4,727	6.2%	65	6.5%	4,727	6.3%
1965-1980	5,540	7.2%	81	8.1%	5,309	7.1%
Post-1980	9,839	12.9%	128	12.9%	9,524	12.8%
Total	76,452	100.0%	996	100.0%	74,452	100.0%

2.6 Household characteristics

In addition to studying the characteristics of dwellings it is of interest to study the characteristics of the occupiers. In this section, condition variables are tabulated along with household type, the existence within the household of anyone with a special need and households receiving certain income or disability benefits (termed vulnerable households). It should be noted that the base total for these tables is 74,452 as the results exclude vacant dwellings.

Table 2.5 Number of households in each household type group				
Household type	Occupied dwellings		Responses	
	Number	%	Number	Number
Single pensioner	8,928	12.0%	104	10.7%
2 or more pensioners	4,571	6.1%	63	6.5%
Single non-pensioner	14,611	19.6%	128	13.1%
2 or more adults, no children	27,346	36.7%	378	38.8%
Lone parent	2,862	3.8%	49	5.0%
2+ adults, 1 child	7,160	9.6%	110	11.3%
2+ adults, 2+ children	8,973	12.1%	142	14.6%
Total	74,452	100.0%	974	100.0%

Note: A pensioner is taken as a male aged 65 or over or a female aged 60 or over.
An adult is taken to be any other person aged 16 or over.

Table 2.6 Number of households with special needs				
Special needs	Occupied dwellings		Responses	
	Number	%	Number	Number
Special needs	9,041	12.1%	126	12.9%
No special needs	65,411	87.9%	848	87.1%
Total	74,452	100.0%	974	100.0%

Note: Special needs households are defined as having one or more members who fall into one or more of the following categories: Frail elderly, a physical disability, a learning disability, a mental health problem, vulnerable young people and children leaving care, severe sensory disability, other

Table 2.7 Number of vulnerable households				
Vulnerable	Occupied dwellings		Responses	
	Number	%	Number	Number
Vulnerable	13,702	18.4%	195	20.0%
Not vulnerable	60,750	81.6%	779	80.0%
Total	74,452	100.0%	974	100.0%

Note: Vulnerable households are defined as in receipt of any of the following state benefits: Income Support, Housing Benefit, Council Tax Benefit, Job Seekers Allowance, Child Tax Credit, Pension Credit, Attendance Allowance, Disability Living Allowance, Industrial Injuries Disablement Benefit, War Disablement Pension

2.7 Summary

The survey comprised two related surveys undertaken simultaneously: a socio-economic survey of households and a physical survey of dwellings. The surveys were carried out by trained surveyors who between them achieved 996 valid inspections. The survey data was weighted by a number of variables such as sub-area and tenure so as to be representative of all private sector dwellings in Merton. In total it is estimated that there are 76,452 private sector dwellings in the Borough; of these 2,000 are vacant leaving a total of 74,452 occupied dwellings.

3. Profile of the housing stock

3

















3.1 Introduction

At the broadest level the condition of the stock within the Borough is influenced by the relationship between the profile of the dwelling stock and the characteristics of occupants. This chapter seeks to provide an overview of the profile of the housing stock within Merton using information derived from the survey and sets the context for the subsequent condition analysis. We have, where appropriate, put the survey results from Merton into context with comparative regional and national figures from the 2001 EHCS.

The profile of the dwelling stock can be classified using a number of key characteristics. For the purpose of this chapter the main characteristics considered include tenure, type of property, age and size of dwelling. These are considered in turn. This chapter also comments on the vacant housing stock which is considered separately from the occupied stock. Some further details about the stock can be found in Appendix A1.

3.2 Typology of the housing stock

The composition of the stock is an important determinant of its condition. The survey data has been used to construct a dwelling typology which brings together those characteristics which can affect condition. These characteristics are age, types, size and tenure. The figure below shows a broad typology of the housing stock (four dwelling types by four dwelling ages) which differs slightly from the main categories used in this report.

Figure 3.1 A typology of the housing stock				
Building type	Dwelling age			
	Pre-1919	1919-1944	1945-1964	Post-1964
Detached house				
Semi-detached house				
Terraced				
Flats				

3.3 Tenure

A range of four tenure types were identified as part of the survey plus vacant dwellings. These are defined below.

Box 3.1 Definition of tenure type categories

Tenure type	Definition
Owner-occupied (no mortgage)	Includes all households who own their home outright.
Owner-occupied (with mortgage)	Includes all households buying their own home with a mortgage or loan. Includes shared ownership schemes.
RSL	Includes all households living in the property of registered social landlords.
Private rented	Includes all households living in privately owned property which they do not own. Includes households living rent free or in tied homes.
Vacant dwellings	Includes all dwellings which were un-occupied at the time of the surveyors visit (regardless of whether long or short term vacancy).

The table below sets out the results from the Merton survey in both a regional and national context. Merton has a slightly lower level of RSL dwellings when compared to England as a whole. The proportion of private rented dwellings is slightly lower than the London figure but higher than for England. The opposite is the case for the proportion of owner-occupation. This reflects the fact that Merton is an outer London Borough. It is important to note that this does not include Council dwellings.

Tenure	Merton	London	England
Owner-occupied	78.1%	71.4%	80.5%
RSL	5.8%	10.6%	7.6%
Private rented	16.0%	17.9%	11.9%
All tenures	100.0%	100.0%	100.0%

3.4 Type of dwelling

At the broadest level the type of property can be classified in terms of houses and flats. The 2001 English House Condition Survey (EHCS) indicates that dwellings in England are predominantly houses, only 19% of the total stock are flats. A range of six dwelling types were identified as part of the survey, which are defined below.

Box 3.2 Definition of dwelling type categories

Dwelling type	Definition
Detached House	No other dwelling adjoins any part of the structure. This includes mobile homes
Semi-detached	A house that is only attached to one other dwelling. The two dwellings taken together should be detached from any other dwellings.
End Terrace	An end house forming part of a block where at least one house is attached to two or more other houses.
Mid Terrace	A house forming part of a block where it is attached to two or more other houses.
Purpose-built flat	A flat in a purpose-built block.
Converted flat	Flat in a building converted from a house or some other use or a flat with or without independent access in a building which is also used for non-domestic or commercial purposes.

Results, presented in the table below, indicate that the profile of dwelling types in Merton resembles that of London much more closely than it resembles the profile of England as a whole. Compared to the national profile, Merton shows a much higher proportion of flats, particularly converted flats and a much lower proportion of detached houses. Comparing Merton to London, the Borough contains a higher proportion of terraced houses and a lower proportion of flats.

This comparison should be treated with caution due to the fact that the Merton survey only covers the private sector (i.e. excluding Council stock). Figures for London and England include all tenure groups.

Building type	Merton	London	England
Terraced	43.7%	31.2%	29.7%
Semi-detached	16.7%	17.5%	30.8%
Detached	6.3%	5.3%	20.8%
Purpose-built flat	20.9%	37.1%	15.4%
Converted flat	12.4%	9.0%	3.3%
Total	100.0%	100.0%	100.0%

3.5 Age of property

The following table summarises the survey results in Merton and compares them with the national and regional picture derived from the EHCS (2001). The age profile of the stock in Merton is similar to that of London, but more extreme in its differences from the national profile. Housing in Merton is noticeably older, with just 20.1% of the stock built after 1964, compared to 28.7% of London housing, and 38.4% of all housing in England. Merton has a significantly higher proportion of dwellings built in the 1919-1944 age group than both London and England as a whole and a much lower proportion in the 1945-1964 period. Finally, Merton has a slightly higher proportion of pre-1919 stock when compared to both regional and national figures.

As before, **this comparison should be treated with caution due to the fact that the Merton survey only covers the private sector (i.e. excluding Council stock)**. Figures for London and England include all tenure groups.

Dwelling age	Merton	London	England
Pre-1919	29.2%	25.6%	24.5%
1919-1944	44.5%	30.0%	18.8%
1945-1964	6.2%	15.7%	18.3%
Post-1964	20.1%	28.7%	38.4%
All ages	100.0%	100.0%	100.0%

3.6 Size of dwelling

The main measure available to assess the size of dwellings is the number of habitable rooms within the property forming part of the living space (a habitable room is defined as one which could be used for sleeping purposes and for the purposes of this survey includes kitchens which are large enough to accommodate a table and chairs at which the occupants could eat). Survey results indicate that just under half (47.7%) have 4-5 habitable rooms, 32.4% are smaller whilst 19.9% are larger. The average number of habitable rooms in each property across the Borough is 4.4.

Table 3.4 Number of habitable rooms		
Habitable rooms	Number	%
1-2	9,577	12.5%
3	15,199	19.9%
4	16,719	21.9%
5	19,762	25.8%
6	7,858	10.3%
7+	7,337	9.6%
Total	76,452	100.0%

The mean dwelling size, calculated as average floor space, in Merton is 95.5m². This compares to all tenure national and regional averages of 86.8m² and 80.4 m² respectively and private sector averages of 92.2 m² and 86.2 m² respectively.

3.7 Vacant dwellings

The survey estimates that around 2,000 dwellings are vacant representing 2.6% of the total stock, comparable with the proportion of vacant dwelling stock in England (3%). Almost all vacant dwellings are mid to long-term vacant; some 37.3% of vacant dwellings appear to be long-term vacant. Few holiday or second homes were found. The EHCS estimates that 10% of vacant dwellings in England are newly vacant, with a further 40% empty for up to 6 months. The remaining stock (around half) is long-term vacant. Merton shows a much lower rate of newly vacant properties.

Table 3.5 Length of vacancy		
Length of vacancy	Number	%
Newly vacant (less than a month)	3	0.1%
Mid term vacant (1-6 months)	1,250	62.5%
Long term vacant (over 6 months)	745	37.3%
Second/holiday home	2	0.1%
All vacant dwellings	2,000	100.0%

3.8 Summary

Data from the survey suggests that Merton has somewhat different tenure profile to both London and England as a whole. When compared with both national and regional data some of the main differences found were:

- Merton has an older age profile, with 20.1% built after 1964, compared to 28.7% regionally and 38.4% nationally
- The Borough has a lower than average proportion of RSL accommodation, with 5.8% of all dwellings in this sector, compared to 10.6% of London and 7.6% across England
- Merton has a much lower proportion of detached houses, and a higher proportion of terraced households and converted flats
- At 95.5m² households in Merton are somewhat larger than average, and contain 4.4 rooms
- A high proportion (37.3%) of vacant dwellings are long-term vacant

The comparison for age and type of dwelling should be treated with caution as both regional and national figures include all tenure groups.

Section B: General condition

This section analyses the housing stock in Merton according to the standards of 'unfitness' and 'disrepair'. The first chapter examines different causes of disrepair, and goes on to analyse the cost of repairs by three different levels of urgency. The chapter also examines how repair costs correspond to the different characteristics of households and dwellings laid out in the profile of the housing stock.

The section goes on to make an analysis of dwellings that are classed as 'unfit'. The chapter breaks unfitness down by different housing characteristics, providing a numerical and a graphical comparison between different groups, and a further comparison between Merton and England as a whole. The section finishes by looking at dwellings classified as 'fit but defective'.

4

4. Disrepair

4.1 Introduction

This chapter addresses the details of repairs required to dwellings. Typical repairs required will include repairs to roofs, windows and amenities and services – the survey form at the back of the report shows the full range of possible repairs required to a dwelling. Repairs do not include cosmetic improvements such as cyclical painting. The subsequent analysis of repair costs looks at three different time periods (up to a year, up to five years and within the next ten years).

4.2 Measuring the extent of disrepair

An idea of the presence of faults provides useful information about the main problem areas, but does not represent either the extent of the problems or the cost of putting them right. The standard test for such repairs is the cost to put the building into good repair. This includes all the building elements and the overall cost of rectifying any work. The survey measured three levels of disrepair (shown in the box below).

Box 4.1 Categories of repair measured in the survey

Category	Definition
Urgent repair	Where surveyors had recorded that work was needed to an exterior building element, they indicated whether work specified was urgent; defined as works needed to remove threats to the health, safety, security and comfort of the occupants and to forestall further rapid deterioration of the building. This is a measure of serious and immediate problems in the dwelling and also includes all interior work.
Basic repair	All works identified by the surveyor as needing to be done within 5 years, including any urgent work as described above. These do not include replacement of building elements nearing the end of their life where the surveyor recorded that this action could be delayed by more than 5 years, often by short term patch repairs.
Comprehensive repair	This includes all repairs as specified above together with any replacements the surveyor has assessed as being needed in the next 10 years. Replacement periods are only defined for external elements and are given whether or not any repair work has been identified as needed. The replacement period is given as the number of years before the element needs replacing either following specified repair work or simply as the remaining life expectancy. This measure provides a better basis for identifying work which would form part of a planned programme of repair by landlords.

It should be noted that the above repair categories are cumulative. Consequently figures for *basic repair* include the costs of *urgent repairs*, and both are in turn included in the figures for *comprehensive repairs*.

Standard repair costs are based on a schedule provided by the Building Cost Information Service (BCIS) and have been updated to a March 2005 base for the London region.

The actual costs of work will vary depending on the size of dwellings. Therefore one further measure has been included – Standardised repair costs. The definition of this is shown in the box below.

Box 4.2 Standardised repair costs

The basic repair cost per square metre of floor area, calculated to remove the effect of the size of buildings and give a better measure of relative deterioration.

4.3 Assessment of repair costs – overall findings

The overall situation in terms of repairs costs for Merton is summarised in the table below. The data shows an average urgent repair cost of £1,179 per dwelling, this figure rises to £3,904 for comprehensive repairs – these average costs include dwellings requiring no work.

Table 4.1 Overall repairs cost comparison			
Repairs category	Merton 2004		England EHCS 2001 (all tenures)
	Total cost	Average cost per dwelling	Average cost per dwelling
Urgent repair	£90.1m	£1,179	£1,310
Basic repair	£134.9m	£1,765	£2,170
Comprehensive repair	£298.5m	£3,904	£3,820
Standardised repair cost (/m ²)	-	£19.7	£18.7

If we compare repairs costs per dwelling for Merton with those from the EHCS, the assessed costs in Merton are generally lower than those for England as a whole, with the exception of comprehensive repair costs. The standardised cost figure is one pound higher than the 2001 England average.

Consequently, the total cost of repairs is considerable: comprehensive repairs will cost a total of £298.4 million, and even urgent repairs will amount to a total of £90.1 million. The table below looks at the distribution of these repair costs.

Level of cost	Urgent	Basic repairs	Comprehensive repair
No repairs required	24,400	12,515	7,241
Under £1,000	29,080	30,938	21,770
£1,000-£2,499	13,139	18,117	18,722
£2,500-£4,999	5,914	8,088	11,604
£5,000-£9,999	2,699	4,668	8,923
£10,000-£14,999	792	1,480	4,037
£15,000 and above	428	646	4,154
Total	76,452	76,452	76,452

Nearly a third (31.9%) of dwellings no *urgent* repairs are needed. For both the urgent and basic repair categories, the numbers requiring substantial expenditure are really quite small. However, over 8,000 dwellings will require expenditure of over £10,000 over the next ten years.

4.4 Elements of repairs

It is possible to look at the average cost of *basic repairs* for the individual elements examined in the survey. The elements are shown (in descending order of cost) in the table below.

Table 4.3 Average cost of individual elements – basic repair		
Item	Average cost £ per dwelling	% of cost
External doors and windows	£310.54	17.6%
Walls, fences, paved areas and outbuildings	£239.14	13.5%
Heating systems	£198.80	11.3%
Roofs	£176.26	10.0%
Kitchens	£150.45	8.5%
Bathrooms	£138.27	7.8%
External walls	£110.01	6.2%
Insulation	£77.49	4.4%
Foundations	£54.10	3.1%
Internal walls	£47.78	2.7%
Gas & electric	£41.02	2.3%
Condensation	£38.94	2.2%
Chimneys	£28.90	1.6%
Water closet	£27.84	1.6%
Internal doors & frames	£22.69	1.3%
Ceilings	£19.41	1.1%
Damp proof course	£17.37	1.0%
Drainpipes and soil & waste pipes	£16.72	0.9%
Staircases	£16.19	0.9%
Floors	£14.47	0.8%
Internal drainage	£9.88	0.6%
Water & drainage	£7.49	0.4%
Common parts	£1.34	0.1%
Total	£1,765.09	100.0%

Many items contribute to the total basic repairs cost. Four items; *'External doors & Windows'*, *'Walls, fences, paved areas & outbuildings'* *'Heating systems'* and *'Roofs'* account for just over half of the total basic repair cost.

4.5 Repair costs and dwelling characteristics

The tables below show repair costs by tenure, age of dwelling, and building type. There are significant differences in repair costs by tenure, with owner-occupied (no mortgage) dwellings generally showing the highest and owner-occupied (with mortgage) dwellings the lowest repair costs. Vacant dwellings show much higher costs than occupied dwellings – over double that of the average costs.

As might be expected, repair costs are closely related to age of dwelling. The data shows the highest costs for dwellings built before 1944, and much lower costs for post-1964 dwellings. The standardised repair costs vary from £3.8 per square metre for post 1980 dwellings, to £28.0 for 1945-1964 dwellings.

By dwelling type, purpose-built flats show lower repair costs, whilst detached houses show significantly higher repair costs. Looking at standardised repair costs, converted flats show a standardised repair cost significantly above the average.

Tenure	Urgent repairs	Basic repairs	Comprehensive repairs	Standardised repair cost
	Repair cost per dwelling £			£ per sq. m
Owner-occupied (no mortgage)	£1,637	£2,374	£5,001	£25.0
Owner-occupied (with mortgage)	£805	£1,288	£3,358	£14.5
RSL	£1,547	£1,960	£4,172	£14.0
Private rented	£1,267	£1,929	£3,305	£27.0
Average	£1,179	£1,765	£3,904	£19.7
Vacant dwellings	£3,661	£4,218	£5,766	£49.7

Dwelling age	Urgent repairs	Basic repairs	Comprehensive repairs	Standardised repair cost
	Repair cost per dwelling £			£ per sq. m
Pre-1919	£1,468	£2,091	£3,905	£21.7
1919-1944	£1,263	£2,020	£5,019	£22.9
1945-1964	£1,692	£2,330	£3,975	£28.0
1965-1980	£786	£1,075	£2,646	£13.7
Post-1980	£206	£261	£716	£3.8
Average	£1,179	£1,765	£3,904	£19.7

Table 4.6 Repair costs by building type				
Building type	Urgent repairs	Basic repairs	Comprehensive repairs	Standardised repair cost
	Repair cost per dwelling £			£ per sq. m
End terrace	£1,101	£1,710	£4,347	£18.2
Mid terrace	£1,035	£1,604	£3,487	£17.9
Semi-detached	£1,391	£2,076	£4,948	£18.6
Detached	£2,416	£3,719	£8,063	£19.5
Purpose-built flat	£894	£1,142	£2,470	£18.1
Converted flat	£1,162	£1,830	£3,127	£30.2
Average	£1,179	£1,765	£3,904	£19.7

4.6 Repair costs and household characteristics

The table below shows repair costs by household type, special needs and vulnerable households. The data shows that single pensioner households generally have the highest repair costs, even when taking size of dwelling into account. Single pensioners show a standardised repair cost of £28.6/m² compared to an average for all households of £18.9/m². Households with two or more adults and two or more children generally show low repair costs. Special needs households show significantly higher repair costs to those with no special needs members. The same is the case for vulnerable households.

Table 4.7 Repair costs by household type				
Household type	Urgent repairs	Basic repairs	Comprehensive repairs	Standardised repair cost
	Repair cost per dwelling £			£ per sq. m
Single pensioner	£2,180	£2,734	£5,821	£28.6
2 or more pensioners	£1,371	£2,049	£4,828	£19.1
Single non-pensioner	£931	£1,315	£2,184	£18.8
2 or more adults, no children	£964	£1,616	£3,638	£16.7
Lone parent	£1,466	£2,220	£5,107	£26.4
2+ adults, 1 child	£820	£1,488	£3,137	£17.6
2+ adults, 2+ children	£783	£1,374	£4,950	£14.9
Average	£1,112	£1,699	£3,854	£18.9

Table 4.8 Repair costs and special needs				
Special needs	Urgent repairs	Basic repairs	Comprehensive repairs	Standardised repair cost
	Repair cost per dwelling £			£ per sq. m
Special needs	£2,158	£3,088	£6,174	£31.3
No special needs	£967	£1,507	£3,533	£17.2
Average	£1,112	£1,699	£3,854	£18.9

Table 4.9 Repair costs and vulnerable households				
Vulnerable households	Urgent repairs	Basic repairs	Comprehensive repairs	Standardised repair cost
	Repair cost per dwelling £			£ per sq. m
Vulnerable	£1,938	£2,733	£5,164	£30.5
Not vulnerable	£926	£1,466	£3,559	£16.3
Average	£1,112	£1,699	£3,854	£18.9

4.7 Summary

The survey studied faults to dwellings and associated repair costs. Some of the main findings of the analysis were:

- The average cost per dwelling of urgent repairs (i.e. those needing to be done within the next year) was £1,179– this totals £90.1m Borough-wide
- The average cost per dwelling for basic repairs (i.e. all work needing to be done within the next 5 years) was £1,765– totalling £134.9 m Borough-wide
- The main problem areas (in terms of the amount needing to be spent) were '*External doors & Windows*', '*Walls, fences, paved areas & outbuildings*' '*Heating systems*' and '*Roofs*'
- Older dwellings showed the highest repair costs, as did those in detached houses
- Special needs and vulnerable households have considerably higher average repair costs

5

5. Levels of unfitness

5.1 Introduction

The fitness standard (as set out in Section 604 of the 1985 *Housing Act* and amended by the 1989 *Local Government and Housing Act*) details a list of criteria which must be met if a dwelling is to be considered fit for human habitation. A dwelling-house is unfit for human habitation if it fails to meet one or more of the requirements of the fitness standard (see Chapter 1) and by reason of that failure is not reasonably suitable for occupation.

5.2 Level of unfitness

The table below shows the reasons for unfitness in both Merton and nationally (2001 EHCS). An estimated 4,093 private sector dwellings are unfit, accounting for 5.4% of the private sector housing stock; this compares to an unfitness rate of 4.2% nationally and 5.6% in London (2001 EHCS). The most common reasons for unfitness in Merton are *food preparation* – 1,666 dwellings (40.7% of unfit dwellings) and *bath/shower, wash hand basin* – 1,198 dwellings (29.3%). Both figures are higher than the national averages of 39.4% and 20.9% respectively.

