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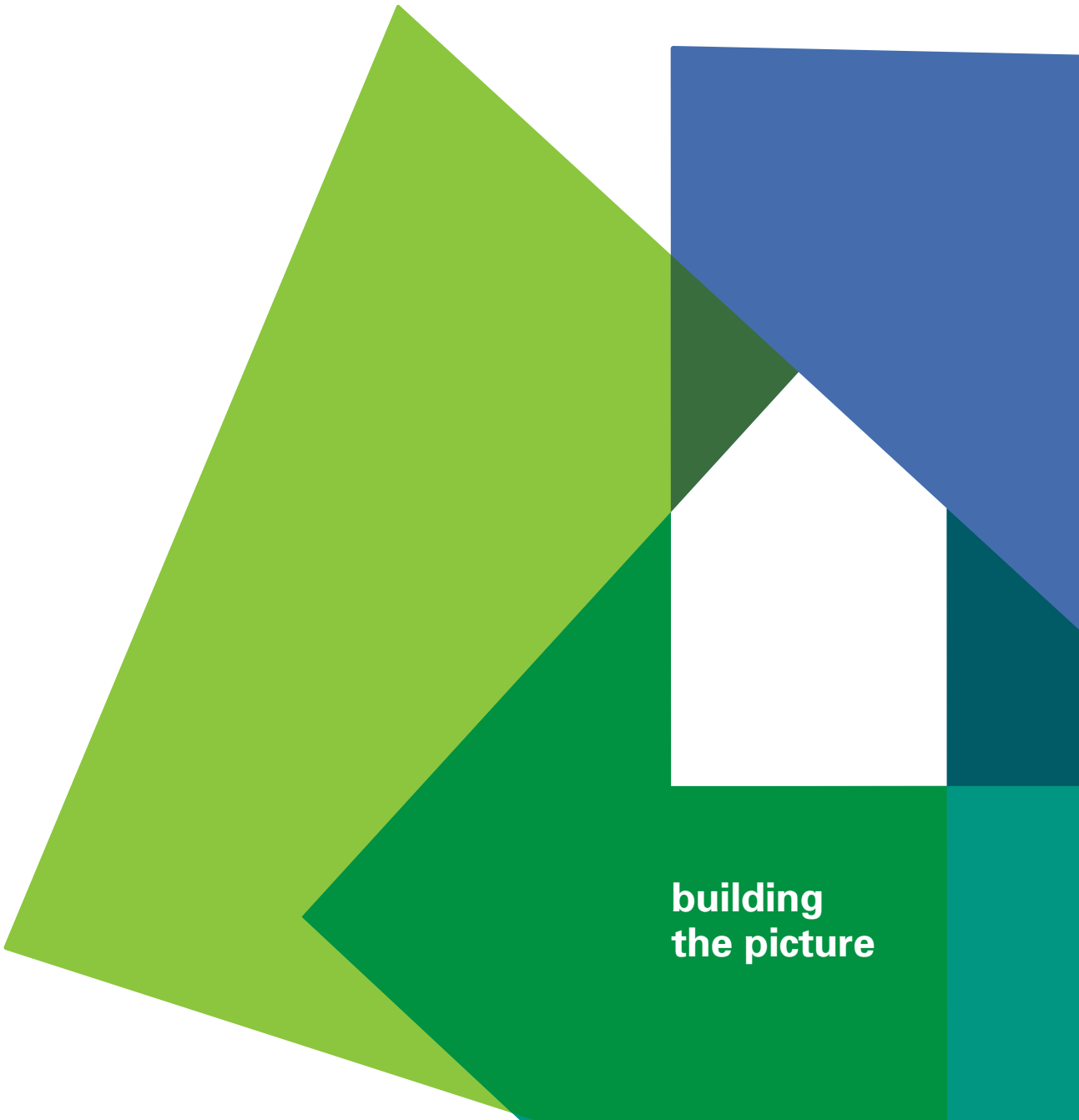
DEPUTY PRIME MINISTER

English House Condition Survey

2001



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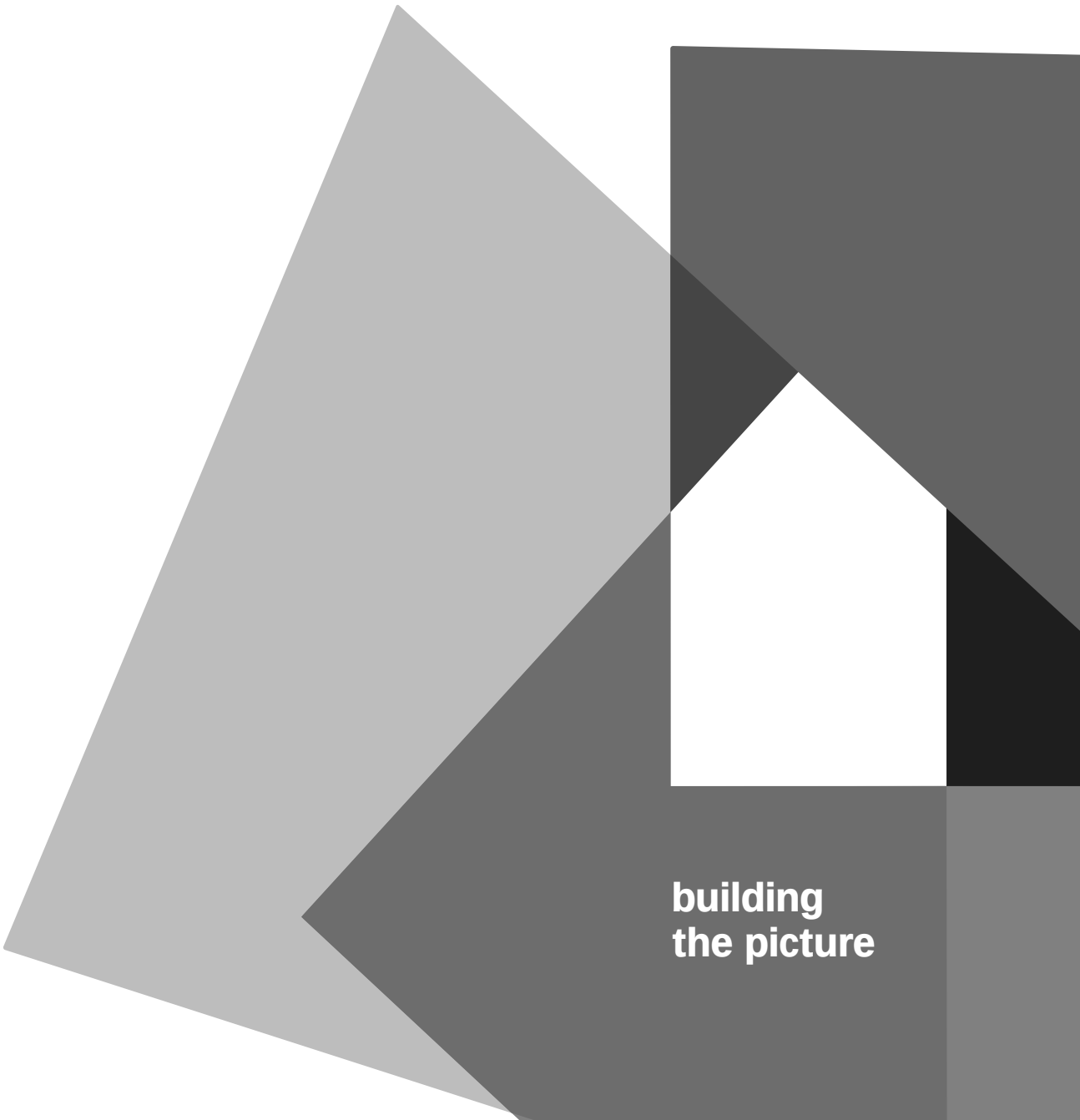

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Introduction

The *2001 English House Condition Survey* (EHCS) is the eighth of a five yearly series undertaken by the Office of the Deputy Prime Minister (ODPM). The survey is undertaken to assess the condition of the stock and its improvement, and how poor conditions are distributed across different types of dwellings, households and areas.

The *Housing Policy Statement Quality and Choice: A decent home for all*, published in December 2000, set out the Government's key housing policy aim of providing everyone with the opportunity to live in a decent home. This was reaffirmed in *Sustainable Communities: building for the future* in March 2003 with an extension of the related ODPM Public Service Agreement (PSA) target to the private housing sector.

Sustainable Communities also placed decent homes within a broader framework of raising the quality of life for all communities – a concern not only with 'decent homes' but also 'decent places'.

This report from the 2001 EHCS provides national baseline evidence from which to monitor and evaluate progress towards meeting the PSA target for delivering decent homes, but also, retrospectively, to assess what has been achieved since 1996. From 2002, the survey is being carried out annually to enable ongoing assessment of progress in respect of the PSA target. The report also provides evidence on a wider range of environmental and housing indicators of the quality of life in local communities.

Findings from three components of the 2001 survey are reported here:[1]

- the *interview* survey provides information on household characteristics, resources and housing costs and views from respondents about their home and neighbourhood;
- the *physical* survey provides information on dwelling characteristics and a professional assessment of dwelling and neighbourhood conditions;
- the *market value* survey provides a professional assessment of the value of dwellings and local market conditions.

Drawing on *Sustainable Communities: building for the future*, the broad themes of the report are about decent homes and decent places to live. The report covers:

- the composition, ownership, condition and energy efficiency of the housing stock, and the range and quality of services it provides;
- how poor housing conditions are distributed across tenures, broad regional groups and different types of areas;
- how poor housing conditions are related to social and economic deprivation;
- the types of households who are most likely to live in poor housing conditions, in terms of their resources, vulnerability and other characteristics;
- concentrations of poor housing and environmental conditions in poor neighbourhoods, the households who live there and the problems they experience.

Conduct of the survey

Survey content and data analysis are the responsibility of staff at the ODPM together with the Building Research Establishment. The organisation of the component surveys of the 2001 EHCS, including sampling, questionnaire design, fieldwork and data cleaning and validation were undertaken by MORI Ltd with support from NOP for the interview survey. MORI employed 200 qualified surveyors to undertake the physical survey and also organised the collection of market valuations by the Valuation Office Agency.

A full description of the management and organisation of the survey is given at Appendix B.

A sample of 40,500 addresses was drawn for the survey of which 20% were dwellings previously surveyed in 1996. A full description of the sampling

1 The 2001 EHCS also included a follow up survey of private landlords whose lettings were included in the main survey. This will be reported separately.

process and response rates are given at Appendix A. The results presented here are based on a core achieved sample of 17,500 cases where a full interview, physical survey and market valuation was obtained or, for vacant properties, a physical survey and market valuation only.

Survey method

The survey method was generally the same as that used in 1996, to provide comparable results for assessing change. The 1996 survey collected the information required for assessing decent homes, which is central to the 2001 EHCS assessment of housing condition and this main report.

Some changes in detail have been made to improve the quality of the data collected and to include parts of the Housing Health and Safety Rating System and Housing Quality Indicators in the survey. These are not addressed in this report but will be reported separately (see below). See Appendix B for a full description of the survey method.

Interpretation of the results

Definitions of terms used in the report are given in the Glossary.

Results are generally grossed to all dwellings (whether occupied or vacant) or all households in England. The text, figures and tables make clear which base population applies. In some cases these refer to a sub-population (all owner occupied dwellings etc) which is made clear in the text and any figures or tables.

The survey results have a margin of error associated with them arising from sampling, non-response bias, and measurement error. The level of error (to a degree of confidence) is generally not quoted in the text, figures or tables in order to provide for clear presentation of the results. However the level of error has been considered in all statistical comparisons – and the conclusions drawn from them – in the report. Details of the error levels associated with the findings of the main report are given in Appendix C.

Content of the report

The report presents national level findings for the stock and households across all tenures. Key statistical findings are summarised in the report. Detailed tables to support the report are available on the EHCS web site at: www.odpm.gov.uk/housing

This report does not include government office regional findings, although it does make use of three regional groups ('north', 'south east' and 'rest of England') which allow for more detailed analysis than is possible for individual regions. *The 2001 EHCS Regional Report* is being published separately to include detailed breakdowns by government office region where it is possible to do so.

No information is available at a sub-regional level because of limitations of sample size and design. However this report does include analysis of local areas based on aggregations of specific areas types: urban and rural localities (based on surveyor classification made in the field); a decile ranking of most and least deprived wards (as provided by the Index of Multiple Deprivation 2000); and 'poor neighbourhoods' (based on a composite scale of surveyor assessments of environmental conditions using observed natural/physical boundaries to delimit the neighbourhood). More detailed definitions of these can be found in the Glossary.

Further results

Further results from the 2001 survey will become available through

- ODPM research reports, covering for example the Housing Health and Safety Rating; Housing Quality Indicators; private landlords; houses in multiple occupation (HMOs); and market values and conditions;
- publication of 2001 EHCS key results to inform a range of Government targets concerned with poverty, health and housing, fuel poverty and sustainable development. These results will be published on relevant Government web sites.

All additional results will be announced on the EHCS web site: www.odpm.gov.uk/housing/ and in the EHCS Bulletin. Free subscription to the EHCS Bulletin can be obtained by e-mail to *ehcs@odpm.gsi.gov.uk* or by post to *EHCS Project Team, 2/B4, Eland House, Bressenden Place, London SW1E 5DU*.

The 2001 EHCS public dataset will be made available during 2003 once detailed user documentation for the dataset has been prepared. A bespoke tabulation service is also provided on a commercial basis by the Building Research Establishment. Enquiries can be made through e-mail to *davidsonm@bre.co.uk*.

From 2002 the EHCS has been organised to provide annual key indicators at the national level to meet its key role in monitoring and assessing progress towards the Government decent homes target. Annual summary results will be available from winter 2003 with more detailed information available from 2005 onwards (based on combined annual datasets). Further information on the reorganisation of the survey can be found on the EHCS web site at www.odpm.gov.uk/housing/

Overview of findings

The stock and its use

1 There are 21.1 million dwellings in England, an increase of 800 thousand since 1996 (the year of the last EHCS). Most additions were provided by new-build (averaging around 150 thousand each year) although the level of new construction continued a longer term trend of decline and was less than half the post-1945 high of the mid- to late-1960s.

2 Consequently, there has been little change in the composition of the stock and it remains relatively old with 8.1 million dwellings (39%) built before 1945, including 4.4 million dwellings (21% of all) built before 1919.

3 Some 70% of the stock is owner-occupied, and another 10% is rented from private landlords. The remainder is rented from a social housing provider (13% from local authorities and 7% from RSLs). Between 1996 and 2001 nearly two million dwellings changed tenure, the biggest movements being: between owner occupation and private renting (around 600 thousand dwellings in both directions); the transfer of local authority dwellings to RSLs (350 thousand); and the sale of local authority dwellings to their occupants through 'Right to Buy' (200 thousand).

4 Overall, 80% of dwellings are houses and just 20% flats, although the proportion of flats in the rented sectors (private 37% and social 44%) is much higher than in the owner occupied stock (9%). The age profile of the stock differs between tenures with a high proportion (43%) of pre-1919 properties in the private rented sector, compared to the owner occupied stock (21%) and the social sector (11% for RSL and 3% for local authority properties).

5 The stock provides homes for 20.5 million households. Recently built dwellings are on average smaller, and on smaller plots than older housing. The average size for a post 1980 home is 83m^2 compared to 88m^2 for those built before 1980. Nevertheless, the average amount of living space per person provided by homes has increased, largely as a consequence of a fall in household size.

6 Where they can afford it, households in the private sector opt for more living space. For households who moved in the last five years, highest income earners living alone bought or rented accommodation that was on average 17m^2 larger than the properties occupied by those on lowest income and living alone – for households of four or more people the difference between those on highest and lowest income was over 11m^2 per person (giving higher income households homes that are on average at least 44m^2 larger).

7 Retired households tend to have most living space (58m^2 per person), even when compared with other small households. While this space facilitates visiting by children and others, such homes can be more expensive to maintain and heat for those with modest retirement income and savings.

8 Ethnic minority households tend to have least living space – with Pakistani and Bangladeshi households averaging only 22m^2 per person. Black households have least space per person when comparing like-sized households. However Pakistani and Bangladeshi households, who tend to have larger households, are most likely to have insufficient bedrooms to meet their needs because suitably sized homes are either unavailable or unaffordable.

9 Some 2.6 million people, comprising 1.3 million households, live in a range of dwellings that might be considered 'houses in multiple occupation' (HMOs). More than half of all HMOs are located in city and other urban centres. The majority are in the south east regions (with more than a third of all in London) where multiple occupation is partly a response to high levels of housing demand, high housing costs and issues of affordability for some sections of the local population.

10 Excluding properties converted into self-contained flats, 1.7 million people share amenities in their homes with unrelated others in bedsit accommodation, lodgings and shared houses/flats.

11 Around 3% of the dwelling stock (nearly 700 thousand dwellings) is vacant, compared to 4% (800 thousand) in 1996. The social sector (4%) is a little more likely to have vacant stock than the private (3%). Around half of vacant dwellings are 'problematic' in that they either need significant work to bring them back into use, or have been vacant for at least 6 months.

12 Problematic vacancies are concentrated among the lowest valued stock in each region. The overall rate of vacancy is a little higher in northern regions (4%) compared to elsewhere (3%). However *concentrations* of vacant and derelict residential and non residential property are much more likely in northern regions, in city and urban centres and in the most deprived wards than elsewhere.

Decent homes

13 The number of dwellings failing to provide a decent home (that is are unfit, in disrepair, in need of modernisation or provide insufficient thermal comfort) has fallen from 9.4 million (46% of all) in 1996 to 7.0 million (33%), Table 1.

14 Improvement has been most marked in the owner occupied and RSL sectors where there has been over 25% reduction in the proportion of dwellings that do not provide decent homes. The local authority and privately rented stock have improved by a little over 20%. The number of non decent homes in the RSL sector has actually increased – largely as a result of the rapid expansion of the sector as a whole through transfer of stock from local authorities.

Table 1: Decent and non decent homes by tenure, 1996 and 2001

	1996			2001		
	decent	**non decent**	**all dwellings**	**decent**	**non decent**	**all dwellings**
number (000s):						
owner occupied	8,083	5,843	13,927	10,435	4,336	14,771
private rented	735	1,263	1,998	1,108	1,083	2,191
all private	8,818	7,107	15,925	11,543	5,419	16,963
LA	1,548	1,921	3,469	1,599	1,191	2,790
RSL	588	353	941	1,005	383	1,388
all social	2,136	2,274	4,410	2,604	1,574	4,178
all tenures	10,953	9,381	20,335	14,147	6,993	21,140
percentage:						
owner occupied	58.0	42.0	100.0	70.6	29.4	100.0
private rented	36.8	63.2	100.0	50.6	49.4	100.0
all private	55.4	44.6	100.0	68.1	31.9	100.0
LA	44.6	55.4	100.0	57.3	42.7	100.0
RSL	62.5	37.5	100.0	72.4	27.6	100.0
all social	48.4	51.6	100.0	62.3	37.7	100.0
all tenures	53.9	46.1	100.0	66.9	33.1	100.0

Base: all dwellings

15 This substantial improvement in the stock as a whole is reflected across a range of indicators of housing standards:

> Amenity provision has continued to increase over the last five years: the proportion of homes with central or programmable heating has risen from 88% in 1996 to 94%, those with double glazing from 59% to 76%, and those with a second WC from 31% to 35%.

> The proportion of dwellings with insulated cavity walls has increased from 21% to 36% of dwellings with cavity walls. Some 95% of all lofts are now insulated, and the proportion with 100mm or more of insulation has risen from 60% to 69%. The average energy cost rating (SAP) has increase by 5 percentage points to 51.

> The number of unfit homes (the statutory measure of condition and one component of decent homes) has fallen from 1.5 million (7.4% of the stock) in 1996 to 900 thousand (4.2%), following a previous five year period (1991-96) of little overall change (reported in the 1996 EHCS).

> The number of homes requiring no immediate general repairs has increased from 22% to 31% of the stock.

As with decent homes, these improvements have not happened uniformly across the stock.

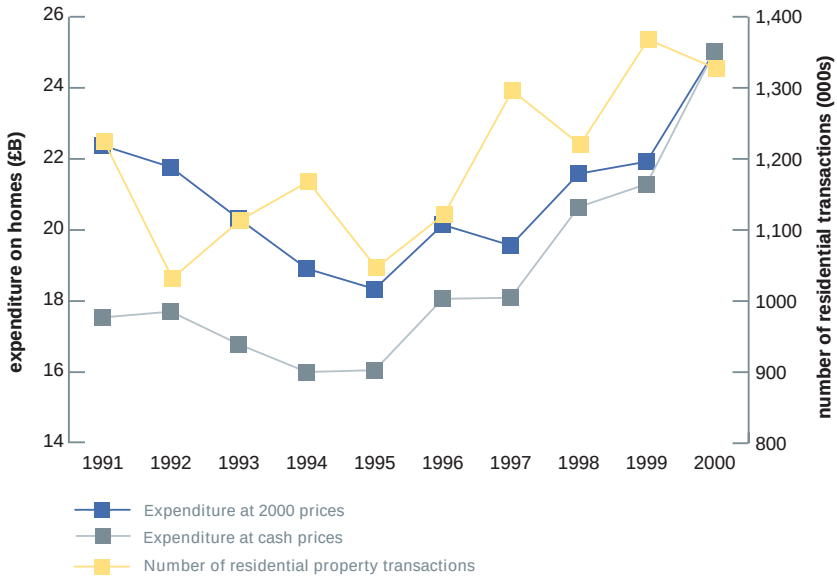
16 The factors underpinning this overall improvement include:

> The continuing steady recovery of the housing market during the latter half of the 1990s, accompanied by low interest rates and steady increases in house prices, which have provided a major stimulus to expenditure on repairs and improvements by owners.

> Increased central and local government investment in the social sector of £350 million between 1997/98 and 2000/01 – an 18% increase over the period.

Household expenditure on repairs, improvements and decoration increased from £20 billion in 1996 to £25 billion in 2000 (at year 2000 prices), along with increasing activity in buying and selling homes, Figure 1.

Figure 1 Trends in residential transactions and occupant expenditure on homes, 1991–1992



Source: Adapted from *Family Expenditure Survey* and Inland Revenue data on property transactions which includes England and Wales.

17 Nevertheless, 7 million dwellings do not provide decent homes. The most common reason why dwellings do not meet the standard is because they do not provide a reasonable degree of thermal comfort – 5.6 million homes (80% of all non decent dwellings) fail on this count, 4.3 million (62%) fail for this reason alone. Some 2.0 million (27% of all non decent dwellings) are in disrepair, 900 thousand (13%) are unfit, and 500 thousand (7%) require modernisation. Only 1.4 million (21% of all non decent) fail for more than one of these reasons.

18 The average cost to make homes decent is nearly £7,200 per dwelling, representing a total cost of £50 billion. However, while 40% of non decent homes require expenditure of less than £1,000 per dwelling (largely those homes requiring only insulation work to improve their thermal comfort), another 10% require expenditure of £20,000 per dwelling or more. For some low value, low demand or obsolescent properties a sounder investment may be demolition.

19 While the numbers of non decent homes has been reduced substantially since 1996, more progress has been made among some aspects and parts of the stock than others:

> Less progress has been made in tackling disrepair relative to the other reasons for failing the standard, with the share of non decent homes failing on this count rising from 25% in 1996 to 27%. Properties are much more likely to fall into disrepair than become non decent for other reasons if they are not adequately maintained, because the state of repair is more susceptible to deterioration.

> Although the rate of unfitness has declined substantially since 1996, a higher proportion of those unfit fail on more than one item (45% compared to 38% in 1996). In consequence the costs to tackle a smaller but 'harder core' of unfit properties is on average higher.

> Pre 1919 dwellings (comprising a third of all non decent homes) are more expensive to deal with than newer dwellings because they are more likely to fail on the more expensive components (unfitness and disrepair) or for more than one reason. These dwellings have improved far less than those built 1919–1965.

All of the above factors mean that, although the number of non decent dwellings has reduced, those that remain non decent are more expensive to deal with.

20 The non decent stock remains concentrated among older dwellings (51% of pre-1919 stock is non decent) and flats, with 44% of low rise, 58% of high rise and 47% of converted flats non decent.

Vulnerable households

21 Some 6.7 million households (33%) live in non decent homes, some 2.2 million less than in 1996. 5.2 million of these households live in the private sector (31% of all private sector households) and 1.5 million are social tenants (37%).

22 In the private sector some types of households are more likely than average to live in non decent homes: 43% of the poorest fifth of private sector households are living in non decent homes, as are 42% of those below retirement age who are either economically inactive or unemployed and some 41% of ethnic minorities.

23 Some sections of older people are also more likely to live in non decent homes in the private sector: 39% of elderly households (that include someone aged 75 years or more), 40% of people aged 60 years or more living alone and 47% of households who have been resident 30 years or more.

24 In contrast there is relatively little difference in the housing conditions of different groups within the social sector but where 37% of households live in non decent homes.

25 The government PSA target for the private housing sector is concerned with reducing the proportion of 'vulnerable' households living in non decent homes (households in receipt of income or disability related benefits). Some 1.2 million (43% of all) vulnerable households in the private housing sector live in non decent homes, a reduction from 1.5 million (58%) in 1996, Table 2.

Table 2: 'Vulnerable' households in non decent homes by tenure, 1996 and 2001

	1996			2001		
	decent	non decent	all dwellings	decent	non decent	all dwellings
number (000s):						
owner occupied	854	954	1,809	1,243	812	2,055
private rented	187	514	701	285	347	632
all private	1,042	1,468	2,509	1,527	1,160	2,687
all social	1,540	1,595	3,135	1,836	1,060	2,896
all tenures	2,582	3,062	5,644	3,364	2,220	5,583
percentage:						
owner occupied	47.2	52.8	100.0	60.5	39.5	100.0
private rented	26.7	73.3	100.0	45.1	54.9	100.0
all private	41.5	58.5	100.0	56.8	43.2	100.0
all social	49.1	50.9	100.0	63.4	36.6	100.0
all tenures	45.7	54.3	100.0	60.2	39.8	100.0

Base: all vulnerable households (that is, households in receipt of income and disability related benefits).