Reason	Number of dwellings	% of unfit dwellings	% of unfit dwellings (2001 EHCS)
Food preparation	1,666	40.7%	39.4%
Bath/shower, WHB	1,198	29.3%	20.9%
Disrepair	1,189	29.1%	45.5%
Water closet	1,109	27.1%	16.0%
Ventilation	557	13.6%	11.8%
Heating	512	12.5%	10.5%
Dampness	153	3.7%	21.9%
Structural stability	49	1.2%	7.0%
Drainage	40	1.0%	9.5%
Lighting	29	0.7%	6.0%
Water supply	0	0.0%	4.2%

5.3 Severity of unfitness

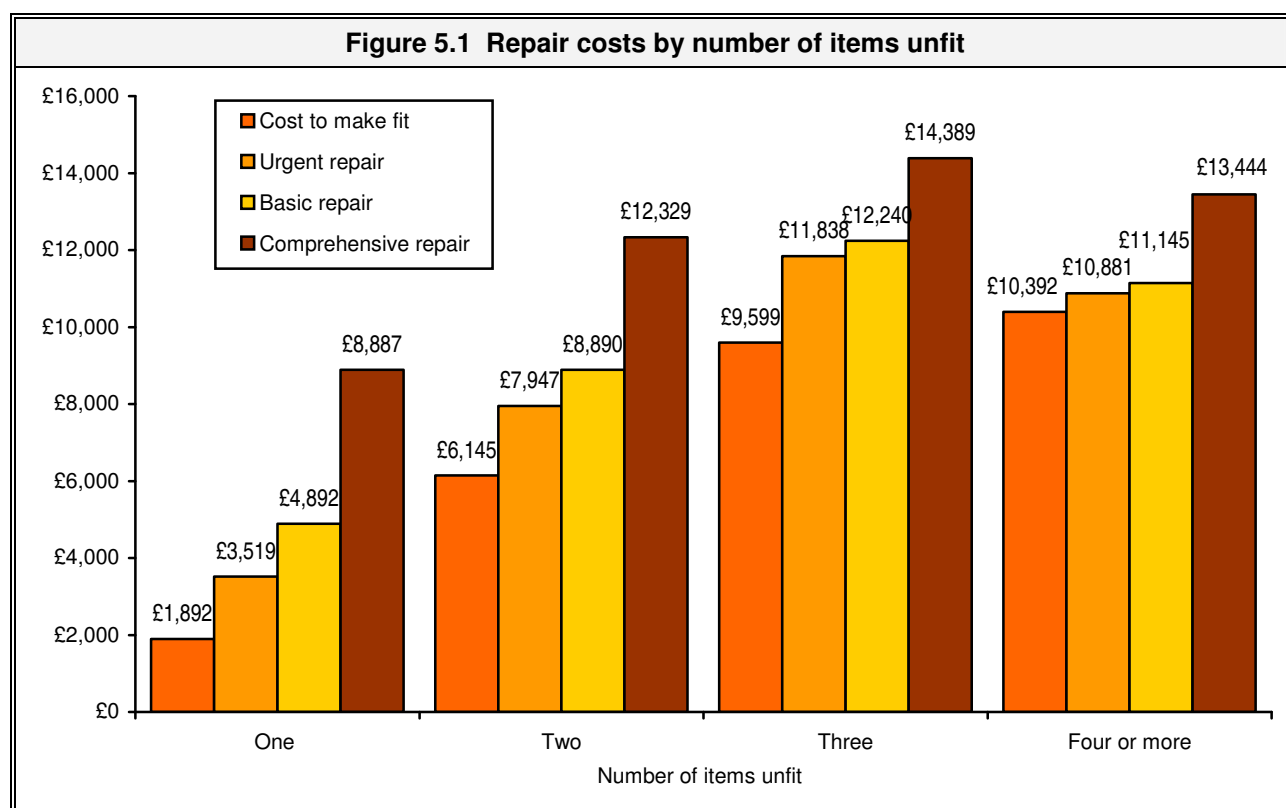
It will be clear from the table above that it is possible for a dwelling to fall into more than one of the unfitness criteria used. The table below shows the number of unfit dwellings with more than one reason for unfitness. It can be seen that 62.0% of unfit dwellings only fail on one item, whilst only 4.6% fail on four or more. The profile of number of unfit items in Merton is very similar to that of England as a whole, although dwellings in Merton are more likely to fail due to only one reason than nationally.

Number of items unfit	Number of dwellings	% of unfit dwellings	% of unfit dwellings (2001 EHCS)
One	2,539	62.0%	55.2%
Two	1,061	25.9%	23.3%
Three	303	7.4%	11.3%
Four or more	190	4.6%	10.2%
Total	4,093	100.0%	100.0%

5.4 Cost to make fit

In addition to estimating the number of unfit dwellings the survey can estimate the cost of making dwellings fit for human habitation. The cost to make fit is the urgent cost associated with the reason for unfitness. For example, if a dwelling fails the fitness standard for food preparation only then the cost to make fit will be the total cost of those elements required to make the dwelling fit for food preparation only. It is quite possible that there are other urgent works required to the dwelling but which have not been deemed by a surveyor to make the dwelling unfit. Hence, in most cases the cost of required urgent repairs for a dwelling will exceed the cost just to make fit.

The average cost to make unfit dwellings just fit is £3,959 per dwelling. This represents a considerable increase on the 1996 estimate of £2,540 (HIP 2004 data). The urgent repair costs in unfit dwellings averages £5,624, basic repair costs average £6,763 and comprehensive costs £10,398. Borough-wide these costs are £16.2m, £23.0m, £27.7m and £42.6m respectively. There is a relationship between the various costs and the number of items on which a dwelling fails, as shown by the figure below. As the number of items on which a dwelling fails increases, so do the associated costs.



5.5 Dwelling characteristics of unfit dwellings

The following tables and figures show unfitness and tenure, dwelling age and building type.

There is a great deal of variation by tenure. The survey shows that private rented dwellings have the highest level of unfitness, whilst RSL dwellings show the lowest level. Almost half of the vacant dwellings in Merton are unfit.

Unfitness is in general strongly associated with older dwellings. In the case of Merton the pre-1944 stock exhibits the greatest proportions of unfits, and post-1980 dwellings the lowest.

Trends in relation to building type show that converted flats show a particularly high level of unfitness. Detached houses and purpose-built flats show low levels of unfitness.

Tenure	Unfitness			% of group in unfit housing	% of those in unfit housing in group
	In unfit housing	Not in unfit housing	Total		
Owner-occupied (no mortgage)	1,497	22,088	23,585	6.3%	36.6%
Owner-occupied (with mortgage)	1,300	34,851	36,151	3.6%	31.8%
RSL	122	4,325	4,447	2.7%	3.0%
Private rented	1,174	11,096	12,270	9.6%	28.7%
Total	4,093	72,360	76,453	5.4%	100.0%
Vacant dwellings	886	1,114	2,000	44.3%	21.6%

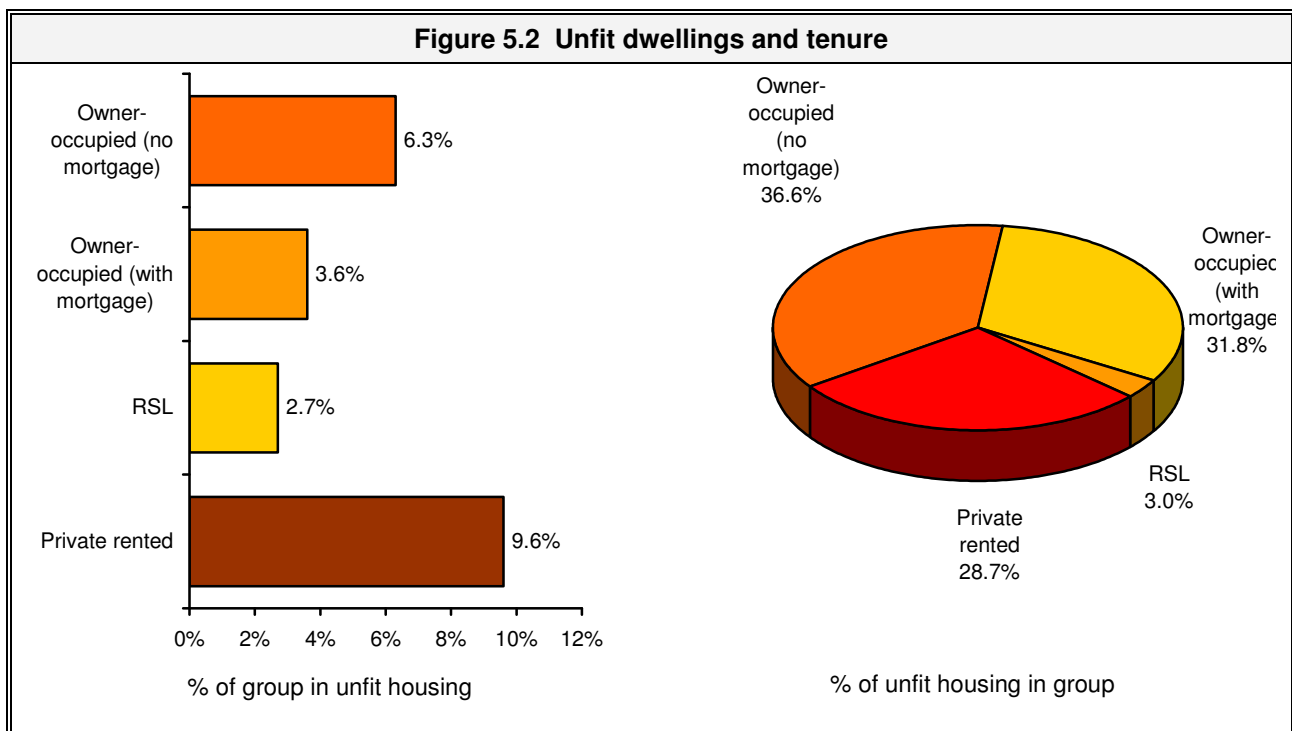
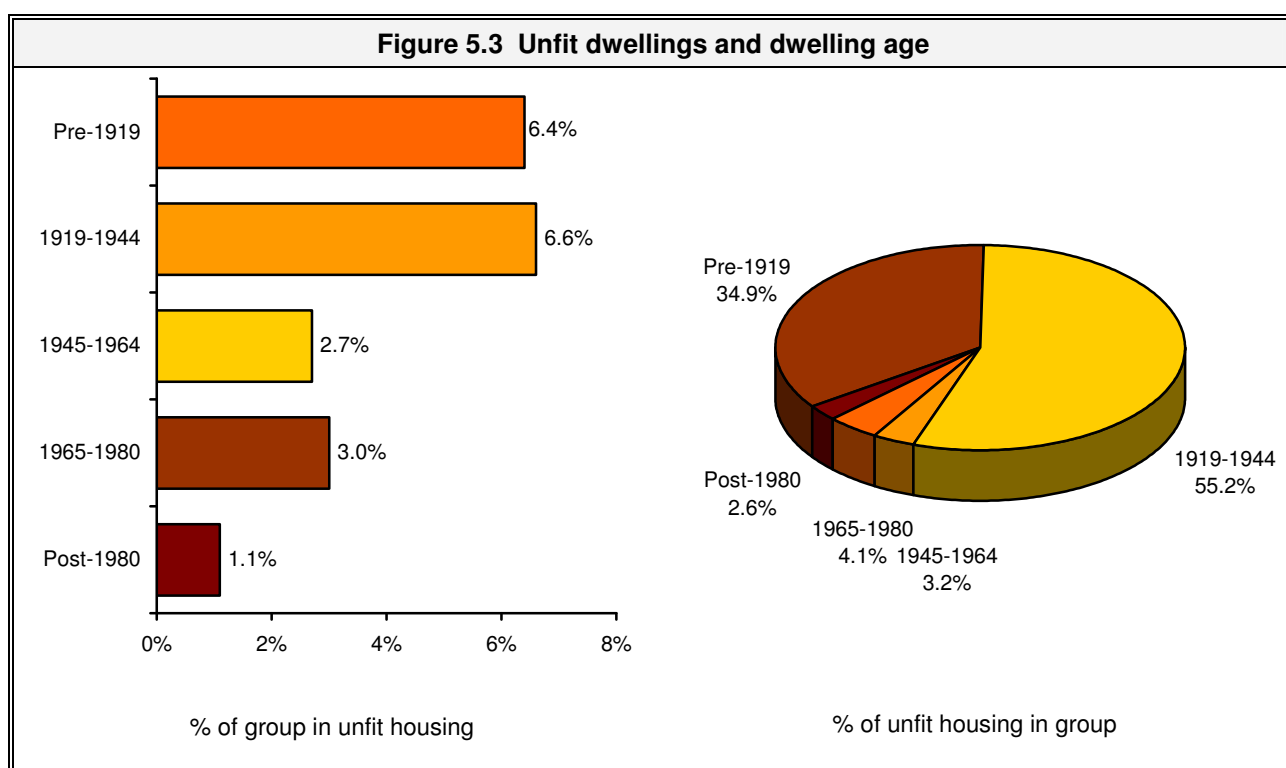
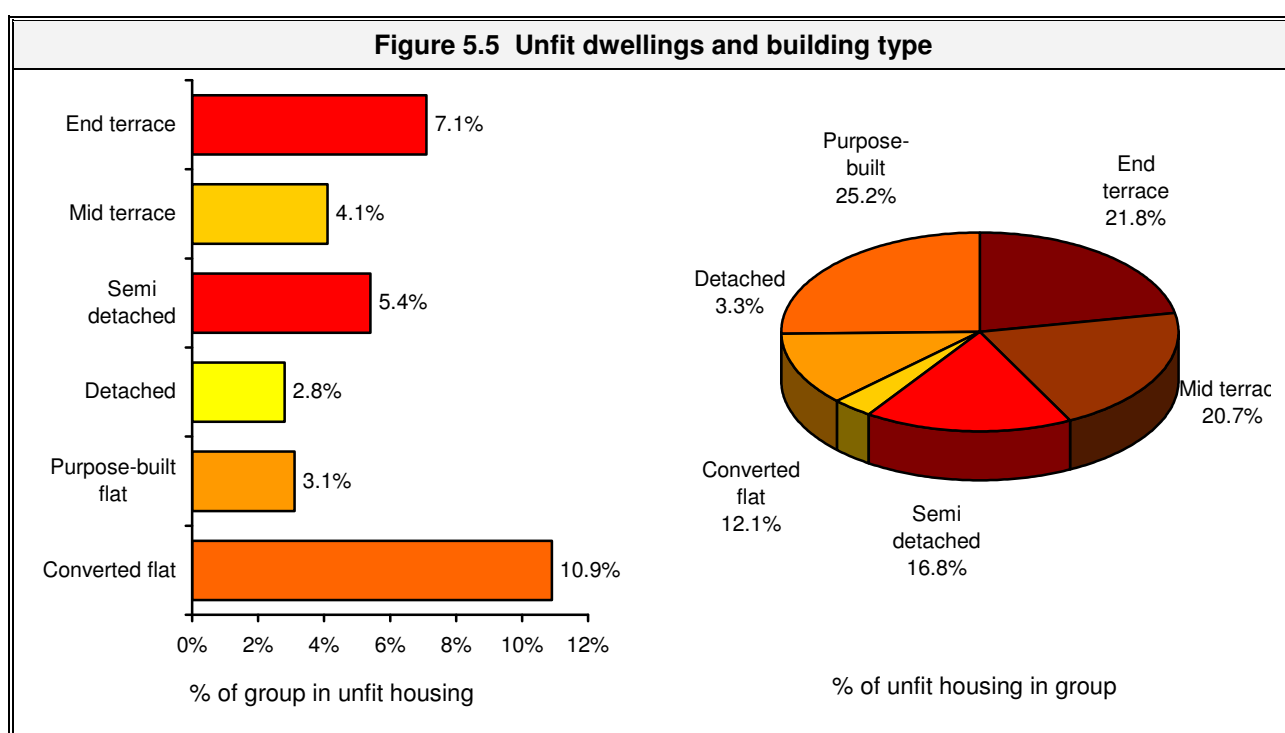


Table 5.4 Unfit dwellings and dwelling age					
Age	Unfitness			% of group in unfit housing	% of those in unfit housing in group
	Unfit housing	Not unfit housing	Total		
Pre-1919	1,428	20,862	22,290	6.4%	34.9%
1919-1944	2,262	31,793	34,055	6.6%	55.3%
1945-1964	129	4,599	4,728	2.7%	3.2%
1965-1980	167	5,373	5,540	3.0%	4.1%
Post-1980	107	9,732	9,839	1.1%	2.6%
Total	4,093	72,359	76,452	5.4%	100.0%



Building type	Unfitness				
	Unfit housing	Not unfit housing	Total	% of group in unfit housing	% of those in unfit housing in group
End terrace	894	11,682	12,576	7.1%	21.8%
Mid terrace	849	20,011	20,860	4.1%	20.7%
Semi-detached	688	12,056	12,744	5.4%	16.8%
Detached	136	4,695	4,831	2.8%	3.3%
Purpose-built flat	494	15,501	15,995	3.1%	12.1%
Converted flat	1,031	8,415	9,446	10.9%	25.2%
Total	4,092	72,360	76,452	5.4%	100.0%



5.6 Household characteristics and unfitness

The following tables show unfitness by household type, special needs and vulnerable households. The results show that households with children are most likely to be living in unfit housing, in particular lone parent households. Some 7.3% of lone parent households are in unfit housing – well above the average for occupied dwellings of 4.3%. Households with special needs are much more likely to be living in unfit accommodation than those with no special needs members. The survey data also suggests that vulnerable households are more likely than average to be living in unfit housing.

Table 5.7 Household type and unfitness					
Household type	Unfitness				
	Unfit housing	Not unfit housing	Total	% of group in unfit housing	% of those in unfit housing in group
Single pensioner	432	8,497	8,929	4.8%	13.5%
2 or more pensioners	76	4,496	4,572	1.7%	2.4%
Single non-pensioner	649	13,963	14,612	4.4%	20.2%
2 or more adults, no children	876	26,471	27,347	3.2%	27.3%
Lone parent	210	2,652	2,862	7.3%	6.5%
2+ adults, 1 child	405	6,755	7,160	5.7%	12.6%
2+ adults, 2+ children	561	8,413	8,974	6.3%	17.5%
Total	3,209	71,247	74,456	4.3%	100.0%

Table 5.8 Special needs and unfit housing					
Special needs	Unfitness				
	Unfit housing	Not unfit housing	Total	% of group in unfit housing	% of those in unfit housing in group
Special needs	587	8,454	9,041	6.5%	18.3%
No special needs	2,620	62,791	65,411	4.0%	81.7%
Total	3,207	71,245	74,452	4.3%	100.0%

Table 5.9 Vulnerable households and unfitness					
Vulnerable households	Unfitness				
	Unfit housing	Not unfit housing	Total	% of group in unfit housing	% of those in unfit housing in group
Vulnerable	768	12,934	13,702	5.6%	23.9%
Not vulnerable	2,439	58,311	60,750	4.0%	76.1%
Total	3,207	71,245	74,452	4.3%	100.0%

5.7 Comparisons with 2001 EHCS

The following table compares the results of this survey with the 2001 EHCS. In general the two surveys show similar patterns with regard to the characteristics of unfit dwellings, but an abnormally high rate of unfitness for vacant dwellings. It should be remembered when considering these figures that the overall level of unfitness in Merton is slightly higher than that found in the 2001 EHCS and that the EHCS figures are for all tenures, therefore include Council stock.

Table 5.10 Comparing 2004 Merton survey and 2001 English House Condition Survey		
Comparator	Unfit dwellings	
	Merton	2001 EHCS
Overall unfitness	5.4%	4.2%
London		5.6%
Unfitness and tenure		
Owner-occupied	4.7%	3.2%
Private rented	9.6%	10.9%
RSL	2.7%	3.4%
Local Authority	-	4.7%
Vacant dwellings	44.3%	15.5%
Unfitness and dwelling age		
Pre-1919	6.4%	10.3%
1919 – 1944	6.6%	5.3%
1945 – 1964	2.7%	3.0%
Post-1964	1.8%	1.2%
Unfitness and building type		
All houses	5.0%	4.2%
Purpose-built flat	3.1%	3.0%
Converted flat	10.9%	10.5%
Main reasons for unfitness		
Food preparation	40.7%	39.4%
Bath/shower, WHB	29.3%	20.9%

5.8 Defective dwellings

In addition to the main measure of unfitness dwellings could be recorded by surveyors as 'fit but defective' in one or more of the matters of unfitness. In total it is estimated that 11,463 dwellings (15.0%) are currently fit but defective. The table below shows the causes of defective dwellings, of these, the most significant are *disrepair* and *bath/shower/wash hand basin*, followed by *food preparation*.

Reason	Number of dwellings	% of defective dwellings
Disrepair	6,018	52.5%
Bath/shower, WHB	3,933	34.3%
Food preparation	3,675	32.1%
Water closet	1,753	15.3%
Dampness	1,355	11.8%
Heating	1,044	9.1%
Ventilation	1,036	9.0%
Structural stability	460	4.0%
Lighting	418	3.6%
Drainage	397	3.5%
Water supply	259	2.3%

5.9 Summary

Under the provisions of Section 604 of the 1985 Housing Act (amended by the 1989 Local Government and Housing Act) a dwelling house is fit for human habitation unless it fails to meet one or more of eleven requirements and as a result of that failure, is not reasonably suitable for occupation. The following were some of the main findings in relation to unfitness in Merton:

- It is estimated that 5.4% of private sector dwellings in Merton are unfit (4,093 dwellings), this compares with a national average of around 4.2% and a regional average of 5.6% (all tenures)
- The main causes of unfitness are *food preparation* (40.7% of unfit dwellings) and *bath/shower, WHB* (29.3%)
- The average cost to make unfit dwellings just fit is £3,959 per dwelling. As the number of items on which a dwelling fails increases, so do the associated costs.
- Private rented dwellings are most likely to be unfit as are pre-1944 dwellings and converted flats
- Households with children, special needs and vulnerable households are more likely to live in unfit housing
- An additional 11,463 dwellings are estimated to be 'fit but defective' (representing 15.0% of the private sector dwelling stock), most commonly owing to reasons of '*food preparation*' and '*disrepair*'

Section C: Energy efficiency

This section makes an assessment of the energy efficiency of the area's housing stock according to the Standard Assessment Procedure (SAP) rating system. After an initial analysis of what energy-saving measures and heating systems are already in use, the report rates the energy efficiency of the Borough's housing as a whole, and that of different groups and characteristics. Having taken consideration of both the average SAP rating for each group, and the distribution of SAP ratings within it, a comparison is made with England as a whole.

The second chapter in the section looks at practical measures that can be taken to improve SAP ratings. Focussing on three particular possible improvements, the survey shows the impact of each improvement or combination of improvements, and its associated cost. The chapter also deals with how best to achieve a fixed level of improvement in SAP rating – 30% in this case.

6

6. Energy efficiency

6.1 Introduction

This chapter looks at the energy efficiency of dwellings in Merton. An energy rating is intended to give a measure of the overall energy efficiency of a dwelling. The Standard Assessment Procedure (SAP) is the Government's recommended system for home energy rating. The SAP rating is standardised for floor area so that the size of the dwelling does not strongly affect the result. The box below gives a general description of the SAP rating.

Box 6.1 Definition of 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 1-120 scale. The higher the number the better the standard.

It is important for the occupants of a dwelling for it to be energy efficient. Not only does a less energy efficient property cost more to heat, it is also an important influence on the health of the occupants; cold and damp contribute to many excess deaths during the winter period. The office of national statistics (ONS) produces data on excess deaths between December and March each year. This has ranged from 24,000 to 49,000 over recent years.

A less energy efficient property is also more likely to fail the Decent Homes Standard under the thermal comfort criteria, and be classified as hazardous due to 'excessive cold' by the Housing Health and Safety Rating System (HHSRS). Both the Decent Homes Standard and HHSRS are analysed later in the report.

The first aspect of analysis relates to the amount of thermal insulation followed by a discussion of heating systems – these are two of the main factors which determine the SAP rating of a dwelling.

6.2 Thermal insulation

(i) Cavity walls

It is estimated that 31.0% of dwellings in Merton have cavity walls, of these a total of 64.7% have no cavity insulation. The table below shows this information by age of dwelling. It is clear that pre-1919 dwellings are least likely to have cavity walls, with just 0.3% doing so, whilst almost all of dwellings built since 1980 have cavity walls. In terms of insulation – there is no evidence of insulation in pre-1919 dwellings and an average of 55.9% of post-1980 dwelling with cavity walls have insulation.

Age of dwelling	Number of dwellings	Number with cavity walls	% with cavity walls	% of these with added insulation
Pre-1919	22,290	57	0.3%	0.0%
1919-1944	34,055	5,070	14.9%	17.1%
1945-1964	4,727	3,494	73.9%	38.3%
1965-1980	5,540	5,272	95.2%	13.0%
Post-1980	9,839	9,788	99.5%	55.9%
Total	76,452	23,681	31.0%	35.3%

(ii) Double glazing

Information from the 2001 EHCS suggests that nationally around 76% of all dwellings have some double glazing. In Merton 77.5% of dwellings have partial double glazing. A total of 54.7% have all windows double glazed and a further 22.8% have some double glazing. The results below show presence of double glazing by age of dwelling and tenure. Pre-1919 dwellings are generally less likely to have full double glazing but there is no clear trend for dwellings built after this period. By tenure we find that 44.5% of private rented dwellings have full double glazing, this compares with 68.8% of RSL dwellings.

Age of dwelling	Number of dwellings	Number with full double glazing	Number with partial double glazing	% with full double glazing
Pre-1919	22,290	7,688	6,550	34.5%
1919-1944	34,055	20,885	9,495	61.3%
1945-1964	4,727	3,721	235	78.7%
1965-1980	5,540	3,177	574	57.3%
Post-1980	9,839	6,317	578	64.2%
Total	76,452	41,788	17,432	54.7%

Table 6.3 Double glazing by tenure				
Tenure	Number of dwellings	Number with full double glazing	Number with partial double glazing	% with full double glazing
Owner-occupied (no mortgage)	23,585	12,646	5,859	53.6%
Owner-occupied (with mortgage)	36,151	20,626	8,333	57.1%
RSL	4,445	3,057	489	68.8%
Private rented	12,271	5,461	2,750	44.5%
Total	76,452	41,790	17,431	54.7%

(iii) Loft insulation

The last insulation element to be considered is loft insulation. It is estimated that 62.9% of dwellings in Merton have loft insulation (18.0% have no loft). A great many dwellings with insulation (75.2%) have no more than 100mm of insulation whilst only 0.7% were estimated to have over 200mm (250mm being the current recommended standard of insulation).

Table 6.4 Loft insulation			
Insulation thickness	Number of dwellings	% of dwellings	% with insulation
No loft	13,741	18.0%	-
Zero insulation	6,973	9.1%	-
Less than 50mm	3,184	4.2%	5.7%
50mm	6,790	8.9%	12.2%
75mm	6,662	8.7%	12.0%
100mm	25,259	33.0%	45.3%
150mm	9,922	13.0%	17.8%
200mm	3,541	4.6%	6.4%
More than 200mm	381	0.5%	0.7%
Total	76,452	100.0%	100.0%

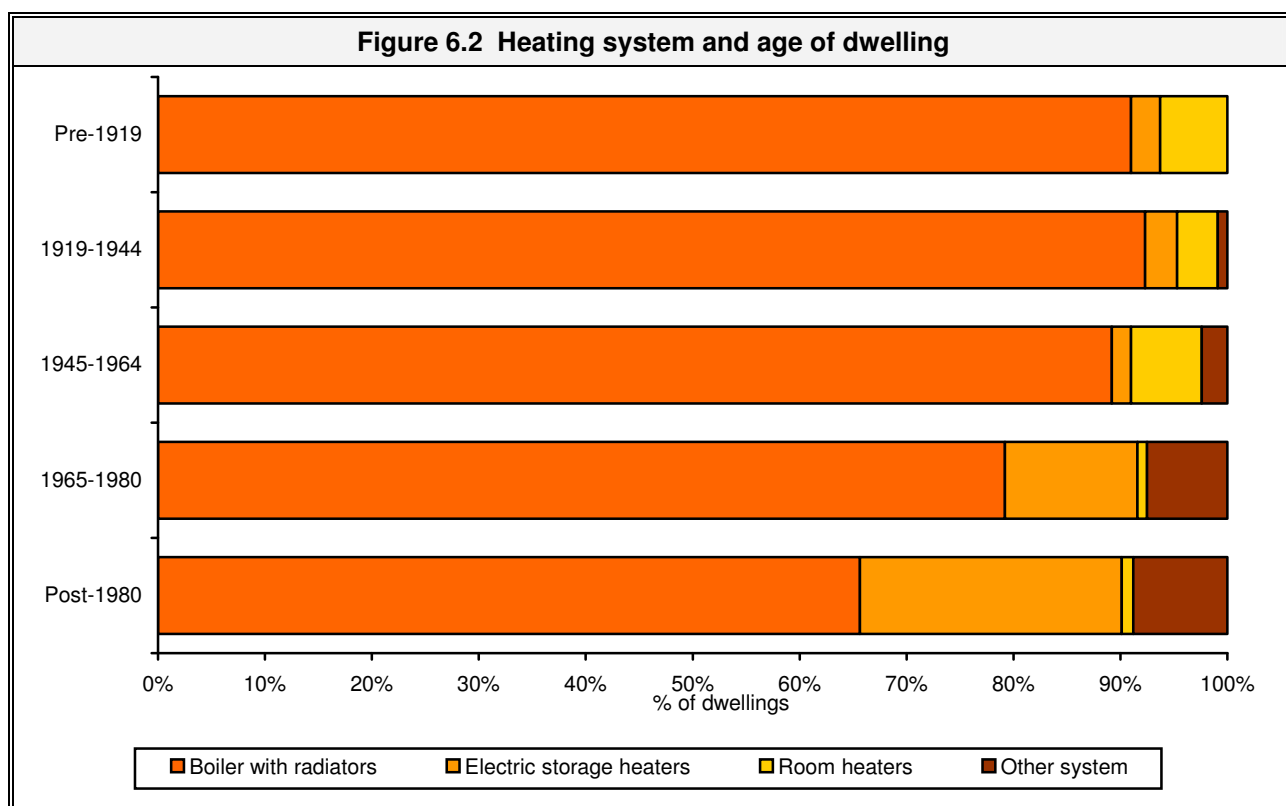
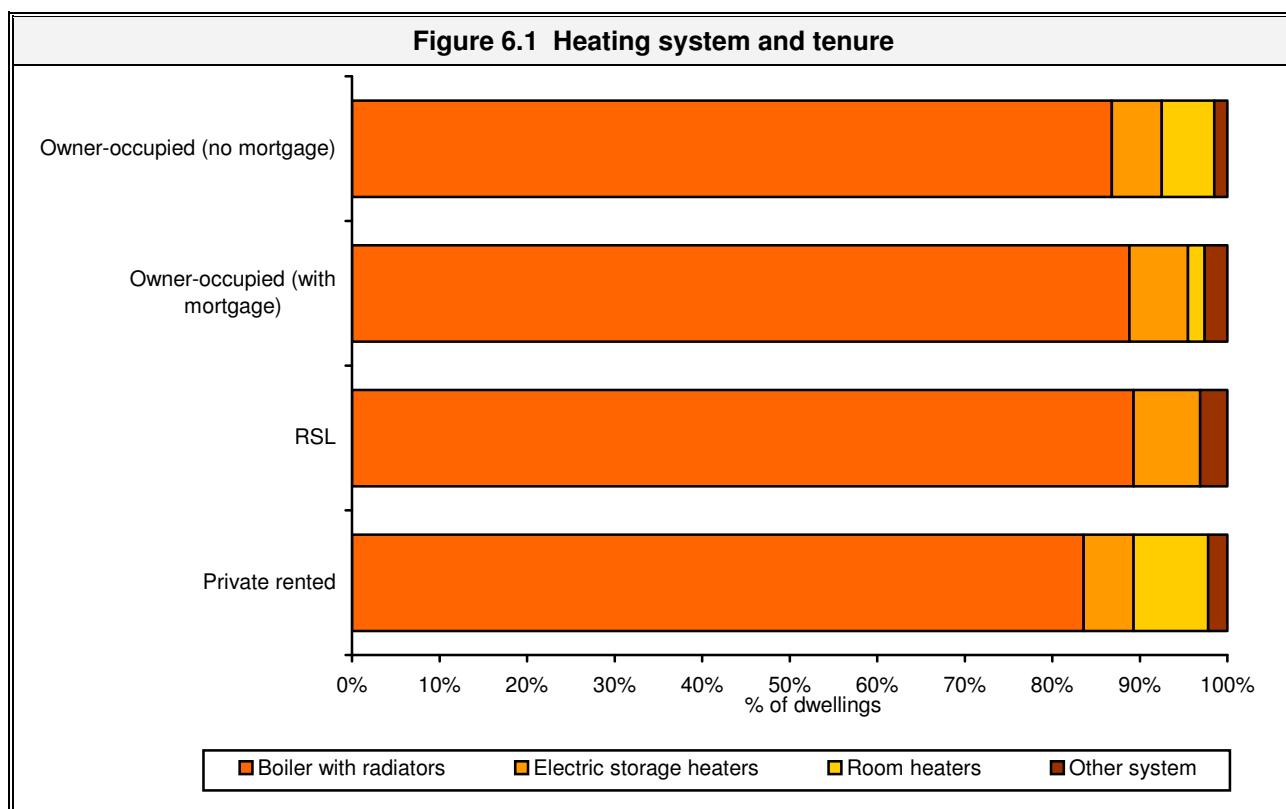
6.3 Heating systems and fuel use

(i) Main heating systems

For the purpose of this survey the 'main heating system' is taken as the system which heats the majority of the dwelling. The high efficiencies of modern heating systems have had a positive effect on the overall energy efficiency of dwellings. In Merton, it is estimated that 95.9% of dwellings have central heating or programmable heating systems. The definition of central heating or programmable heating systems used here is a very wide one including electric storage heaters and a small 'other' group. The national figure for 2001 showed 94% of dwellings had central or programmable heating systems. The table below shows the main heating system available in dwellings.

Table 6.5 Main heating systems		
Main heating system	Number of dwellings	% of dwellings
Boiler with radiators	66,796	87.4%
Electric storage heaters	4,805	6.3%
Room heaters	3,152	4.1%
Other system	1,698	2.2%
Total	76,452	100.0%

The figures below show heating systems by tenure and age of dwelling. The data shows that RSL dwellings are particularly likely to have central heating via a boiler with radiators. In total, 89.2% of RSL dwellings have this type of central heating. Private rented dwellings are particularly likely to have room heaters. Newer dwellings are more likely to use electric storage heaters. They are also more likely to have other heating systems.



(ii) Fuel use

In terms of the fuel used for heating, the data shows the main type used is gas (90.8% of dwellings), this is followed by on-peak and off-peak electricity; these three fuel types account for 99.9% of all fuel used in Merton. The table below shows the distribution of fuel uses for main heating systems.

Table 6.6 Fuel used for main heating system		
Fuel used	Number of dwellings	% of dwellings
Gas	69,418	90.8%
On-peak electric	3,901	5.1%
Off-peak electric	2,997	3.9%
Solid fuel	109	0.1%
Oil	26	0.0%
Total	76,452	100.0%

6.4 The SAP rating

The SAP rating depends upon a range of factors that contribute to energy efficiency, namely:

- Thermal insulation of the building fabric
- Efficiency and control of the heating system
- Ventilation characteristics of the dwelling
- Solar gain characteristics of the dwelling
- The price of fuels used for space and water heating

The rating is not affected by factors that depend on the individual characteristics of the household occupying the dwelling when the rating is calculated, for example:

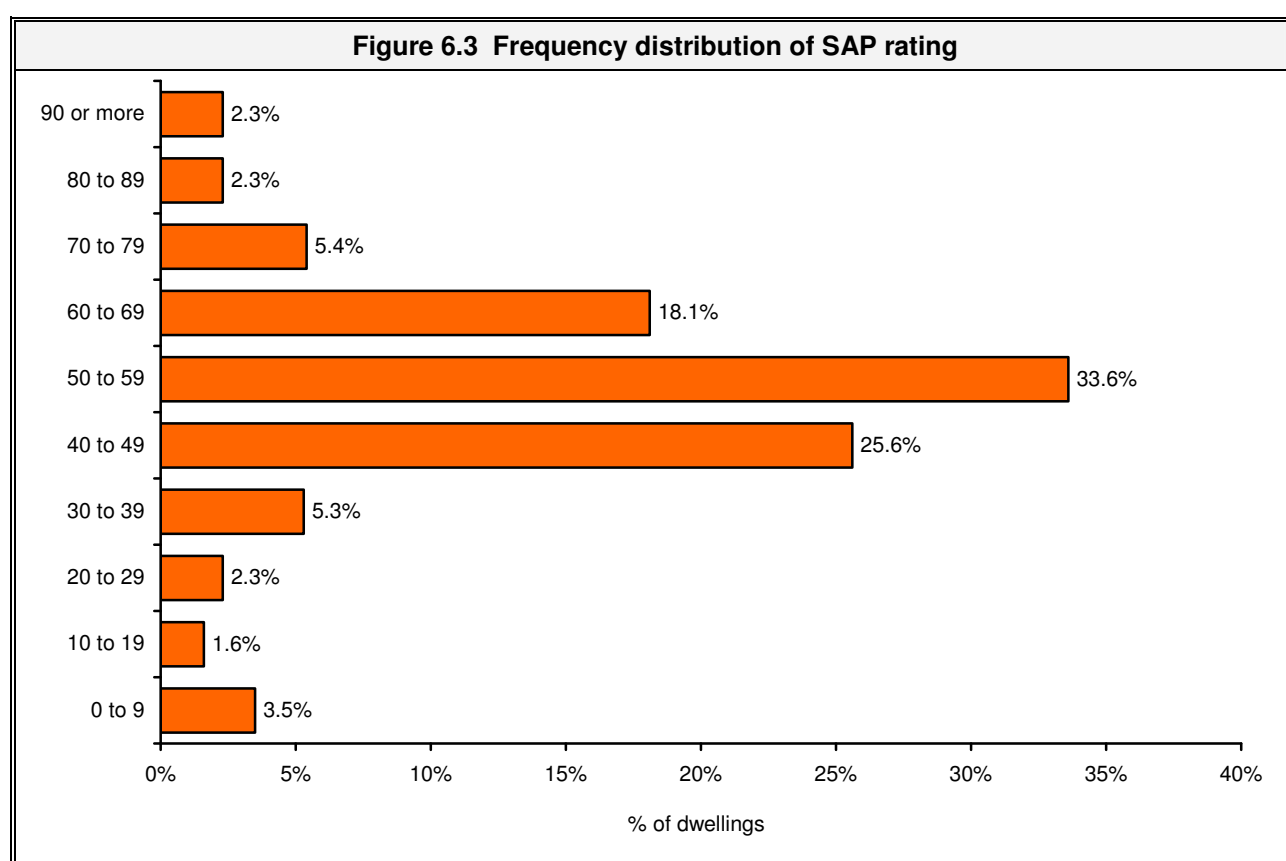
- Household size and composition
- The ownership and efficiency of particular domestic electrical appliances
- Individual heating patterns and temperatures

Nor is it affected by geographical location, so that a given type of dwelling has the same rating in all parts of the United Kingdom.

6.5 General results

The average SAP rating for Merton is 52. This compares with a national average (2001) of 50 (excluding Council stock) and an average for London of 53 (all tenures). It is important to remember however that the SAP rating for an area is an *average* for all the dwellings surveyed; although Merton as a whole has a rating above national and regional figures, there will still be a large number of dwellings in the Borough with SAP ratings below 52.

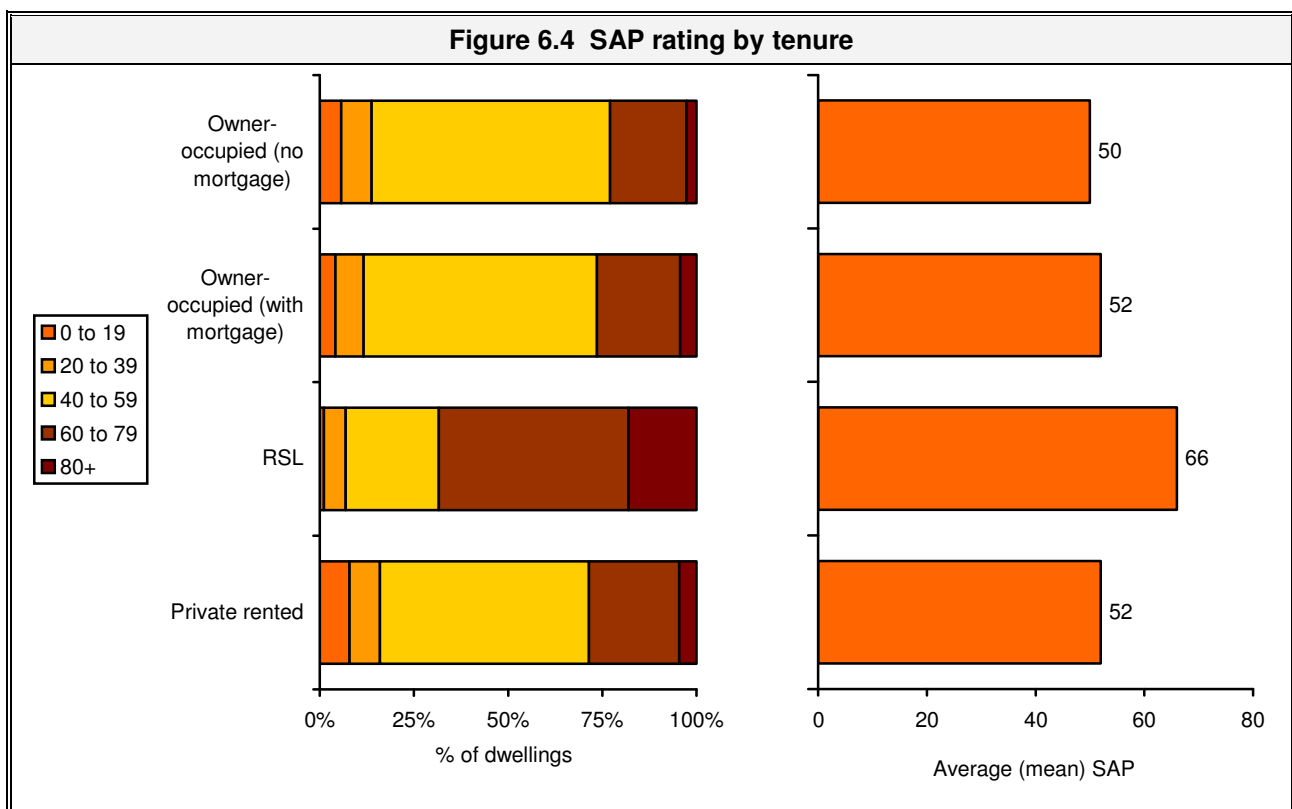
The figure below shows the distribution of SAP ratings. The majority of dwellings have a SAP rating between 40 and 59 (59.2%). An estimated 7.4% of dwellings have a SAP of below 30 compared with a national average of 9.4% and a regional average of 6.0% in London (for all dwellings, including Council stock).

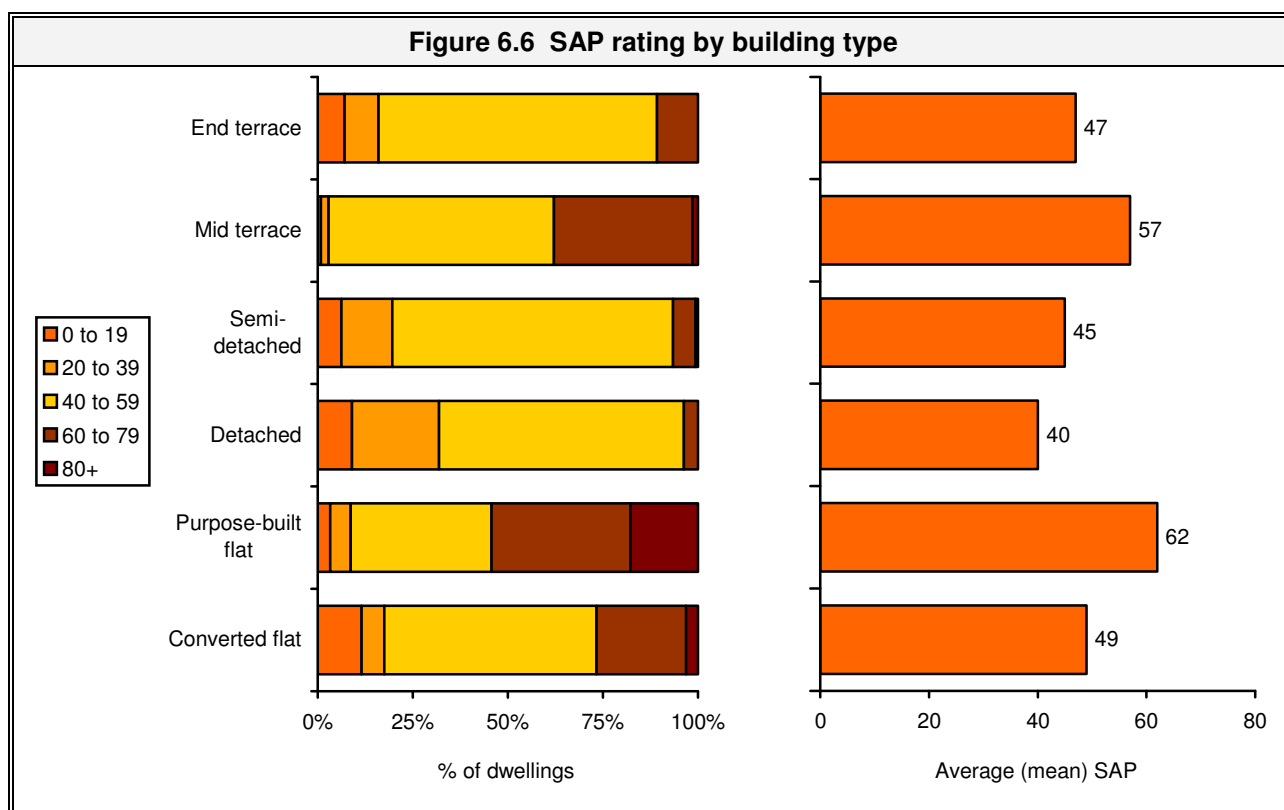
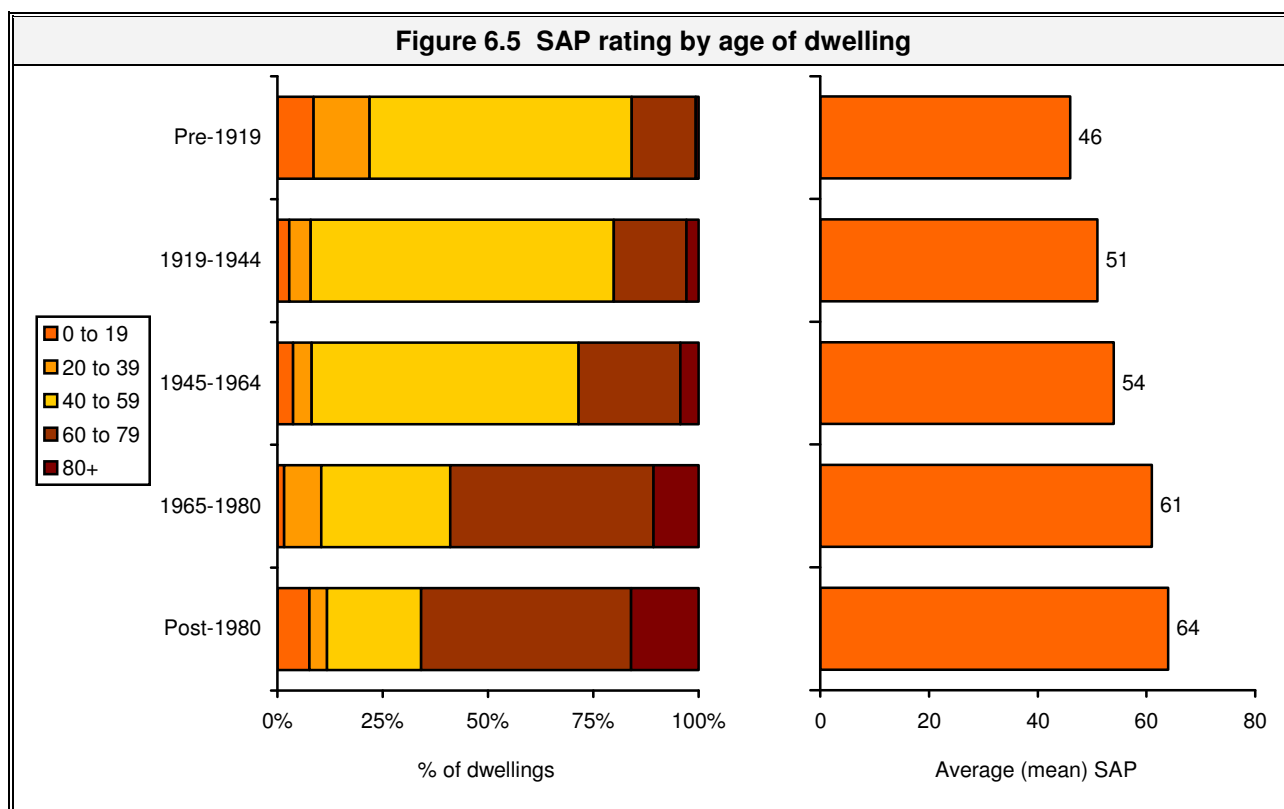


6.6 SAP ratings and dwelling characteristics

The figures below show SAP ratings by tenure, dwelling age and building type. Results show that the mean SAP rating is significantly greater for RSL dwellings and is lowest in owner-occupied (no mortgage) dwellings. The private rented sector shows the largest proportion of dwellings with a SAP below 20, whilst the largest proportion of dwellings with a SAP rating above 80 is found in RSL accommodation. Typically, the older the dwelling, the lower the SAP rating. This is clearly the case in Merton where dwellings built pre-1919 have an average SAP of 46, compared to 64 for post 1980 dwellings.