26 Private sector dwellings in the northern regions (34%) are a little more likely than elsewhere (31%) to be non decent. The proportions of vulnerable households in private sector non decent homes do not vary significantly from the national average (43%) across broad regional groups. However, because of social, economic and demographic factors, vulnerable households are more likely to be found in the northern regions and consequently in their non decent stock – 38% of non decent homes in northern regions are occupied by vulnerable households compared to 30% of non decent homes in south east regions and 33% of those in the rest of England.

27 The substantial reduction in the number of non decent homes has benefited all social groups equitably. In consequence there has been little change in the position of different groups relative to each other since 1996. While the proportion of the poorest fifth of all households living in non decent homes has fallen from 57 to 42%, they remain twice as likely to be living in non decent homes as the fifth of households with highest income.

Decent places

28 Environmental problems are concentrated in urban and city centres. Some 2.5 million dwellings overall are affected by substantial problems associated with heavy traffic and parking, 1.0 million by poorly maintained/neglected buildings, private gardens and public spaces, 500 thousand by vandalism, graffiti and other forms of anti-social behaviour, and 500 thousand by concentrations of vacant and boarded up buildings. Some dwellings are affected by more than one of these problems.

29 City (48%) and other urban (41%) centres, along with village and isolated rural (42%) locations have much higher incidences of non decent homes than suburban (30%) and rural residential (26%) areas – although nearly half of all non decent homes are in suburban locations, which is expected given that most people live in such areas.

30 Neighbourhoods with concentrations of housing and environmental problems embrace around 2.4 million dwellings (11% of the stock). Half of these 'poor neighbourhoods' are private sector housing areas characterised by old and typically terraced properties concentrated in urban and city centres. Another 40% are predominantly local authority-built neighbourhoods comprising mainly terraced houses and flats, the majority of which are in suburban locations. Less than 10% of poor neighbourhoods have no predominant tenure character.

31 The majority (53%) of homes in these neighbourhoods are non decent and over a quarter (28%) are situated within areas of 'limited' demand – mainly those built by local authorities where there is significantly greater evidence of anti-social and/or criminal behaviour. There is a strong link with social and economic deprivation with 38% of the housing stock of all poor neighbourhoods being located in the 10% most deprived wards.

32 Ethnic minority households (27%) are nearly three times more likely to live in poor neighbourhoods than white households (10%). Poor neighbourhoods have relatively high concentrations of pre-retirement households on low income, those who are unemployed or economically inactive, lone parents, and other people living alone or sharing.

33 Residents of poor neighbourhoods are much more likely than those living elsewhere to view their neighbourhood as having a wide range of problems linked to the environment and its upkeep and to criminal and anti-social behaviour:

- The most common problems indicated by residents of predominantly local authority-built poor neighbourhoods are the amount of litter and rubbish around (60% of all households in these neighbourhoods), fear of being burgled (50%), vandalism and hooliganism, troublesome teenagers/children, and the general level of crime (all 44%).

- For households in private sector poor neighbourhoods (who are most likely to live in city and other urban centres) the most common problems are the amount of litter and rubbish (55%), street parking (55%), fear of burglary (44%) and heavy road traffic (42%).

Summary statistics

A. Stock, 2001

number of dwellings (000s):

	owner occupied	private rented	local authority	RSL	all
dwelling age					
pre 1919	3,208	952	95	153	4,408
1919–45	2,836	352	448	102	3,738
1945–64	2,857	243	1,132	243	4,475
1965–80	3,141	337	282	566	3,915
post 1980	2,730	337	282	566	3,915
dwelling type					
small terraced house	1,725	416	336	184	2,661
medium/large terraced house	2,387	351	399	208	3,345
semi-detached house	4,710	356	578	209	5,853
detached house	3,118	138	9	8	3,273
bungalow	1,546	112	285	111	2,054
converted flat	246	340	40	65	691
low-rise purpose built flat	977	444	929	578	2,928
high-rise purpose built flat	63	34	214	25	336
location					
urban	11,405	1,776	2,504	1,190	16,875
rural	3,367	415	286	198	4,266
access					
flush thresholds	2,225	442	778	529	3,974
level access	10,596	1,312	1,909	961	14,778
bathroom/WC at entrance level	5,515	936	1,337	694	8,482
750mm doorway opening	2,191	304	487	303	3,285
all four	277	60	193	162	692
facilities and services					
some double glazed windows	4,287	391	413	117	5,208
all windows double glazed	7,906	751	1,264	909	10,830
central heating	13,210	1,526	2,330	1,109	18,175
programmable heating	795	340	242	223	1,600
garage	8,140	454	229	106	8,929
smoke detectors[1]	11,062	1,226	1,838	1,070	15,196
second wc	6,167	441	449	255	7,312
secure windows and doors	8,393	798	1,174	761	11,126
burglar alarms	4,757	274	230	107	5,368
All dwellings	14,772	2,191	2,790	1,388	21,141

Note (1) for households, not dwellings

B. Conditions
i) households, 2001

household group:	% of households in the group that: are non decent	fail thermal comfort	fail disrepair	fail fitness	fail modern-isation	number of house-holds in the group (000s)	average floor space/ person of group (m^2)
tenure							
owner occupiers	29.0	22.9	7.7	2.9	1.4	14,488	46
private tenants	48.9	39.8	16.8	10.3	4.3	2,010	40
local authority tenants	41.9	33.4	8.6	4.1	5.8	2,684	38
RSL tenants	27.1	21.8	4.7	3.0	2.4	1,328	36
type							
couple under 60, no dependents	27.6	21.5	8.0	3.0	1.2	4,085	41
couple over 60, no dependents	30.8	26.0	5.8	2.1	2.7	2,925	46
couple with dependent child(ren)	27.7	20.5	8.4	3.4	1.1	4,986	26
lone parent with dependents	33.2	25.6	8.0	6.2	2.1	1,597	28
other multi-person households	40.8	30.4	13.7	6.7	3.9	1,443	35
one person under 60	40.0	33.4	9.9	4.8	3.8	2,397	65
one person aged 60 or over	38.4	32.5	8.9	3.8	3.7	3,077	71
ethnicity							
white	31.9	25.7	8.2	3.5	2.2	19,081	45
black	35.6	22.7	14.6	8.0	7.4	497	35
asian	44.5	32.7	14.0	9.2	3.5	644	28
other	38.4	26.7	9.3	6.6	2.1	289	33
income							
lowest income quitile	42.0	34.7	10.1	6.1	4.2	4,102	52
2nd	38.0	31.0	9.3	4.1	3.2	4,103	45
3rd	33.6	27.0	9.2	4.1	1.9	4,102	43
4th	25.6	19.8	6.3	2.5	1.4	4,102	38
highest income quintile	23.5	16.9	7.9	2.2	0.9	4,101	42
employment status							
full time employment	28.5	22.3	8.2	3.4	1.5	10,458	39
part-time employment	34.3	26.2	9.7	4.1	2.6	1,597	42
retired	35.3	29.7	7.7	3.1	3.4	5,568	58
unemployed	43.5	35.2	10.6	9.3	3.0	649	36
full time education	40.0	28.2	14.6	6.8	3.2	297	30
other inactive	39.8	30.7	10.4	5.9	3.1	1,940	37
vulnerable households(1)							
private sector	43.2	34.4	13.2	7.5	2.7	2,687	43
social sector	36.6	29.0	7.2	3.9	4.4	2,896	38
all vulnerable	39.8	31.6	10.1	5.6	3.6	5,583	41
potentially at risk groups							
children under 11	29.1	21.6	8.3	4.2	1.5	4,913	25
children under 5	30.4	21.8	9.1	4.5	1.9	2,746	25
people over 60	35.1	29.3	7.9	3.3	3.3	6,919	56
people over 75	39.0	31.1	8.2	3.5	4.6	2,739	58
long term illness/ disability	36.5	29.8	9.7	4.2	3.2	4,504	45
resident 30+ years	46.5	37.3	12.5	5.9	6.5	2,465	59
All households	32.5	25.9	8.5	3.8	2.3	20,510	44

Note (1) vulnerable households are those in receipt of income or disability related benefits.

ii) dwellings, 2001

stock group	% of dwellings in group that: *are non decent*	*fail thermal comfort*	*fail disrepair*	*fail fitness*	*fail modern-isation*	number of dwellings in group (000s)	average floor space of group (m^2)	average repair cost of group[1] (£/m^2)	average SAP rating of group
tenure									
owner occupied	29.4	23.1	8.0	3.2	1.5	14,771	95	15.93	50
private rented	49.4	40.4	17.1	10.9	4.3	2,191	75	38.62	45
local authority	42.7	34.1	8.8	4.7	5.7	2,790	65	20.85	54
RSL	27.6	22.1	5.0	3.4	2.3	1,388	64	11.77	60
dwelling type									
small terraced house	39.2	30.5	11.8	7.2	2.1	2,660	57	26.54	51
larger terraced house	39.0	29.9	12.9	5.9	2.2	3,344	96	21.93	50
semi-detached house	30.3	23.1	8.3	3.7	1.9	5,853	88	16.96	48
detached house	18.5	14.3	5.8	1.6	0.9	3,273	139	10.69	49
bungalow	22.7	19.6	3.3	2.7	0.9	2,055	78	17.03	46
converted flat	46.7	30.0	21.4	10.5	6.4	691	66	46.98	43
low rise flat	44.0	39.7	6.8	2.7	4.6	2,929	57	14.27	61
high rise flat	57.7	47.1	11.2	6.0	9.5	335	59	20.91	52
dwelling age									
pre 1919	51.1	37.1	20.9	10.3	4.2	4,406	99	37.79	41
1919–1944	38.3	27.8	14.0	5.3	2.2	3,739	88	24.45	46
1945–1964	35.4	29.4	6.1	3.0	2.9	4,476	81	15.51	48
1965–1980	36.8	34.1	3.2	1.6	2.4	4,604	83	11.16	55
post 1980	0.8	0.0	0.1	0.7	0.0	3,915	83	4.02	63
occupancy									
occupied	32.5	25.9	8.5	3.8	2.3	20,457	87	17.59	51
vacant	49.5	38.9	18.1	15.5	3.7	683	80	50.65	48
All dwellings	33.1	26.3	8.8	4.2	2.4	21,140	87	18.66	51

iii) places, 2001

area group	% of dwellings in group that: *are non decent*	*fail thermal comfort*	*fail disrepair*	*fail fitness*	*fail modern-isation*	number of dwellings in group (000s)	average floor space of group (m^2)	average repair cost of group[1] (£/m^2)	average SAP rating of group
regions									
northern regions	34.4	28.7	9.1	4.1	2.0	6,200	83	18.53	51
rest of England	32.5	26.0	8.0	4.3	1.9	8,437	89	18.25	49
south east regions	32.6	24.3	9.7	4.1	3.4	6,503	88	19.32	52
type of location									
city centre	47.9	33.3	16.8	7.7	8.5	633	76	35.63	51
urban centre	41.5	31.6	13.2	7.1	3.7	4,728	77	26.03	51
suburban residential	29.6	23.8	7.0	2.8	1.9	11,559	84	14.79	52
rural residential	25.7	21.6	5.1	2.8	0.7	2,858	101	13.16	49
village centre	35.7	30.1	12.2	4.5	2.5	795	112	26.32	43
isolated rural	50.1	43.2	15.1	8.4	1.4	568	137	30.24	32
deprived wards									
most deprived 10%	40.8	32.8	11.5	6.7	3.6	3,288	73	25.29	52
10 to 20%	38.6	29.5	10.5	5.3	2.7	2,962	77	22.59	51
20 to 30%	37.9	29.9	10.9	4.4	3.1	2,514	80	20.02	50
30 to 40%	31.0	24.4	8.0	3.8	2.6	2,216	83	17.33	51
40 to 50%	30.0	23.9	7.3	3.3	1.7	1,838	86	16.06	51
50 to 60%	30.7	25.4	8.7	3.0	1.6	1,831	90	15.71	49
60 to 70%	28.9	22.8	7.8	3.8	2.1	1,587	97	18.55	49
70 to 80%	30.4	23.7	8.3	4.5	1.9	1,561	101	15.88	49
80 to 90%	24.3	19.7	5.3	2.6	1.2	1,622	105	13.53	50
least deprived 10%	24.3	20.1	5.9	1.6	1.7	1,721	105	12.90	50
All areas	33.1	26.3	8.8	4.2	2.4	21,140	87	18.66	51

Note: (1) Average repair cost includes major and minor basic repairs needed for dwellings using a common price base for all regions and tenures. It is not costs to tackle the disrepair component of non decent dwellings.

iv) change, 1996–2001

	2001		1996			2001	1996
	number (000s)	% of all house-holds	number (000s)	% of all house-holds	% of dwellings with:		
households					central/program heating	94	88
owner occupiers	14,488	70.6	13,581	69.1	double glazing	76	59
private tenants	2,010	9.8	1,817	9.3	use of garage	42	43
local authority tenants	2,684	13.1	3,340	17.0	second WC	35	31
RSL tenants	1,328	6.5	905	4.6	smoke detectors*	72	70
all tenures	20,510	100.0	19,643	100.0	secure windows and doors	53	30
	number (000s)	% of all dwellings	number (000s)	% of all dwellings	average SAP rating		
dwellings					owner occupied	50	44
owner occupied	14,771	69.9	13,927	68.5	private rented	45	36
private rented	2,191	10.4	1,998	9.8	local authority	54	44
local authority	2,790	13.2	3,469	17.1	RSL	60	48
RSL	1,388	6.6	941	4.6	all tenures	51	44
all tenures	21,140	100.0	20,335	100.0	*figures for households only		

dwelling based data	2001		1996	
	number (000s)	% within tenure	number (000s)	% within tenure
non decent				
owner occupied	4,336	29.4	5,843	42.0
private rented	1,083	49.4	1,263	63.2
local authority	1,191	42.7	1,921	55.4
RSL	383	27.6	353	37.5
all tenures	6,993	33.1	9,381	46.1
failing thermal comfort				
owner occupied	3,416	23.1	4,796	34.4
private rented	885	40.4	1,057	52.9
local authority	951	34.1	1,657	47.8
RSL	307	22.1	315	33.4
all tenures	5,560	26.3	7,824	38.5
failing disrepair				
owner occupied	1,182	8.0	1,472	10.6
private rented	375	17.1	508	25.4
local authority	245	8.8	326	9.4
RSL	69	5.0	56	5.9
all tenures	1,870	8.8	2,362	11.6
failing fitness				
owner occupied	468	3.2	834	6.0
private rented	238	10.9	337	16.9
local authority	132	4.7	252	7.3
RSL	47	3.4	49	5.2
all tenures	885	4.2	1,472	7.2
failing modernisation				
owner occupied	216	1.5	343	2.5
private rented	94	4.3	165	8.3
local authority	160	5.7	211	6.1
RSL	32	2.3	12	1.3
all tenures	502	2.4	731	3.6

Chapter 1 Profile of the stock

The condition of the housing stock is influenced by a number of factors including dwelling age, type, tenure, location and level of investment. Changes to these characteristics over time have a significant impact on condition. This chapter looks at the profile of the housing stock as whole and within the main housing sectors, and how this has changed since 1996. It also looks at the presence and distribution of a range of dwelling features that improve accessibility for people with mobility problems, safety and security, and comfort for occupants.

Summary

> The housing stock is old. Of the 21.1 million dwellings in 2001, 39% were built before 1945, and 21% before 1919.

> Between 1996 and 2001 there was a net gain of around 800 thousand dwellings. Most were provided by new-build – fewer than 100 thousand resulted from conversions or changes of use. Over the same period, about 100 thousand dwellings were demolished.

> Over 80% of dwellings are houses or bungalows, the remainder flats. Semi-detached houses provide the most common type of home (accounting for 5.9 million dwellings or 28% of the stock). However some 68% of the oldest (pre-1919) stock comprise terraced houses or converted flats.

> Recently built dwellings are smaller, and on smaller plots than older housing.

> 70% of the stock is owner-occupied, and another 10% is rented from private landlords. The remainder is rented from a social housing provider (local authority or RSL).

> Between 1996 and 2001 nearly two million dwellings changed tenure – the biggest movements being through the transfer of local authority dwellings to RSLs, the sale of local authority dwellings to their occupants through 'Right to Buy' and movements between owner occupation and private renting.

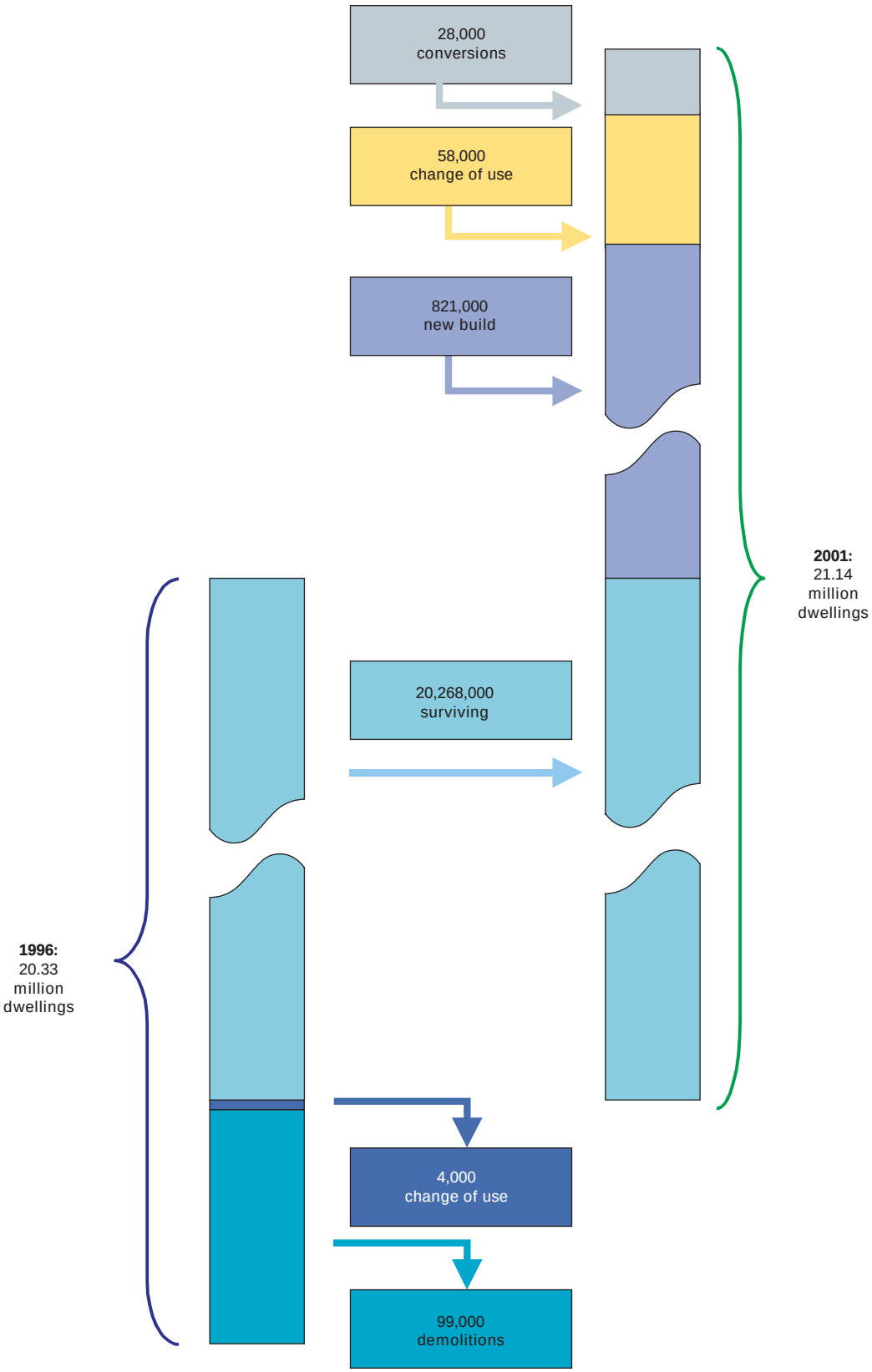
> Amenity provision has continued to increase over the last five years. Some 94% of homes now have central or programmable heating, 76% have double glazing and 35% have a second WC.

> Only 53% of dwellings are assessed to have fully secure doors and windows that provide an effective barrier to intrusion.

The stock overall

1.1 In 2001 there were 21.1 million dwellings in England compared to 20.3 million at the time of the 1996 EHCS, Figure 1.1. The 800 thousand extra dwellings have not simply been provided by building new homes but are the net outcome of additions that also include conversions of houses to flats, and non-residential buildings into homes, offset by demolitions and conversion from residential to other use.

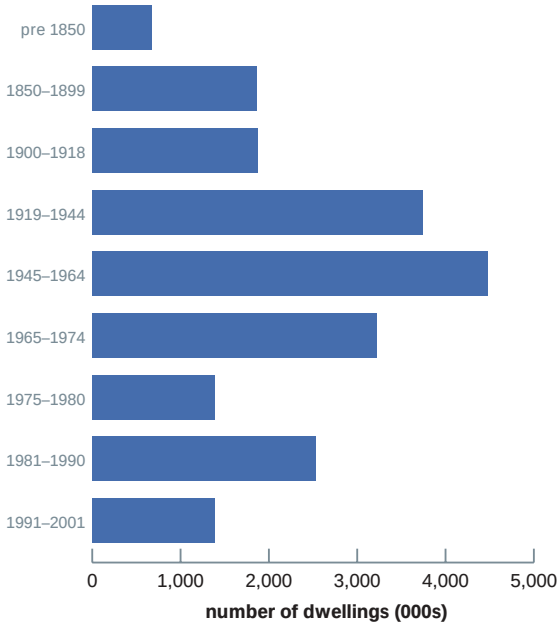
Figure 1.1 Changes to the number of dwellings, 1996–2001[1]



1 The figures in this table are based on the longitudinal component of the survey 1996–2001. ODPM statistical returns report the level of new construction to be around 700,000 dwellings over the same period. There are also some small differences between EHCS findings reported here and the official returns in the number of conversions, changes of use and demolitions. The EHCS estimates are used in the report to maintain consistency in the findings across the 1996 and 2001 survey results and should not be regarded as a revision of official statistics.

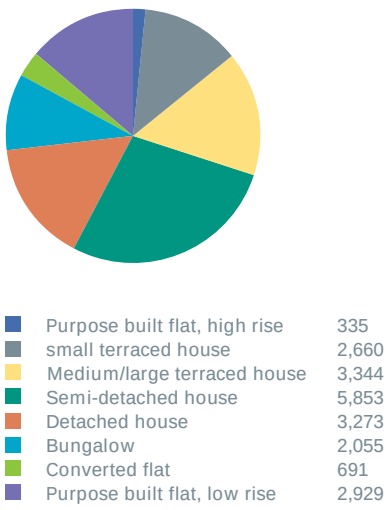
1.2 The English housing stock is old. Some 39% of the dwellings were built over 50 years ago and some 4.4 million dwellings (21% of the stock) dates from before 1919, Figure 1.2. The level of construction (averaging less than 140 thousand dwellings each year since 1996) continued a longer term trend of decline and were less than half the post 1944 high of the mid to late 1960's.

Figure 1.2 Age of the stock, 2001



1.3 Most of the dwellings in England are houses, only about 1 in 5 (19%) are flats. These proportions have not altered significantly since the 1996 survey although slightly more flats are being built – 24% of dwellings added since the 1996 survey are flats. However, there are also more detached houses. These comprise 31% of all dwellings built over the last five years compared with only 21% of the stock that existed in 1996.

Figure 1.3 Types of dwellings, 2001



Note: dwellings in thousands

1.4 The great majority of houses are two storeys, but there are now just over 2 million bungalows. Most flats (92%) are in low rise buildings of less than 6 storeys. Of the 343 thousand high rise flats, 137 thousand (40%) are in buildings over 11 storeys high (tower blocks).

1.5 The average useable internal floor area for all dwellings in England is 87m^2. For houses it is 93m^2 and for flats it is 59m^2. Dwellings are getting smaller. The average size for a post 1980 home is 83m^2 compared to 88m^2 for those built before 1980.

1.6 An alternative means of measuring dwelling size is by the number of bedrooms. Over 70% of all homes in England have three or more bedrooms. In 2001 there were 2.2 million dwellings with just one bedroom, or a bed sitting room, representing 10% of the total stock. At the other end of the scale, 719 thousand homes have five or more bedrooms, an increase of 106 thousand since 1996.

1.7 Plots are also getting smaller. Three quarters (73%) of dwellings have their own definable plot. Of these 89% stand on plots of sizes less than 600 m^2. The mean plot size is 376m^2 compared to 404m^2 in 1996, a reduction of 7%. The mean plot size of dwellings built since 1980 is 340m^2 compared to 357m^2 for dwellings built between 1964 and 1980, a shrinkage of some 5%.

Typology of the dwelling stock

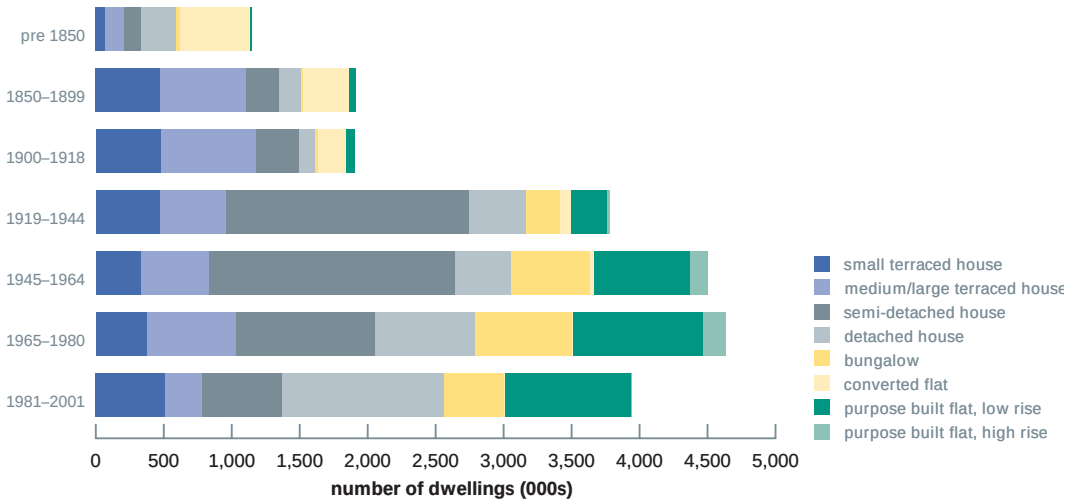
1.8 The present housing stock encompasses nearly 200 hundred years of residential building (this excludes the relatively small stock of historic or "heritage" dwellings still privately occupied, many of which go back 400 to 500 years). During the last two hundred years the form and size of dwellings built have regularly changed reflecting changes in social, economic and demographic conditions and building technology.