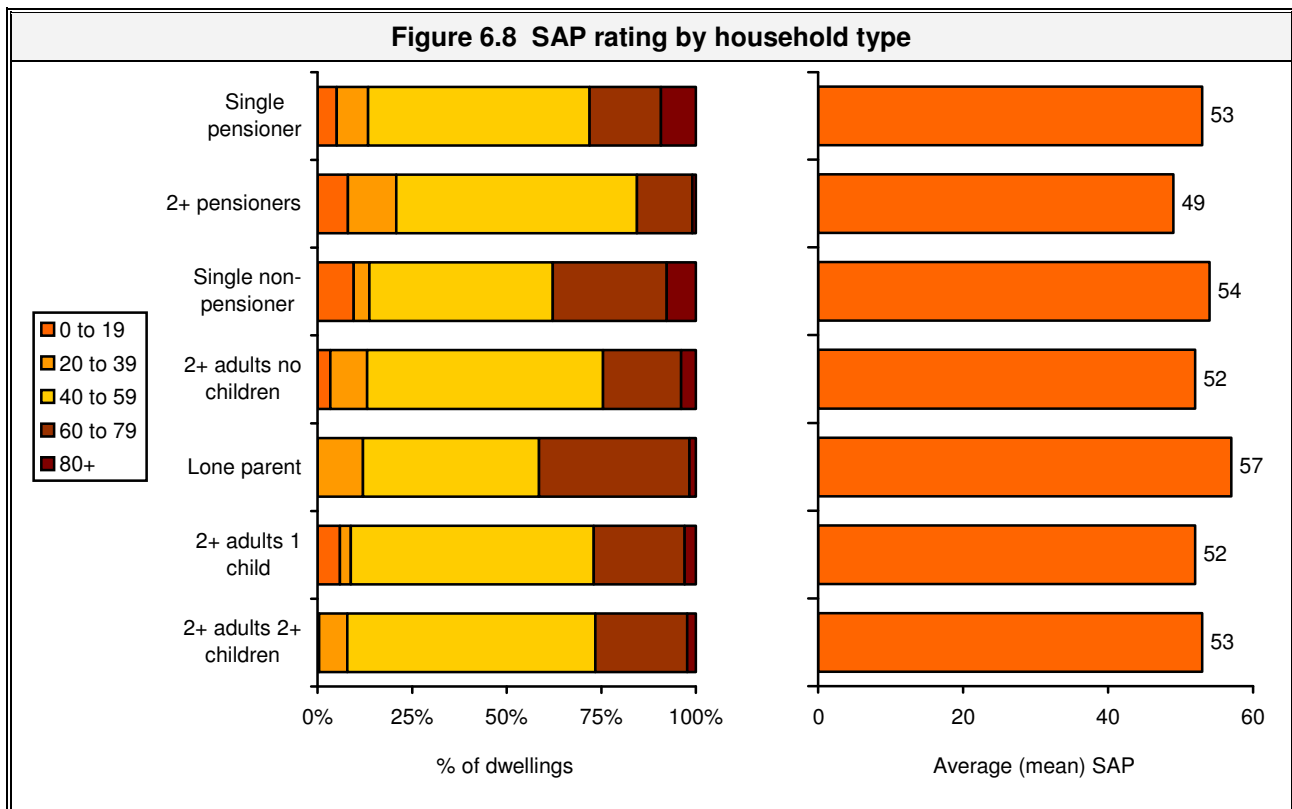
In terms of building type, exposure is often a key factor and hence we would expect lower SAP ratings for detached, semi-detached and end terraced dwellings. In Merton, mid terraced dwellings have a mean SAP of 57, whilst detached houses have a mean rating of 40. Purpose-built flats show the highest mean SAP rating (62).

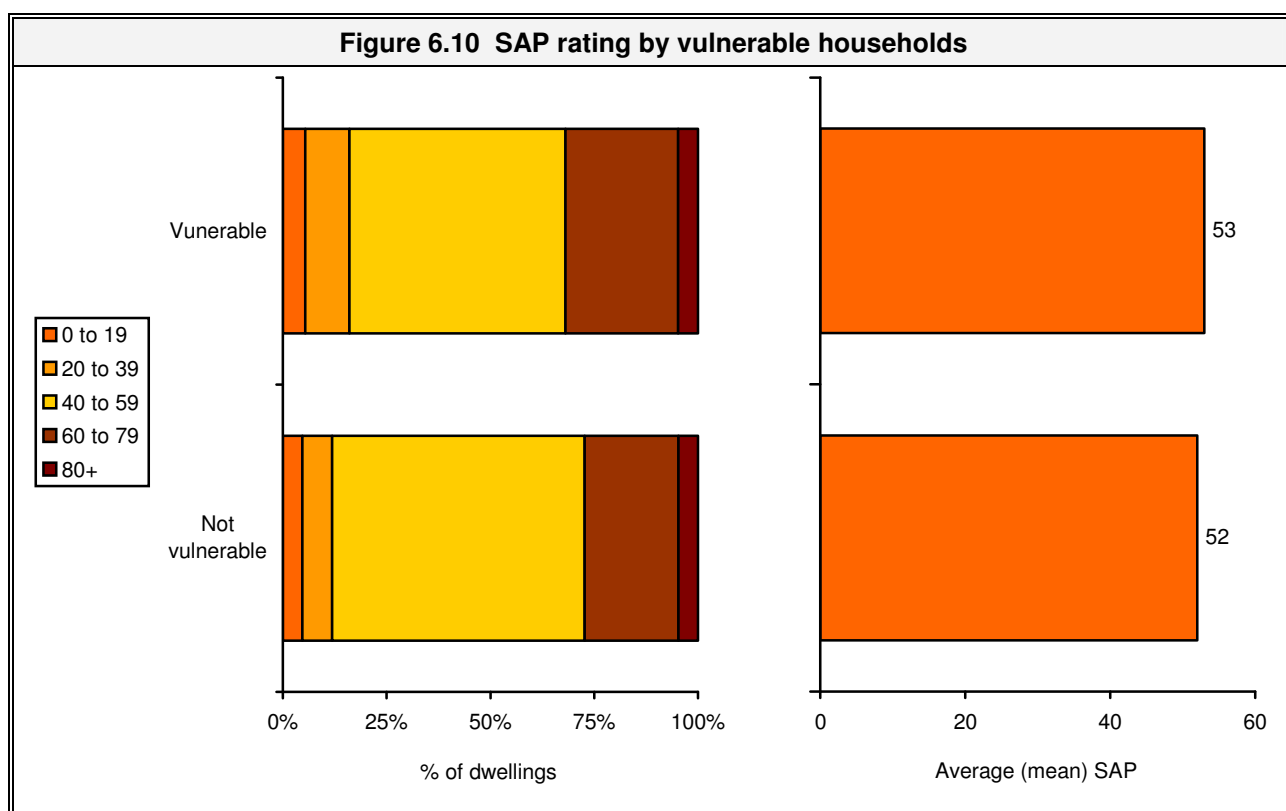
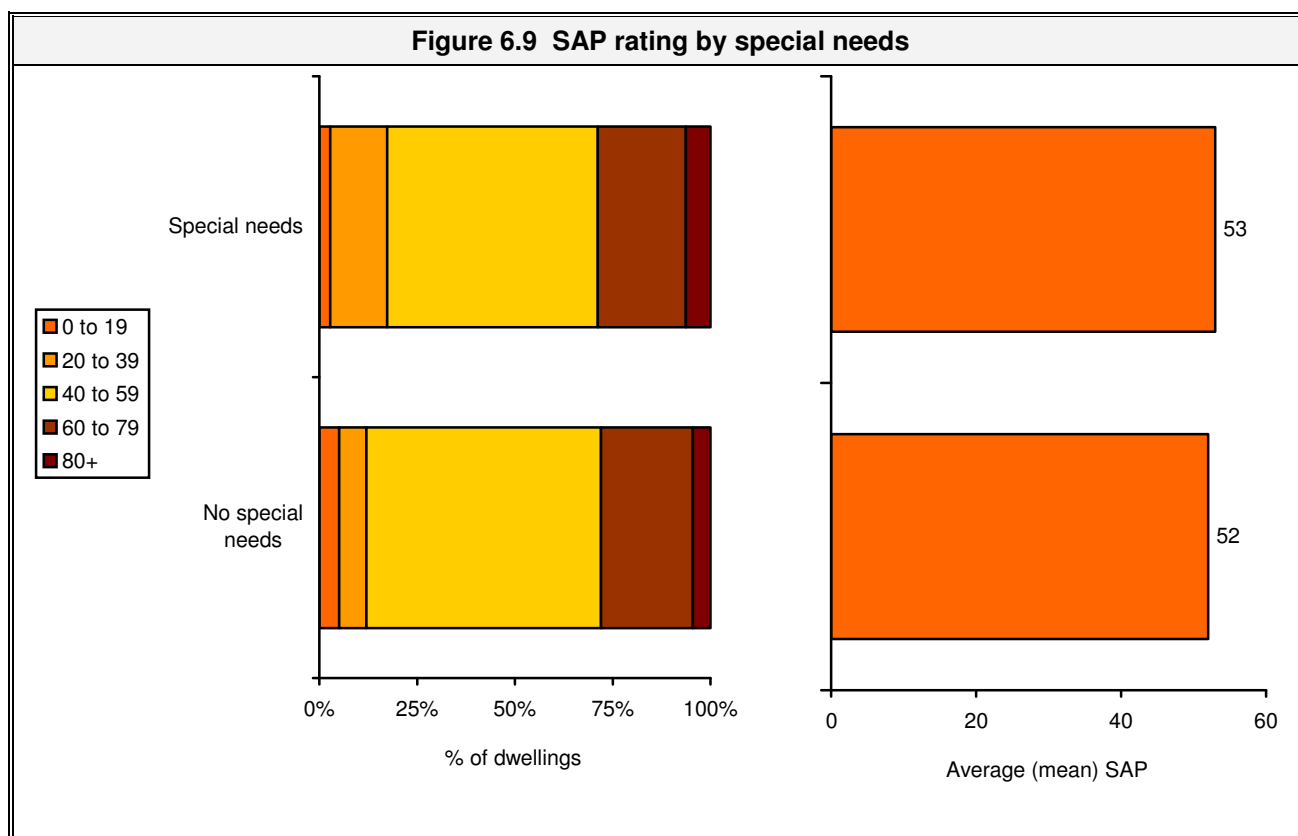




6.7 SAP ratings and household characteristics

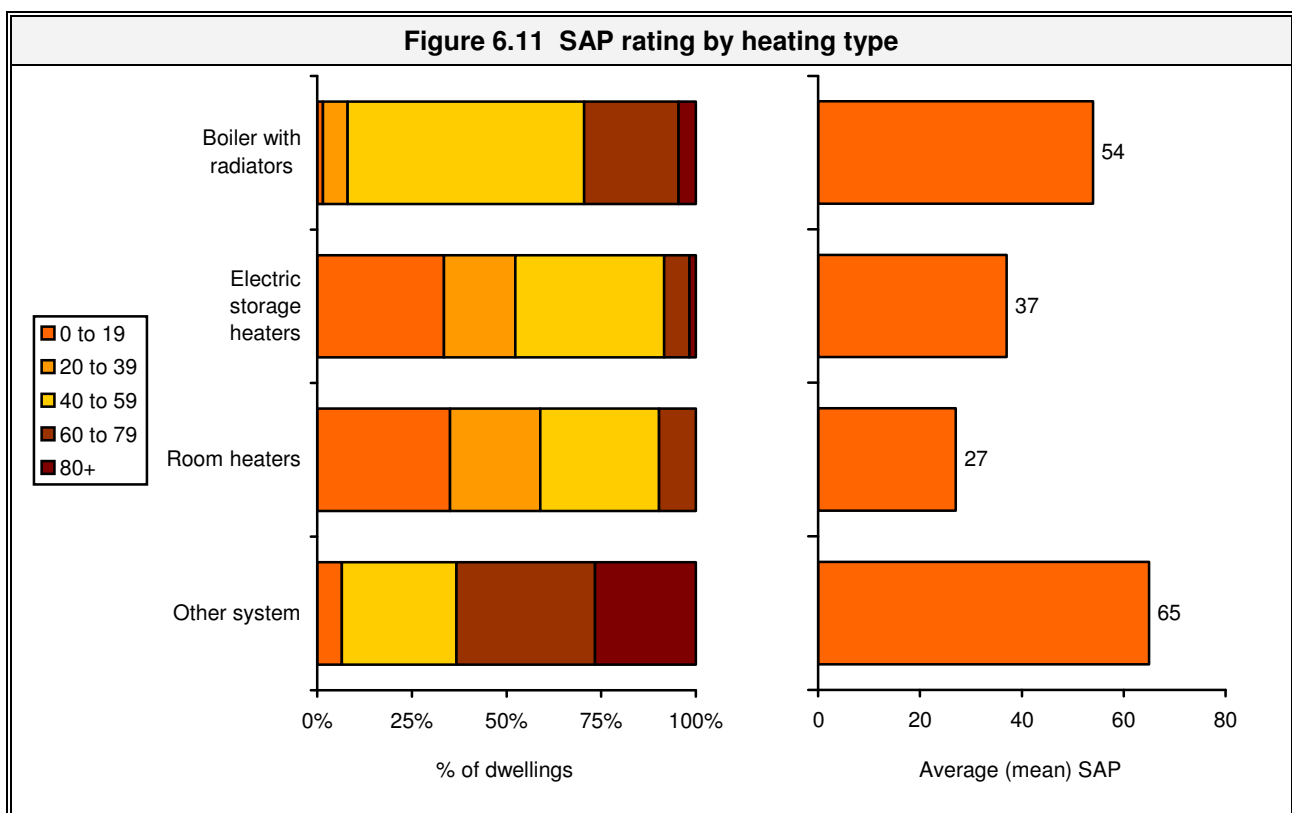
The figures below show SAP ratings by household type, special needs and vulnerable households. The SAP rating is largely dependent on age of dwelling and building type, however it is of interest to see how SAP ratings vary between different types of household group. Results show that there is some difference between household type groups, with dwellings containing multiple pensioner households having lower than average SAP ratings. Lone parent households show the highest SAP rating. Both vulnerable and special needs households show a marginally higher mean SAP ratings than other households.

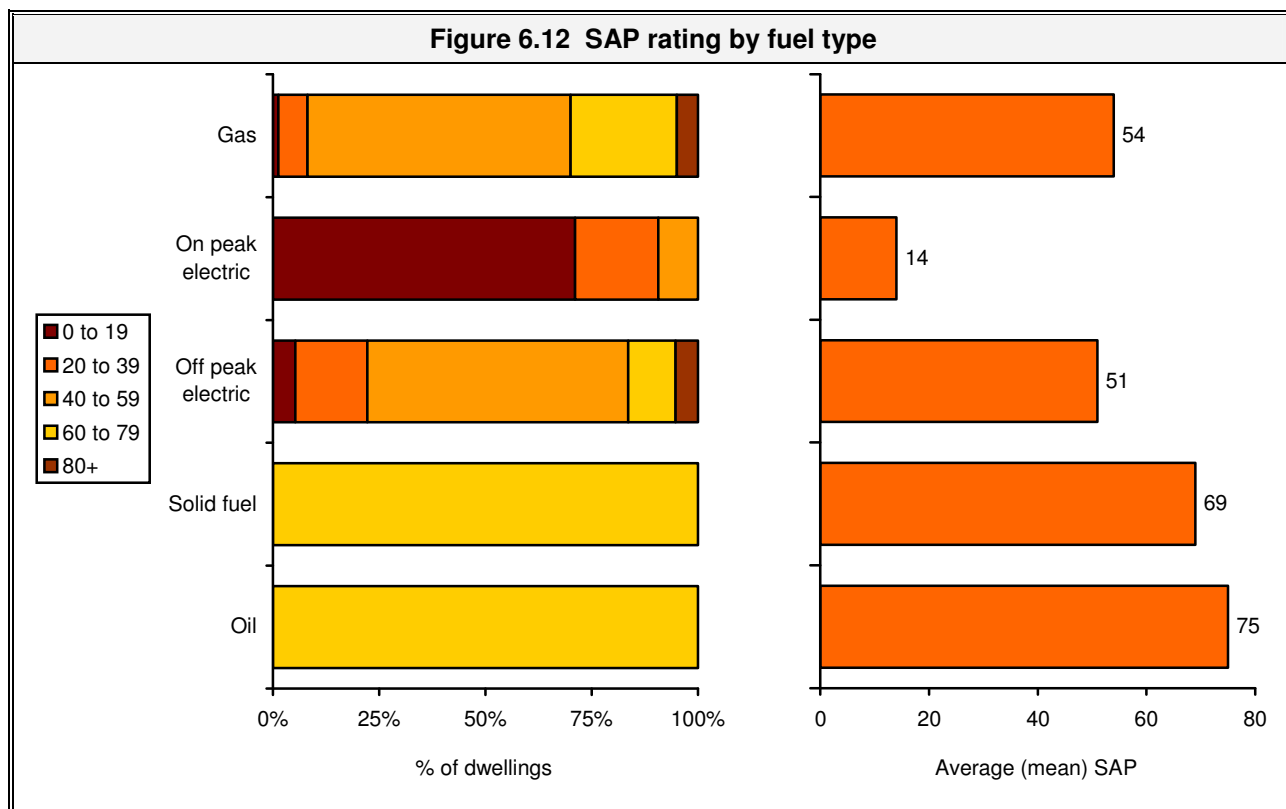




6.8 SAP ratings and heating types and fuel use

The figures below show SAP ratings and heating type and fuel use. These two factors have a significant impact on the SAP rating. By heating type, dwellings with central heating generally have higher SAP ratings than other dwellings. The mean SAP of dwellings with a system from the 'other' category is 65, this figure compares with an average SAP of 30 for dwellings whose main heating type is room heaters. Dwellings using gas as their main fuel type have a mean SAP rating of 54. At the other end of the scale, dwellings using on-peak electricity have a mean SAP of only 14. Caution should be taken with results for oil and solid fuel as estimates are based on only one case.





Additionally, the survey provides some details about how the SAP rating varies depending on the loft insulation and wall construction of the dwelling. The table below gives the mean SAP ratings by each of these factors. The table shows that dwellings with 100mm or more loft insulation have much higher SAP ratings than those with less than 100mm. Dwellings with no loft have the highest SAP ratings. For walls, the data shows that dwellings with filled cavity walls have the highest SAP ratings, dwellings with non-cavity walls show a much lower mean SAP.

Loft insulation	Mean SAP	Cavity walls	Mean SAP
Less than 100mm	47	Non-cavity walls	49
100mm or more	53	Insulated cavity walls	62
No loft	59	Un-insulated cavity walls	57
Average	52	Average	52

6.9 Households with low SAP ratings

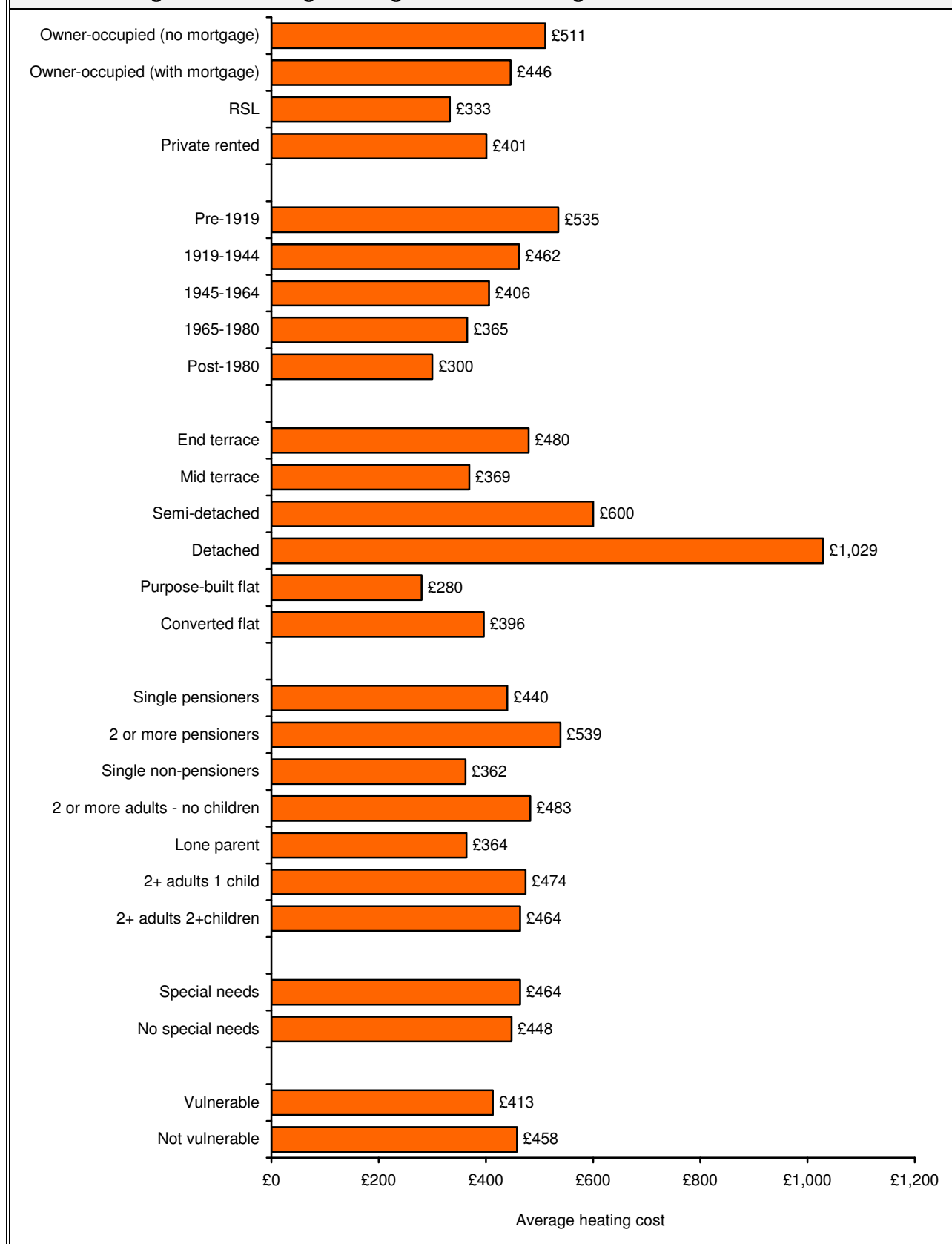
Below are highlighted some characteristics of households with low SAP ratings. A low SAP rating in this instance is taken as a SAP rating of less than 30. Households living in the least efficient homes tend to:

- Live alone – 46.9% of the least efficient homes contain only one person, whereas only 31.6% of all households are single person households
- Be vulnerable – 23.3% of the least efficient households are vulnerable, whereas 18.4% of all households are vulnerable
- Have lower incomes – the average net annual income (including benefits) of households in the least energy efficient homes is £36,523 compared with £34,480 for all households

6.10 Carbon dioxide emissions and cost of heating

As part of the SAP calculation a by-product is the calculation of Carbon Dioxide emissions and the costs for space and water heating. Overall it is estimated that households current heating systems make for an average (mean) requirement to spend £452 on space and water heating and that the average dwelling produces 5.52 tonnes of CO₂ per year.

The figure below shows some characteristics of dwellings/households by fuel costs.

Figure 6.13 Average heating costs and dwelling/household characteristics

6.11 Comparisons with 2001 EHCS

The following table compares the results of this survey with the 2001 EHCS results for all tenures. In general the two surveys show very similar patterns with regard to energy efficiency. Figures in parenthesis present comparisons for private sector dwellings only in the case of London and for all dwellings excluding Council stock in the case of England.

Table 6.8 Comparing 2004 Merton survey and 2001 English House Condition Survey		
Comparator	SAP rating	
	Merton	2001 EHCS
Overall SAP rating	52	51 (50)
London		53 (50)
SAP rating and tenure		
Owner-occupied	51	50
RSL	66	60
Private rented	52	45
SAP rating and dwelling age		
Pre-1919	46	41
1919 – 1944	51	46
1945 – 1964	54	48
Post-1964	63	59
SAP rating and building type		
End terrace	47	46
Mid terrace	57	53
Semi-detached	45	48
Detached	40	49
Purpose-built flat	62	60
Converted flat	49	43
SAP rating and loft insulation		
Loft with less than 100mm insulation	47	46
Loft with 100mm insulation or more	53	52
No loft	59	55
SAP rating and cavity walls		
Non-cavity walls	49	43
Insulated cavity walls	62	60
Un-insulated cavity walls	57	50
SAP rating and heating system		
Central heating & 'other'	55	53
Storage heaters	37	40
Room heaters	27	30

6.12 Summary

An important part of any stock condition survey is the measurement of energy efficiency. The Standard Assessment Procedure (SAP) is the Government's recommended system for home energy rating – where a high score (on a scale from 1 to 120) means a dwelling is more energy efficient. Some of the main findings in Merton were:

- 95.9% of dwellings have central or programmable heating
- 77.5% of dwellings have some form of double glazing
- Merton has an average SAP rating of 52, which is slightly above the average for England (50, for all tenures excluding Council accommodation) and below that for London (53, for all dwellings)
- Detached, owner-occupied (no mortgage) and pre-1919 dwellings showed the lowest mean SAP ratings
- Households living in dwellings with particularly low SAP ratings also appear to show quite distinct characteristics and are likely to be single person households or a vulnerable household, and with lower incomes
- It is estimated that households' current heating systems make for an average (mean) requirement to spend £452 on space and water heating and that the average dwelling produces 5.52 tonnes of CO₂ per year

7. Improving energy efficiency

7

7.1 Introduction

This chapter is devoted to studying ways in which the Council could improve the energy efficiency of dwellings in the Borough. This is both in terms of improving SAP ratings and reducing the amount required to be spent on fuel. In looking at fuel costs it is possible to calculate a 'payback' period which is simply calculating the amount of time it would take for the cost of improvements to equal the cost savings. The report studies three main ways in which the energy efficiency of dwellings can be improved, these are:

- Add or increase insulation to hot water cylinders, lofts and cavity walls
- Upgrade or install heating systems to gas powered programmable central heating
- Upgrade all windows to double glazing

The analysis looks at the costs and savings of each of these measures in isolation as well as combinations of these. The analysis also studies the effects of only carrying out improvements to particular dwellings (e.g. those with initially low SAP ratings, the elderly etc.); this can help the Council in working out the most cost effective package of measures for energy efficiency improvement in the local area.

The two aims of improving energy efficiency asked for in Councils' specifications are:

- i) Action required and costs of improving average SAP ratings to 60
- ii) Action required and costs of improving average SAP ratings by 30%

In the case of Merton the latter would lead to an increase in mean SAP to 68 (given the current estimated average of 52). This chapter therefore seeks to inform these purposes.

7.2 The cost of improving energy efficiency

The table below shows the costs of improving the various measures mentioned in the introduction. It can be seen that in the case of insulation there are three elements and for central heating there are two. In the case of double glazing the actual cost per dwelling will depend on the amount of double glazing already present, adjusted by the size of dwelling. The cost shown is an estimate of the cost per window to reflect the double glazing for each individual dwelling.

In the case of insulation a dwelling can be improved on between none and all three of the elements shown (e.g. if cavity walls do not exist then insulation is not an option) and no adjustments are made for size of the dwelling. In the case of central heating an upgrade is considered to be the option where a relatively inefficient central heating system already exists and full installation is the option where there is currently no central heating provision.

Hence whilst the costs of insulation measures can be cumulative, the costs of heating systems can only be one or other of those shown – in this way the maximum cost per average sized dwelling (with ten windows) will be £9,225 (£25+£200+£500+£4,000+£4,500).

Table 7.1 Cost of energy improvement measures (per dwelling)	
Energy efficiency improvement measure	Cost per dwelling
Insulation	
Hot water cylinder jacket to minimum 80mm	£25
Loft insulation to minimum 200mm	£200
Cavity wall insulation	£500
Double glazing	
Install full double glazing per window	£400
Central heating	
Upgrade current system	£2,000
Install new central heating system	£4,500

7.3 Improvements to dwellings requiring energy efficiency measure

The table below shows the impact of applying various energy efficiency measures on dwellings requiring specific action (e.g. the insulation and double glazing group would only include those dwellings requiring both measures). This impact is measured in improvements to SAP ratings and also 'payback' periods (based on the cost of measures compared with the estimated reduction in running costs).

Table 7.2 Impact of energy improvement measures

Energy improvement measure required	Number of dwellings requiring measures (including upgrades)	Cost per dwelling requiring improvement	Previous SAP	New SAP	Previous energy cost	New energy cost (per dwelling)	Payback period (years)	Total cost of measure (Borough-wide)
Insulation only	26,767	£330	57	62	£387	£352	9.2	£8.8m
Double glazing only	5,338	£3,408	54	58	£441	£408	103.7	£18.2m
Central heating only	1,415	£3,179	64	87	£278	£175	30.7	£4.5m
Insulation and double glazing	22,542	£4,032	49	56	£527	£454	55.4	£90.9m
Insulation and central heating	7,902	£3,573	48	81	£440	£216	15.9	£28.2m
Double glazing & central heating	867	£5,333	47	86	£430	£161	19.8	£4.6m
All three measures	5,916	£7,083	37	85	£661	£200	15.4	£41.9m
No additional measures	5,707	-	63	63	£317	£317	-	-
Total	76,452	-	-	-	-	-	-	£197.2m

The table shows for example that a total of 5,916 dwellings require improvements to all of insulation, double glazing and central heating. Carrying out these measures would increase the SAP rating of these dwellings from 37 to 85. The consequent improvement in running costs would be a reduction of £461 per dwelling per annum (from £661 to £200). However, with a cost per dwelling of £7,083 it would take 15.4 years (£7,083/£461) for the costs to be recouped.

7.4 Improvements to energy efficiency throughout the Borough

It is of more interest to the Council to study the impact of energy improvement measures on the Borough overall. Whilst the table above divided dwellings into mutually exclusive groups, the table below shows them in a cumulative way (e.g. all those dwellings requiring insulation will automatically be in the 'insulation and/or double glazing' group even if they do not require double glazing). Without any improvements, the current stock has a mean SAP rating of 52 with average heating costs (for space and hot water) of £452 per dwelling.

Table 7.3 Impact of energy improvement measures							
Energy improvement measure	Number of dwellings requiring measures (including upgrades)	Cost per dwelling requiring improvement	New SAP	New energy cost (per dwelling)	Average cost of improvements (per dwelling in the Borough)	Payback period (years)	Total cost of measures (Borough-wide)
No extra measures	-	-	52	£452	-	-	-
Only insulation	63,126	£300	56	£421	£248	8.0	£18.9m
Only double glazing	34,662	£3,510	54	£434	£1,591	85.6	£121.7m
Only central heating	16,099	£3,515	59	£393	£740	12.6	£56.6m
Insulation and/or double glazing	69,331	£2,028	57	£402	£1,839	36.6	£140.6m
Insulation and/or central heating	65,407	£1,154	62	£368	£988	11.7	£75.5m
Double glazing and/or central heating	43,979	£4,053	61	£378	£2,331	31.5	£178.2m
Any of the three measures	70,745	£2,787	64	£352	£2,579	25.8	£197.2m

The table shows for example that altogether 63,126 dwellings could benefit from additional insulation. Carrying out this insulation would improve the SAP rating for the Borough from 52 to 56 and reduce average energy costs per dwelling to £421 per annum (from £452) a reduction of £31. The total cost per dwelling of these measures (including dwellings not requiring any improvement) would be £248 hence the payback period is 8.0 years (£248/£31). The total cost of adding insulation for the whole of the Borough is estimated to be £18.9m. For double glazing the payback period is considerably longer, whilst updating/installing central heating systems has a payback period of 12.6 years.

Combining measures suggests that insulation and central heating improvements together could improve the mean SAP to 62 with a cost per dwelling of £1,154 – this would reduce running costs by £84 giving a payback period of 11.7 years. Combining all three measures shows an improved SAP to 64 at a cost per dwelling of £2,787 and a payback period of 25.8 years. In general any package of measures which includes installing double glazing has a considerably longer payback period and smaller increases in SAP ratings.

7.5 Targeted energy improvements

It is uncommon for any local authority to look at improvements for all types of dwellings/households, mainly due to the cost of such improvements. The table below suggests a few groups which might be targeted for energy improvement measures and the relative improvement possible to be made to the relevant dwellings. All the figures are based on the 'insulation and central heating' category although it should be recognised that where a group of households or dwellings show particularly high improvements it is likely that a lesser package of measures would still be more beneficial than if targeted towards other groups.

Targeting households where people are on benefit is often a starting point for any scheme, however this has the drawback that such households do not necessarily live in dwellings which are less efficient than dwellings in general. The table below shows characteristics of improving energy efficiency for dwellings with low SAP ratings (currently below 30), elderly households, vulnerable households, special needs households and low income households (net annual income including benefits) plus low income owner-occupiers. The bottom row of the table repeats the Borough-wide data for comparative purposes.

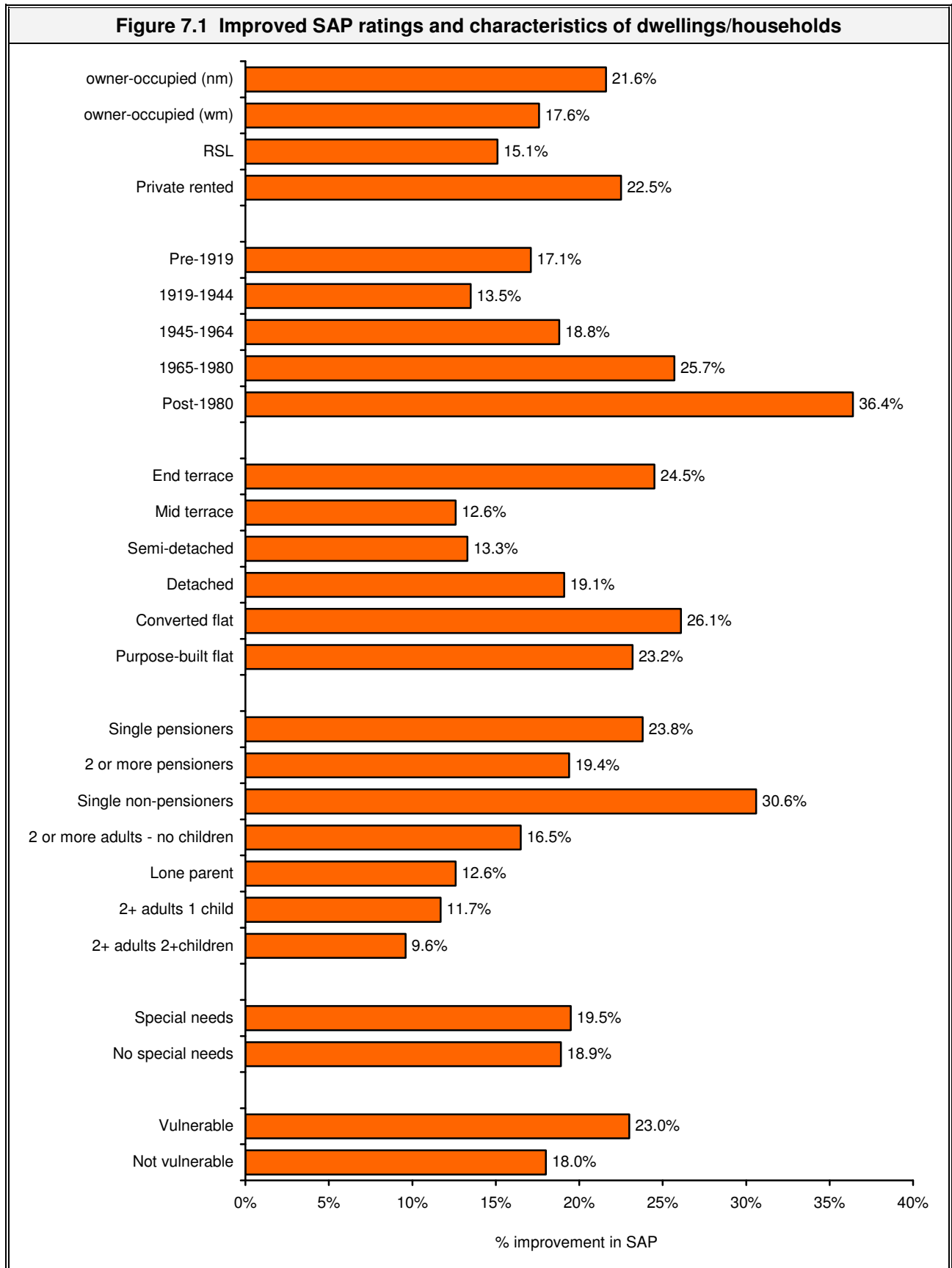
Dwelling/ household group	Number of dwellings in group	Cost per dwelling requiring improvement	Previous SAP	New SAP	Previous energy cost	New energy cost (per dwelling)	Payback period (years)	Total cost of measure (Borough-wide)
SAP < 30	5,640	£3,364	13	60	£1,133	£549	5.8	£19.0m
Elderly households	13,500	£1,240	51	63	£474	£370	12.0	£16.7m
Vulnerable households	13,702	£1,233	53	65	£413	£327	14.3	£16.9m
Special needs households	9,041	£1,245	53	63	£464	£374	13.9	£11.3m
Income < £10k	20,363	£1,204	53	65	£434	£342	13.1	£24.5m
Owner-occupied (income < £10k)	14,179	£1,265	50	63	£464	£359	12.0	£17.9m
All dwellings	76,452	£988	52	62	£452	£368	11.7	£75.5m

The table shows that for all but one of the specific groups chosen for analysis a payback period in terms of the suggested works would in fact be higher than the average for all dwellings in the Borough. The group which shows the shortest payback period (dwellings with SAP ratings below 30) is unfortunately the group which is most likely to be difficult to identify.

7.6 Improved SAP ratings and dwelling/household characteristics

The figure below shows how the average SAP ratings of individual dwelling/household groups change from their current average (mean SAP Borough-wide of 52) to improving dwellings' insulation and heating systems (mean SAP Borough-wide of 62), the average dwelling/household sees an improvement of 19.4%. Including double glazing in this measure could push the improvement up to 22.6%.

Dwellings/households that show particularly high improvements in SAP ratings include private rented dwellings (up 22.5%), post-1980 dwellings, and converted flats (26.1%). By household type above average improvements are seen for single person households. Both special needs and vulnerable households also show an above average level of improvement. In contrast dwellings/households which show particularly lower improvements RSL dwellings (up 15.1%), and older dwellings. Households containing children also show below average levels of improvement.



7.7 The aims of energy efficiency improvement

A 30% improvement in energy efficiency for the stock appears difficult to achieve. A full range of measures will increase the mean SAP rating of dwellings from 52 to 64 (an improvement of 22.6%), however the total cost of this is estimated to be £197.2m. A more realistic aim might be to look at upgrading or installing heating systems to more efficient central heating systems along with a programme of insulation; these two measures would increase the mean SAP rating from 52 to 62 (an improvement of 19.4%) at a total cost of £75.5m. It can be seen therefore that there is a clear trade-off between further improvements to energy efficiency and the cost of bringing about these improvements.

In truth there is a limit to the amount dwellings can be improved – for example in the stock without cavity walls (and hence considerable exposure through inefficient walls) the amount that can reasonably be done to dwellings to improve efficiency is more limited than in other dwellings. That said, there are considerable improvements possible from improving insulation in dwellings and upgrading or replacing heating systems.

An average SAP of 64 is technically possible. However this requires such a high take-up of energy efficiency measures that it might not be a sensible target over any reasonable time period. If however dwellings built in the future were included in the assessment, built under current Building Regulations to a SAP rating of 80, then an improvement in average SAP ratings of 30% might be a reasonable long term target.

7.8 Summary

Improving energy efficiency in Merton by 30% appears possible but difficult to achieve. To achieve an improvement of 22.6% would mean improving virtually every dwelling in the Borough to some degree. By applying insulation and central heating improvements to dwellings the increase in SAP is 19.4% (to a mean SAP of 62). Small further improvements could be made through double glazing although this does not appear to be very cost-effective. The package of measures estimated to achieve the highest mean SAP (of 64) would entail a total cost of £197.2m Borough-wide.

Section D: Emerging standards

This section focuses on newer areas of focus for housing conditions – Decent Homes, houses in multiple occupation (HMOs), and the Housing Health and Safety Rating System (HHSRS). Whilst the Decent Homes standard is perhaps the broadest of all the housing stock condition standards in place, the other two issues are very specific.

The first chapter analyses those dwellings which are classified as non-decent. After looking at the reasons for dwellings failing the standard, an analysis is made of how non-decency correlates with different characteristics of households and dwellings. Finally, a comparison is made with England as a whole.

The following chapter examines HMOs as a specific group, looking initially into their particular profile of characteristics. The chapter deals also with issues of safety, amenities, and repair costs for different levels of disrepair.

The final part of this section deals with the frequency and severity of hazards in the Borough, as measured by the HHSRS. Looking at ten specific hazards to determine the severity of each hazard, appropriate action required by the Council is analysed and an assessment made of which groups are most at risk.

8

8. Decent homes

8.1 Introduction

The government's housing objective is "to ensure that everyone has the opportunity of a decent home and so promote social cohesion, well being and self-dependence". In 2000 the Government set a standard for 'decent homes' whereby housing should:

- i) Meet the current statutory minimum standard for housing (i.e. not unfit)
- ii) Be in a reasonable state of repair
- iii) Have reasonably modern facilities and services
- iv) Provide a reasonable degree of thermal comfort

The Decent Homes standard can be seen as a Government standard for Government reporting purposes. Although the Decent Homes standard was initially intended to be for the public sector housing stock only, it has more recently become an important issue in the private sector. The government has indicated targets for bringing private sector homes up to the decent homes standard. A public service agreement (PSA) was set out by the ODPM in 2002. Of note from this document is PSA target 7 (PSA7) which deals with decent homes. The PSA target is *'By 2010, bring all social housing into a decent condition with most of this improvement taking place in deprived areas, and for vulnerable households in the private sector, including families with children, increase the proportion who live in homes that are in decent condition.'*

For the private sector, the PSA has set targets for the proportion of vulnerable households achieving the decency standard by 2005, 2010 and beyond. Government data states that the baseline for 2001 is 57% and that current targets are to increase this to 63% by 2005, to 70% by 2010 and to 75% by 2015/20. The general implication is that whilst individual local authorities are not necessarily expected to meet these targets (as this will very much depend on their own baseline) they are expected to contribute towards meeting targets nationally. This chapter studies each of the above criteria to ascertain the number of homes which are 'non-decent' and the reasons why.

8.2 Applying the standard

The 2001 EHCS sets out what factors would be considered to make a dwelling 'non-decent'. The table below shows the four criteria along with suggested measurements by the guidance, this is followed by our comment about how the current survey data has been used to meet the criteria.

Table 8.1 Decent homes criteria and comment on calculation

Decent home criterion	Summary of government guidance	Application in this survey
Does it meet the current minimum standard?	Is dwelling unfit?	All unfit dwellings are included here.
Is it in reasonable state of repair?	Key components: external wall structure, wall finish/applied surface, chimney stacks, roof structure, roof covering, external doors, windows, gas system, electrical supply, heating boiler Non key components: kitchen amenities, bathroom amenities, heating system	The definition used in the survey is consistent with the EHCS and considers urgent work required to any of the key components or urgent work required to two or more of the non-key components.
Has it reasonably modern facilities?	Kitchen: modern (<20 years old), adequate space and layout. Bathroom: modern (<30 years old) Appropriately located bathroom and WC Adequate noise insulation Flats: common areas adequate size and layout	A dwelling must fail on at least three of these categories to be considered as non-decent. This is consistent with the EHCS.
Does it provide a reasonable degree of thermal comfort?	Has programmable heating system and (for gas/oil programmable heating) has it cavity wall insulation and/or at least 50mm of roof insulation, where appropriate (for electric storage heaters/LPG/programmable solid fuel central heating) has it cavity wall insulation and at least 200mm of roof insulation, where appropriate?	All of this information is available from the survey data and hence this part of the standard is replicated in full.

8.3 National figures

The 2001 EHCS estimates that a total of 7.0m dwellings are non decent. This represents 33% of all dwellings. Of these, 1.6m are social sector dwellings, representing 38% of the social sector. The remaining 5.4m non-decent homes are private sector dwellings, this represents 32% of the private sector. It is additionally estimated that 79% of non-decent dwellings fail on only one of the four criteria used. The table below shows estimates of the reasons for failure. It is clear that the main reason for a home to be considered as non-decent is under the heading 'thermal comfort'.

Non decent due to	% of all dwellings	% of non-decent dwellings
Unfitness	4.2%	13.0%
Disrepair	9.2%	28.7%
Modern facilities	1.8%	5.7%
Thermal comfort	25.4%	79.4%

Note: Percentages add up to more than 100 because some dwellings fail on more than one criterion

8.4 Decent homes in Merton

Having worked through each of the four headings used to determine decent (or non-decent) homes in Merton, the survey estimates that in the private sector 30.4% of dwellings would be categorised as non-decent. This represents 23,272 dwellings in the Borough. The table below highlights the reasons for homes being considered as non-decent. The results suggest that the reasons for non-decency in Merton are similar to those found nationally (for all dwellings), however a higher proportion of dwellings in Merton are considered not to have modern facilities.

Non decent due to	Number of non-decent dwellings	% of non-decent dwellings
Unfitness	4,093	17.6%
Disrepair	7,163	30.8%
Modern facilities	4,094	17.6%
Thermal comfort	16,089	69.1%

Note: Percentages add up to more than 100 because some dwellings fail on more than one criterion

The table below shows the number of reasons for dwellings being considered non-decent. The table shows that the majority of non-decent dwellings (74.7%) are considered such on just one of the various items. This is comparable to the national estimate (for all dwellings) of 79%.