1.9 The composition of the stock is an important determinant of its condition and the survey data has been used to construct a typology that brings together those dwelling characteristics most relevant to condition: age, type, storey height, size and tenure, Photograph 1.

Photograph 1: Typology of the dwelling stock

1.10 The most common forms of dwelling within the typology are semi-detached houses built 1945-64 and 1919-44 – each accounting for 1.8 million dwellings (and together, 17% of the whole stock, 21% of all houses, Figure 1.4). Post 1980 detached houses are the next most common type, comprising 1.2 million properties (6% of the whole stock). The most common form of flats are 1965-80 and post 1980 low rise, each accounting for over 900 thousand dwellings and together comprising nearly half of all flats.

Figure 1.4 Age and type of dwellings, 2001



Tenure

1.11 Some 14.8 million dwellings (70% of the stock) are owner occupied, 2.2 million (10%) are privately rented, 2.8 million (13%) rented from local authorities and the remaining 1.4 million (7%) are rented from Registered Social Landlords (RSLs).

1.12 The pattern of tenure has changed significantly over time. Prior to 1914 private landlords owned nearly 90% of the stock. Since the end of the First World War owner occupation has grown to be the dominant form of tenure. While local authorities now own the majority of rented dwellings (as a result of major house building 1945–80 and the decline of private renting), RSLs have, since the 1970's, developed a significant portfolio of dwellings with a programme of acquisitions from the private rented sector, large scale voluntary transfers from local authorities and new build. The more recent decline of the local authority proportion of the stock was hastened by the "Right to Buy" initiative introduced in the 1980's which has seen around 1.5 million homes transfer into owner occupation. This historical development of housing in England is reflected in the composition of the stock within each of the tenures.

1.13 The owner occupied sector, comprising 70% of the total stock, inevitably reflects much of the diversity of the stock as a whole, Figure 1.5. The most common type is still the inter-war semi-detached house, which makes up 10% of all owner occupied homes.

1.14 Older dwellings dominate the private rented sector, with 44% of the stock over 80 years old and 60% over 55 years old, Figure 1.6. Over a third (37%) of dwellings in this sector are flats, many of them older converted flats.

Figure 1.5 Owner occupied stock – dwelling type by age band, 2001

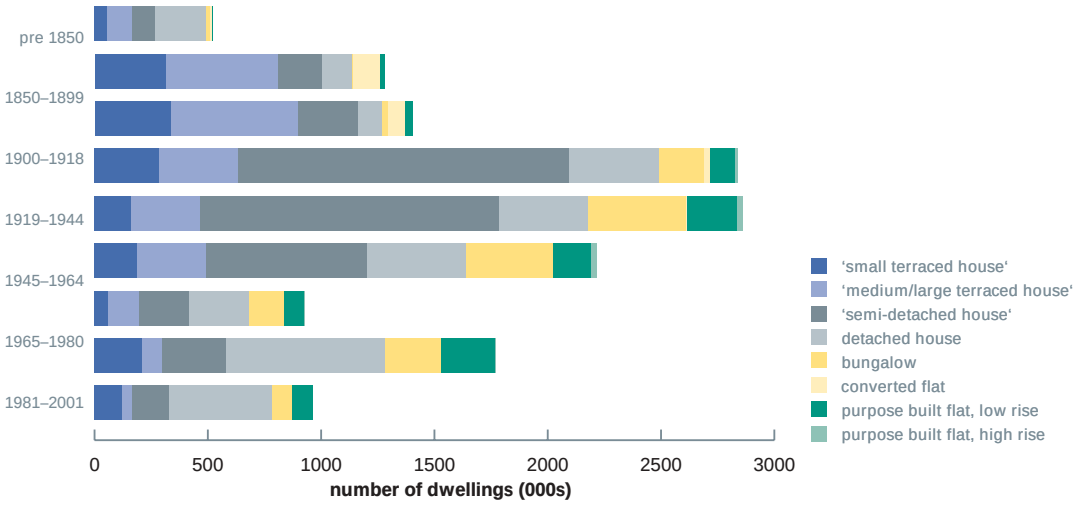
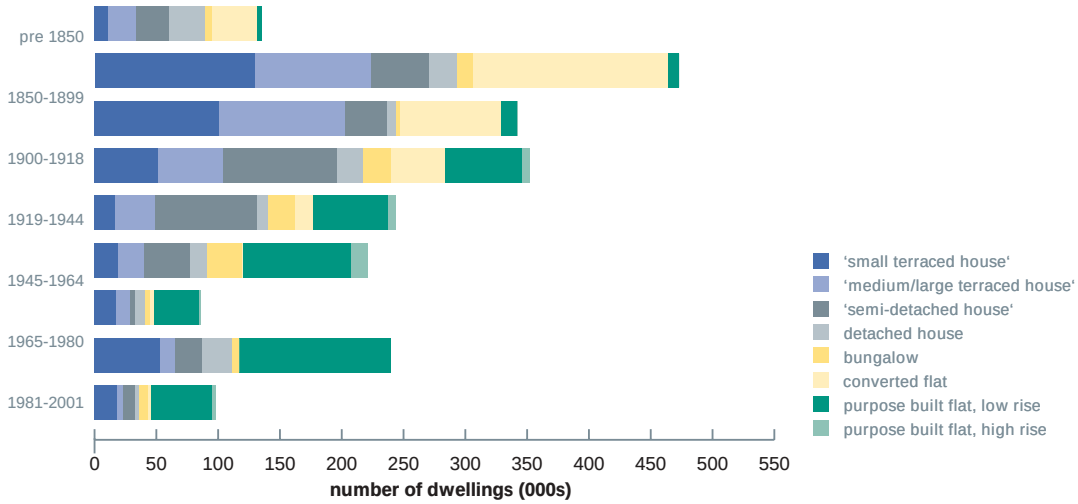


Figure 1.6 Private Rented stock – dwelling type by age band, 2001



1.15 The local authority stock is of fairly recent construction compared with the private rented, with some 70% of dwellings built between 1945 and 1980, Figure 1.7. Some 34% of dwellings are low rise and a further 8% are high rise flats.

1.16 Although the RSL stock is predominantly new with 40% built since 1980, it also contains a substantial proportion of older dwellings, Figure 1.8. The latter fall into two main groups: firstly, pre 1919 dwellings built by the original founders of the housing association movement and acquisitions from the private sector; which mainly comprise terraced houses and converted flats; secondly, dwellings built 1919-1964, many of which represent transfers from local authorities. The RSL sector has the highest proportion of flats of all the tenures (48%).

Figure 1.7 Local Authority stock – dwelling type by age band, 2001

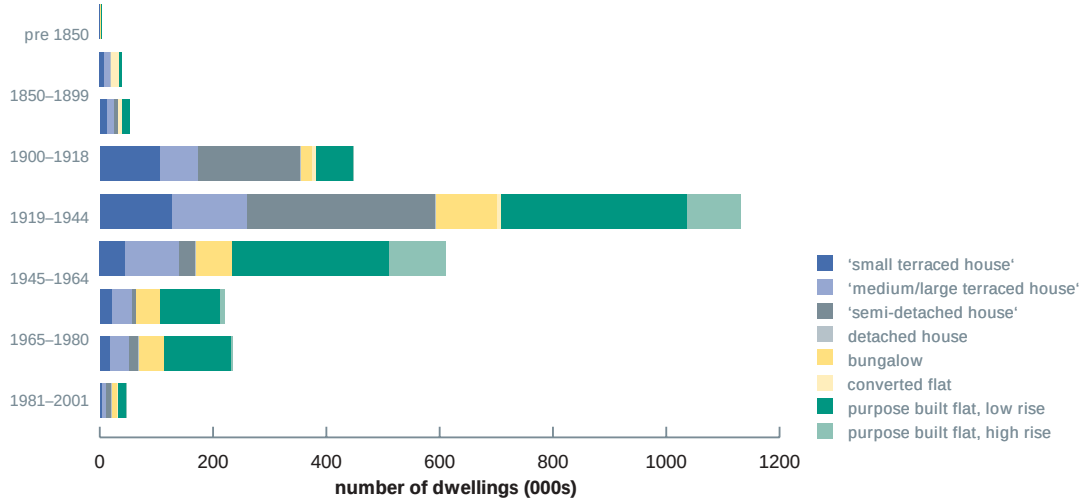
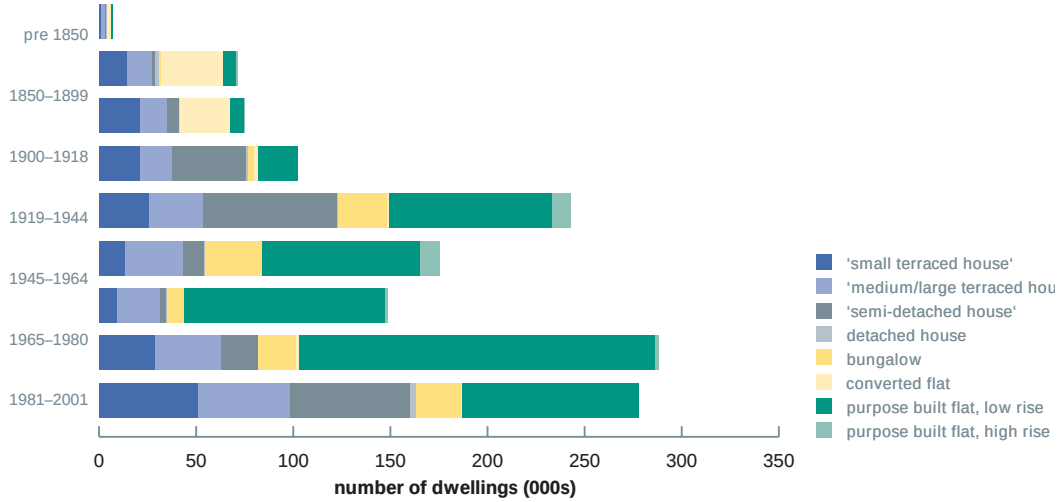


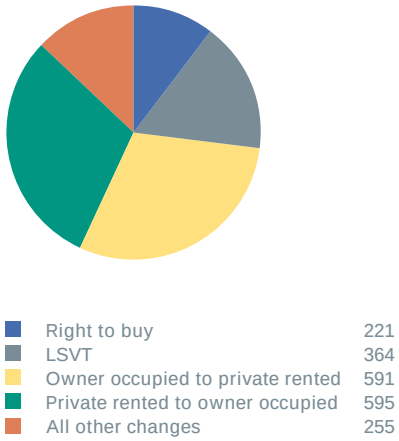
Figure 1.8 RSL stock – dwelling type by age band, 2001



Tenure change 1996–2001

1.17 Since 1996 approximately 2 million dwellings have changed tenure. Four types of tenure change account for nearly 90% of this change: the transfer of over 350 thousand local authority dwellings to RSLs; the sale of over 200 thousand local authority dwellings to their occupants, and nearly 600 thousand dwellings moving from private renting to owner occupation with a similar number moving in the other direction (from owner occupation into private renting), Figure 1.9. Transfers between owner occupation and private renting account for 60% of all tenure changes in the stock over this period.

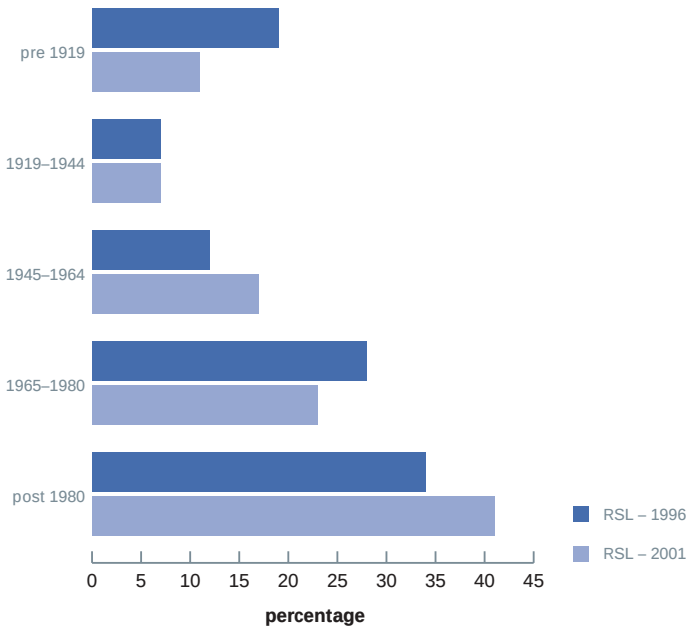
Figure 1.9 Components of tenure change 1996–2001



1.18 These recent movements of dwellings between tenures have had an impact on the profile of the local authority and, especially, the RSL stocks. The age profile of the local authority stock has, on balance, become newer with a higher proportion of post 1965 dwellings, as most of the dwellings transferred to RSLs or purchased under the Right to Buy dated from 1964 or earlier. The local authority dwelling type profile shows marginal increases in the proportion of low rise flats and bungalows accompanied by small reductions in other types.

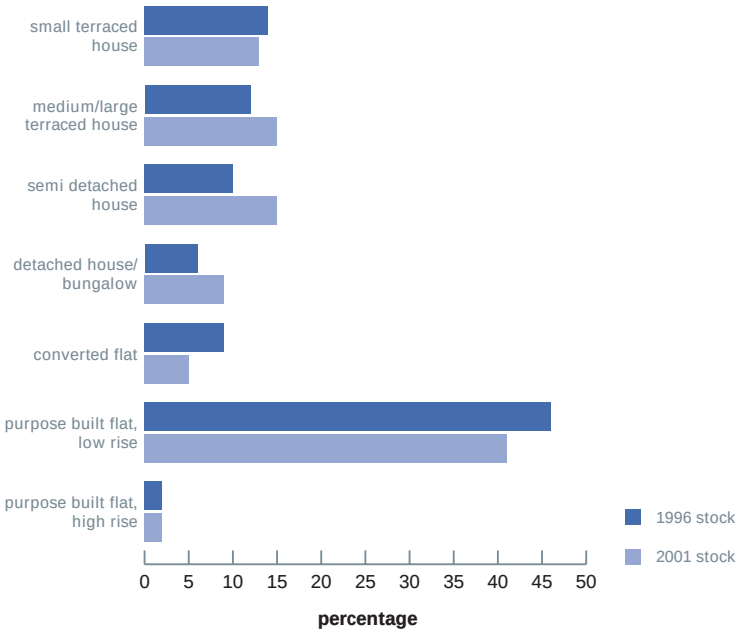
1.19 The impacts on the RSL stock are greatest, as the transfers from local authorities and new build together account for a significant proportion of the total stock. Large Scale Voluntary Transfers (LSVTs) have increased the proportion of homes dating from 1945–64 and new build has increased the proportion of post 1980 homes, Figure 1.10.

Figure 1.10 Change in age profile of RSL stock 1996–2001



1.20 The RSL dwelling type profile has shifted significantly in favour of houses from flats, Figure 1.11.

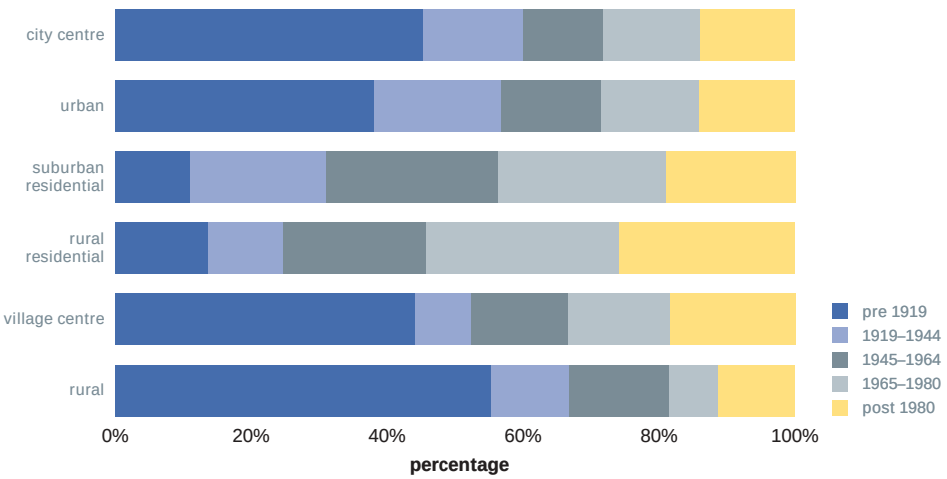
Figure 1.11 Change in dwelling type composition of RSL stock 1996–2001



Location of the dwelling stock

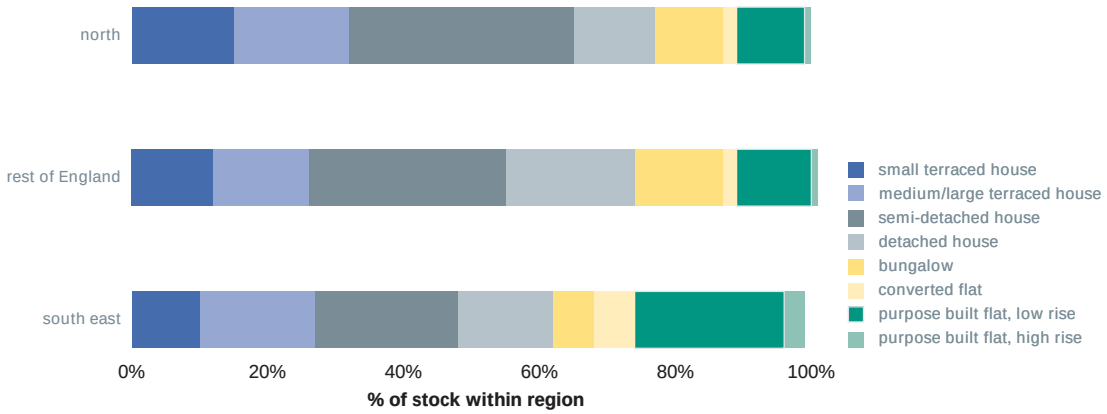
1.21 The pre 1919 housing stock is concentrated in city and other urban centres on the one hand and villages centres and more dispersed rural residences on the other, Figure 1.12. The great majority of dwellings in suburban and particularly rural residential areas has been built since 1945.

Figure 1.12 Age of dwellings by type of area



1.22 The Northern and South East (including London) groups of regions have the oldest housing stocks. They are also more likely to consist of terraced housing. The South East has by far the highest concentration of flats, Figure 1.13. Over 50% of all flats and 66% of high rise flats are in the South East.

Figure 1.13 Broad region by type of dwellings

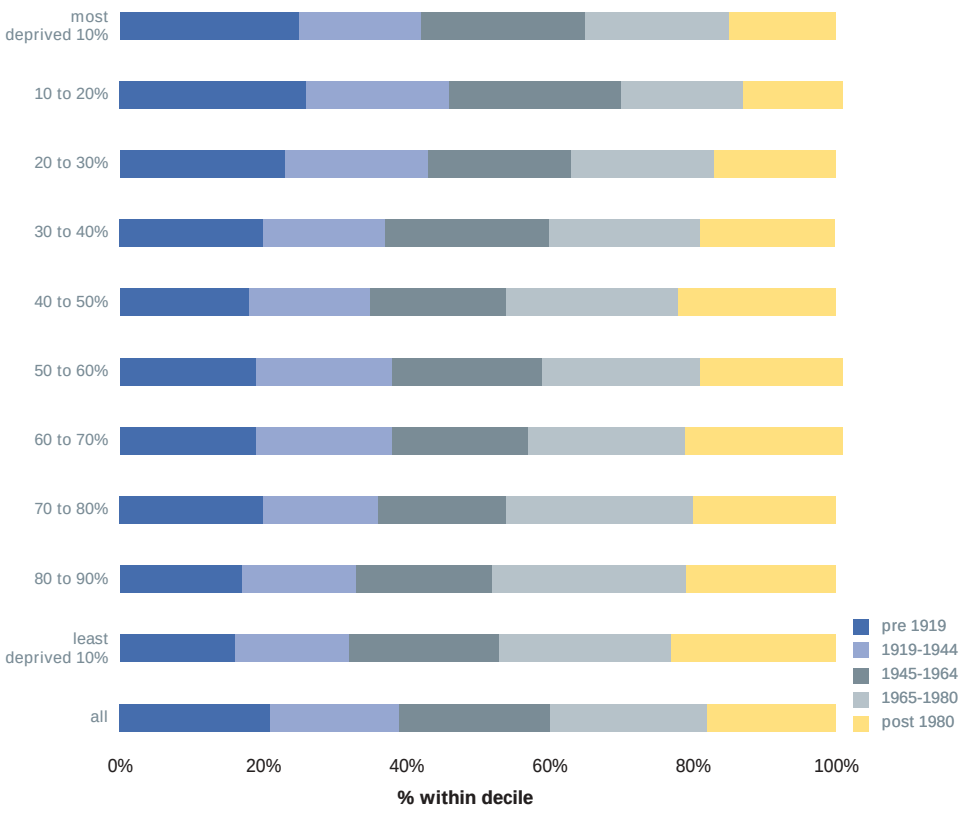


1.23 Owner occupied dwellings are represented equally in all regional groups. The South East has the highest proportion of private rented dwellings.

Deprived areas

1.24 The dwelling stock within more socially and economically deprived wards (as ranked by the Index of Multiple Deprivation 2000) differs markedly from that of less deprived areas, Figure 1.14. More deprived areas are characterised by greater concentrations of older, typically private sector terraced housing and post 1945 social sector terraced and flatted accommodation.

Figure 1.14 Scale of deprivation by age of dwelling



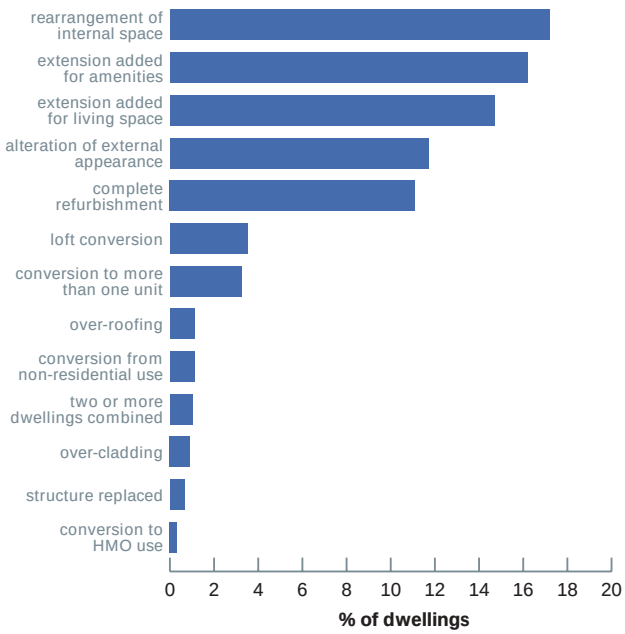
1.25 Over half the total stock in the most deprived 30% of wards consists of terraced houses and low rise flats contrasting with the least deprived 30% where semi-detached and detached dwellings constitute over 55% of the stock. This suggests a higher dwelling density in the more deprived wards.

1.26 Social rented dwellings comprise 40% of the stock in the most deprived 10% of wards but only 5% of dwellings in the least deprived 10% of wards, where 86% are owner occupied. However, private rented dwellings are distributed fairly uniformly across more and less deprived groups of wards, reflecting the very diverse nature of this sector.

Improvements and alterations

1.27 Many dwellings are of course altered and improved during their lifetime to address problems or meet the needs or wants of occupants. Some 41% have had at least one major alteration or improvement carried out since they were originally built. This is particularly so for the oldest stock – 80% of pre 1919 dwellings have had at least one major modification and 25% has had 3 or more such modifications. Dwellings in the private sector, particularly those that are owner occupied, are more likely to have had some modifications. However, about 20% of the social rented stock has had at least one major alteration carried out. The most common modifications are re-arrangement of internal space, extensions, alterations of appearance and complete refurbishment, Figure 1.15.

Figure 1.15 Major improvements and alterations since original construction

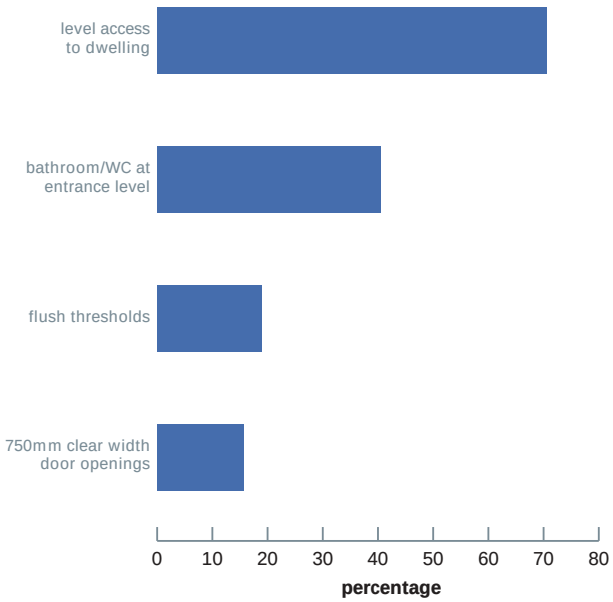


Access for people with disabilities

1.28 The survey records the presence of four key features that affect the dwelling's suitability for access for people with mobility problems.[2] While the majority (70%) of dwellings have level access to the dwelling and 40% have a bathroom/WC at entrance level, flush thresholds and wider door openings are far less common, Figure 1.16.