Number of items	Number of non-decent dwellings	% of non-decent dwellings
One	17,378	74.7%
Two	4,063	17.5%
Three	1,389	6.0%
Four	442	1.9%
Total	23,272	100.0%

8.5 Characteristics of non-decent homes

The figure below shows some dwelling and household characteristics of non-decent homes. Private rented dwellings are most likely to be considered non-decent (40.0%), as are pre-1919 dwellings (37.6%). Additionally converted flats are most likely to be non-decent, with 42.6% failing the decent homes standard.

By household type, single pensioner households show high levels of non-decency, particularly under the modern facilities criteria. The data also shows that special needs households are much more likely than other households to be living in non-decent accommodation, mostly on account of disrepair. Vulnerable households are also moderately more likely to live in non-decent homes. The proportion of vulnerable households in non-decent homes (31.9%) is below national estimates (for all dwellings) of around 43%.

Table 8.5 Non-decent homes and dwelling/household characteristics					
% of dwellings in group that:					
Dwelling characteristic	Are non decent	Fail fitness	Fail disrepair	Fail modernisation	Fail thermal comfort
Tenure					
Owner-occupied (nm)	32.4%	6.3%	11.5%	6.2%	21.1%
Owner-occupied (wm)	27.1%	3.6%	5.6%	4.3%	20.5%
RSL	20.9%	2.7%	8.4%	3.8%	8.5%
Private rented	40.0%	9.6%	16.7%	7.3%	27.2%
Age of dwelling					
Pre-1919	37.6%	6.4%	14.3%	6.3%	27.1%
1919-1944	26.5%	6.6%	8.3%	5.5%	16.0%
1944-1964	31.8%	2.7%	13.8%	6.1%	22.3%
1965-1980	32.4%	3.0%	5.8%	9.7%	19.8%
Post-1980	26.4%	1.1%	1.6%	0.0%	24.8%
Type of dwelling					
End terrace	28.1%	7.1%	9.4%	5.8%	18.9%
Mid terrace	30.1%	4.1%	6.8%	3.9%	22.9%
Semi-detached	23.9%	5.4%	8.5%	2.9%	16.4%
Detached	23.7%	2.8%	17.1%	0.0%	13.5%
Purpose-built flat	32.9%	3.1%	6.4%	7.6%	22.9%
Converted flat	42.6%	10.9%	17.3%	10.3%	27.0%
All dwellings	30.4%	5.4%	9.4%	5.4%	21.0%
Household type					
Single pensioners	42.4%	4.8%	15.2%	11.8%	25.7%
2 or more pensioners	30.0%	1.7%	9.5%	2.7%	20.5%
Single non-pensioners	35.0%	4.4%	7.6%	4.7%	27.8%
2+ adults, no children	24.9%	3.2%	6.9%	4.1%	16.9%
Lone parent	30.9%	7.3%	16.6%	7.9%	18.6%
2+ adults, 1 child	23.4%	5.7%	6.6%	1.9%	17.4%
2+ adults, 2+ children	25.5%	6.3%	7.2%	4.2%	18.3%
Special needs					
Special needs	35.9%	6.5%	17.6%	9.0%	21.1%
No special needs	28.6%	4.0%	7.3%	4.5%	20.5%
Vulnerable households					
Vulnerable	31.9%	5.6%	14.4%	7.0%	19.3%
Not vulnerable	28.9%	4.0%	7.3%	4.6%	20.9%
All households	29.4%	4.3%	8.6%	5.0%	20.6%

8.6 Cost to make homes decent

In addition to estimating the number of homes considered as non-decent it is possible to estimate the likely costs of making these homes decent. In the case of unfit homes or those not in a reasonable state of repair the costs can be taken directly from survey evidence about the causes of unfitness/disrepair. In the case of modern facilities the cost estimates are based on the cost of replacing a kitchen/bathroom (as appropriate) as well as separate costs where the reason for non-decency is poor space, layout, or location. Finally for thermal comfort the costs are taken as the cost for providing central heating and insulation measures (where central heating is not present) and for providing insulation only where there is central heating.

The table below shows estimated costs for rectifying each reason for non-decency and the total cost Borough-wide. The table shows that the average non-decent home would cost £2,976 to make it decent. Borough-wide this would entail a total cost of £69.3m.

Non decent due to	Number of non-decent dwellings	Average cost per non-decent dwelling	Total cost Borough-wide
Unfitness	4,093	£3,959	£16.2m
Disrepair	7,163	£2,044	£14.6m
Modern facilities	4,094	£4,731	£19.4m
Thermal comfort	16,089	£1,184	£19.0m
Average/total	23,272	£2,976	£69.3m

8.7 Comparisons with 2001 EHCS

The following table compares the results of this survey with the 2001 EHCS. In general the two surveys show similar patterns with regard to the characteristics of decent homes. Overall, Merton shows a slightly lower level of non-decency when compared with both regional and national figures. Vacant dwellings show a particularly low level of non-decency when compared to the EHCS and results for dwelling age show a different trend.

Table 8.7 Comparing 2004 Merton survey and 2001 English House Condition Survey		
Comparator	Non-decent dwellings	
	Merton	2001 EHCS () indicates private sector only
Overall proportion non-decent	30.4%	33.1% (31.9%)
London		36.2% (34.7%)
Non-decency and tenure		
Owner-occupied	29.2%	29.4%
Private rented	40.0%	49.4%
RSL	20.9%	27.6%
Local Authority	-	42.7%
Vacant dwellings	29.4%	49.5%
Non-decency and dwelling age		
Pre-1919	37.6%	51.1%
1919 – 1944	26.5%	38.3%
1945 – 1964	31.8%	35.4%
Post-1964	28.5%	20.3%
Non-decency and building type		
All houses	27.4%	30.2%
Purpose-built flat	32.9%	45.4%
Converted flat	42.6%	46.7%

8.8 Summary

Survey information was used to calculate a measure of 'decent homes' based on published government guidance. Although the decent homes standard was originally designed for social sector housing the principle has now been extended to the private sector. In assessing decent homes four factors are taken into account. These are:

- Unfitness
- Disrepair
- Modern facilities
- Thermal comfort

The results suggested that 30.4% of dwellings failed the standard under one or more of these headings. This figure compares with a national estimate (for all dwellings) of 33.1%. Some of the main findings relating to 'non-decent' homes were:

- The main reason for failure was thermal comfort, 69.1% of non-decent homes failed under this heading. This is also the main reason nationally
- Around three quarters of 'non-decent' homes fail on only one of the four factors
- Groups with high levels of 'non-decency' included: private rented, pre-1919 dwellings, and converted flats
- Households that show high levels of non-decency include single pensioner, special needs, and vulnerable households
- The Borough-wide cost of remedying non-decent homes is £69.3m

9

9. Houses in multiple occupation

9.1 Introduction

This chapter looks at the characteristics of houses in multiple occupation (HMOs). The Housing Act 1985 provides the legal definition of HMO that was subsequently amended by the Local Government and Housing Act 1989. The legal definition of an HMO is 'a house which is occupied by persons who do not form a single household'.

The main reason for interest in HMOs is an additional standard under Section 352 of the *1985 Housing Act*.

Box 9.1 HMO standard (1985 Housing Act)

Under the provisions of Section 352 of the Housing Act 1985, a house in multiple occupation is not reasonably suitable for the number of occupants, if it fails to meet one or more of the following requirements (having taken into account the numbers of individuals and/or households living on the premises) and as a result of that failure is not reasonably suitable for occupation by those occupants:

- Satisfactory facilities for the storage, preparation and cooking of food, including an adequate number of sinks with a satisfactory supply of hot and cold water
- Adequate number of suitably located WCs for the exclusive use of the occupants
- Adequate number of suitably located fixed baths or showers and wash hand basins each of which is provided with a satisfactory supply of hot and cold water for the exclusive use of the occupants
- Adequate means of escape from fire

HMOs have been split into 6 main categories as shown in the table below. The categories follow as closely as possible Chartered Institute of Environmental Health definitions. The table below estimates that there were 5,062 buildings acting as HMOs at the time of the survey – almost two thirds of these are converted houses.

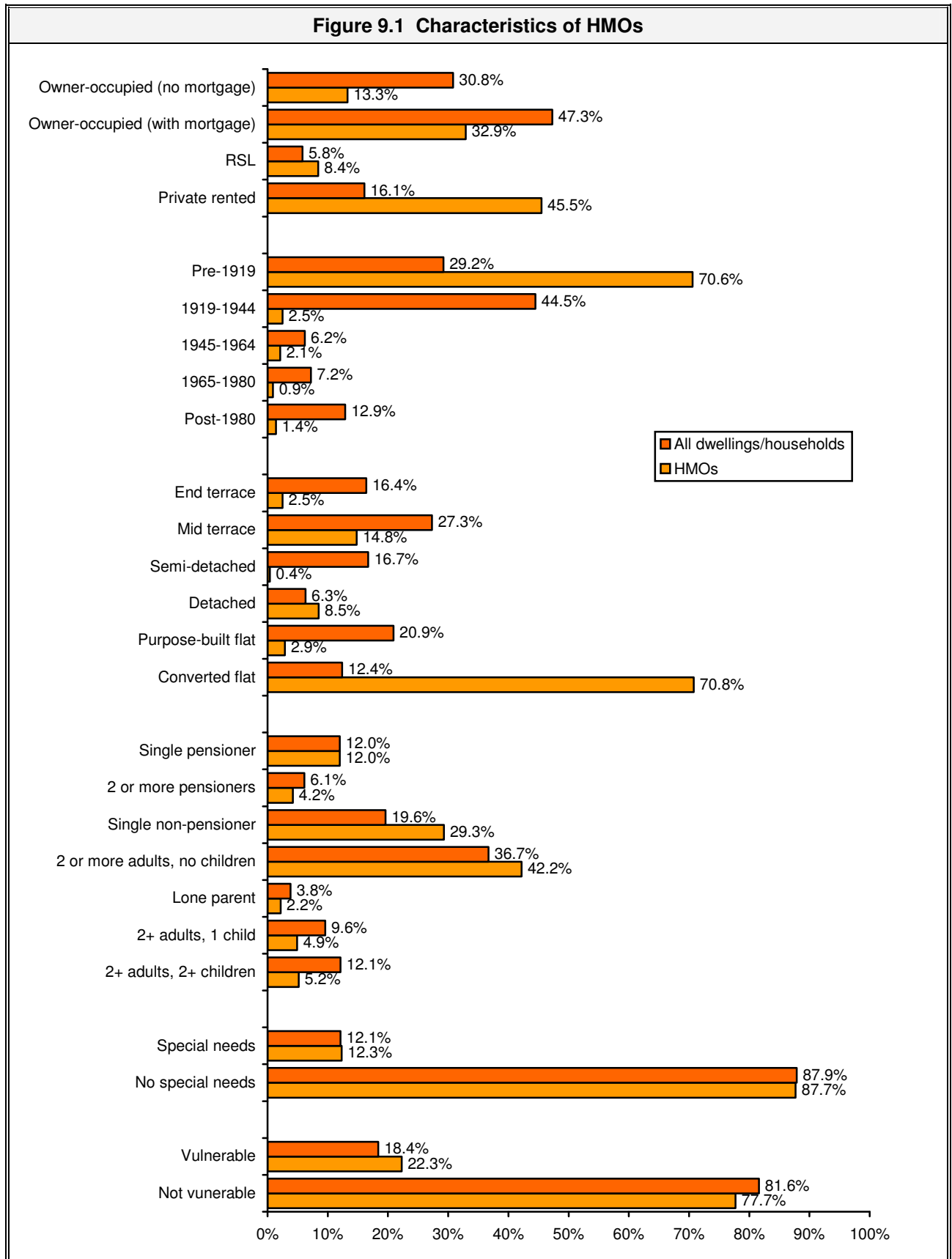
The English House Condition Survey estimates that there are a total of 638,000 HMO buildings in England. Almost half of these are shared houses/flats and over a quarter of these are converted houses (26.9%).

Table 9.1 Categories of HMO		
Category	Number of buildings	% of HMOs
Bedsits	452	8.9%
Shared house	929	18.3%
Household with lodger	188	3.7%
B&B	62	1.2%
Registered home	140	2.8%
Converted house	3,292	65.0%
Total	5,062	100.0%

9.2 Characteristics of HMOs

The figure below shows some of the main characteristics of HMOs, these figures are also compared with the overall stock. A large proportion of HMOs were found to be in the private rented sector (45.5%) – this compares with 16.1% of all dwellings. In general the buildings forming HMOs are older, with 70.6% dating from before 1919 compared with 29.2% of all dwellings. HMO dwellings are also more likely to be converted flats, 70.8% of HMOs are converted flats compared to only 12.4% of all dwellings.

Households living in HMOs are particularly likely to contain two or more adults and no children. Finally, both special needs and vulnerable households are slightly more likely than average to live in HMOs.



9.3 HMOs and Stock Condition

The table below shows the estimated average repair costs for HMOs and all dwellings in the Borough. The data shows that for all repairs categories the average cost per building for HMOs is significantly higher than for all dwellings. The standardised repair cost, is also higher than the figure for all dwellings in the Borough.

Table 9.2 Overall repairs cost comparison (HMOs and all dwellings)				
Repairs category	HMOs		All dwellings	
	Total cost	Average cost per building	Total cost	Average cost per dwelling
Urgent repair	£13.9m	£2,747	£90.1m	£1,179
Basic repair	£18.7m	£3,692	£134.9m	£1,765
Comprehensive repair	£35.2m	£6,963	£298.5m	£3,904
Standardised repair cost (/m ²)	-	£21.6	-	£19.7

In addition the survey estimates that 9.2% of all HMOs are unfit, compared with a Borough average of 5.4% (this relates to unfitness as laid down in the Housing Act 1985 (s604) and also relates to individual units within HMO buildings and not necessarily the building itself).

9.4 Specific HMO issues

There are a number of issues specific to HMOs which need to be considered, these include means of escape from fire and the use of amenities. The following tables highlight these issues in relation to the HMOs found in the survey.

Table 9.3 Means of escape from fire		
Means of escape from fire	Number of buildings	% of buildings
Protected shaft, fire doors with strips and seals	351	6.9%
Protected shaft, fire doors	420	8.3%
Fire doors	810	16.0%
Fire doors, poor condition	522	10.3%
Not present	2,959	58.4%
Total	5,062	100.0%

Fire detection system	Number of buildings	% of buildings
Full, working AFD	408	8.1%
Full, defective AFD	0	0.0%
Mains AFD/smoke detectors	236	4.7%
Battery smoke detectors only	2,159	42.7%
No AFD or smoke detectors	2,259	44.6%
Not required	0	0.0%
Total	5,062	100.0%

Note: AFD – Automatic fire detection system

The main results from the tables above are that 58.4% of HMOs do not have any provision for escape from fire and 44.6% have no AFD system or smoke detectors. A further 42.7% have battery smoke detectors only.

The table below shows the availability of amenities in HMOs. The results indicate that almost all buildings have the use of all basic amenities. There are however, a number of dwellings sharing facilities up to and worse than a ratio of 1:5.

Use	Amenity			
	Kitchen	Wash hand basin	Bath/shower	WCs
Exclusive use all lets	3,720	3,727	3,727	3,727
Exclusive use most lets	0	125	125	125
Shared up to 1:5	1,289	874	874	874
Shared worse than 1:5	53	307	336	336
None	0	29	0	0
Total	5,062	5,062	5,062	5,062

9.5 Management regulations

Finally the table below shows the adequacy of management of HMOs [level of compliance with The Housing (Management of Houses in Multiple Occupation) Regulations 1990]. The majority of HMOs have been categorised in the 'good' or 'adequate' categories. However, a third of HMOs are categorised as 'inadequate' or 'poor', with the majority of these in the 'poor' category.

Table 9.8 HMOs and management regulations		
Management regulations	Number of buildings	% of buildings
Good	864	17.1%
Adequate	1,513	29.9%
Just adequate	968	19.1%
Inadequate	624	12.3%
Poor	1,094	21.6%
Total	5,062	100.0%

9.6 Summary

In the survey particular attention is given to HMOs due to an additional standard applied to such buildings (relating to fire safety and amenities in common parts and covered in Section 352 of the 1985 Housing Act). The survey followed as closely of possible Chartered Institute of Environmental Health definitions and in total it was estimated that there were 5,062 buildings acting as HMOs at the time of the survey. The following are some of the main characteristics of HMOs:

- A large proportion of HMOs were found to be in the private rented sector (45.5%) – this compares with 16.0% of all dwellings
- HMOs were more likely to be pre-1919 (70.6%) – this compares with 29.2% of all dwellings
- HMOs were more likely to be converted flats (70.8%) – this compares with 12.4% of all dwellings

Generally HMO buildings had higher repair costs than other dwellings and HMOs show above average levels of unfit. Almost all HMO buildings have the use of all basic amenities however a number share facilities up to and worse than a ratio of 1:5, and a third were categorised as inadequately or poorly managed.

10. Housing Health and Safety Rating System

10

10.1 Introduction

The Housing Health and Safety Rating System (HHSRS) is a means of identifying faults in dwellings and of evaluating the potential effect of any faults on the health and safety of occupants, visitors, neighbours and passers-by.

The system grades the severity of any dangers present in the dwelling. It also provides a means of differentiating between dwellings that pose a low risk to health and safety and those which pose a higher risk such as an imminent threat of serious injury or death. The system concentrates on threats to health and safety and is not concerned with matters of quality, comfort and convenience.

As part of a stock condition survey the system can assist in identifying dangerous housing conditions that could be given priority and indicate specific areas to be targeted. For individual dwellings, the system can help determine matters that require remedial action and the priority with which those matters should be tackled.

The form of construction, type and age of dwelling will not affect the identification and evaluation of hazards. These matters will however be relevant to the nature of remedial action.

This chapter does not seek to go into any detail about the rationale behind the HHSRS but merely concentrates on the results of the analysis, how hazards vary across different groups and how sensitive the rating system is to different assumptions about what is an acceptable hazard. The HHSRS is set to replace the fitness standard as brought about by the 2004 Housing Act, however at present it is still a fairly new standard and will require further time and money before it becomes a fully functional system that all understand.

Additionally, this survey only studies 10 of the 32 potential hazards to be assessed under the system. The 10 hazards chosen were thought by the Council to be the most appropriate in the local situation. Nationally the 10 most important hazards (most of which are covered here) account for over 90% of all occurrences of hazardous dwellings.

10.2 The system

The hazard scoring procedure is discussed in detail in Appendix A3. This section briefly sets out the components of calculations and how they are used.

A hazard score is a numerical figure calculated for each hazard identified at a dwelling. The higher the score the greater the hazard (ODPM guidance then suggests taking the highest score for each dwelling to indicate the most serious hazard for that particular dwelling).

The hazard score is generated by looking at three factors:

1. The likelihood expressed as a ratio – in effect this is a 1 in x chance of any particular hazard occurring in a one year period.
2. A weighting given to each class of harm – there are four classes used in the calculation (Extreme, Severe, Serious and Moderate) in the case of falls these might represent a range from death to severe bruising.
3. A spread of health outcomes indicated as a percentage – this would mean that if the hazard occurs what are the chances of it being in each of the classes of harm (e.g. in the case of falls this might be no (or negligible) chance of death and 60% chance of severe bruising).

Once each dwelling has been assessed for each potential hazard the data is banded to provide more useful data. The bands suggested in ODPM guidance are shown in the Box below.

Box 10.1 Hazard scores equivalent risk of death and suggested response

Band	Score	Equivalent annual risk of death	Response
A	5,000 or more	1 in 200 or more	Mandatory
B	2,000 – 4,999	1 in 200 – 1 in 500	
C	1,000 – 1,999	1 in 500 – 1 in 1,000	
D	500 – 999	1 in 1,000 – 1 in 2,000	Discretionary
E	200 – 499	1 in 2,000 – 1 in 5,000	
F	100 – 199	1 in 5,000 – 1 in 10,000	
G	50 – 99	1 in 10,000 – 1 in 20,000	
H	20 – 49	1 in 20,000 – 1 in 50,000	
I	10 – 19	1 in 50,000 – 1 in 100,000	Ideal
J	Less than 10	Less than 1 in 100,000	

Our main analysis therefore concentrates on dwellings with any hazard in bands A to C and also bands D to I.

10.3 Individual hazards

Each of the individual hazards has been grouped into three categories shown in the box above as to the type of response suggested by the results of the surveyor's assessment (Mandatory, Discretionary and Ideal). The table below shows the numbers of dwellings falling into each of these groups for each type of hazard.

Hazard	Mandatory		Discretionary		Ideal		Total	
	Number	%	Number	%	Number	%	Number	%
Falls on the level	190	0.2%	6,567	8.6%	69,694	91.2%	76,452	100.0%
Falls on stairs	998	1.3%	5,174	6.8%	70,280	91.9%	76,452	100.0%
Falls between levels	51	0.1%	1,462	1.9%	74,939	98.0%	76,452	100.0%
Carbon Monoxide	0	0.0%	286	0.4%	76,166	99.6%	76,452	100.0%
Fire	129	0.2%	7,852	10.3%	68,470	89.6%	76,452	100.0%
Hot surfaces & materials	294	0.4%	2,422	3.2%	73,736	96.4%	76,452	100.0%
Damp & mould	110	0.1%	4,268	5.6%	72,074	94.3%	76,452	100.0%
Electrical hazards	103	0.1%	2,084	2.7%	74,264	97.1%	76,452	100.0%
Excessive cold	3,889	5.1%	231	0.3%	72,332	94.6%	76,452	100.0%
Structural failure	0	0.0%	431	0.7%	76,021	99.4%	76,452	100.0%

The table shows that the three hazards most likely to lead to a mandatory response from the Council are *excessive cold*, and *falls on stairs*.

10.4 Grouped hazard scores

We can use the data in the above table to estimate the number of dwellings which fall into the mandatory group on any hazard, those which fall into the discretionary groups on any hazard (excluding those in the mandatory group) and finally dwellings with no hazards (ideal). The table below shows the results of this analysis.

Category of worst hazard	Number of dwellings	% of dwellings
Mandatory	5,378	7.0%
Discretionary	17,272	22.6%
Ideal	53,801	70.4%
Total	76,452	100.0%

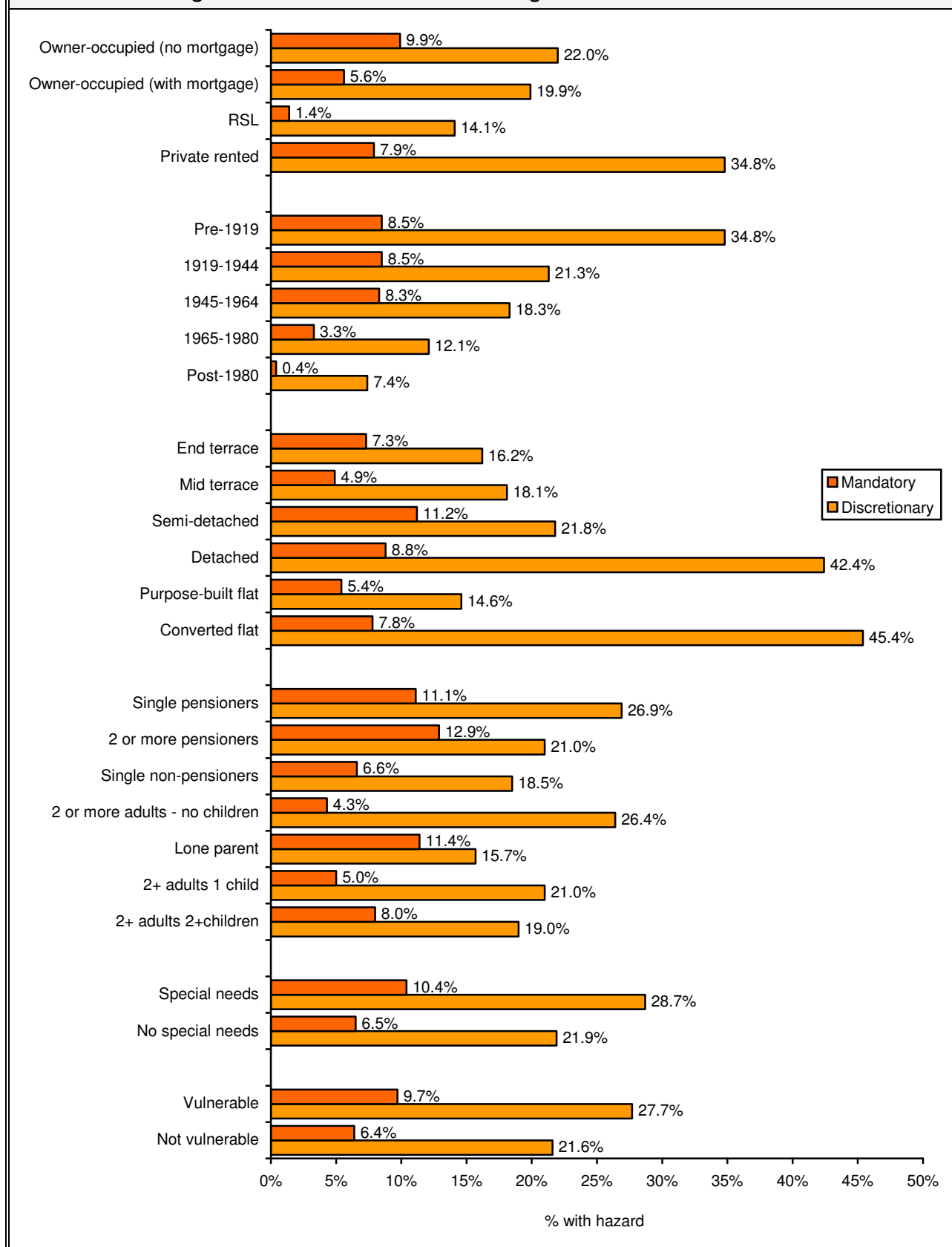
The table shows that a total of 7.0% of dwellings have at least one hazard described as requiring a mandatory response, a further 22.6% of dwellings have discretionary hazards leaving 70.4% with no recorded hazards – the dwellings therefore being described as ‘ideal’.

The figure below shows the mandatory and discretionary hazards by dwelling and household characteristics.

Certain dwelling types are more likely than average to be in the mandatory category. Dwellings in the owner-occupied (no mortgage) sector and older dwellings show high levels requiring a mandatory response. Semi-detached houses also show higher levels requiring a mandatory response. Looking at discretionary hazards we see that private rented dwellings, those built before 1919, detached houses and converted flats are more likely than average to be in this group.

There is less variation by household type. Pensioner households are the most likely to live in a dwelling containing a hazard. Households with two or more pensioners are most likely to contain a mandatory response hazard and single pensioner households are most likely to have a discretionary hazard. Special needs households are more likely than other households to be in both categories, as are vulnerable households.

Figure 10.1 Characteristics of dwellings/households with hazards



10.5 Comparison with unfitness

Cross-tabulating the hazard ratings with unfitness and defective dwellings is shown in the table below. The table shows that there is some link between hazards and unfitness (and defective dwellings) but these links are far from clear. Of all dwellings in the mandatory category some 23.0% are also considered to be unfit, this compares with 7.4% in the discretionary group and 2.9% in the ideal group. Of unfit dwellings, 61.4% are in either the mandatory or discretionary group, this compares with 65.5% of dwellings in defective dwellings and 20.7% of dwellings described as in good condition. Of all dwellings in the mandatory hazard group some 27.6% are actually described as being in good condition.

Table 10.3 Unfit & defective dwellings, and hazard ratings				
Hazard rating	Unfit and defective dwellings			
	Unfit	Defective	Good condition	Total
Mandatory	1,239	2,655	1,484	5,378
Discretionary	1,271	4,846	11,155	17,272
Ideal	1,583	3,961	48,257	53,801
Total	4,093	11,462	60,896	76,451

10.6 Summary

The Housing Health and Safety Rating System is an alternative method for looking at the condition of dwellings in an area taking into account the potential hazards of a dwelling in relation to any persons using it rather than a study of the fabric condition of the home.

It is estimated that around 7.0% of dwellings require a mandatory response, which is significantly higher than the estimated level of unfitness in the Borough of 5.4 %. Below are some characteristics of 'hazardous' homes:

- The main hazards in Merton relate to excessive cold and falls on stairs
- Owner-occupied (no mortgage) and pre-1919 dwellings appear particularly likely to be 'hazardous'; special needs households are particularly likely to live with a hazard
- There is some link between unfitness and the hazard rating although a number of dwellings fail on only one of the two measures

Section E: Policy implications

This final section assesses the practical implications of the rest of the study. The initial chapter deals with the implied financial demand of repair costs. Focussing in particular on owner-occupied dwellings, the chapter shows what potential impact might be had through schemes such as equity release. The chapter goes on to look at rented dwellings.

The concluding chapter begins by identifying the Council's policy obligations with regards to housing stock condition. Drawing on the key findings of the report, a series of policy recommendations are made, and groups requiring particular attention are highlighted.

11. Intervention and financial assistance

11

11.1 Introduction

This chapter examines the ability of various household groups to afford the improvements required. In the private sector, the local authority's main role is advising and enabling owner occupiers and landlords as it can only intervene directly via cash limited grant schemes, (targeted at people and properties most in need,) providing access to schemes for equity release, and the consideration of loan based financial assistance where no other options are available or practical. The local authority role as enabler has become more rather than less important as the overall level of financial assistance available has fallen.

It is more important now for the local authority to consider ways in which various groups (owners and landlords particularly), can be encouraged to fund the necessary improvements. This is the trend of H.I.P. Guidance as well as the logic of the declining ability of the public sector to assist with repairs.

The chapter begins by looking at owner-occupiers' ability to afford repairs and improvements to energy efficiency based on current income levels. This is followed by a similar analysis taking into account the possibility of using equity release schemes to fund repairs/improvements and finally a summary of the costs in the rented sectors. The final section includes figures for vacant owner-occupied dwellings.

Where energy efficiency is studied in this chapter it relates to the costs of improving/providing insulation and central heating (it will be remembered that this increases the mean SAP of all dwellings to 62 and with a relatively short payback period (of 11.7 years)).

11.2 Owner-occupiers' ability to fund

It will be recalled that owner-occupiers show high levels of unfitness in Merton (in terms of overall numbers). In addition owner-occupiers make up a large proportion of the total costs for repairs/energy efficiency improvements. For these reasons, it is important to analyse the ability of owner-occupiers to carry out the necessary works.

For repairs/improvements required in the owner-occupied sector the survey makes assumptions about the ability to afford based on income levels. The assumptions are shown in the table below. The means test applied here is quite simplistic, but nonetheless reasonable. Households with less than £14,200 of household income are unlikely to be able to afford any significant amount of repairs, and those in the intermediate band of income may in many cases not be able to do so. The £14,200 figure is one used by the Government as an affordability threshold for some means-tested benefits.

Table 11.1 Assumptions used in assessing a household's ability to fund repairs/ improvements (owner-occupiers only)	
Income band	Proportion of repairs/improvements to be made by household
Under £14,200	Zero
£14,200 to £25,000	Half
Over £25,000	All

Note: The income band is based on annual gross earned income (including all benefits)

The table below shows the number of households in each of these broad income bands for both those in unfit housing and also all households. Households in unfit housing are somewhat more likely to be in the lowest income bracket when compared with all households. This implies that they will be less likely to be able to fund the necessary repairs/improvements to their dwellings.

Table 11.2 Broad income levels of owner-occupiers				
Income band	Unfit		All households	
	Number of households	% of households	Number of households	% of households
Under £14,200	870	35.4%	16,114	27.6%
£14,200 to £25,000	153	6.2%	7,744	13.3%
Over £25,000	1,436	58.4%	34,440	59.1%
Total	2,459	100.0%	58,297	100.0%

The table below shows a summary of costs for owner-occupiers. This is then offset against the implied abilities to afford improvements based on households' income levels. The table is split between those in unfit housing and all households.

Table 11.3 Summary of costs in owner-occupied housing			
	Cost per dwelling	Total cost	Implied financial demand
UNFIT HOUSING – total number of dwellings – 2,459			
Make fit only	£2,922	£7.2m	£2.5m
All urgent repairs	£4,159	£10.2m	£4.2m
All repairs within 5 years	£5,196	£12.8m	£5.8m
All repairs within 10 years	£9,396	£23.1m	£9.3m
Energy efficiency improvements	£1,466	£3.6m	£2.1m
Maximum Total	£10,862	£26.7m	£11.4m
ALL OWNER-OCCUPIED DWELLINGS – total number of dwellings – 58,297			
All urgent repairs	£1,081	£63.0m	£29.0m
All repairs within 5 years	£1,664	£97.0m	£42.8m
All repairs within 10 years	£3,970	£231.4m	£96.2m
Energy efficiency improvements	£943	£55.0m	£22.5m
Maximum Total	£4,913	£286.4m	£118.7m

The table shows for example that the average cost to make unfit owner-occupied dwellings fit is £2,922 per dwelling – given a total number of unfit owner-occupied dwellings of 2,459 this makes for a total of £7.2m needing to be spent to make these dwellings fit for human habitation. Given the income levels of these households it is then further estimated that there would be a demand for financial assistance of £2.5m. Including all repairs required over the next 10 years along with suggested energy improvements the total cost figure rises to £26.7m with a potential demand for financial assistance of £11.4m.

Turning to all households it can be seen that the maximum total for all repairs/improvements comes to £286.4m, again using estimates of owners' ability to afford this figure is reduced to a potential demand for assistance of £118.7m.

11.3 Equity release schemes

However, in the context of the above situation the owner-occupiers involved will in most cases have some equity. There may be means of releasing some of this equity to repair the dwellings; this is likely to be a more realistic focus of Council attention than trying to increase the availability of financial aid by the necessary sum.

The Merton survey asked all owner-occupiers the following questions:

“If you sold your home now, how much money do you estimate you would get, after paying off any remaining mortgages and other associated debts?”

and

“Would you be prepared to use the equity in your home to fund any repairs that you may need now or in the future?”

Using information collected from these questions it is possible to make some broad estimates about the scope for equity release schemes to help fund repairs to owner-occupiers dwellings.

Releasing equity is seen as a way of using the debt free equity value of owner-occupied homes to provide repairs, improvements and adaptations at nil or minimal public cost. Schemes are primarily aimed at older person households who may be equity rich but cash poor, however, for analysis purposes there is no reason why this should not be extended to all owner-occupied dwellings in the Borough.

In terms of equity release itself a limit of 30% of a current dwelling value has been assumed (this is consistent with information available from the Home Improvement Trust). It is then assumed that the amount available to borrow could be used to directly offset any repairs/improvements required. The table below shows an estimate of the impact of equity release schemes for owner-occupiers. Again it is assumed that households with over £25,000 income would be able to fund any repairs and those with an income of £14,200 to £25,000 would fund half of all repairs.

It should be noted that this analysis considers both the possibility of using equity release schemes and also the willingness of owner-occupiers to use this form of finance to carry out repairs/improvements. Hence, any household who is unwilling to use equity release is not considered in this analysis. In total, 41.5% of owner-occupiers stated that they would be prepared to release equity to carry out repairs/improvements to their accommodation.

Additionally, the analysis does not take account of the additional mortgage/loan payments that would arise from releasing equity on a property. In many cases this will be an additional barrier to access to such schemes.

Table 11.4 Summary of costs in owner-occupied housing – including the maximum use of equity release schemes			
	Cost per dwelling	Total cost	Implied financial demand
UNFIT HOUSING – total number of dwellings – 2,459			
Make fit only	£2,922	£7.2m	£1.6m
All urgent repairs	£4,159	£10.2m	£2.3m
All repairs within 5 years	£5,196	£12.8m	£3.2m
All repairs within 10 years	£9,396	£23.1m	£6.5m
Energy efficiency improvements	£1,466	£3.6m	£1.1m
Maximum Total	£10,862	£26.7m	£7.6m
ALL OWNER-OCCUPIED DWELLINGS – total number of dwellings – 58,297			
All urgent repairs	£1,081	£63.0m	£20.2m
All repairs within 5 years	£1,664	£97.0m	£29.7m
All repairs within 10 years	£3,970	£231.4m	£72.8m
Energy efficiency improvements	£943	£55.0m	£17.8m
Maximum Total	£4,913	£286.4m	£90.7m

Note: Unlike the previous table it is not possible to arrive at the total figure by adding up other totals. This is because the use of equity is taken as a one-off sum of money (i.e. whilst it is possible to take this away from any individual element required (i.e. repairs or improvements) it would only be possible to reduce costs of other elements if there was still money remaining. For example if all the equity has been used to pay for repairs then there would be nothing left to spend on energy efficiency improvements (i.e. the money can only be used once).

The table above shows that when equity is taken into account, the implied financial demand for repairs to unfit dwellings is reduced significantly, to £7.6 million, from £11.4 million if only income is taken into account. This compares to a level of total costs of £26.7 million. Looking at all owner-occupied dwellings, the table shows a total of £286.4m of repairs required by owner-occupiers over the next ten years (including energy efficiency costs). Looking only at household income would suggest a requirement for public sector assistance to cover £118.7m of this. The impact of equity release for owner-occupiers could be considerable. Potentially over the next ten years it could reduce the public sector financial assistance requirement from £118.7m to £90.7m.

11.4 The rented and vacant stock

In the case of private rented dwellings, it is the financial ability of the landlord that matters rather than the income of the tenant. The table below shows the full range of costs again split between unfit and all dwellings. Vacant (owner-occupied) dwellings are included in the table below for reasons of completeness.

Table 11.5 Summary of costs in rented and vacant (owner-occupied) housing						
Tenure	RSL		Private rented		Vacant (owner-occupied)	
	Cost per dwelling	Total cost	Cost per dwelling	Total cost	Cost per dwelling	Total cost
UNFIT RENTED AND VACANT DWELLINGS						
Number of dwellings	122		1,174		338	
Make fit only	£7,164	£0.9m	£4,425	£5.2m	£8,742	£3.0m
All urgent repairs	£12,492	£1.5m	£6,102	£7.2m	£12,154	£4.1m
All repairs within 5 years	£15,429	£1.9m	£7,003	£8.2m	£14,206	£4.8m
All repairs within 10 years	£22,623	£2.8m	£9,303	£10.9m	£17,081	£5.8m
Energy efficiency improvements	£963	£0.1m	£1,387	£1.6m	£2,395	£0.8m
Maximum Total	£23,586	£2.9m	£10,690	£12.6m	£19,476	£6.6m
ALL RENTED AND VACANT DWELLINGS						
Number of dwellings	4,445		12,271		1,438	
All urgent repairs	£1,548	£6.9m	£1,267	£15.5m	£3,238	£4.7m
All repairs within 5 years	£1,960	£8.7m	£1,929	£23.7m	£3,857	£5.5m
All repairs within 10 years	£4,174	£18.6m	£3,304	£40.5m	£5,525	£7.9m
Energy efficiency improvements	£1,052	£4.7m	£1,094	£13.4m	£1,690	£2.4m
Maximum Total	£5,227	£23.2m	£4,398	£54.0m	£7,215	£10.4m

The table shows that the maximum total cost for the private rented sector is £54.0 million (over the next ten years). This compares with RSL dwellings where the total bill is £23.2 million.

On the face of it, therefore, the private landlords face a serious bill for the necessary repairs costs. We have no direct information as to the ability or willingness of private landlords to fund the improvements which have been identified through the survey. To establish this convincingly would itself require a substantial survey. However, a Private Landlords' Survey was conducted as part of the English House Condition Survey in 2001.

This found that landlords and agents tended to be overly confident about the condition of their properties and their ability to keep it in a good state of repair. Many landlords and agents also felt that they had not received sufficient information to comply with regulations and good practice for safety issues. Landlords who managed their properties operated in isolation for sources of information regarding managing rented properties. Some 42% had never had any contact with their local authority whilst renting out property and only 15% had been involved in a local authority landlords forum. Additionally, only 15% were members of a trade or professional body.

Therefore it appears essential for the Council to contact organisations of landlords and alert them to the need for some action now to prevent more serious costs arising in future.

11.5 Summary

This chapter looked at the total costs of repairs and energy efficiency improvements required. The analysis was separated by tenure and took account of owner-occupiers income and equity levels. Some of the main findings were:

- To carry out all urgent repairs required to owner-occupied dwellings (occupied dwellings) would cost an estimated £63.0m
- Households' income levels could reduce this figure to a potential demand for financial assistance of £29.0m whilst including the scope for equity release would reduce this figure to £20.2m
- To carry out all comprehensive repairs required to owner-occupied dwellings (occupied dwellings) would cost an estimated £286.4m. Again, this figure could be reduced dramatically when taking into account households income and equity levels to £118.7m and £90.7m respectively
- In the private rented sector the total bill for carrying out all urgent repairs comes to £54.0m, whilst RSL dwellings show a total bill for carrying out all urgent repairs comes to £23.2m

12. Conclusions and policy implications

12

12.1 Introduction

Private sector housing policy is constantly evolving. The 2004 Merton Stock Condition Survey should influence the Local Authority's overall Housing Strategy, as well as the Private Sector Renewal Strategy. The results should also be considered in the context of the Authority's Energy Strategy. This chapter discusses current legislation and targets shaping the Council's housing policies and considers how the current condition of stock should influence future policy decisions. Finally, the chapter includes key findings of the survey and summarises the options available to the Council.

12.2 Current policies

The Regulatory Reform Order (RRO) 2002 gave the Council greater flexibility to customise financial assistance, creating a more locally suited package with a wider range of measures. However, this freedom brings increased responsibility for ensuring that a number of the Council's duties towards housing are fulfilled. Specifically, these include:

- Reducing the number of unfit properties, under the 1985 Housing Act
- Gradually replacing the unfitness assessment with the HHSRS, as stated in the Housing Bill 2003 and committing to reducing the number of dwellings requiring mandatory action under HHSRS standards
- Increase the number of households living in decent homes - specifically the proportion of private sector housing in decent condition occupied by vulnerable households - as required by the PSA target 7
- Reducing energy consumption and domestic carbon dioxide emissions of private sector stock under the 1995 Home Energy Conservation Act
- Reducing the number of vacant properties as part of an Empty Homes Strategy
- Licensing Houses in Multiple Occupation (HMOs) and improving the number in a fit state, under the Housing Act (December 2004)

12.3 Relevant findings for Merton

Particular results that will be of interest to the Council regarding these commitments are:

- 5.4% of private sector dwellings are unfit, compared to a national average of 4.2%
- 7.0% of dwellings require a mandatory action under HHSRS
- The hazard most likely to require a mandatory action is excessive cold
- 30.4% of homes are non-decent (compared to 33% nationally), mainly due to thermal comfort
- The mean SAP rating is 52, compared to the national figure of 51 (in 2001)
- 92.5% of dwellings could benefit from some improvement that would increase energy efficiency; 10.3% could benefit from both the two key forms of improvement – i.e. insulation and central heating measures
- 2.6% of dwellings are estimated to be vacant
- An estimated 4,371 vulnerable households are thought to be living in non-decent private housing

12.4 Targeting dwellings requiring action

Results show that the majority of dwellings require action on an individual basis rather than improvement to blocks or groups of dwellings. This makes identification of dwellings requiring some sort of remediation difficult.

In determining a suitable localised strategy to implement an appropriate package of measures, targeting dwellings by tenure, age and vulnerable household groups may prove beneficial. More specifically, account could be taken of those categories where the highest incidence of unfitness and disrepair as well as low energy efficiency was identified.

- Private rented dwellings
- Vacant dwellings
- Converted flats
- Pre-1919 stock dwellings
- Vulnerable households
- Pensioner households

12.5 Policy Recommendations

Strategies to identify these dwellings would provide a basis for action.

- Households occupying properties with existing or potential condition problems should be encouraged to make themselves known to the Council. To facilitate this, the Council must provide information to households throughout the Borough, promoting schemes of education and advice regarding proper maintenance where necessary. This will reduce the likelihood of dwellings currently in disrepair becoming unfit in the future
- In the owner-occupied sector, the Council should encourage the use of equity to fund repairs (the potential impact of which was discussed in the previous Chapter) to reduce grant assistance.
- In the private rented sector, the Council must work closely with landlords and tenants to create policies to ensure action and enforcement where necessary, by advising them of their responsibilities under current legislation
- The Council must remain aware that new categories of action may become necessary when HHSRS permanently replaces the unfitness measure, shifting focus from clearly defined (yes or no) dwelling faults to a more continuous measure of hazards affecting the health of occupants
- Improving the energy efficiency of dwelling stock is of particular interest to the Council; any policy that improves energy efficiency will consequentially improve the decent homes level (under Thermal comfort) and reduce the likelihood of mandatory action against the HHSRS hazard excessive cold. The Council should seek partnerships with energy efficiency organisations providing advice and installation and other agencies to promote energy efficiency improvements and tackle fuel poverty. The sub regional partnership of “Coldbusters” is an example of the type of partnership that will address thermal comfort issues
- Although at present 5.1% of dwellings in the Borough require mandatory action against excessive cold, encouraging or part-funding improvements to insulation and central heating systems should be seriously considered in terms of long term cost and energy savings. As seen in chapter 7, such improvements could pay for themselves within 6-11 years
- Vacant properties should be studied and strategy regarding Empty Homes may need to be updated in the light of the survey. Such properties can be detrimental to areas but may also be relevant to addressing the backlog of housing need by returning property to the housing stock. The proportion of vacant properties in Merton is similar to the national level but a high percentage of empty properties are unfit, non-decent and in need of substantial repairs

12.6 Summary

It has been discussed that, under the RRO, private sector condition improvement assistance is shifting away from grants determined by national government to locally determined assistance, in the form of a wider form of measures. The Stock Condition Survey in Merton generally shows worse dwelling conditions than those found nationally (2001 EHCS), but more polarised levels of condition when looking at individual groups. The costs of making the necessary improvements to dwelling conditions and the suggested improvements to energy efficiency may however be quite prohibitive. The Council will therefore need to consider a wide range of measures (including finance from the local authority and the use of landlords' /owners' own finances, as well as advice) to achieve improvements to the housing stock and, importantly, to prevent further deterioration.

The Council does not possess the resources to identify each individual dwelling requiring action and therefore requires policies to bring those that require assistance to their attention. Information and education can play an important role in this, as will advice to ensure occupants can carry out required improvements with as little financial involvement from the Council as possible.

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13. Glossary

Age/construction date of dwelling

The age of the dwelling refers to the date of construction of the oldest part of the building.

Average

The term 'average' when used in this report is taken to be a mean value unless otherwise stated.

Basic amenities

- Kitchen sink
- Bath or shower in a bathroom
- A wash hand basin
- Hot and cold water to the above
- Inside WC

Basic repairs

These are all urgent repairs plus all other repairs/replacements to external elements where the surveyor indicated a fault, but where the work was not specified as urgent. This is taken to be all work required in the next five years.

Central heating system

A heating system with a distribution system sufficient to provide heat in at least one room in addition to the room or space containing the boiler. In this report, the definition also includes electric storage heaters which run on off-peak electricity and programmable gas convector heaters.

Comprehensive repair

This includes all repairs as specified above together with any replacements the surveyor assessed as falling due over the next 10 years. For all exterior elements, whether work was specified or not, they recorded the replacement period of that element - the number of years before it would need replacing. This measure provides a better basis for identifying work which would form part of a planned programme of repair by landlords.

Cost to make fit

The costs of undertaking all 'urgent' basic repair work, plus any additional costs to rectify the problems of unfitness. These are the 'required expenditure' costs to make 'just fit' and not to secure the dwelling in the long term. The economics of undertaking the work varies between tenures for the same jobs.