[2] Inclusion of these features became mandatory for the design of new dwellings in the 1998 revision of Part M, England & Wales Building Regulations.

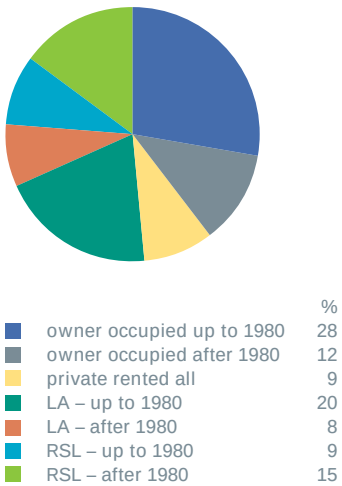
Figure 1.16 Incidence of access features, 2001



1.29 Level access to the dwelling is less common in pre 1919 dwellings (60%) and even rarer in converted flats (39%). While 40% of all dwellings have a bath/WC at entrance level this falls to 20% among small terraced houses. The incidence of flush thresholds varies widely by dwelling type from 64% in high rise flats to just 13% in semi-detached houses. The wider 750mm door openings are particularly uncommon in small terraced houses and pre 1919 dwellings.

1.30 Altogether, 700 thousand dwellings have all four of these access features. Just over half of these dwellings are in the social rented sector, Figure 1.17. Only 40% of dwellings with these features are owner occupied.

Figure 1.17 Breakdown of dwellings with all 4 access features, 2001

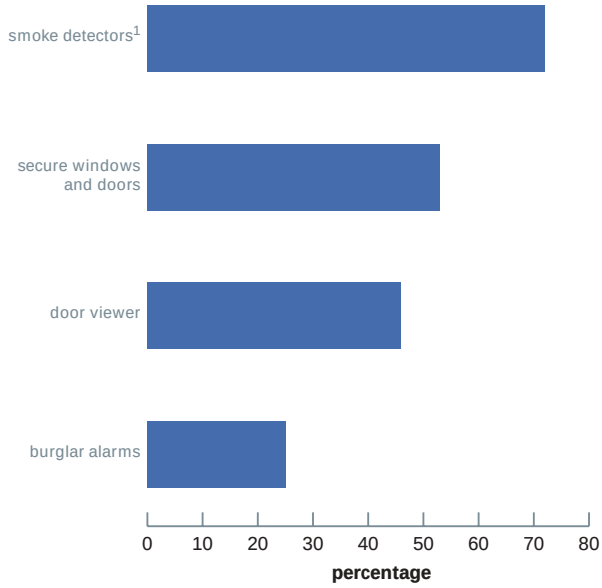


Security and safety

1.31 Security from intrusion is of paramount importance to households. Overall, 53% of dwellings have entrance doors and accessible windows fitted with working locks that present a barrier to intrusion, Figure 1.18. Owner occupied dwellings are the most likely

to have secure windows and doors (57%), and private rented the least (36%). Newer dwellings are more likely to be secure with two thirds (66%) of post 1980 dwellings being secure compared with 50% of pre 1919 dwellings. A quarter (25%) of dwellings have burglar alarms. These are much more common in the owner occupied sector, where nearly a third (31%) have these alarms compared to just 9% of social rented dwellings. Nearly half (46%) of all homes have a door viewer. These are more commonly found in social rented housing, particularly the RSL sector where 56% have these viewers.

Figure 1.18 Dwellings with security and safety features



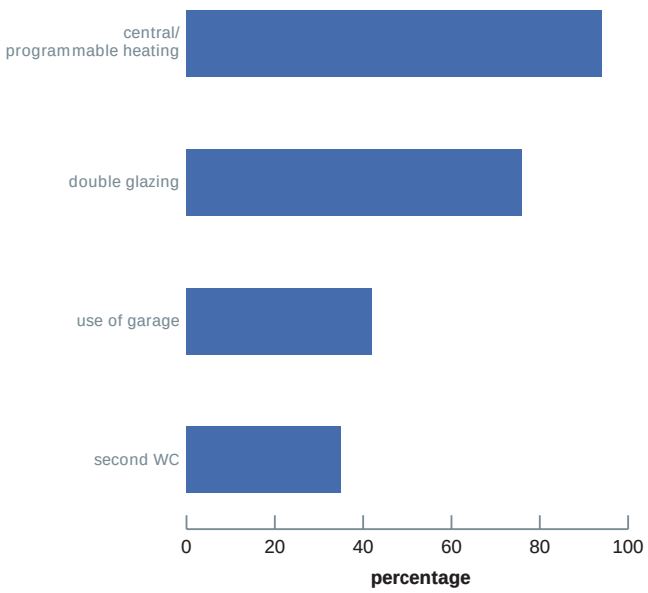
1 refers to households – not dwellings

1.32 Nearly three quarters (74%) of households have one or more smoke detectors. This is only a modest increase from the 67% with smoke detectors in 1996. Between 1991 and 1996 there was a very large increase (from 39% to 67%). Households living in newer dwellings are more likely to have smoke detectors than those occupying the oldest stock (82% of post 1980 compared with 67% of pre 1919). RSL tenants are the most likely to have smoke detectors (81%) and private renters are the least (61%). Households in detached homes are also more likely to have smoke detectors (80%).

Heating and amenities

1.33 Some 94% of dwellings now have central or programmable heating – an increase from the 88% in 1996, Figure 1.19. The presence of this type of heating does not vary markedly by dwelling age although pre 1919 dwellings still have a lower incidence of this type of heating (87%). Private rented homes are the least likely to have central or programmable heating systems (85%) and RSL dwellings are the most likely (96%). Chapter 7 contains more detailed information on heating provision.

Figure 1.19 Dwellings with central heating and other amenities, 2001



1.34 Three quarters (76%) of dwellings have some double glazed windows and half (51%) have all windows double glazed. This is a significant increase from the 30% with full double glazing in 1996. Partial double glazing is surprisingly common, especially in the owner occupied sector where 29% of dwellings have some, but not all, windows double glazed. This is mainly because dwellings are larger and owners tend to adopt a more piecemeal approach to improvement than many landlords. Two thirds of RSL dwellings (66%) have full double glazing compared with just 34% of private rented dwellings. Only 20% of converted flats have full double glazing. Newer dwellings are much more likely to have full double glazing – 70% of the post 1980 stock has this compared with just 28% of pre 1919 homes.

1.35 Just over a third (35%) of dwellings have a second WC. This is much more common for detached houses where 83% have a second WC. Owner occupied homes are much more likely to have a second WC (42%) than rented homes although some 16% of local authority dwellings have a second WC. Around 200,000 (1% of) dwellings lack one of the five basic amenities.[3]

1.36 Some 42% of dwellings have a garage either located on the plot or available elsewhere. Around a third of dwellings have street parking only (35%), about half of which is judged to be inadequate. Detached houses are most likely to have a garage (87%). Dwellings most likely to have inadequate street parking are pre 1919, private rented or local authority, mid terraced houses or flats.

Mains services

1.37 While mains electricity supply is present for virtually all dwellings, some 3.0 million dwellings or 15% of the stock do not have a mains gas supply. Purpose-built flats are much less likely to have mains gas, especially high rise flats for safety reasons.[4] Newer dwellings built since 1980 are also less likely to have mains gas than older dwellings; partly because a higher proportion of new dwellings are flats. Only about two-thirds (65%) of dwellings in rural areas have a mains gas supply.

1.38 The vast majority of dwellings (98%) have mains drainage. Most of the rest have septic tanks. Older dwellings are more likely to have non-mains drainage – 6% of pre 1919 dwellings have other types.

[3] This figure has stayed almost constant since the 1991 survey and now consists largely of dwellings awaiting or undergoing refurbishment.

[4] This has important implications for the thermal comfort component of decent homes (see Chapter 3). Dwellings that can not have gas central heating (arising from safety restrictions or considerations on the types of dwellings that gas can be safely supplied to) require higher levels of insulation to meet the decent homes standard.

Chapter 2 Use of the stock

The previous chapter looked at the profile of the housing stock. This chapter looks at how that stock is used in respect of: the amount of living space available to different types of households with its implications for health and more general well being; houses in multiple occupation; and vacant dwellings.

Summary

> The amount of living space available to households has increased largely as a consequence of households generally becoming smaller.

> However, where they can afford to, households in the private sector tend to purchase more living space. Highest income earners living alone bought or rented accommodation within the previous five years that was on average 17m^2 larger than the properties bought or rented by lowest income earners – for households of four or more people the difference was over 11m^2 per person (which equates to homes at least 44m^2 larger).

> Retired households tend to have most living space (58m^2 per person), even when compared with other small households. While this space facilitates visiting by children and others, such homes can be more expensive to maintain and heat for those with modest retirement income and savings.

> Ethnic minority households tend to have least space – with Pakistani and Bangladeshi households averaging only 22m^2 per person. Black households have least space per person when household size is taken into account but Pakistani and Bangladeshi households are most like to be overcrowded (in terms of the bedroom standard) largely because homes of sufficient size to meet their needs are unavailable or unaffordable.

> Some 2.6 million people, comprising 1.3 million households, live in a range of dwellings that might be considered 'HMOs'. Excluding properties converted into self-contained units, 1.7 million people share amenities in their homes with unrelated others in bedsit accommodation, lodgings and shared houses/flats.

> More than half of all HMOs are located in city and other urban centres. The majority are in the south east regions (with more than a third of all in London) where multiple occupation is partly a response to high levels of housing demand, high housing costs and issues of affordability for some sections of the local population.

> Around 700 thousand dwellings (3% of the dwelling stock) are vacant. The vacancy rate is a little higher in the social (4%) compared to the private sector (3%). Around half of vacant dwellings are 'problematic' in that they either need significant work to bring them back into use, or have been vacant for at least 6 months.

> Problematic vacancies are concentrated among the lowest valued stock. The overall rate of vacancy is a little higher in northern regions (4%) compared to elsewhere (3%). However concentrations of vacant and derelict residential and non residential property are much more likely in northern regions than elsewhere, in city and other urban centres and in the most deprived wards.

Household living space

2.1 The dwelling stock provides homes for some 20.5 million households in England. The amount of living space those homes provide for their occupants varies widely. Policy concerns with over-crowded conditions revolve around its link to health problems and issues of social exclusion, while interest in 'under-occupancy' focuses on the utilisation of scarce housing resources (particularly in the social rented sector) and on risks for elderly people who may not be able to afford to adequately heat or maintain large dwellings.

2.2 The amount of dwelling space households have at their disposal is influenced by a range of factors, including: past and present income; biography or 'life stage' of the household; culture (aspirations and expectations); affordable dwellings available within specific localities in the private sector; and needs assessment and availability of suitable homes in the social sector. Living space available to different household groups is assessed below through dwelling floor area (measured in square meters) per person.

2.3 Despite new dwellings generally being smaller than the older stock, floor area per person across the stock as a whole has steadily increased – from 38m^2 in 1991 to 43m^2 in 1996 and 44m^2 in 2001. This is primarily because of the general reduction in the average household size (arising from smaller family households and more people (younger and older) living alone.

2.4 The main factor determining the floor space available per person is the number of people in the household – people living alone have an average of 69m^2 compared with 20m^2 per person for households of 5 or more people, Table 2.1.

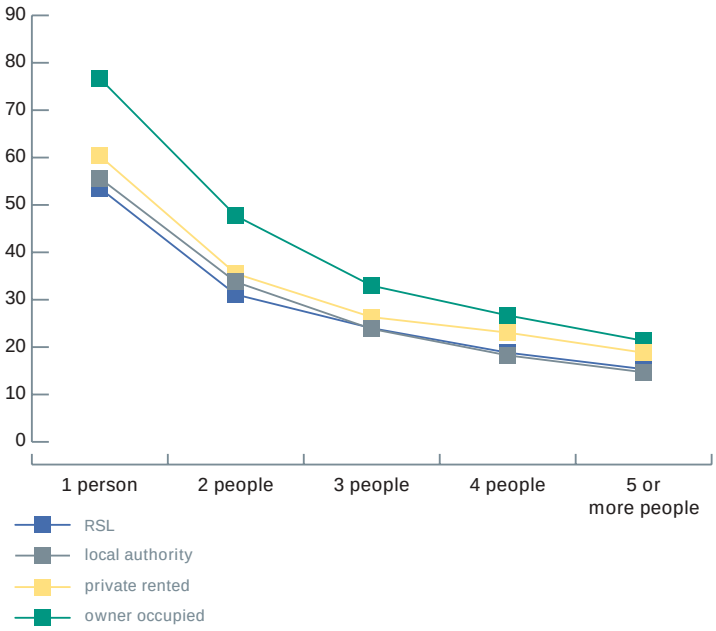
Table 2.1: Average floor space (m^2) per person by household size by household categories, 2001

	one person	two people	three people	four people	five or more people	all households
tenure:						
owner occupied	77	48	33	27	21	46
privated rented	62	35	26	23	19	40
local authority	56	34	24	18	14	38
RSL	54	31	24	19	15	36
type:						
couple, no dependent child(ren) under 60	–	45	33	26	23	41
couple, no dependent child(ren) aged 60 or over	–	48	34	27	20	46
couple with dependent child(ren)	–	–	31	26	20	26
lone parent with dependent child(ren)	–	34	26	20	16	28
other multi-person households	–	41	32	23	18	35
one person under 60	65	–	–	–	–	65
one person aged 60 or over	71	–	–	–	–	71
economic status[1]						
full or part time employed	68	45	32	25	21	40
unemployed	60	34	25	21	15	36
inactive	66	36	26	24	16	37
retired	71	47	34	32	16	58
ethnic identity						
white	69	45	31	26	20	45
black	67	32	25	19	14	35
indian	66	39	29	26	20	35
pakistani & bangladeshi	64	36	27	20	15	22
all asian[2]	62	38	27	23	17	28
other ethnic minority	57	33	29	24	20	32
all households	69	44	31	25	20	44

Notes
(1) students excluded
(2) 'all asian' includes Indian, Pakistani and Bangladeshi and other Asian households.

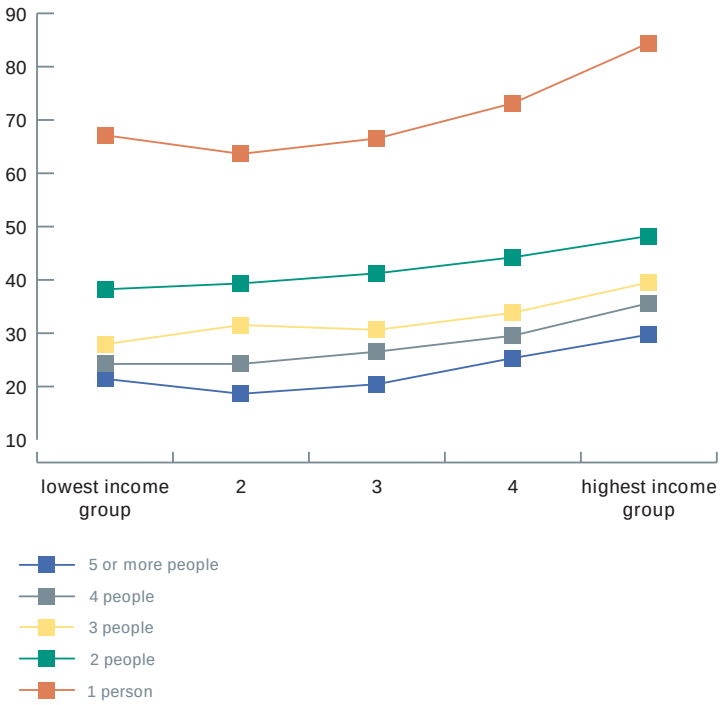
2.5 For comparable sized households, owner occupiers generally have more space than households in other tenures, followed by private tenants, Figure 2.1. There is little difference in the amount of space available to local authority and RSL tenants when the size of households is taken into account.

Figure 2.1 Floor area per person (m²) by household size by tenure, 2001



2.6 Where they can afford it, households in the private sector opt for more space (whether this is for the space itself, for reasons related to 'prestige' or, for home owners, because of the higher price such property commands on the market), Figure 2.2. Highest income earners living alone bought or rented accommodation within the previous five years that was on average 17m^2 larger than the properties bought or rented by lowest income earners within the same period – for households of four or more people the difference was over 11m^2 per person (which equates to homes at least 44m^2 larger). For social sector tenants the amount of dwelling space at their disposal tends to reflect assessed need and the size of homes available in the locality.

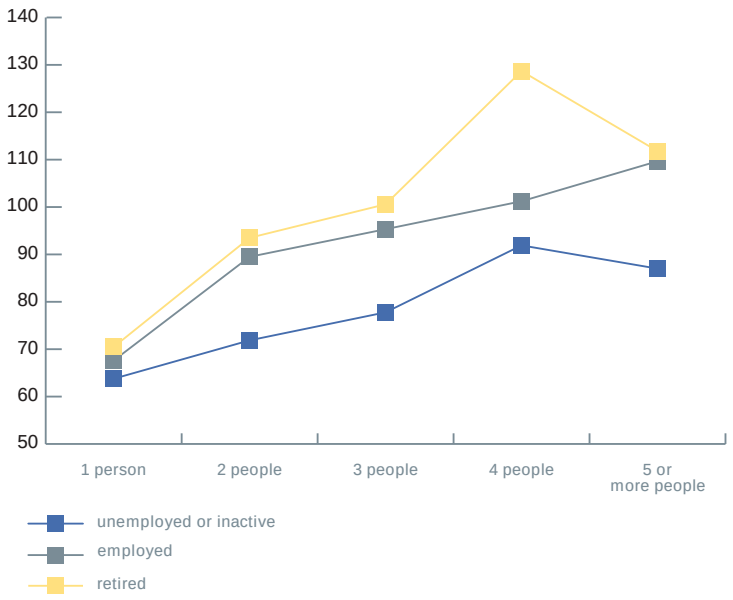
Figure 2.2 Floor area per person (m²) by income group by household size for those moving in the private sector within the last five years, 2001



2.7 Overall, couples with dependant children have the lowest average floor space per person (26m^2). In the social rented sector, these households have just 18m^2 per person.

2.8 Retired households overall have 58m^2 per person compared with 40m^2 for employed, 36m^2 for unemployed and 37m^2 for economically inactive households.[1] Retired households have most space even when the size of the household is taken into account, Figure 2.3.

Figure 2.3 Floor area (m^2) by economic status by household size, 2001

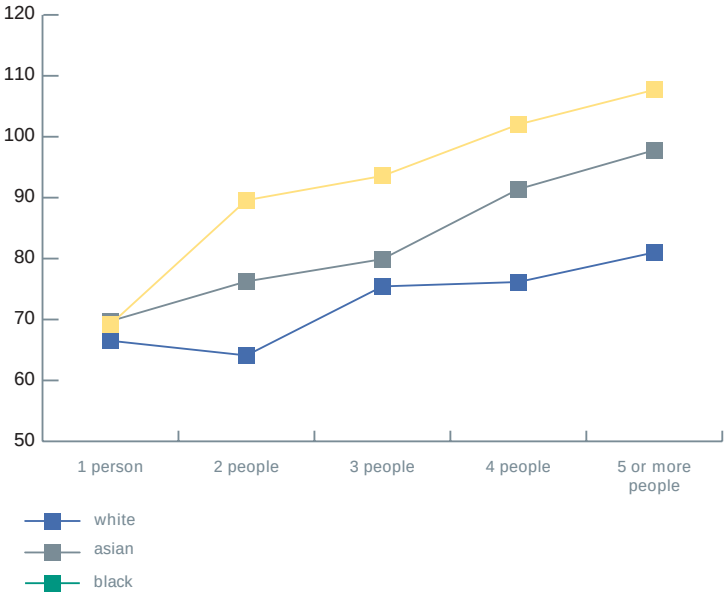


2.9 Many retired households do of course retain occupancy of the family home after their children have left. This enables their children and others to visit – a factor which may be of increasing importance when economically active households need to be more geographically mobile. Outright home owners also have much reduced housing costs compared to others. Nevertheless, larger homes are more expensive to maintain and heat, particularly where retirement incomes are at best modest, and elderly retired people may become much more dependent on support from family, neighbours and friends.

2.10 Ethnic minority households have much less space on average than white households – 32m^2 per person compared to 45m^2 with Pakistani and Bangladeshi households averaging only 22m^2 per person. However, comparing like-sized households, black households tend to have least space available to them, Figure 2.4. This largely arises from their relative concentration in social housing and in flats. On average a four person white household lives in a home with 102m^2 of floor area, compared to 91m^2 for Asian households of a similar size and only 76m^2 for Black households.

1 The economic status of the household reference person is used to define that for the household as a whole – see the Glossary.

Figure 2.4 Floor area (m^2) by ethnicity by household size, 2001



2.11 Nevertheless, Pakistani and Bangladeshi households are more likely than other ethnic groups to have an insufficient number of bedrooms to meet their needs (around a quarter of such households being below the bedroom standard). More than half of Pakistani and Bangladeshi households comprise five people or more. The dwellings required to meet the needs of many of these households either do not exist in sufficient numbers or are not affordable.

Houses in multiple occupation

2.12 The vast majority of the housing stock consists of dwellings originally designed for, and occupied by, just one household. A small minority of dwellings have either been converted or purpose built for occupancy by more than one household or they provide homes for people some or all of whom are unrelated. Generically these dwellings are called 'houses in multiple occupation' (HMO), although there is no common standard definition of what should be included under this term. For research purposes, HMOs include: bedsit dwellings where occupants share one or more key amenities (kitchen, bathroom or WC) with other households, shared houses or flats, households with lodgers and self-contained converted flats.[2]

2.13 Altogether, HMOs comprise 1.1 million dwellings and provide homes for 1.3 million households, Table 2.2. While over half of these dwellings (631 thousand) are self-contained converted flats, 82 thousand dwellings have been converted to bedsits and provide accommodation for 27% of households (363 thousand) living in HMOs.

2 This typology omits purpose-built HMOs, which are two few in number to enumerate as a separate category through the EHCS and hostels which are not covered by the survey as they are not classed as domestic dwellings.

Table 2.2: Dwellings, buildings, accommodation units, households and people in main HMO categories, 2001

thousands (row %)

	shared house/flat	household with lodger	bedsits	converted flat	all main HMOs
number of dwellings	293	91	82	631	1,098
	(26.7)	(8.3)	(7.5)	(57.5)	(100)
number of buildings	293	91	82	171	638
	(45.9)	(14.3)	(12.9)	(26.9)	(100)
number of accommodation units	293	91	423	631	1,438
	(20.4)	(6.4)	(29.4)	(43.9)	(100)
number of households	293	91	363	579	1,327
	(22.1)	(6.9)	(27.4)	(43.7)	(100)
number of people	965	272	418	974	2,629
	(36.7)	(10.3)	(15.9)	(37.0)	(100)

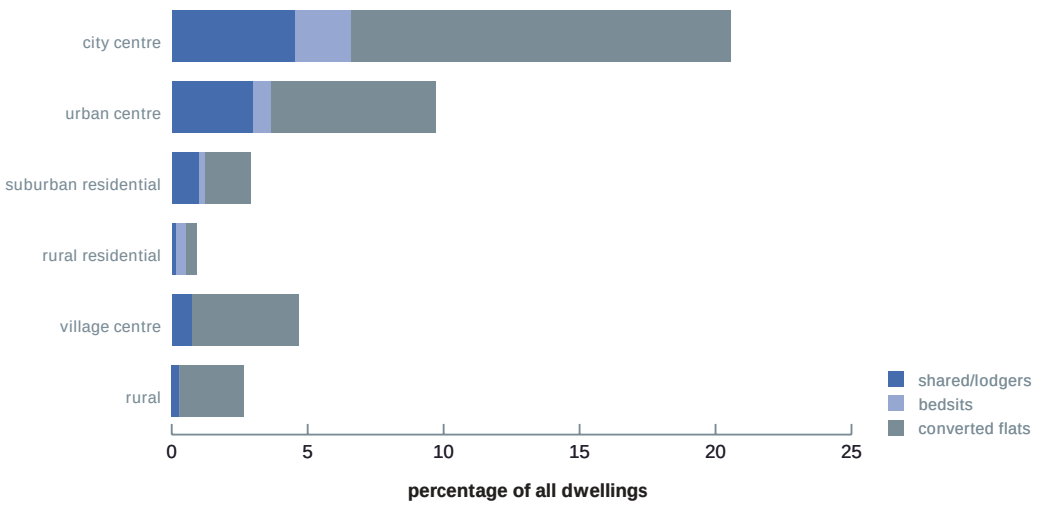
2.14 The average number of self contained flats in a conversion is nearly four, while the average number of bedsits from a conversion is five.

2.15 Compared to 1996, there has been a significant increase in the number of shared houses, and a decrease in the number of households with lodgers.

2.16 The majority of HMO dwellings (53%) are found in the private rented sector. However, there are a significant proportion that are owner occupied – where HMOs tend to consist of households with lodgers or (partial) conversions of the dwelling to bedsits where the owner lives in one of the units.

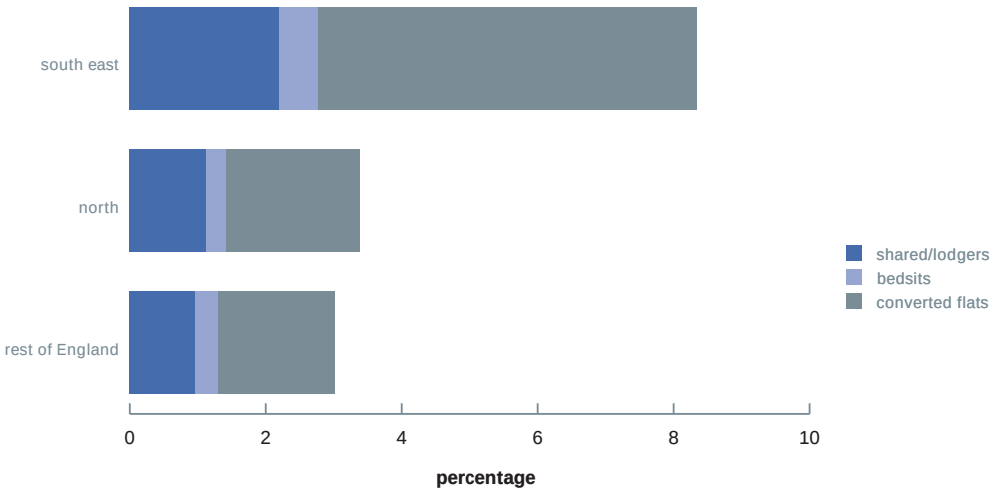
2.17 Some 56% of all HMO dwellings are located in city and other urban centres and comprise 22% of all city centre dwellings, Fig 2.5.