Double glazing

Factory made sealed window units. Does not include windows with secondary glazing or external doors with double or secondary glazing (other than double glazed patio doors which count as 2 windows).

Dwelling

A dwelling is a self contained unit of accommodation where all rooms and facilities available for the use of the occupants are behind a front door. For the most part a dwelling will contain one household, but may contain none (vacant dwelling), or may contain more than one (HMO).

Fixed heating

Heating which is permanently stationed in a room whether it is fixed in place or not. It has a designated space in which it remains, and is connected via a gas point, fused spur, dedicatable 13 amp power socket or is run from a centrally-located boiler or heat exchanger, either dedicated to the dwelling or as part of a Borough or common heating system. It also includes open fireplaces which are capable of use with minimum effort (not permanently blocked) and 'Aga' type cookers or ranges which also emit heat into the room.

Household

One person living alone or a group of people who have the address as their only or main residence and who either share one meal a day or share a living room.

Houses in multiple occupation (HMO)

An HMO is a dwelling-house which is occupied by more than one household. There are, for the purposes of this survey 6 categories of HMO:

- Bedsits
- Shared house
- Households with lodger
- Bed & Breakfast
- Registered Home
- Converted House

Modern bathroom

A bathroom which was installed less than 30 years ago.

Modern kitchen

A kitchen which was installed less than 20 years ago.

SAP rating

The energy rating as determined by the Government's Standard Assessment Procedure (SAP). This is an index of the notional annual cost of heating a dwelling to achieve a standard heating regime and normally runs from 1 (highly inefficient) to 120 (highly efficient).

Standardised costs

These are costs in £ per square metre (£/sqm). By reducing costs to a £/sqm basis the effect of the size of buildings on the amount of disrepair recorded is omitted, otherwise the extent of the disrepair measured is substantially determined by the size of the building.

Unfit housing

A dwelling house is unfit for human habitation if in the opinion of the local authority it fails to meet one or more of the requirements of the fitness standard as laid down in Section 604 of the *1985 Housing Act* as amended by *1989 Local Government and Housing Act* and by reason of that failure is not reasonably suitable for occupation.

Urgent repairs

These are any works specified to deal with an external fault where its treatment was specified as urgent, plus all recorded work to internal elements.

Vacant dwellings

The assessment of whether or not a dwelling was vacant was made at the time of the interviewer's visit. Clarification of vacancy was sought from neighbours. Surveyors were required where possible to gain access to vacant dwellings and undertake full inspections.

Appendix A1: Data Tables

A1

This appendix provides further detailed information from the stock condition survey. The tables below cross-tabulate some of the main variables used in the report. These are:

- Tenure
- Dwelling age
- Sub-area
- Dwelling type
- Household type
- Special needs
- Vulnerable households

To this list has been added the size of dwelling. This has been measured using the average number of habitable rooms and also the average (mean) floor space of dwellings.

Table A1.1 Summary of dwelling/household characteristics and tenure					
Dwelling characteristic	Tenure				
	Owner-occupied (no mortgage)	Owner-occupied (with mortgage)	RSL	Private rented	Total
Age of dwelling					
Pre-1919	5,080	10,819	742	5,650	22,290
1919-1944	13,643	16,265	490	3,657	34,055
1945-1964	1,562	1,997	474	694	4,727
1965-1980	1,917	2,267	326	1,030	5,540
Post-1980	1,383	4,802	2,412	1,241	9,839
Total	23,585	36,151	4,445	12,271	76,452
Type of dwelling					
End terrace	4,141	6,742	644	1,049	12,576
Mid terrace	6,816	10,955	918	2,171	20,860
Semi-detached	5,669	6,045	254	776	12,744
Detached	2,013	2,020	256	542	4,831
Converted flat	3,535	6,866	2,017	3,577	15,995
Purpose-built flats	1,411	3,523	356	4,156	9,446
Total	23,585	36,151	4,445	12,271	76,452
Household type					
Single pensioners	6,812	462	1,122	532	8,928
2 or more pensioners	4,023	121	147	280	4,571
Single non-pensioners	2,781	8,938	519	2,373	14,611
2+ adults, no children	8,012	13,190	285	5,859	27,346
Lone parent	123	999	1,085	655	2,862
2+ adults, 1 child	701	5,007	377	1,074	7,160
2+ adults, 2+ children	511	6,617	879	966	8,973
Total	22,963	35,334	4,415	11,740	74,452
Special needs					
Special needs	4,594	1,689	1,708	1,051	9,041
No special needs	18,369	33,645	2,707	10,689	65,411
Total	22,963	35,334	4,415	11,740	74,452
Vulnerable households					
Vulnerable	5,239	2,577	3,157	2,729	13,702
Not vulnerable	17,724	32,757	1,258	9,011	60,750
Total	22,963	35,334	4,415	11,740	74,452
Size of dwelling					
Av no. of rooms	4.9	4.5	3.7	3.4	4.4
Av floor space (m ²)	106.7	96.6	87.8	73.4	95.5

Table A1.2 Summary of dwelling/household characteristics and age of dwelling						
Age of dwelling						
Dwelling characteristic	Pre-1919	1919-1944	1945-1964	1965-1980	Post-1980	Total
Tenure						
Owner-occupied (nm)	5,080	13,643	1,562	1,917	1,383	23,585
Owner-occupied (wm)	10,819	16,265	1,997	2,267	4,802	36,150
RSL	742	490	474	326	2,412	4,445
Private rented	5,650	3,657	694	1,030	1,241	12,271
Total	22,290	34,055	4,727	5,540	9,839	76,452
Type of dwelling						
End terrace	1,865	7,094	710	580	2,327	12,576
Mid terrace	6,719	10,148	952	1,373	1,668	20,860
Semi-detached	3,839	7,346	758	390	412	12,744
Detached	1,488	2,235	293	488	327	4,831
Converted flat	1,696	4,869	1,892	2,499	5,038	15,995
Purpose-built flats	6,682	2,364	123	210	66	9,446
Total	22,290	34,055	4,727	5,540	9,839	76,452
Household type						
Single pensioners	2,228	3,873	947	1,089	791	8,928
2 or more pensioners	1,019	2,995	35	137	386	4,571
Single non-pensioners	4,727	4,250	735	835	4,064	14,611
2+ adults, no children	8,191	12,955	1,722	2,285	2,194	27,346
Lone parent	423	1,144	311	205	780	2,862
2+ adults, 1 child	2,297	3,681	216	268	698	7,160
2+ adults, 2+ children	2,500	4,610	763	490	611	8,973
Total	21,385	33,507	4,727	5,309	9,524	74,452
Special needs						
Special needs	2,170	4,157	774	781	1,160	9,041
No special needs	19,216	29,350	3,953	4,528	8,364	65,411
Total	21,385	33,507	4,727	5,309	9,524	74,452
Vulnerable households						
Vulnerable	3,062	6,145	1,079	957	2,458	13,702
Not vulnerable	18,323	27,362	3,648	4,351	7,066	60,750
Total	21,385	33,507	4,727	5,309	9,524	74,452
Size of dwelling						
Av no. of rooms	4.6	4.8	3.9	4.0	3.3	4.4
Av floor space (m ²)	101.5	99.1	84.7	97.5	73.4	95.5

Table A1.3 Summary of dwelling/household characteristics and type of dwelling							
Dwelling characteristic	Type of dwelling						Total
	End terrace	Mid terrace	Semi-detached	Detached	Converted flat	Purpose-built flat	
Tenure							
Owner-occupied (nm)	4,141	6,816	5,669	2,013	3,535	1,411	23,585
Owner-occupied (wm)	6,742	10,955	6,045	2,020	6,866	3,523	36,150
RSL	644	918	254	256	2,017	356	4,445
Private rented	1,049	2,171	776	542	3,577	4,156	12,271
Total	12,576	20,860	12,744	4,831	15,995	9,446	76,452
Age of dwelling							
Pre-1919	1,865	6,719	3,839	1,488	1,696	6,682	22,290
1919-1944	7,094	10,148	7,346	2,235	4,869	2,364	34,055
1945-1964	710	952	758	293	1,892	123	4,727
1965-1980	580	1,373	390	488	2,499	210	5,540
Post-1980	2,327	1,668	412	327	5,038	66	9,839
Total	12,576	20,860	12,744	4,831	15,995	9,446	76,452
Household type							
Single pensioners	1,251	2,008	1,225	392	3,095	957	8,928
2 or more pensioners	523	1,201	1,570	731	192	354	4,571
Single non-pensioners	1,700	3,251	446	61	5,611	3,544	14,611
2+ adults, no children	4,556	7,514	5,144	2,603	4,670	2,860	27,346
Lone parent	1,008	805	431	0	485	133	2,862
2+ adults, 1 child	1,451	2,728	1,450	368	822	341	7,160
2+ adults, 2+ children	1,704	2,977	2,147	675	936	534	8,973
Total	12,192	20,483	12,414	4,829	15,812	8,722	74,452
Special needs							
Special needs	1,874	2,484	968	976	1,872	867	9,041
No special needs	10,319	17,999	11,445	3,853	13,940	7,854	65,411
Total	12,192	20,483	12,414	4,829	15,812	8,722	74,452
Vulnerable households							
Vulnerable	2,395	3,624	1,916	618	3,603	1,546	13,702
Not vulnerable	9,797	16,860	10,498	4,211	12,209	7,176	60,750
Total	12,192	20,483	12,414	4,829	15,812	8,722	74,452
Size of dwelling							
Av no. of rooms	4.6	4.8	5.6	7.1	2.9	3.0	4.4
Av floor space (m ²)	95.1	92.9	125.8	200.5	62.4	63.1	95.5

Table A1.4 Summary of dwelling/household characteristics and household type								
Dwelling characteristic	Household type							Total
	Single pensioners	2+ pensioners	Single non-pensioners	2+ adults, no children	Lone parent	2+ adults, 1 child	2+ adults, 2+ children	
Tenure								
Owner-occupied (nm)	6,812	4,023	2,781	8,012	123	701	511	22,963
Owner-occupied (wm)	462	121	8,938	13,190	999	5,007	6,617	35,334
RSL	1,122	147	519	285	1,085	377	879	4,415
Private rented	532	280	2,373	5,859	655	1,074	966	11,740
Total	8,928	4,571	14,611	27,346	2,862	7,160	8,973	74,452
Age of dwelling								
Pre-1919	2,228	1,019	4,727	8,191	423	2,297	2,500	21,385
1919-1944	3,873	2,995	4,250	12,955	1,144	3,681	4,610	33,507
1945-1964	947	35	735	1,722	311	216	763	4,727
1965-1980	1,089	137	835	2,285	205	268	490	5,309
Post-1980	791	386	4,064	2,194	780	698	611	9,524
Total	8,928	4,571	14,611	27,346	2,862	7,160	8,973	74,452
Type of dwelling								
End terrace	1,251	523	1,700	4,556	1,008	1,451	1,704	12,192
Mid terrace	2,008	1,201	3,251	7,514	805	2,728	2,977	20,483
Semi-detached	1,225	1,570	446	5,144	431	1,450	2,147	12,414
Detached	392	731	61	2,603	0	368	675	4,829
Converted flat	3,095	192	5,611	4,670	485	822	936	15,812
Purpose-built flats	957	354	3,544	2,860	133	341	534	8,722
Total	8,928	4,571	14,611	27,346	2,862	7,160	8,973	74,452
Special needs								
Special needs	2,956	1,159	1,081	2,797	512	149	387	9,041
No special needs	5,972	3,412	13,530	24,549	2,350	7,011	8,586	65,411
Total	8,928	4,571	14,611	27,346	2,862	7,160	8,973	74,452
Vulnerable households								
Vulnerable	3,497	1,326	2,537	2,981	1,574	458	1,329	13,702
Not vulnerable	5,432	3,245	12,074	24,365	1,288	6,702	7,644	60,750
Total	8,928	4,571	14,611	27,346	2,862	7,160	8,973	74,452
Size of dwelling								
Av no. of rooms	3.9	5.2	3.3	4.7	4.3	5.0	5.3	4.4
Av floor space (m ²)	92.8	107.3	70.1	102.8	83.6	102.6	112.5	95.9

Table A1.5 Summary of dwelling/household characteristics and households with special needs			
Dwelling characteristic	Special needs	No special needs	Total
Tenure			
Owner-occupied (nm)	4,594	18,369	22,963
Owner-occupied (wm)	1,689	33,645	35,334
RSL	1,708	2,707	4,415
Private rented	1,051	10,689	11,740
Total	9,041	65,411	74,452
Age of dwelling			
Pre-1919	2,170	19,216	21,385
1919-1944	4,157	29,350	33,507
1945-1964	774	3,953	4,727
1965-1980	781	4,528	5,309
Post-1980	1,160	8,364	9,524
Total	9,041	65,411	74,452
Type of dwelling			
End terrace	1,874	10,319	12,192
Mid terrace	2,484	17,999	20,483
Semi-detached	968	11,445	12,414
Detached	976	3,853	4,829
Converted flat	1,872	13,940	15,812
Purpose-built flats	867	7,854	8,722
Total	9,041	65,411	74,452
Household type			
Single pensioners	2,956	5,972	8,928
2 or more pensioners	1,159	3,412	4,571
Single non-pensioners	1,081	13,530	14,611
2+ adults, no children	2,797	24,549	27,346
Lone parent	512	2,350	2,862
2+ adults, 1 child	149	7,011	7,160
2+ adults, 2+ children	387	8,586	8,973
Total	9,041	65,411	74,452
Vulnerable households			
Vulnerable	5,734	7,968	13,702
Not vulnerable	3,308	57,443	60,750
Total	9,041	65,411	74,452
Size of dwelling			
Av no. of rooms	4.4	4.4	4.4
Av floor space (m ²)	101.0	95.2	95.9

Table A1.6 Summary of dwelling/household characteristics and vulnerable households			
Dwelling characteristic	Vulnerable	Not vulnerable	Total
Tenure			
Owner-occupied (nm)	5,239	17,724	22,963
Owner-occupied (wm)	2,577	32,757	35,334
RSL	3,157	1,258	4,415
Private rented	2,729	9,011	11,740
Total	13,702	60,750	74,452
Age of dwelling			
Pre-1919	3,062	18,323	21,385
1919-1944	6,145	27,362	33,507
1945-1964	1,079	3,648	4,727
1965-1980	957	4,351	5,309
Post-1980	2,458	7,066	9,524
Total	13,702	60,750	74,452
Type of dwelling			
End terrace	2,395	9,797	12,192
Mid terrace	3,624	16,860	20,483
Semi-detached	1,916	10,498	12,414
Detached	618	4,211	4,829
Converted flat	3,603	12,209	15,812
Purpose-built flats	1,546	7,176	8,722
Total	13,702	60,750	74,452
Household type			
Single pensioners	3,497	5,432	8,929
2 or more pensioners	1,326	3,245	4,571
Single non-pensioners	2,537	12,074	14,611
2+ adults, no children	2,981	24,365	27,346
Lone parent	1,574	1,288	2,862
2+ adults, 1 child	458	6,702	7,160
2+ adults, 2+ children	1,329	7,644	8,973
Total	13,702	60,750	74,452
Special needs			
Special needs	5,734	3,308	9,041
No special needs	7,968	57,443	65,411
Total	13,702	60,750	74,452
Size of dwelling			
Av no. of rooms	4.1	4.5	4.4
Av floor space (m ²)	85.9	98.2	95.9

Appendix A2: Statistical Issues

A2

A2.1 Sampling errors

Estimates of dwelling and household characteristics produced from a sample survey may differ from the true population figures because they are based on a survey rather than a complete census. This is known as sampling error, and it is important to know the extent of this error when interpreting the results.

The size of the sampling error depends on the size of the sample. In general, the smaller the sample size the larger the potential error. For example, in this survey, estimates for dwellings in the private rented sector will be subject to a larger sampling error than owner-occupied dwellings. A way of taking account of sampling error is to calculate a confidence interval for an estimate. This is an interval within which it is fairly certain the true percentage figure lies. This section explains how 95% confidence intervals can be calculated for the key survey estimates – and comes from standard statistical theory for large samples.

The 95% confidence interval for a percentage estimate p , is given by the formula:

$$p \pm 1.96 \times se(p)$$

where $se(p)$ represents the standard error of the percentage and is calculated by:

$$se(p) = \sqrt{p(100-p)/n} \quad (n \text{ is the unweighted sample size})$$

Estimating standard errors for results based on a simple random sample, which has no stratification, are fairly straightforward. However samples in stock condition surveys are rarely simple random ones so the standard errors could be corrected using a sample design factor. The design factor is calculated as the ratio of the standard error with a complex sample design to the standard error that would have been achieved with a simple random sample of the same size. Overall, design effects were assumed to be small and so no adjustment has been made in the example below (this is also the position taken by the 2001 EHCS).

A 95% confidence interval for a percentage may be calculated using the equations above. The width of the confidence interval depends on the value of the estimated percentage and the sample size on which the percentage was based.

Example:

The estimated number of unfit dwellings is 4,903 or 5.4%. This percentage is based on the core sample of dwellings of 996. Using the equations above it is found that the margin of error based on this information is 1.4% (to 1 decimal place) giving a confidence interval of between 4.0% and 6.8%. In terms of the total number of dwellings (based on an estimated number of dwellings of 76,452) this is a confidence interval of 1,073, hence the estimate of the accuracy of the 4,903 figure is +/- 1,073 or between 3,830 and 5,166.

A2.2 Non-response and missing data

Missing data is a feature of all stock condition surveys: mainly due to the difficulty in accessing parts of a dwelling. For all missing data in the survey standard statistical imputation procedures were applied. In general, throughout the survey the level of missing data was minimal.

Non-response can cause a number of problems:

- The sample size is effectively reduced so that applying the calculated weight will not give estimates for the whole population
- Variables which are derived from the combination of a number of responses each of which may be affected by item non-response (e.g. calculating repair costs where a particular element was not included) may exhibit high levels of non-response
- If the amount of non-response substantially varies across sub-groups of the population this may lead to a bias in the results

To overcome these problems missing data was 'imputed'. Imputation involves substituting for the missing value, a value given by a suitably defined 'similar' household, where the definition of similar varies depending on the actual item being imputed.

The specific method used was to divide the sample into subgroups based on relevant characteristics and then 'Probability Match' where a value selected from those with a similar predicted value was imputed. The main sub-groups used were tenure, dwelling age, and building type.

Appendix A3: The Hazard Scoring Procedure

A3

A3.1 Introduction

The scoring procedure, based on the surveyor's assessment of the dwelling, provides a numerical Hazard Score for each of the hazards identified at the property. The higher the score, the greater the severity of that hazard. The highest Hazard Score for an individual dwelling indicates the most serious hazard at that dwelling. A comparison of the Hazard Scores for a number of dwellings provides a means of grading those dwellings from the most dangerous to the safest.

A3.2 Potential hazards

All hazards that can be assessed using the HHSRS are listed in the following box. Those used in the survey have been highlighted in bold.

Box A3.1 List of all potential hazards

Type of Hazard	Hazard
Hygrothermal Conditions	<ul style="list-style-type: none"> • Damp and mould growth • Excess cold • Excess heat
Pollutants (non-microbial)	<ul style="list-style-type: none"> • Asbestos (and MMFs) • Biocides • Carbon Monoxide and fuel combustion products • Lead • Radiation • Uncombusted fuel gas • Volatile Organic Compounds
Space, Security, Light & Noise	<ul style="list-style-type: none"> • Crowding and space • Entry by intruders • Lighting • Noise
Hygiene, Sanitation & Water Supply	<ul style="list-style-type: none"> • Domestic hygiene, Pests and Refuse • Food safety • Personal hygiene, Sanitation and Drainage • Water supply
Falls	<ul style="list-style-type: none"> • Falls associated with baths etc • Falls on the level • Falls associated with stairs and steps • Falls between levels
Electric Shocks, Fires, Burns & Scalds	<ul style="list-style-type: none"> • Electrical hazards • Fire • Hot surfaces and materials
Collusions, Cuts & Stains	<ul style="list-style-type: none"> • Collision and entrapment • Explosions • Ergonomics • Structural collapse and falling elements

A3.3 Generating hazard scores

A formula is used to generate a Hazard Score. For this formula:

- The likelihood is expressed as a ratio
- A weighting is given to each Class of Harm
- The spread of health outcomes is indicated as a percentage

The Hazard Score is the sum of the products of the weightings for each class of harm which could result from the particular hazard, multiplied by the likelihood of an occurrence, and multiplied by the set of percentages showing the spread of harms.

Class of harm weightings

The weightings given to each Class of Harm reflect the degree of incapacity associated with each Class as shown in the box below.

Box A3.2 Weightings give to each of the four classes of harm

Class of harm		Weighting
I	Extreme	10,000
II	Severe	1,000
III	Serious	300
IV	Moderate	10

Spread of health outcomes

While there will be a most likely health outcome, there could also be a possibility of other outcomes, which may be less and/or more serious.

For example, it may be judged that there is a 60% chance that a vulnerable person falling to the ground out of a window on the second floor will suffer serious fractures (Class II). It may also be considered that there are other possible outcomes – a 10% chance of death (Class I), a 20% chance of concussion or sprains (Class III) and a 10% chance of severe bruising (Class IV). Another example is a fall out of a window on the fifteenth floor where it may be judged that there is a 100% chance of death (Class I).

The formula

An example of a Hazard Score using the formula is shown in the box below. In this example, the likelihood of an occurrence has been judged to be 1 in 100, with a 60% chance of a Class IV outcome, a 30% chance of a Class III outcome and a 10% chance of a Class II outcome.

Box A3.3 Formula for calculating a hazard score

	Class of harm weighting		Likelihood 1 in		Spread of harm (%)			
I	10,000	÷	100	×	0	=	0	
II	1,000	÷	100	×	10	=	100	
III	300	÷	100	×	30	=	90	
IV	10	÷	100	×	60	=	6	
						Hazard score	=	196

A3.4 To score a hazard

Likelihood

To score a hazard, the surveyor judges the likelihood of the occurrence resulting in a Class I to IV Harm to a **vulnerable person** over the following twelve months. For stairs, the surveyor determines the likelihood of a fall occurring which would result in a Class I to IV Harm to a vulnerable person. This involves taking account of such matters as the going, the presence or absence of handrails, the state of repair of the treads and the available lighting. For dampness, the surveyor determines the likelihood of the dampness causing Class I to IV Harm to a vulnerable person over the next twelve month period, taking into account the extent and degree of the dampness and its position.

Assessing likelihood is not determining that there **will** be an occurrence. The likelihood that there will be an occurrence over the next twelve months also means that it may not happen. Even where it is judged that there is a very high likelihood, such as a 1 in 10 probability, it is accepted that the likelihood of no occurrence is nine times greater than that of an occurrence.

Spread of outcomes

Next, the surveyor judges the most likely and other possible health outcomes to a **vulnerable person** from an occurrence.

In the case of a fall while using stairs, determining the spread of outcomes should take account of any secondary hazards such as a window or other glazing at the base of the stairs. It will also be influenced by factors such as the position of any fault which could result in a fall. If the occurrence happens at the base of the stairs there will be only a short distance to fall, but if the person is at the top there will be the full length of the stairs to fall.

Judging the extent to which individual features may increase or reduce the likelihood of an occurrence and the severity of the outcome is a matter of professional expertise. This is particularly so where disrepair may increase the risk of an occurrence. Guidance to inform professional judgement is given in the Profiles of Hazards.

While there is some information on the contribution individual features may make to hazards, it is limited. It relies on injuries or other health outcomes resulting from occurrences being reported by General Practitioners, hospitals or identified in research surveys. The surveyor indicates the spread of the Classes of Harm likely to result from an occurrence using percentages, giving the highest to the most likely outcome.

Appendix A4: Stock Condition Survey Form

A4