Figure 2.5 Dwellings providing HMO accommodation by type of area, 2001



2.18 Over half (53%) of all HMO types are found in the south east regions (37% of all in London alone) where, partly, multiple occupation is a response to high levels of housing demand, relatively high housing costs and problems of affordability of homes for some. In all, 9% of dwellings in the south east regions are some form of HMO as defined above, Figure 2.6.

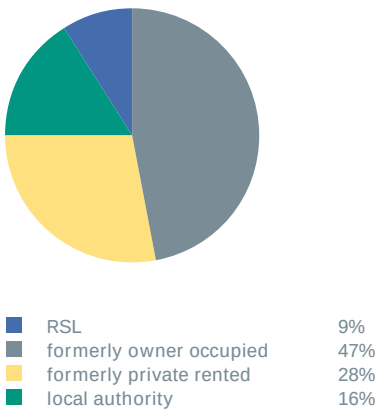
Figure 2.6 Dwellings providing HMO accommodation by regional group, 2001



Vacant dwellings

2.19 About 3% of the total dwelling stock in England (683 thousand dwellings) were vacant at the time of the survey. Numerically, the majority of the vacant dwellings are in the private sector, Figure 2.7. A high proportion of these private sector vacant dwellings were rented when last occupied. This is consistent with the pattern in found in 1996. Although the number of vacant dwellings in the social sector is lower than in the private sector, social rented dwellings are a little more likely to be vacant than private sector dwellings (4% compared with 3%).

Figure 2.7 Vacant dwellings by ownership 2001



2.20 Older dwellings are more likely to be vacant than newer dwellings – 5% of pre 1919 dwellings compared with less than 3% in properties built since then. In both the private and social sectors, flats are more likely to be vacant than houses. This is especially true in the private sector where nearly 6% of flats are vacant compared with a little less than 3% of houses.

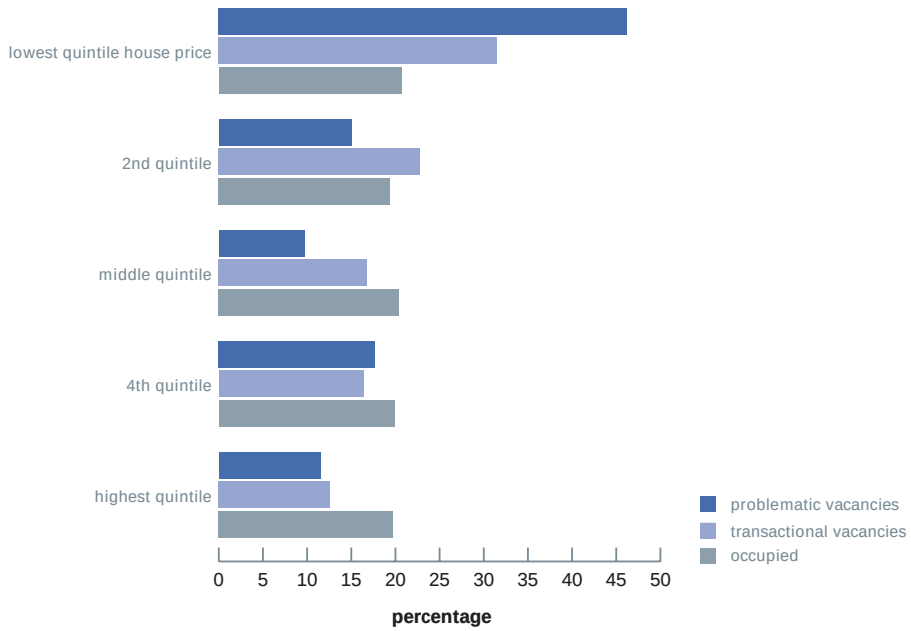
2.21 About 10% of vacant dwellings have been empty for less than a month and another 40% empty for up to 6 months, leaving around half the vacant stock being unoccupied for longer.

2.22 At any point in time, a number of vacant dwellings exist as a result of the 'normal' process of buying/selling and renting/letting in the different housing sectors. Such 'transactional vacancies' simply reflect the gap between past owners or tenants moving out and new owners or tenants moving in. Other dwellings remain vacant for long periods or need work before they can be re-occupied. Such 'problematic vacancies' represent an underused housing resource in high housing demand areas. They also represent a housing liability and drain on resources in areas of low housing demand.[3]

2.23 In 2001, it is estimated that approximately 50% of all vacant dwellings are problematic. However, this falls to 40% if those already being dealt with through modernisation are excluded.

2.24 In terms of market values, a third (32%) of transactional vacancies are among the lowest valued stock within each of the regions, while only 13% are in the highest valued stock, Figure 2.8.[4] Nearly half of all problematic vacancies are among the lowest valued stock, indicating that most problems occur at the lower end of the 'market' for both private and social sector housing.[5]

Figure 2.8 Profile of vacant and occupied dwellings by market value group, 2001



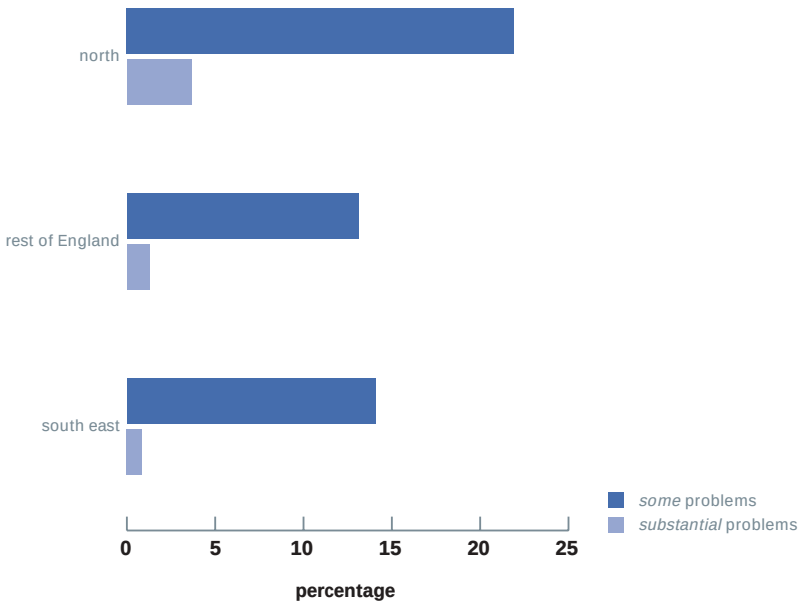
2.25 Considering the stock as a whole, dwellings in the Northern regions are only a little more likely to be vacant than elsewhere (4% compared to 3%). However *concentrations* of unoccupied or derelict residential and non residential properties are much more likely in northern regions with around a quarter of stock there situated in neighbourhoods assessed to have 'some' or 'substantial' problems, Figure 2.9.

3 For the EHCS, dwellings vacant for up to 1 month are classified as transactional vacancies and those unoccupied for at least 6 months are treated as problematic vacancies. Dwellings vacant for between 1 and 6 months can be problematic or transactional depending on whether they are unfit for human habitation and therefore require repair work prior to being re-occupied. Changes in the survey methodology between 1996 and 2001 suggest that this figure is not directly comparable to that reported for 1996.

4 This indicates that lower valued property is generally bought and sold more frequently than higher valued stock.

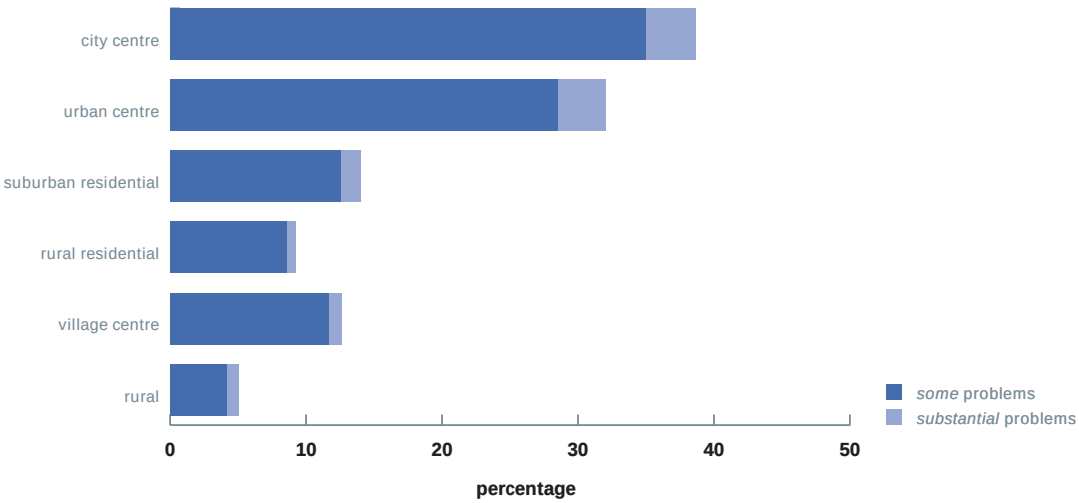
5 Market values for all the stock were obtained through independent assessment by professional valuers. In order to identify the lowest and highest valued stock without the substantial effects of regional variations in price, the stock has been distributed into five equal groups (lowest to highest value) within each government office region, and then the groups have been aggregated together across regions.

Figure 2.9 Dwellings with *some* or *substantial* problems of vacant or derelict buildings in the neighbourhood by type of area, 2001



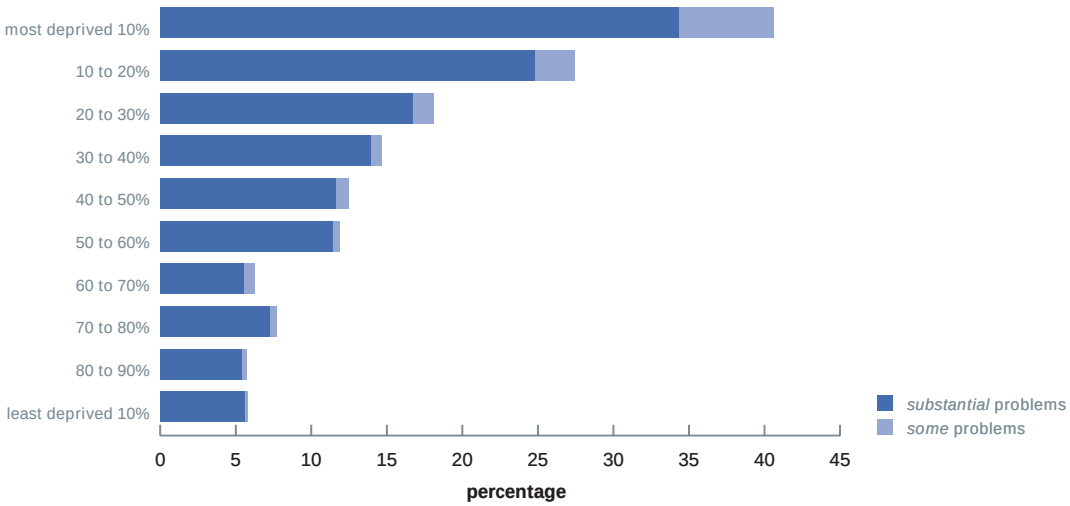
2.26 The greater polarisation of demand in city centres compared with other types of area is reflected in their rate of vacancies (6%) being twice the national average. A third or more of dwellings in city and other urban centres are situated in neighbourhoods where there a 'some' or 'substantial' problems with vacant or derelict buildings, Figure 2.10.

Figure 2.10 Dwellings with *some* or *substantial* problems of vacant or derelict buildings in the neighbourhood by type of area, 2001



2.27 The vacancy rate in the most deprived wards is over 5% compared to 2% in the least deprived. However over 40% of of the stock of the most deprived wards is situated in neighbourhoods with 'some' or 'substantial' problems of vacant or derelict buildings, compared to 5% in the least deprived wards, Figure 2.11.

Figure 2.11 Dwellings with *some* or *substantial* problems of vacant or derelict buildings in the neighbourhood by ward deprivation ranking, 2001



Chapter 3
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.* This chapter addresses the availability of decent homes by looking at: the extent to which homes across and within different sections and areas of the housing stock are non decent, how the situation has changed since 1996 (the year of the last survey), the reasons for dwellings failing to meet this standard, and the costs of work necessary to deal with these problems.

Summary

> Some 7.0 million dwellings (33% of all) are non decent, but this indicates a substantial reduction (25%) in the number of non decent homes since 1996 when 9.4 million (46%) failed to meet the standard.

> Of the 7 million non decent homes, 5.6 million dwellings do not provide a reasonable degree of thermal comfort, 1.9 million fail through disrepair, 900 thousand are unfit and 500 thousand do not have modern facilities and services.

> Less progress has been made in tackling disrepair relative to the other reasons for non decent homes.

> 38% of the social sector stock is non decent (1.6 million) compared to 32% of the private sector stock (5.4 million). Most non decent homes are owner occupied although private rented dwellings (49%) are most likely to be non decent.

> Homes failing the standard tend to be more concentrated among older houses and post 1945 flats. Less progress has been made in improving flats than houses with the majority of local authority flats remaining non decent.

> City and urban centres along with isolated rural locations have much higher incidences of non decent homes than suburban and rural residential areas – although nearly half of all non decent homes are in suburban locations.

> Across all tenures, dwellings in the 10% most deprived wards (41%) are much more likely to be non decent compared with those in the least deprived wards (24%). However, social sector dwellings are just as likely to fail on the criterion of thermal comfort in the least deprived areas as in the most deprived.

> The average cost to make homes decent is nearly £7,200, representing a total cost of £50 billion. However, while 40% of non decent homes require expenditure of less than £1,000 per dwelling another 10% require expenditure of £20,000 per dwelling or more.

> Non decent homes that can be brought up to standard relatively cheaply are most prevalent in the social sector and in flats. Required expenditure for predominantly private sector older stock and dwellings located in city and other urban centres tends to be much higher.

Number of non decent homes

3.1 In 2000 the Government set a standard for 'decent homes' whereby housing should:

> be above the statutory minimum standard (ie be fit for habitation – see chapter 6);

> be in a reasonable state of repair;

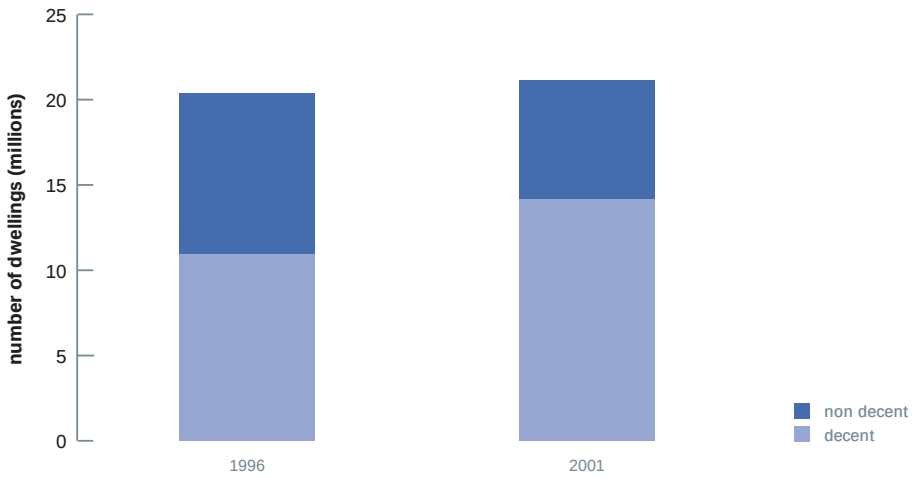
> provide reasonably modern facilities and services; and

> provide a reasonable degree of thermal comfort.

A more detailed description of each of the above criteria is provided in Appendix D.

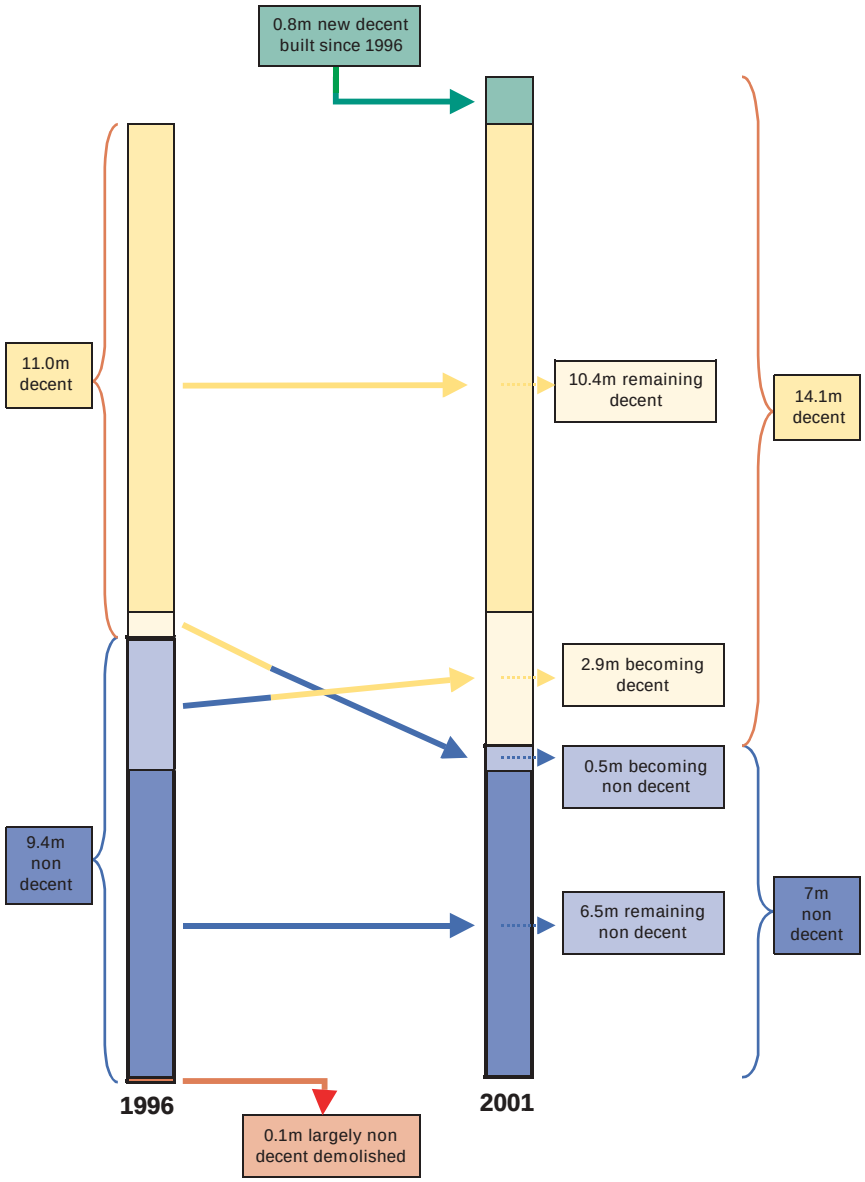
3.2 Two-thirds of the dwellings in England (nearly 14.1 million) meet the decency standard, with one third (7 million) non decent, Figure 3.1. This represents an overall reduction in the number of non decent homes of 25% since 1996 (the year of the last survey) when 9.4 million (46%) were non decent.

Figure 3.1 Decent and non decent dwellings, 1996–2001



3.3 The main factor in the amount of progress made is the improvement of around 2.9 million dwellings that were non decent in 1996, Figure 3.2. The construction of another 800 thousand decent homes, along with the demolition of 100 thousand predominantly non decent dwellings, has also contributed to this progress – but this was offset by around 500 thousand dwellings becoming non decent over the period.

Figure 3.2 Change in decent homes, 1996–2001



Reasons for being non decent

3.4 The most common reason for a dwelling being non decent is failure to provide a reasonable degree of thermal comfort. Some 5.6 million dwellings (26% of all the stock) do not meet the standard for this reason. Disrepair is the next most frequent reason, with 1.9 million dwellings failing (9% of the total stock), followed by unfitness (0.9 million or 4% of the stock), and finally lack of modern facilities and services (0.5 million or 2% of the stock).

3.5 Of the 5,6 million dwellings (80% of all non decent homes) that fail on thermal comfort, some 4,3 million (78%) fail for this reason alone. Three quarters of all dwellings providing insufficient thermal comfort fail because they lack adequate insulation, a further 17% fail because of poor heating while the remainder require improvements to both the heating and the insulation of the home.

3.6 Of the 1.9 million dwellings (27% of all non decent homes) which fail the decent homes criteria on disrepair, 836 thousand (45%) fail on the disrepair criterion alone. The key building components on which dwellings most frequently fail the disrepair criteria are chimneys (28% of all failing on disrepair), windows (26%), wall structure (14%) and roof structure (13%).

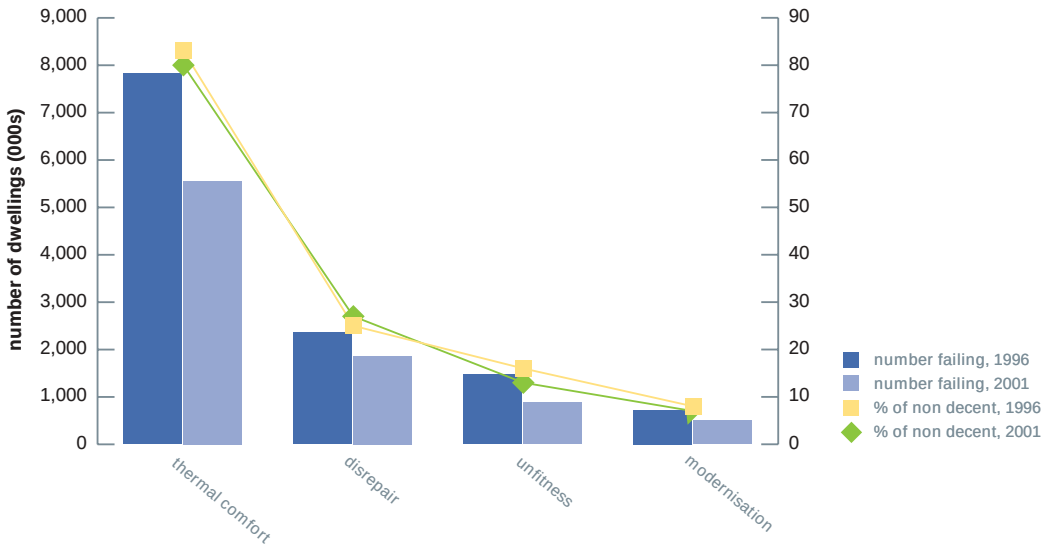
3.7 Of the 0.9 million (13% of all non decent) unfit dwellings, only 252 thousand (28%) fail on fitness alone. Fitness, as the statutory and enforceable minimum standard, is reported in more detail in Chapter 6.

3.8 The 0.5 million dwellings failing because of lack of modern facilities and services comprise 7% of all non decent homes. Only 153 thousand (30%) fail for this reason alone. The most common contributory factors are the age of kitchen (90%) and age of bathroom (87%).

3.9 There have been some changes between 1996 and 2001 in the numbers and proportions of dwellings failing on each set of criteria, Figure 3.3. Dwellings failing on the criterion of thermal comfort fell numerically and as a proportion of all non decent homes. There are 2.2 million less than in 1996 and they now comprise 80% of all non decent homes, compared to 83% in 1996.

3.10 The total number of dwellings failing on disrepair also fell by nearly 500 thousand. However, as a proportion, those failing on disrepair increased from 25% to 27% of all non decent homes. This is because, alongside dwellings failing on thermal comfort, there has been a better rate of improvement regarding unfitness and lack of modern amenities over the period.

Figure 3.3 Dwellings failing on each criterion, 1996 and 2001

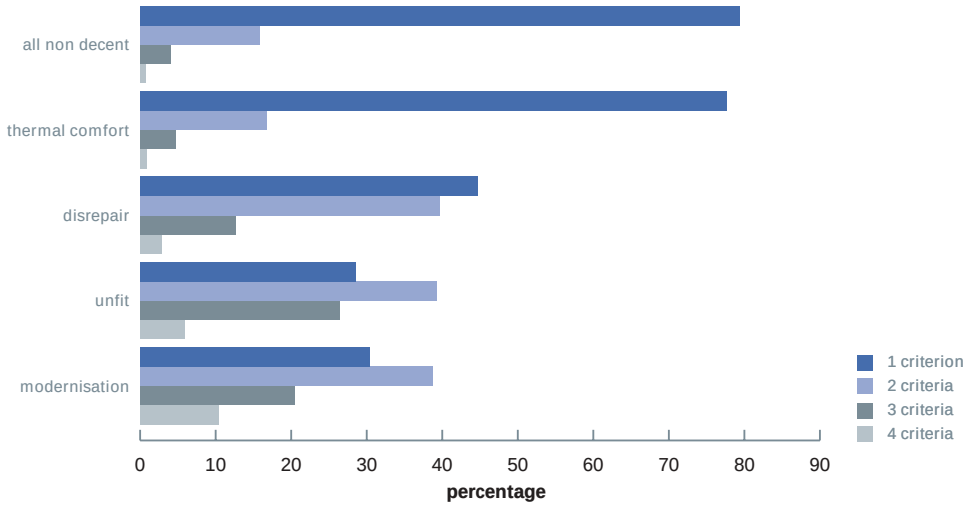


3.11 The total numbers of dwellings failing on fitness and on modern facilities have fallen by 587 thousand (40%) and 229 thousand (31%) respectively. For the latter, most improvement has occurred as a result of work to kitchens. Of all dwellings, decent or not, the number which fail this element of the modernisation criterion has fallen by 1,981 thousand (34%) since 1996.[1]

3.12 Dwellings may be non decent for failing on any one or more of the four criteria. However the great majority (79%) of non decent homes fail on one criterion only, Figure 3.4. A further 16% fail on two criteria, 4% on three, and less than 1% on all four. This pattern has changed little since 1996 – the number of dwellings failing on only one criterion has increased from 76% of all non decent homes to 79%.

1 Dwellings with kitchens over 20 years old are not necessarily non decent, as the modernisation criterion allows for up to 2 specified elements to be in need of modernisation. See Appendix D for the detailed explanation of the criteria defining decent homes.

Figure 3.4 Non decent homes failing the standard by number of counts for failing, 2001



3.13 Dwellings that fail on more than one criterion tend to fail for reasons that include insufficient thermal comfort. Nearly 600 thousand dwellings (8% of all non decent) fail because of thermal comfort and disrepair, 193 thousand (3%) because of thermal comfort and unfitness, and 177 thousand (3%) because of thermal comfort, unfitness and disrepair. However, 130 thousand (2% of all non decent) fail because they are unfit and in disrepair.

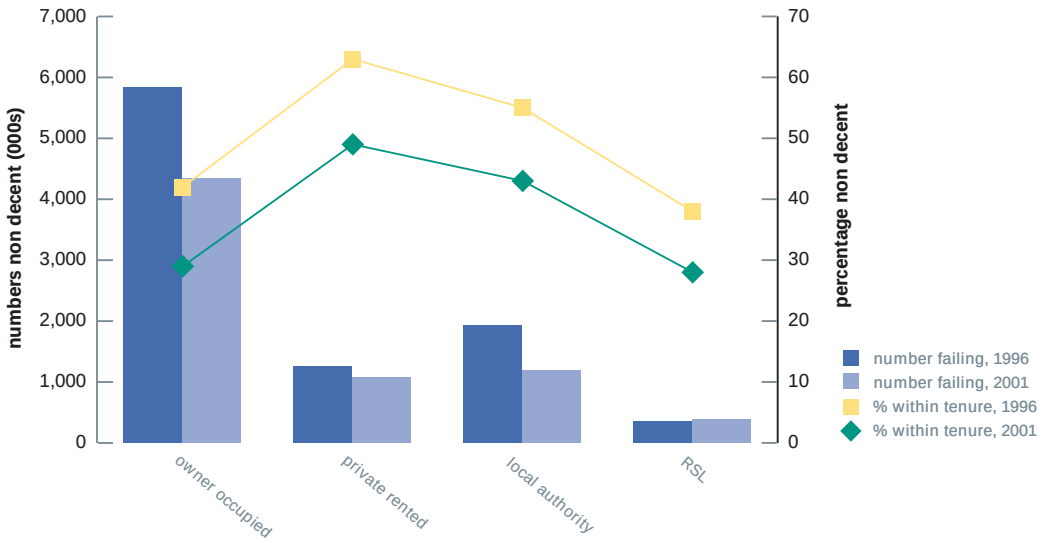
Tenure

3.14 Because owner occupied dwellings form 70% of the total stock, they account for the largest number of all non decent homes, at 4,336 thousand dwellings (62% of the non decent stock). However, non decent homes are proportionately most prevalent in the private rented sector, where 49% are non decent, and in the local authority stock (43%). RSL-owned and owner occupied dwellings are the least likely to be non decent homes.

3.15 Owner occupied and RSL dwellings are less likely than those of other tenures to fail on thermal comfort or modernisation; RSL dwellings are least likely to fail on disrepair. Private rented dwellings have the highest failure rates on thermal comfort (40%), and are around twice as likely to fail on fitness (11%) and disrepair (17%) as any other tenure.

3.16 The number of non decent owner occupied dwellings has fallen by 1.5 million since 1996, from 42% to 29% of this tenure, Figure 3.5. The number of non decent private rented dwellings has only fallen by about 180 thousand, although this modest reduction is due in part to an overall increase in the size of this housing sector over the period (by around 10%). The incidence of non decent dwellings has gone down from 63% to 49% in this sector. Local authority non decent dwellings have declined by 730 thousand. However, some of this will be due to losses of housing from Council stock through stock transfers to the RSL sector and sales to tenants under Right to Buy legislation. The proportion of local authority stock which is non decent has fallen overall from 55% in 1996 to 43 % in 2001. Numbers of non decent RSL dwellings have risen by around 30 thousand, but the total size of the RSL stock has increased by 47% since 1996, partly due to transfers from local authorities. The proportion of non decent RSL homes has fallen from 38% to 28% over the same period.

Figure 3.5 Number and percentage of non decent homes by tenure, 1996 and 2001

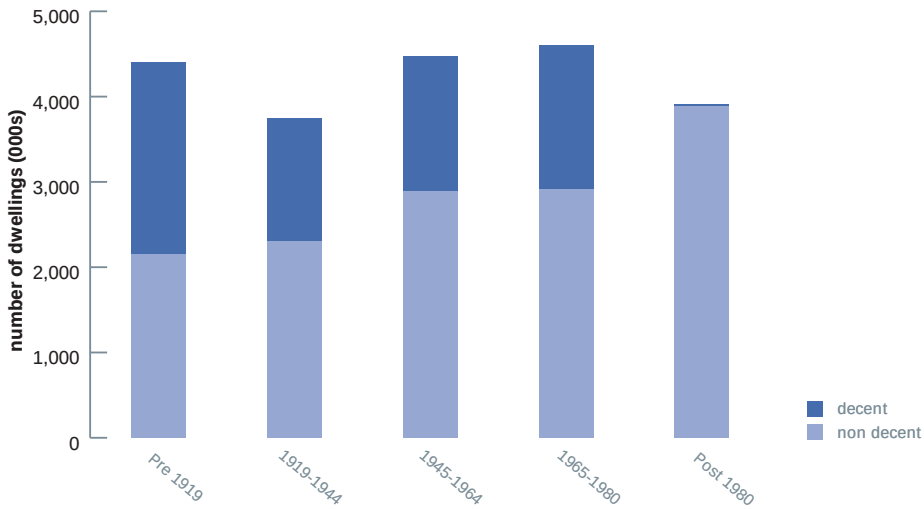


Dwelling characteristics

AGE

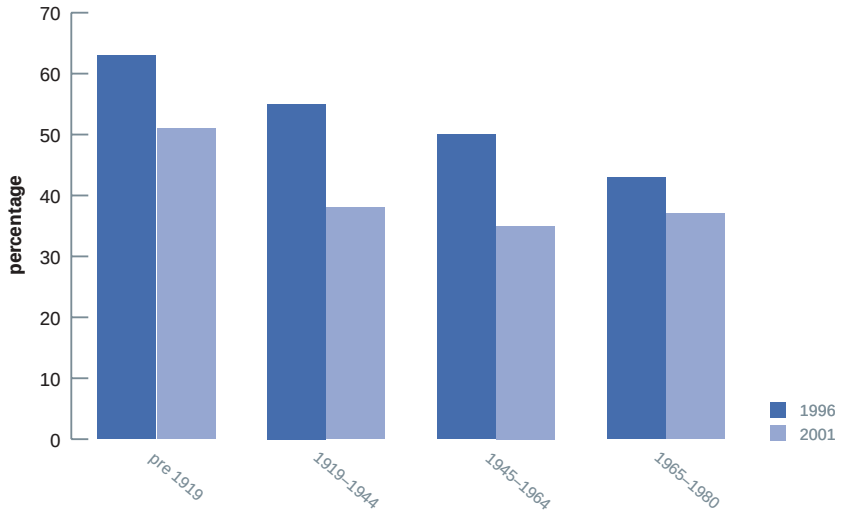
3.17 About a third of all non decent homes are more than 80 years old. Within this age-group half are non decent, compared with just over a third of those built between 1919 and 1980, Figure 3.6. Virtually all the stock built since 1980 is decent.

Figure 3.6 Distribution of decent homes by dwelling age, 2001



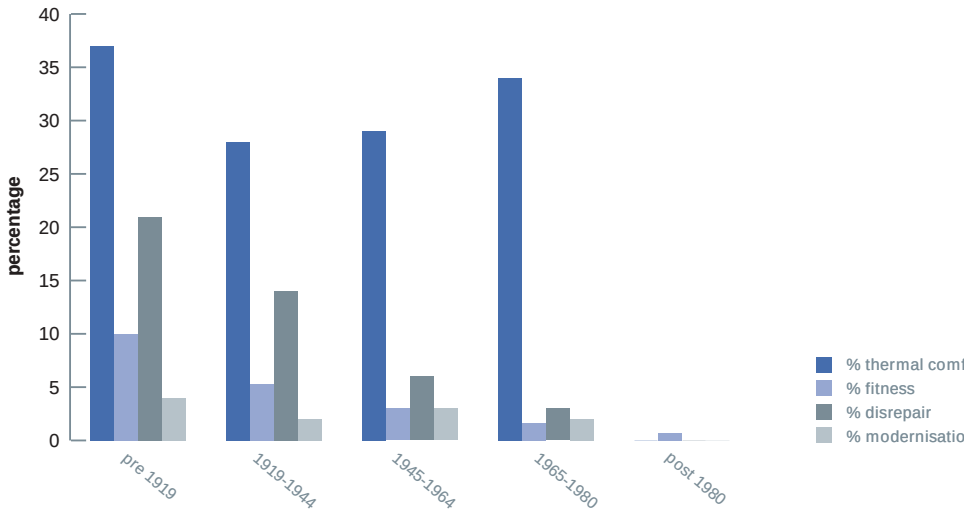
3.18 Since 1996, the number of non decent homes has fallen in all stock built before 1980, Figure 3.7. The largest proportional reductions have occurred in dwellings built 1919-64. The oldest, pre-1919 stock has also improved significantly, but not at the same rate as stock built 1919-64. More modest gains have been made in dwellings built 1965-80 and dwellings built in this period are now just as likely to be non decent as those built 1945-64.

Figure 3.7 Non decent homes by dwelling age, 1996 and 2001



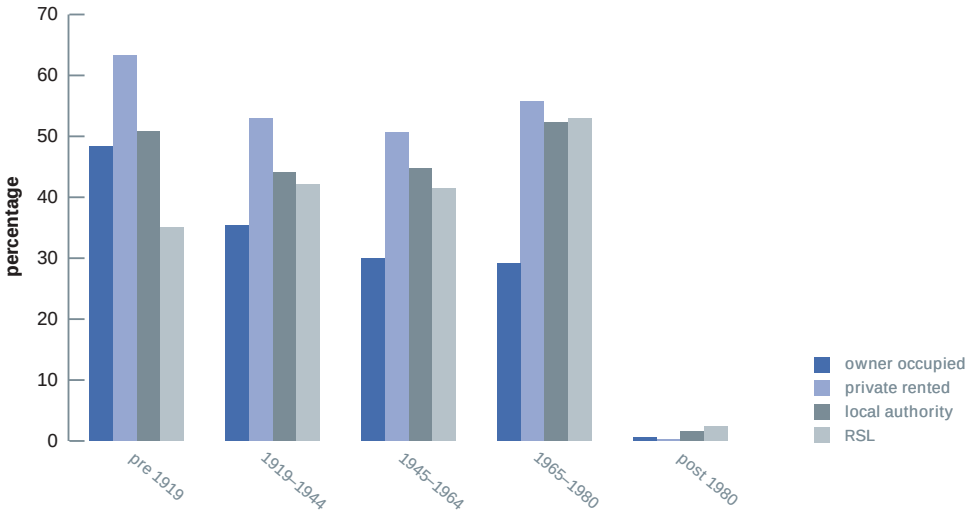
3.19 Dwellings are most likely to fail on thermal comfort whatever their age, Figure 3.8. However older properties are much more likely than average to fail on disrepair or unfitness: 10% of all pre-1919 dwellings fail the fitness criterion, compared with 4% overall, and 21% fail on disrepair compared with 9% overall. Older properties are also much more likely to fail for more than 1 criterion, with 16% of pre 1919 dwellings and 9% of 1919–1944 dwellings failing on two or more criteria.

Figure 3.8 Dwellings failing on each criterion, by age, 2001



3.20 The greater likelihood of non-decency in older dwellings does not hold for all tenures, Figure 3.9. Within the pre-1919 stock, only 35% of the RSL stock is non decent, but this rises to 53% of the 1965–1980 stock in this sector. Much pre-1919 RSL stock will have been refurbished after its acquisition from private owners. Owner occupied dwellings built before 1980 are much less likely to be non decent than private rented stock of the same age, with rates for the social sectors falling between the two. However the incidence of non decent homes within the social sector is highest for its stock built between 1965–1980.

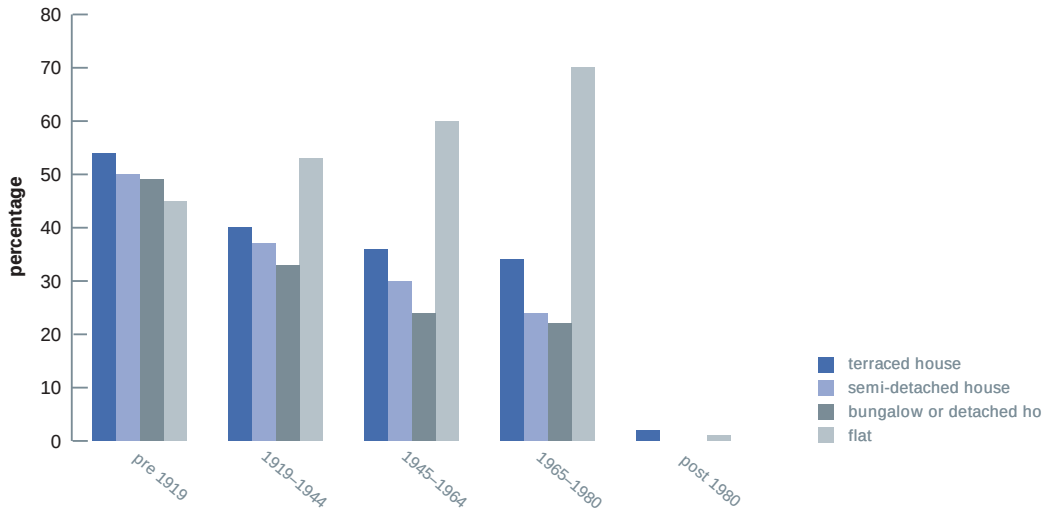
Figure 3.9 Non decent homes by dwelling age and tenure, 2001



Type

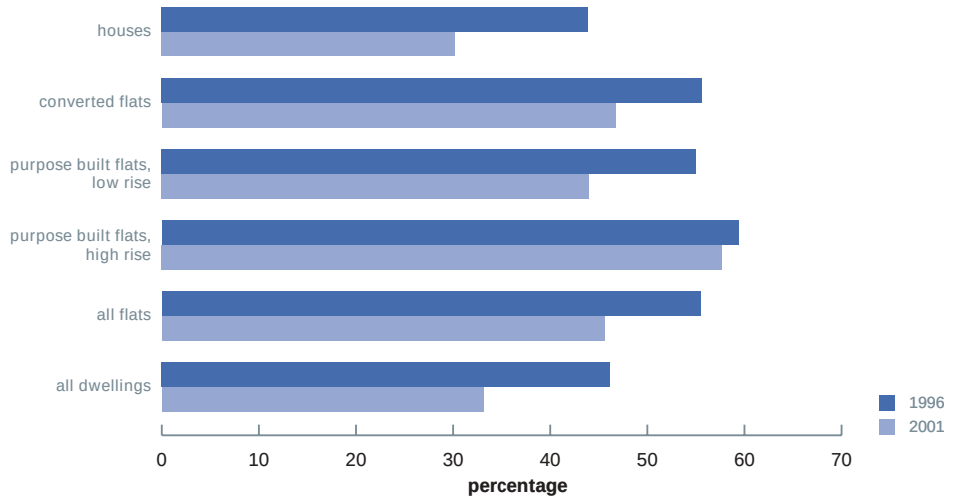
3.21 Overall, detached houses and bungalows are least likely to be non decent, Figure 3.10. Terraced houses are more likely than average to be non decent, and this proportion is higher in the older stock. The greatest proportion of non decent homes is found among flats. With the exception of those built since 1980, newer flats are more likely to be non decent than older ones. High-rise flats, which form only 3% of the non decent stock, have the highest overall proportion non decent at 58%.

Figure 3.10 Non decent homes by dwelling age and type, 2001



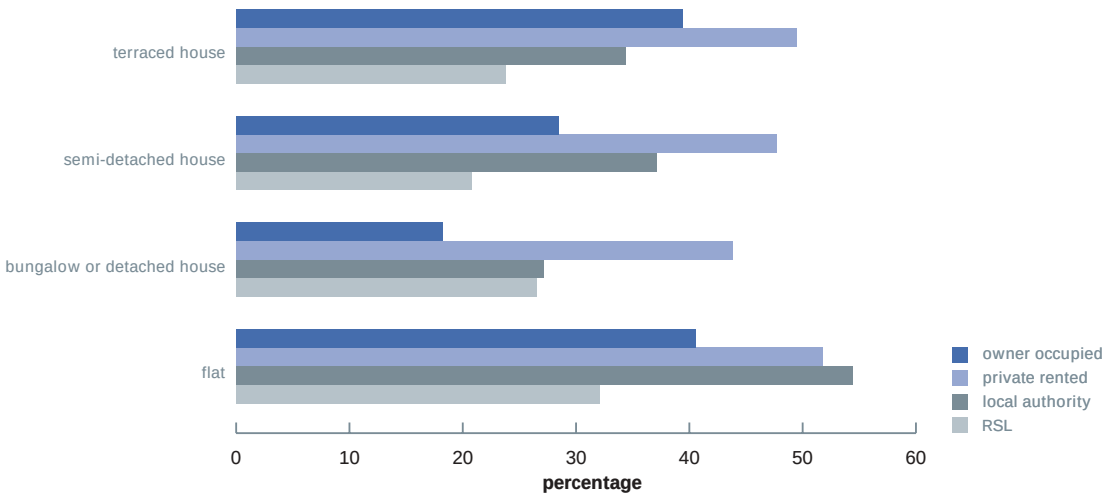
3.22 Larger proportional reductions in non decent homes have been made in houses (from 44% to 30%) compared with flats (from 56% to 46%). Some 40% of purpose built flats fail the thermal comfort criterion, as do 30% of converted flats – this compares with 23% of houses. Converted flats, which are overwhelmingly old and privately owned, are more likely to fail on any criterion other than thermal comfort (29% are either unfit, in disrepair or in need of modern facilities and services) than purpose built flats (13%) or houses (12%). Converted flats are also more likely to fail on more than one criterion of non decent dwellings (33% of non decent ones do so) than purpose built flats (19%) or houses (20%).

Figure 3.11 Non decent homes by types of flat and houses, 1996 and 2001



3.23 Within terraced and semi-detached dwellings, those owned by RSLs are least likely to be non decent, whereas for detached houses and bungalows owner occupied dwellings have the lowest proportion which are non decent, Figure 3.12. In nearly all dwelling types the private rented stock contains the highest proportion of non decent homes. The exception is flatted accommodation, where more than half of private rented and local authority dwellings are non decent.

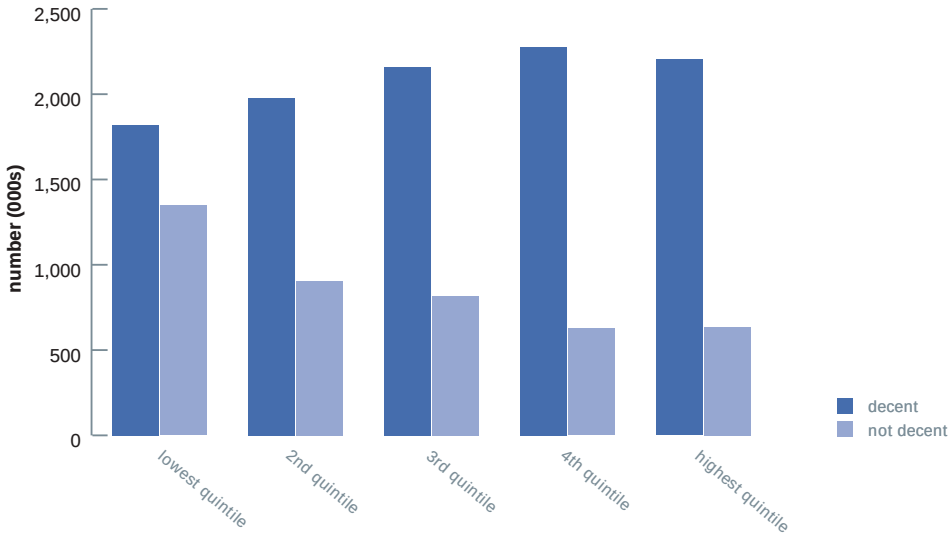
Figure 3.12 Non decent homes by type and tenure, 2001



Market value (owner occupied stock)

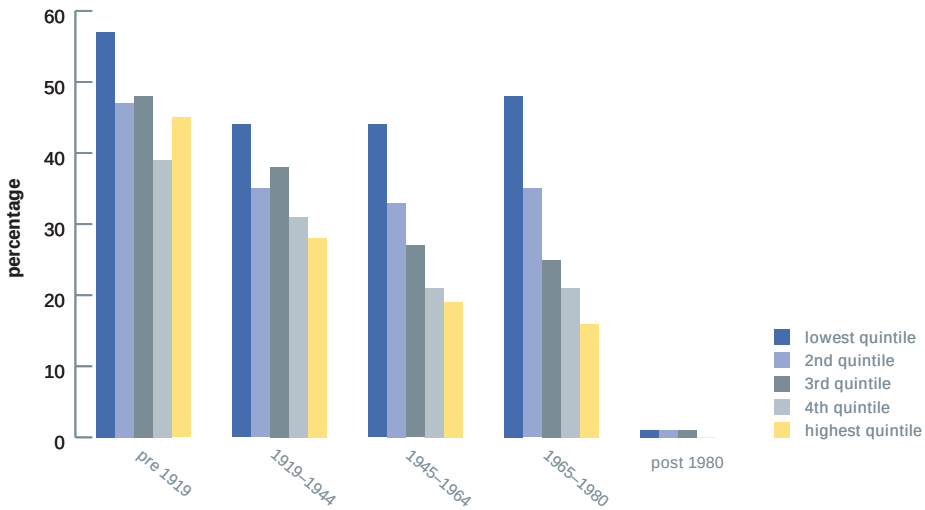
3.24 In the owner occupied stock there is a strong relationship between current market value and the incidence of non decent dwellings, Figure 3.13. Some 43% of the lowest valued fifth of owner occupied properties (calculated within regions on owner occupied stock only) are non decent, compared to around 22% of the highest valued fifth.[2]

Figure 3.13 Owner occupied non decent homes by market value, 2001



3.25 Setting aside the post 1980 owner occupied stock, which is virtually all decent, the more recent the stock, the greater the impact that non decency has on value, Figure 3.14. For owner occupied dwellings in the lowest market value quintile, the proportions of non decent dwellings are well above the owner occupied average of 29% for all dwellings built before 1980, whereas proportions for such dwellings in the highest quintile fall from 45% of pre-1919 dwellings to 16% of 1965-80 dwellings.

Figure 3.14 Owner occupied non decent homes by market value and age, 2001

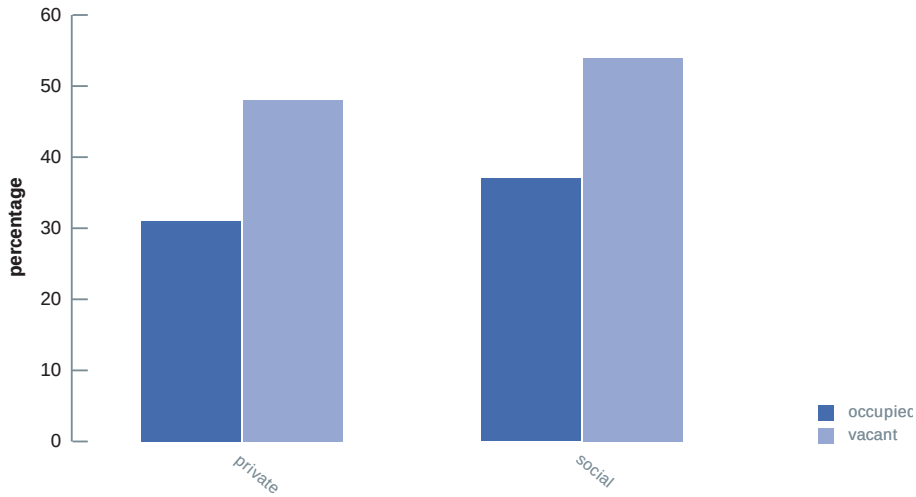


2 Values reported here are based on regionally adjusted quintile groups for the owner occupied stock. These are obtained by examining the distribution of market values of the owner occupied sector within each of the nine (Government Office) regions of England and allocating them to one of five bands or quintile groups containing the same proportion of cases. Lowest to highest quintile groups are then aggregated across regions. This approach therefore identifies 'low' to 'high' value properties independently of the very large regional variations in house prices.

Vacant dwellings

3.26 Only 3% of all dwellings are vacant, but this rises to nearly 5% of non decent homes. Half of all vacant dwellings are non decent, compared with one third of occupied dwellings, and vacant dwellings are more likely to be non decent than occupied dwellings regardless of whether they are in the private or social sectors, Figure 3.15.

Figure 3.15 Non decent homes by occupancy and private/social sector, 2001



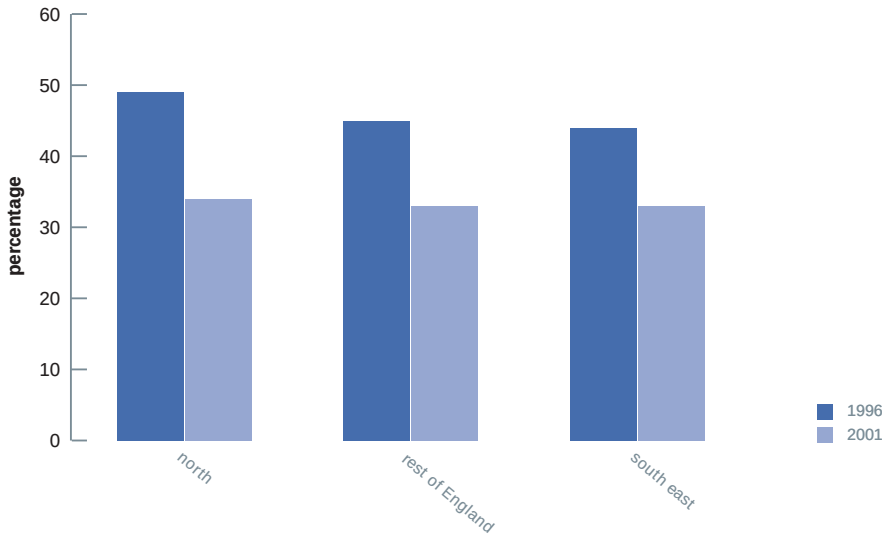
Location of non decent dwellings

REGIONAL GROUPS

3.27 The incidence of non decent dwellings is very similar across three broad regional groups representing: Northern regions; the South East (including London); and Midlands, East and South West, Figure 3.16.[3]

3.28 There have been marked reductions in the proportions of non decent dwellings in all three regional groups since 1996, with the largest improvement occurring within the Northern regions where the proportion has fallen from 49% to 34%.

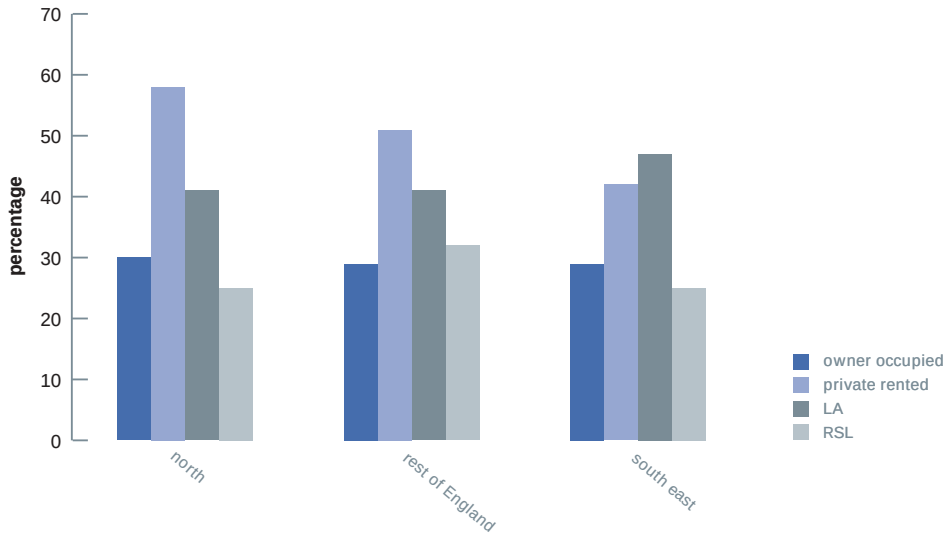
Figure 3.16 Non decent homes by regional group, 1996 and 2001



3 This may mask individual differences between Government Office Regions and does not reflect local variations that exist within regions. Regional results will be published separately. The relationship of non decent homes to area types is looked at below and concentrations of housing environmental problems in local neighbourhoods are reported in Chapter 5.

3.29 In all three regional groups, the proportion of non decent homes is highest in the private rented and local authority stock, Figure 3.17. However the private rented stock is much more likely to be non decent outside of the South East but particularly in the Northern group of regions, while the local authority stock is most likely to be non decent in the South East (including London) where there are higher concentrations of flatted properties.

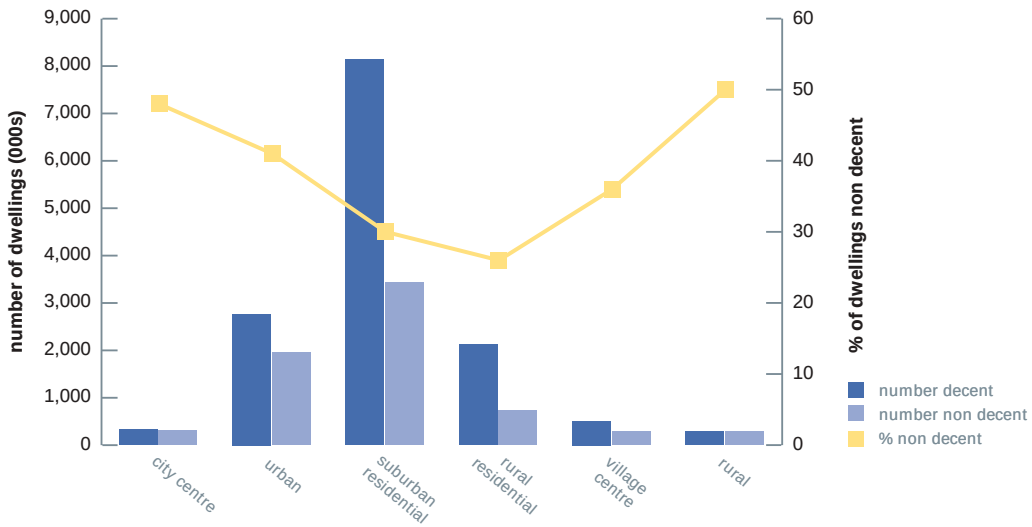
Figure 3.17 Non decent homes by regional group and tenure, 2001



Urban and rural areas

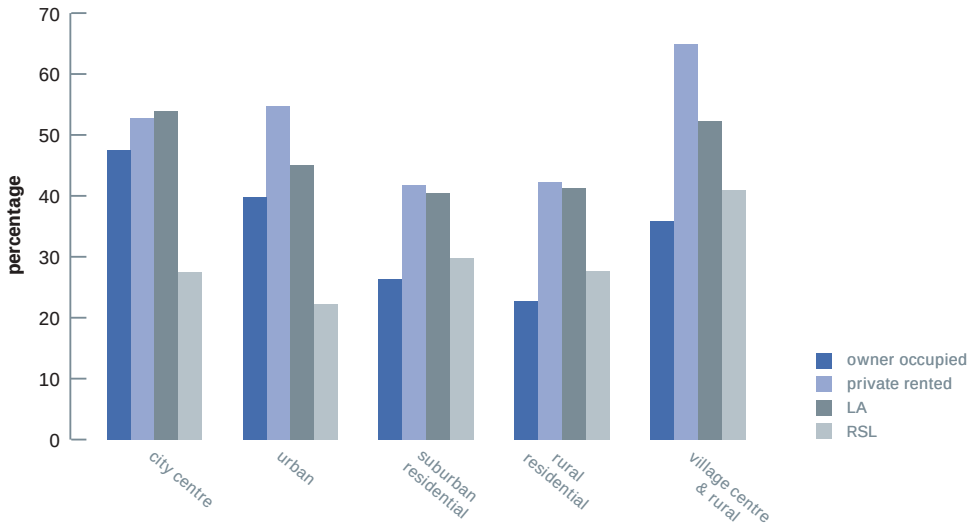
3.30 Over 80% of non decent homes are in city centre, urban, or suburban residential areas, with almost half being located in suburban areas alone, Figure 3.18. But this simply reflects the relative sizes of the stock in towns and cities and in country areas. In fact, the proportion of non decent homes is only marginally lower in country areas (31%) than in towns and cities (34%). The highest proportions of non decent homes occur in isolated rural areas (50%) and in city centres (48%), followed fairly closely by urban centres (41%). Dwellings in suburban and rural residential areas are the least likely to be non decent.

Figure 3.18 Distribution of non decent homes by type of area, 2001



3.31 This pattern reflects differences between the age, type and tenure profiles of the stock in different types of area. Within city and urban centres, dwellings tend to be older with a higher than average proportion of flats, and a higher proportion of private rented and local authority properties. Here, RSL properties are much less likely to be non decent than those of other tenures, Figure 3.19. In suburban and rural residential areas, dwellings tend to be newer and have the highest proportion of owner-occupiers. Here private rented and local authority dwellings are the most likely to be non decent. In village centres and isolated rural areas, there are large proportions of older dwellings, and private rented and local authority tenures in particular have above-average proportions of non decent homes.

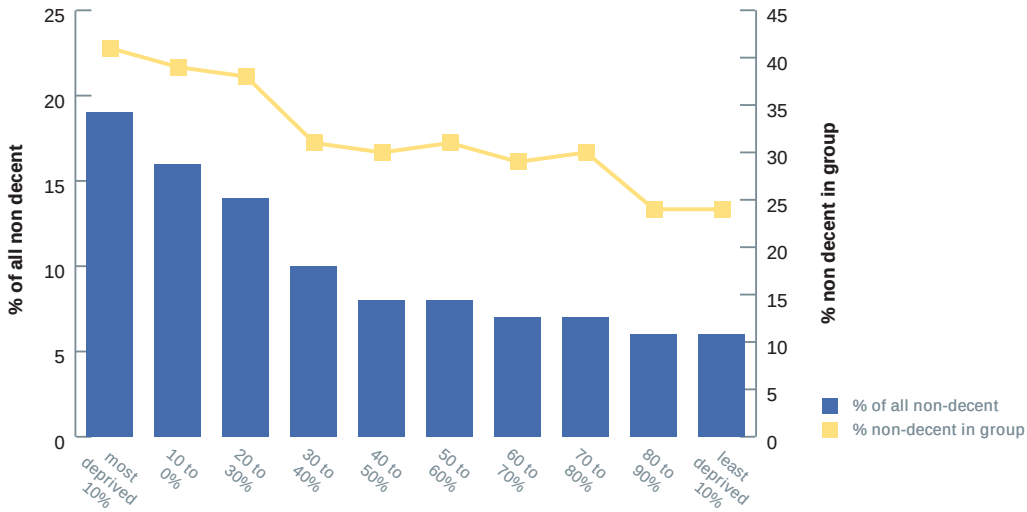
Figure 3.19 Non decent homes by type of area and tenure, 2001



Deprived wards

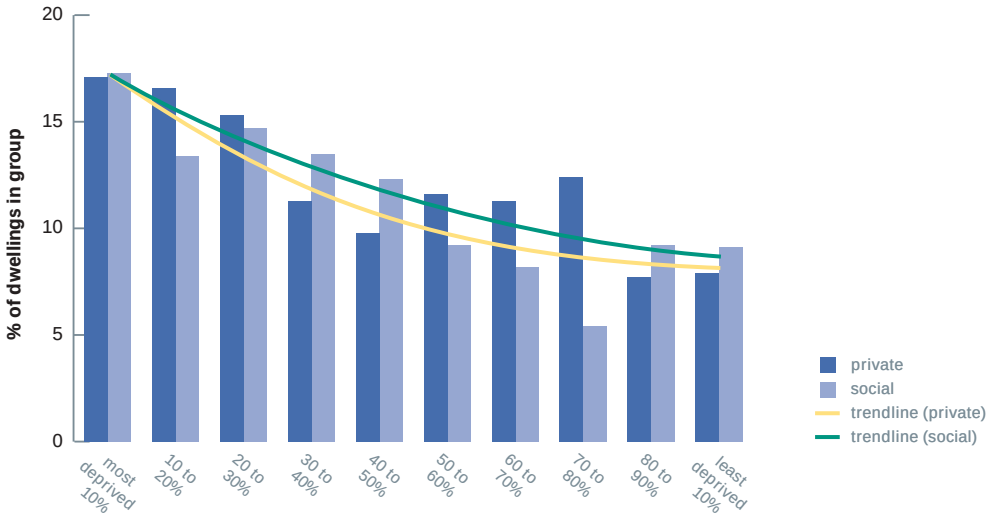
3.32 There is a clear relationship between the incidence of non decent housing and the degree of deprivation at ward level (as measured by the Index of Multiple Deprivation), with higher proportions of non decent dwellings in the more deprived areas. Of all non decent homes, 19% are in the worst 10% of wards, compared with 6% in the best 10% of wards, Figure 3.20. The most deprived wards contain higher numbers of dwellings than the average, but even so, the proportion of non decent dwellings in each ward group shows a marked decline with reducing levels of deprivation, from 41% non decent in the most deprived 10% of wards, to 24% in the least deprived 10% of wards.

Figure 3.20 Distribution of non decent homes by deprivation level of ward



3.33 However this overall trend is not reflected within the social sector stock. This is because social sector dwellings are just as likely to fail on the criterion of thermal comfort in less deprived areas as in the most deprived. Nevertheless, private and social sector dwellings are twice as likely to fail the decency standard for any other reason (ie be unfit, in disrepair or in need of modern facilities and services) in the most deprived (17%) compared to the least deprived wards (8 to 9%).

Figure 3.21 Non decent homes that fail for reasons other than thermal comfort by deprivation level of ward and housing sector, 2001



Cost to make decent

3.34 Estimated costs to make a dwelling decent are based on rectifying faults that it currently fails on and are calculated as required expenditure excluding VAT or the profit mark-up a contractor will include in the price (see Appendix E).

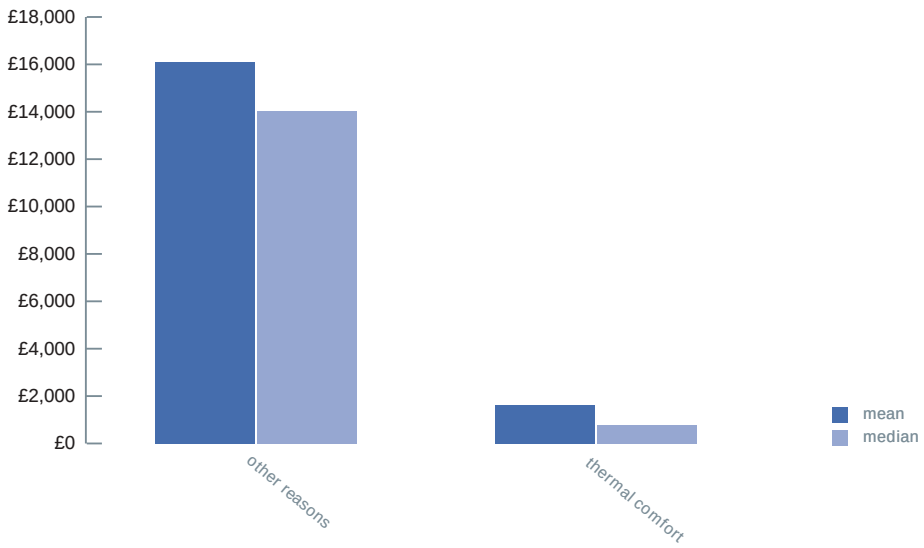
3.35 The average (mean) cost to make decent is £7,181 per dwelling, amounting to a total cost of £50 billion for all non decent stock. However half of these properties need expenditure of only £2,300 or less, with some 40% of the non decent stock requiring around £1,000 or less, Table 3.1.

3.36 The main reason why many dwellings are relatively inexpensive to bring up to standard is that 3.5 million (49% of all non decent) require only insulation measures to make them decent – loft or wall cavity insulation usually costing less than £1,000 per dwelling.

3.37 At the other end of the scale are 10% of non decent properties requiring £20,000 or more to bring up to standard. These may require a number of more expensive measures – for example the installation of new central heating, renovation of kitchen or the replacement of external building components like roof or windows, each costing several thousand pounds.

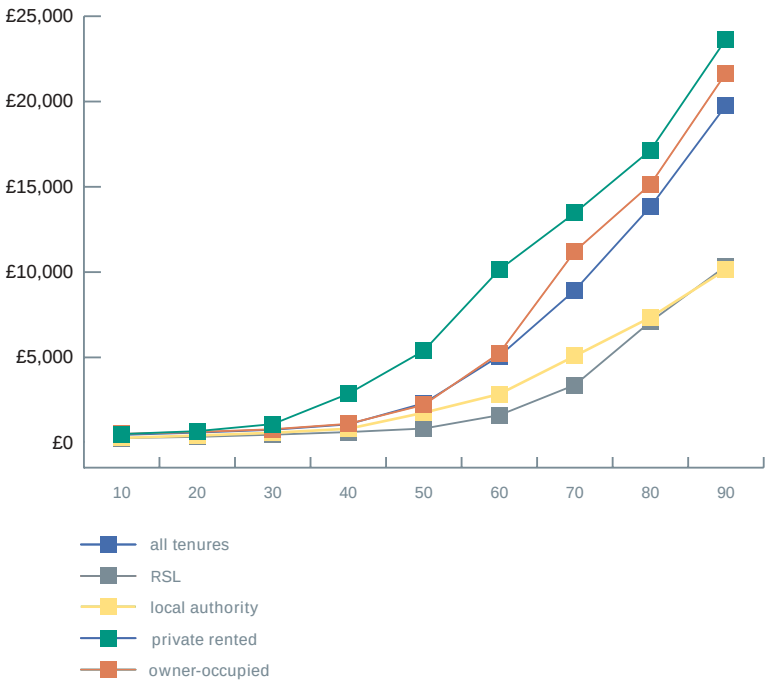
3.38 The mean cost of the 4.3 million homes (62% of all non decent) failing only on thermal comfort is £1,636 per dwelling, totalling £7 billion. This compares with an average cost of £16,000 for all other non decent homes, with expenditure to deal with disrepair comprising the main component of the total bill of £43 billion to deal with these 2.7 million properties, Figure 3.22.

Figure 3.22 Mean and median costs to make decent by reason for non decency, 2001



3.39 The mean cost to make decent is highest in the private rented sector at £9,814, followed by owner-occupied stock at £7,760 with local authority and RSL stock at under £4,000 per dwelling, Figure 3.23.[4]

Figure 3.23 Distribution of costs to make decent by tenure, 2001



4 With regard to the Government decent homes target to make all social housing decent by 2010, the *immediate* cost for bringing local authority stock up to standard is £4.5 billion. However this cost covers only the expenditure required to make existing non decent homes decent *now* and does not take account of: a) work required to ensure current non decent dwellings remain decent until 2010; b) dealing with additional dwellings likely to become non decent between 2001 and 2010; and c) additional important environmental and security work and disabled adaptations that do not impact on the standard as such. Other research using data from the EHCS and local authorities' own estimates suggests the total cost of this outstanding work is around £20 billion. The prime reason why costs are much higher to take these additional factors into account is that dwellings are most likely to become non decent (or return to non decency) because of disrepair (for example from deterioration resulting from ageing and use) which is on average relatively expensive to deal with.

3.40 The cost to make decent is on average much greater for older non decent dwellings, Table 3.1. Differences between types of non decent dwellings reflect their respective age, size and tenure profiles. Purpose built flats generally have the lowest costs among the non decent stock while detached and medium to large terraced houses have the highest.

3.41 As might be expected, the vacant non decent stock is on average much more expensive to bring up to standard than non decent stock that is currently occupied. This difference is almost wholly a consequence of higher costs to make decent (mean £13,400) among private sector vacant properties.

Table 3.1: Costs to make decent, 2001

	mean cost (£s)	median cost (£s)		mean cost (£s)	median cost (£s)
all non decent dwellings	7,181	2,314			
tenure			**dwelling type**		
owner occupied	7,760	2,220	small terraced house	7,564	4,605
private rented	9,815	5,392	medium/large terraced house	9,256	5,175
local authority	3,818	1,759	semi-detached house	7,332	2,519
RSL	3,631	832	detached house	10,442	1,793
age			bungalow	5,501	1,140
pre 1919	11,295	8,499	converted flat	8,944	8,825
1919-1944	8,961	4,942	purpose built flat, low rise	3,682	831
1945-1964	4,410	1,664	purpose built flat, high rise	3,943	906
post 1964	2,876	805			
occupancy			**type of area**		
occupied non decent dwellings	6,991	2,228	city centre	9,142	5,836
occupied private sector	7,920	2,888	urban	8,585	5,006
occupied social sector	3,751	1,185	surburban residential	5,983	1,445
vacant non decent dwellings	10,908	4,675	rural residential	5,847	1,290
vacant private sector	13,399	7,166	village centre & rural	9,891	2,593
vacant social sector	4,110	1,831			

3.42 The *median* cost to make decent for any given part of the non decent stock indicates the amount per dwelling for which half of that particular non decent stock can be brought up to standard.[5] A low median value indicates opportunities for a good proportion of that section of the non decent stock to be brought up to standard relatively cheaply.

3.43 Half of the non decent social sector stock (but particularly RSL properties), high and low rise flats and stock built since 1964 can be brought up to standard for between £800 to £1,200 per dwelling, Table 3.1.

3.44 However, much less progress can be achieved in the older and predominantly private non decent stock with such sums of money. The high median costs to make decent pre-1919 stock (£8,500), converted flats (£8,800), dwellings in city (£5,800) and other urban (£5,000) centres, and the private rented sector (£5,400) indicate that relatively few of these dwellings can be made decent without significant expenditure.

5 The median cost also indicates the minimum expenditure required to bring the other half of a given part of the stock up to standard.

Chapter 4 Opportunity of a decent home

The previous chapter looked at the extent to which homes are decent. This chapter focuses on the *opportunity* of a decent home for different groups of households. It assesses *access* to existing decent homes by looking at the types of households living in non decent homes, the extent to which they are vulnerable, the extent to which such vulnerable households are concentrated in particular types of area, and change since 1996. Vulnerability is looked at in terms of the Government target to reduce the proportion of those living in the private sector who are in receipt of income and disability related benefits and also from wider aspects related to household resources, the age and any long term illness or disability of occupants and length of residence.

Summary

- There were 6.7 million households living in non decent homes at the time of the 2001 EHCS (33% of all households). This is a fall of 25% (2.2 million) since the 1996 EHCS when 8.9 million households were living in non decent homes.
- While there are greater numbers of owner occupied households, couple based households and employed households in non decent homes, it is households that privately rent, people who live alone, ethnic minorities and households with no one in full time employment that are more likely to be living in non decent homes. The concentration of these groups in non decent homes largely arises within private sector housing. There is little difference in the housing conditions of different groups within the social sector.
- Some 1.2 million (43% of) private sector vulnerable households (in receipt of income or disability related benefits) live in non decent homes, compared to an average for this sector of 31%. Another 1 million (37% of) social sector vulnerable households live in non decent homes – which is average for the sector.
- For anyone who is potentially more at risk from poor housing conditions on account of their age, illness or disability their chances of living in a decent home are reduced significantly if they rent privately, are poor, have no one in full time employment or have lived in their home for a long time.
- Differences between private sector vulnerable and all other households living in non decent homes are greatest in the south east regions (15 percentage points) and least in northern regions (12 percentage points). Within the south east regions social sector vulnerable tenants are more likely to live in non decent homes than other tenants while they are less likely to elsewhere.
- Half of private sector vulnerable households who reside in the most deprived wards live in non decent homes, compared to around 35% in the least deprived wards.
- The proportion of private sector vulnerable households living in non decent homes has reduced from 58% in 1996 to 43%. For the social sector there has been a 14 percentage point reduction to 37%.
- The reduction in non decent homes since 1996 has been generally consistent across all sections of the population. This suggests that there has been little change in the position of different groups relative to each other. While the proportion of poorest households living in non decent homes has fallen from 57 to 42%, they remain twice as likely to be living in non decent homes as the highest fifth of income earners.

Who lives in non decent homes

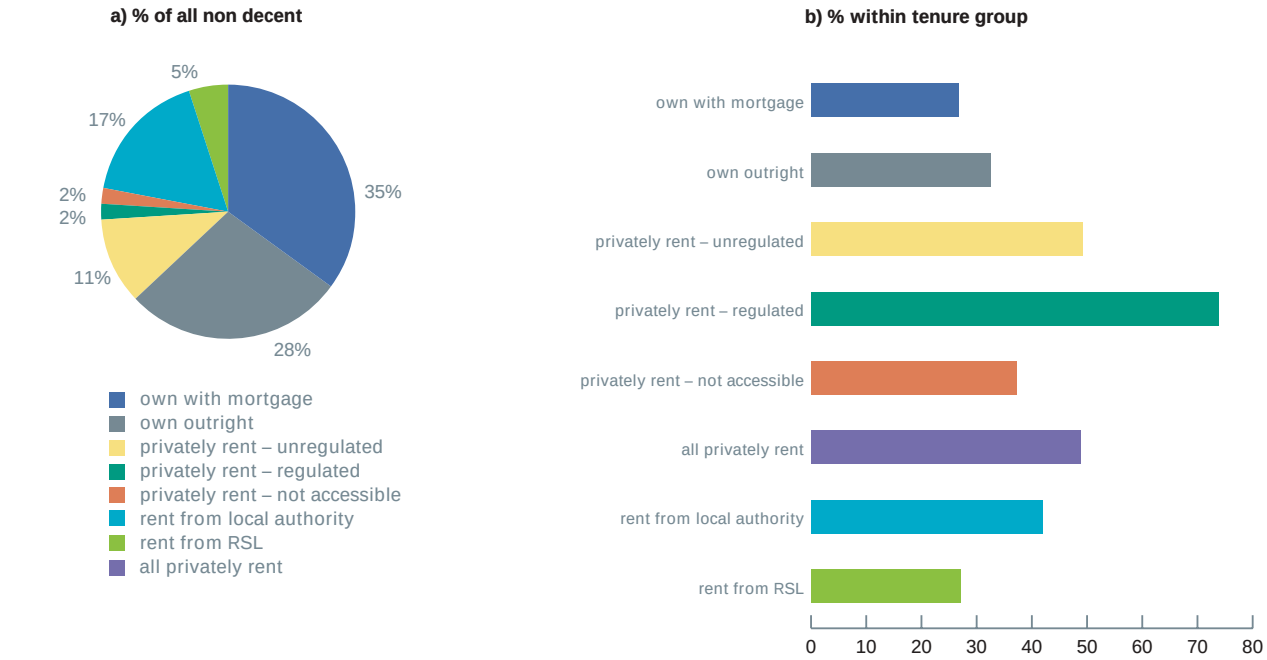
4.1 The number of households living in decent homes has risen from 10.7 million (55% of all) in 1996 to 13.8 million (68%) in 2001, but it still leaves some 6.7 million households (33%) in non decent homes in 2001.

TENURE

4.2 Most households living in non decent homes own their own homes (63%), and the majority of these owners are in the process of purchasing them with a mortgage, Figure 4.1(a). But this simply reflects the continued growth of home ownership in England. As chapter 3 has shown, the likelihood of living in a decent home is very much influenced by tenure.

4.3 Households who rent privately are least likely to have a decent home, Figure 4.1(b). Almost half (49%) of private tenants live in non decent homes. The worst concentration of problems is among those with regulated tenancies, while those who live rent free from family relatives or friends or rent from employers are least likely to live in a non decent home within this sector. Those owning their home with a mortgage, alongside RSL tenants, are least likely to live in non decent homes.

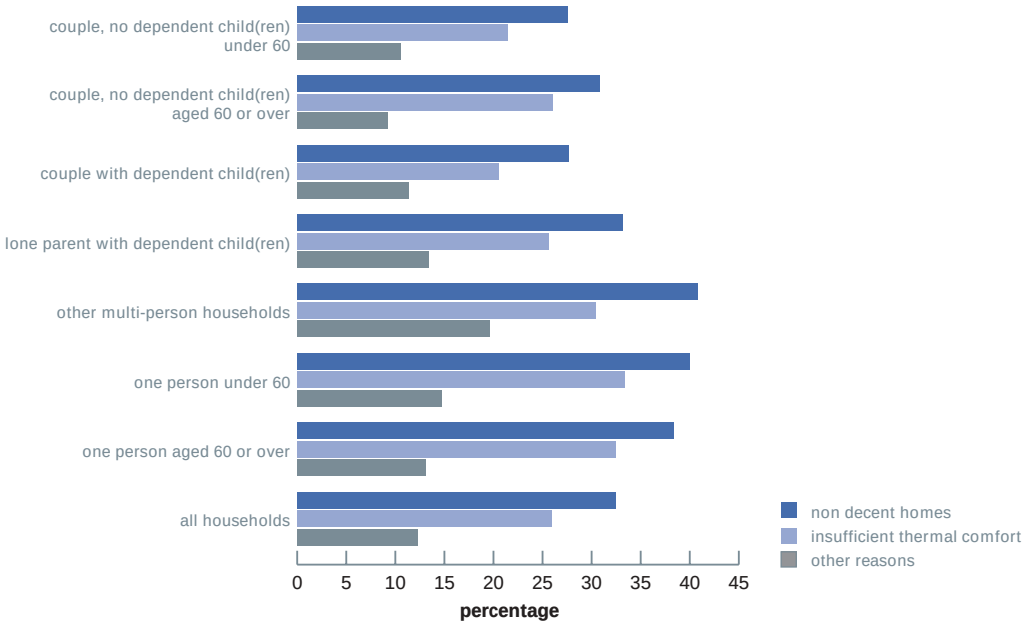
Figure 4.1 Households living in non decent homes by tenure, 2001



TYPE OF HOUSEHOLD

4.4 People living alone, sharing with unrelated others, and lone parents are more likely to live in non decent homes than average, Figure 4.2. These groups of households alone make up nearly half of all households living in non decent homes (49%). Nearly 1.2 million people aged 60 years or more and living alone are in non decent homes.

Figure 4.2 Households living in non decent homes by reason for non decency and by type of household, 2001



Note: 'other reasons' comprise all homes that are unfit, in disrepair or in need of modernisation

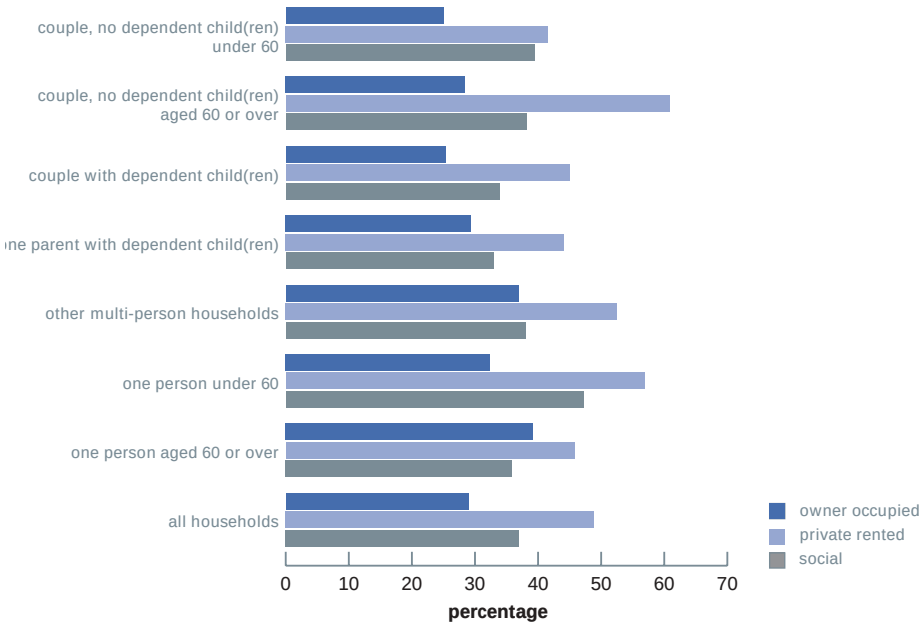
4.5 People living alone (33%) of any age are more likely than any other household types to live in homes with insufficient thermal comfort, while unrelated people in shared houses and flats (20%) are more likely than others to live in homes that are not decent for reasons of disrepair, unfitness or the need for modernisation.

4.6 Among home owners it is people aged 60 years or more and living alone who are more likely than other household types to live in non decent homes with 700,000 (39%) of them so doing, Figure 4.3. This contrasts with private tenants where it is younger people living alone (57%) who are most likely – accounting for a quarter of all households living in non decent homes in the private rented sector.

4.7 Within the social sector, nearly 550,000 households comprising people aged 60 years or more (living alone or as couples) rent non decent homes. These older people make up 37% of all households renting non decent social sector homes. However they are no more likely than average to be without a decent home in the social sector.

4.8 As might be expected, there is generally less difference in the social sector between types of households in terms of their likelihood of living in non decent homes. The exception is people aged under 60 living alone, of whom nearly half do not have a decent home. These tenants are the most likely to live in flats, where stock problems are more prevalent in the social sector.

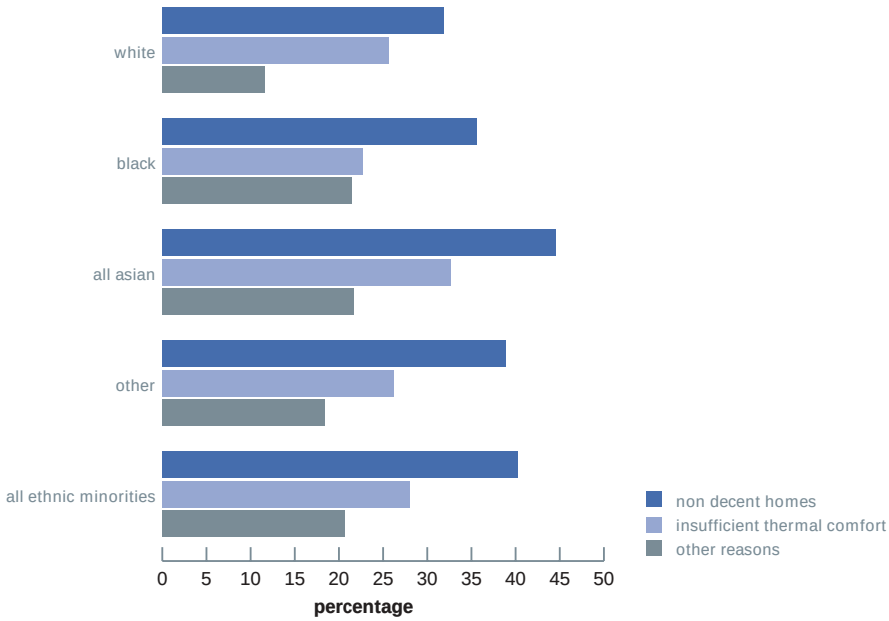
Figure 4.3 Households living in non decent homes by household type and tenure, 2001



ETHNIC IDENTITY

4.9 Inevitably, the great majority of households living in non decent homes are white (91%) with only 9% belonging to any other ethnic group.[1] However ethnic minority households generally are less likely to live in decent homes – 40% live in non decent homes compared to 32% of white households, Figure 4.4. Among the key factors here are the relative concentration of ethnic minority groups in city and other urban centres where a wide range of social, economic and environmental factors interrelate with problems of older housing (see also Chapter 5).

Figure 4.4 Households living in non decent homes by reason for non decency and by ethnic identity, 2001



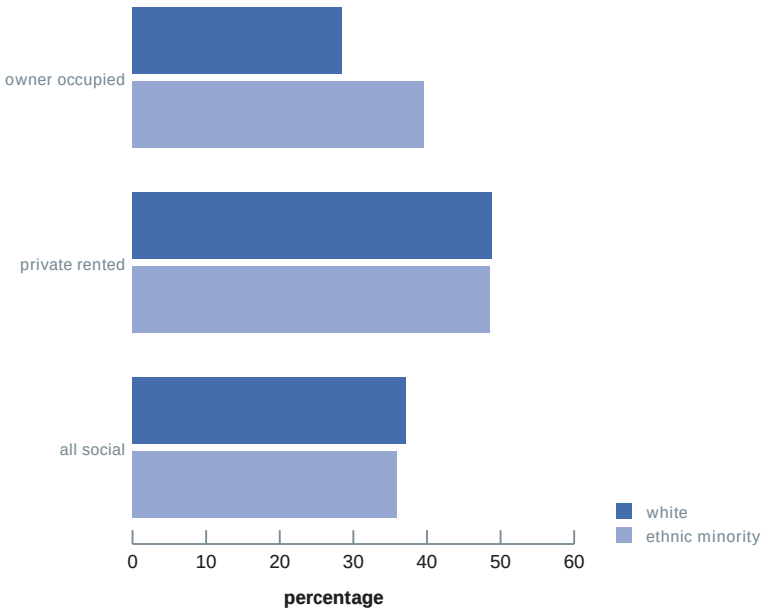
1 Ethnic identity of the household is defined by the identity of the Household Reference Person (HRP) – see Glossary.

4.10 Differences between white and minority households are less marked regarding homes that provide insufficient thermal comfort. However ethnic minorities (21%) are nearly twice as likely as white households (12%) to live in homes that are non decent for reasons of disrepair, unfitness or the need for modernisation.

4.11 Black households are less likely to live in non decent homes than Asian households, although there is no significant difference between minority groups if reasons other than insufficient thermal comfort are considered only.[2]

4.12 The great majority of ethnic minority households (75%) living in non decent homes are in the private sector. While the greatest concentrations of households living in non decent homes occur among private tenants, this is equally the case for white and minority households (49%), Figure 4.5. It is among owner occupiers that ethnic differences are most marked, where 40% of all ethnic minority home owners are without decent homes, compared to only 28% of white owners. Ethnic minority tenants in the social sector are no more or less likely to live in non decent homes than white households.

Figure 4.5 Households living in non decent homes by ethnic identity and tenure, 2001

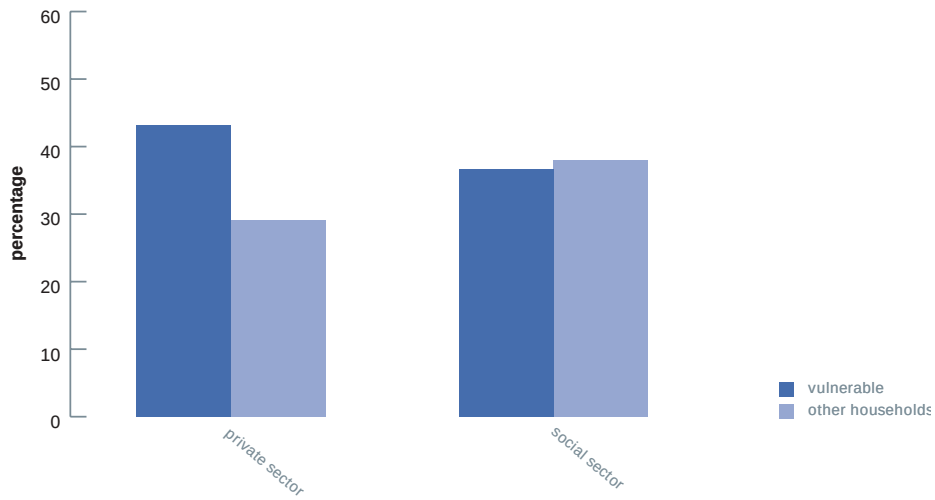


Vulnerability

4.13 The Government target for private sector housing is to reduce the proportion of vulnerable households living in non decent homes. 'Vulnerable' households are defined as those in receipt of income or disability related benefits. Under this definition, there are 5.6 million vulnerable households of whom 2.7 million are housed in the private sector. Of these nearly 1.2 million or 43% live in non decent homes, compared to 29% of other households, Figure 4.6.

2 There are likely to be differences in the housing conditions between distinct ethnic communities (eg Indian, Pakistani and Bangladeshi households) that the survey is unable to report on because of limitations of its sample size.

Figure 4.6 Vulnerable households in non decent homes, 2001



Note: vulnerable households are those in receipt of income or disability related benefits.

4.14 Nevertheless, private sector vulnerable households are much more likely to live in non decent homes than is average for the sector overall (31%). In contrast, while 37% of vulnerable households in the social sector live in non decent homes this is no more than average for that sector.

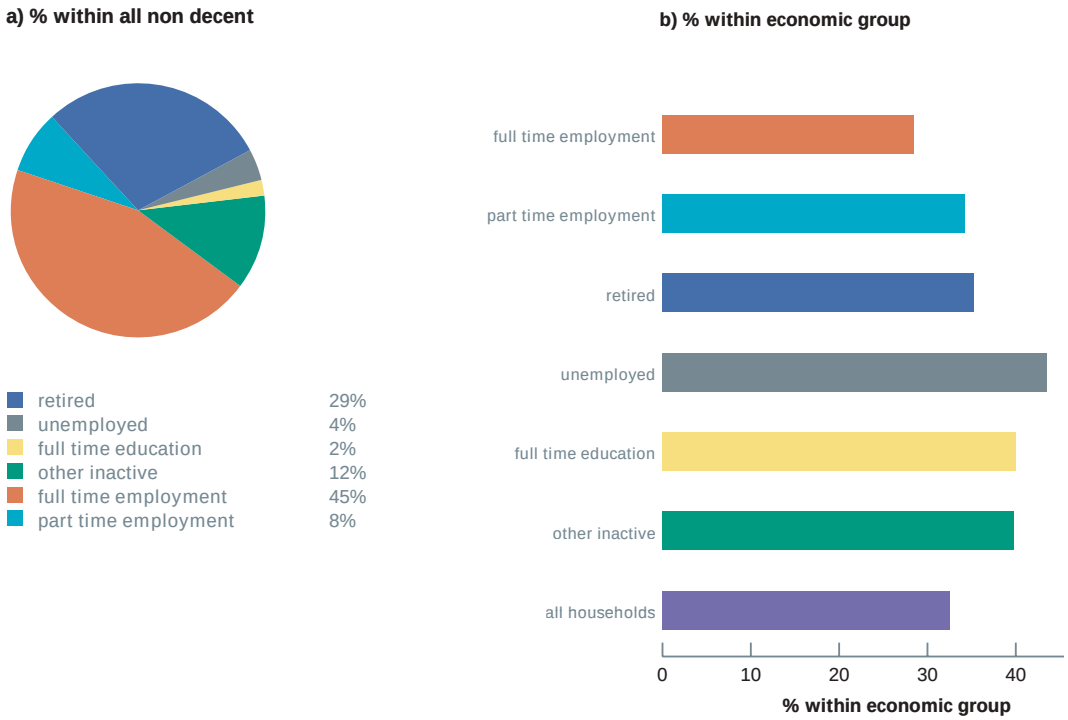
4.15 Vulnerability can be looked at from a number of perspectives: households with less resources to effect their housing circumstances; households with people who may be more at risk from poor conditions on account of their age or any long term illness or disability; and households who may have lived in non decent homes for a long time. These different but overlapping groups are looked at below.

ECONOMIC STATUS AND INCOME

4.16 Limited resources at the disposal of households constrain their capacity to exercise choice in the way they are housed. While the majority of households in non decent homes are in full or part time employment, pre-retirement households that are unemployed or inactive (40%) are much more likely to live in non decent homes, Figure 4.7.[3]

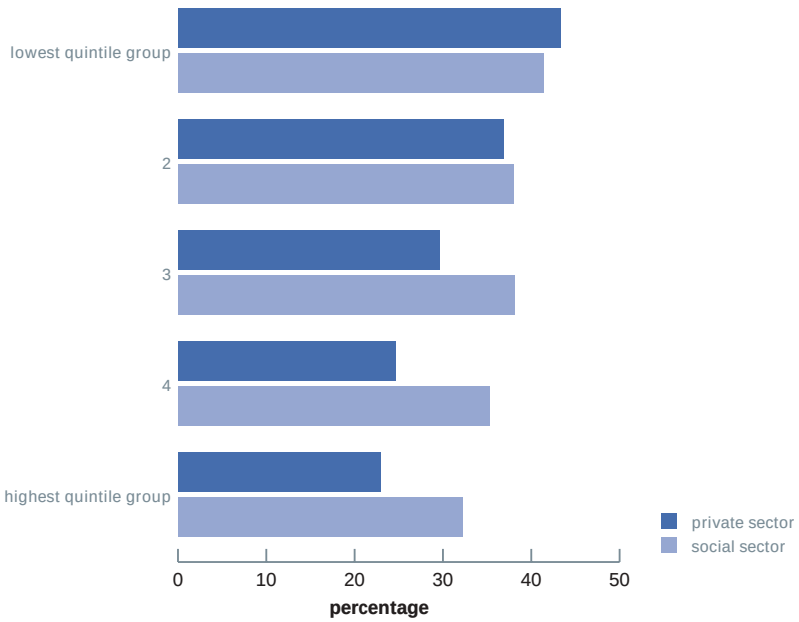
3 The economic status of the household is defined by that of the Household Reference Person (HRP) – see the Glossary.

Figure 4.7 Households living in non decent homes by economic status of household, 2001



4.17 Some 42% of the poorest households (the fifth of all households with income of less than £7,400 each year) live in non decent homes. This is nearly twice the rate of those with the highest incomes (the fifth of households with income of £28,000 or more of whom 24% live in non decent homes). As might be expected this is much more a consequence of the dynamics of the private than the social sector, Figure 4.8.

Figure 4.8 Households living in non decent homes by household income by housing sector, 2001



4.18 While some 46% of households in receipt of income related benefits do not live in a decent home within the private sector (55% of private tenants), only 37% of social sector tenants do so (the average for that sector).

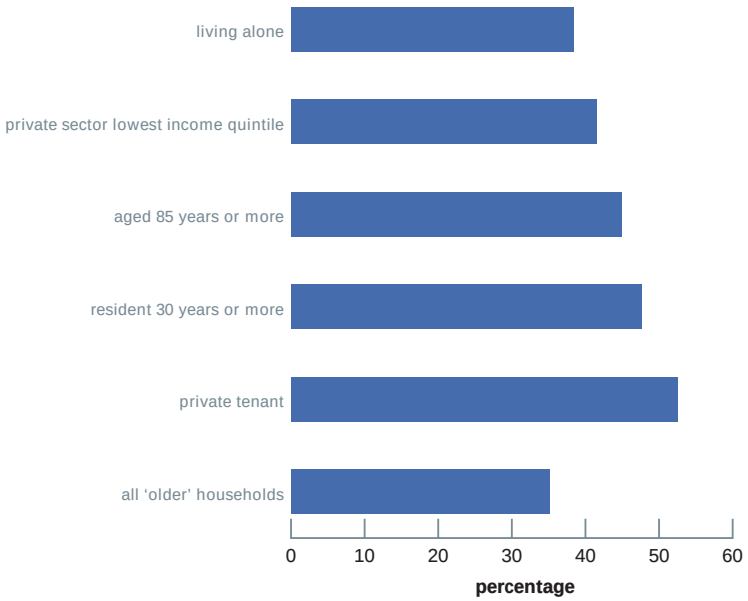
OLDER PEOPLE

4.19 A decent home is important for everyone. It is especially so for vulnerable people, such as the elderly and young children, and people with illness or disability who may have a higher health and safety risk associated with living in homes that are not decent.

4.20 Some 2.4 million 'older' households with at least one person aged 60 years or more live in non decent homes (comprising 36% of all households in non decent homes). Of these, 734 thousand are aged 75 – 84 years and a further 275 thousand are aged 85 years or more.

4.21 Overall, older households are only a little more likely than average to live in a non decent home (35%). However, in the following circumstances elderly people are more likely to live in non decent homes: where the older person lives alone, those on low household income in the private sector, households containing or comprising people over 85 years of age, those who have been long term resident owners (over 30 years) of their current home, and private tenants, Figure 4.9.

Figure 4.9 Older households living in non decent homes by additional 'risk characteristics', 2001



Note: Older households are those with at least one person aged 60 years or more. The groups are not exclusive of each other.

4.22 Non decent homes occupied by older households are more likely to fail the standard because they provide insufficient thermal comfort or require modernisation than other non decent homes. Some 29% of older households require work to improve the thermal comfort of their homes compared to 24% of other households. These problems are more concentrated among the sections of older households identified above, with 46% of such households privately renting and 37% of long term resident home owners needing improvements to the thermal comfort of their homes.

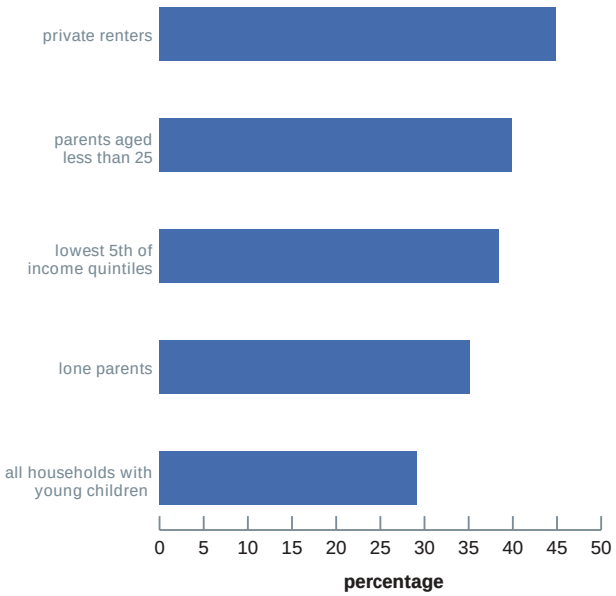
4.23 Older households in the social sector make up a higher proportion of all those living in non decent homes (41%) than their counterparts in the private sector (35%). However, they are no more likely to live in non decent homes than other households renting social housing (37%).

INFANTS AND CHILDREN

4.24 Some 1.4 million households with 'young' children (aged less than 11 years) live in non decent homes. This includes around 830 thousand households with 'infants' (children less than 5 years of age).

4.25 Overall, households with young children are a little less likely to live in non decent homes (29%) than other households (34%). However, as with older households, there are some with young children who are much more likely to live in homes that fail the decency standard: where parents are themselves aged less than 25, in the lowest fifth of the household income distribution, are lone parents, or rent privately, Figure 4.10.

Figure 4.10 Households with young children living in non decent homes by additional 'risk characterisics', 2001



Note: Young children are those less than 11 years old. The groups are not exclusive of each other.

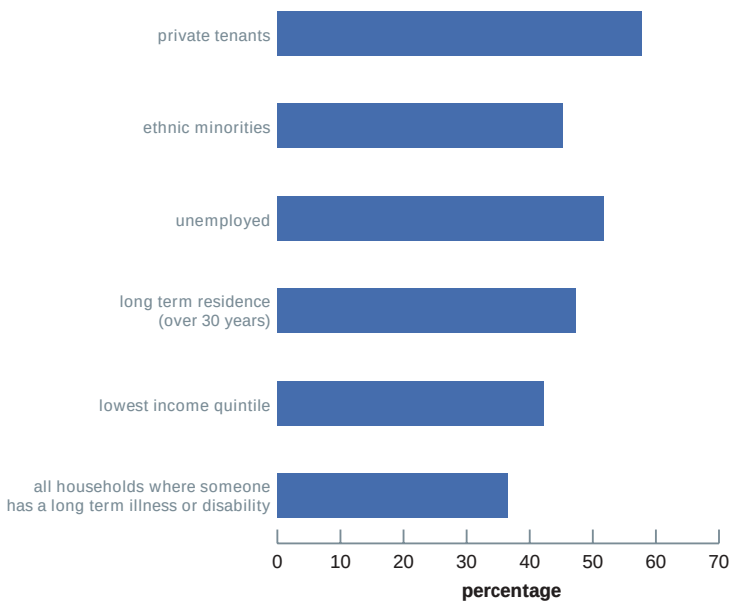
4.26 Households with young children in the social sector (34%) are more likely to be living in non decent homes than those in the private sector (28%), although it is the children of private tenants that are least likely to live in a decent home.

LONG TERM ILLNESS OR DISABILITY

4.27 Around 1.6 million (25%) of all households living in non decent homes include anyone with a long term illness or disability.[4] Such households are generally a little more likely (37%) than other households (31%) to live in non decent homes. Those who privately rent, belong to an ethnic minority group, are unemployed, poor, or who have been resident in the dwelling for thirty years or more are much more likely than average to live in non decent homes, Figure 4.11.

4 Identification of people who have a long term illness or disability is based on the 'self-assessment' of the respondent.

Figure 4.11 Households including anyone with a long term illness or disability living in non recent homes by additional 'risk characteristics', 2001



4.28 Some 550 thousand (34% of) households with anyone with a long term illness or disability in non decent homes are social tenants, reflecting the high proportion of such households housed by this sector. However such households are no more likely to live in non decent homes than is average for the social sector as a whole (37%). This contrasts with the private sector where both tenants (58%) and home owners (33%) are more likely than others within their tenure group to be living in non decent homes if someone in the household has a long term illness or disability.

LONG TERM RESIDENCE

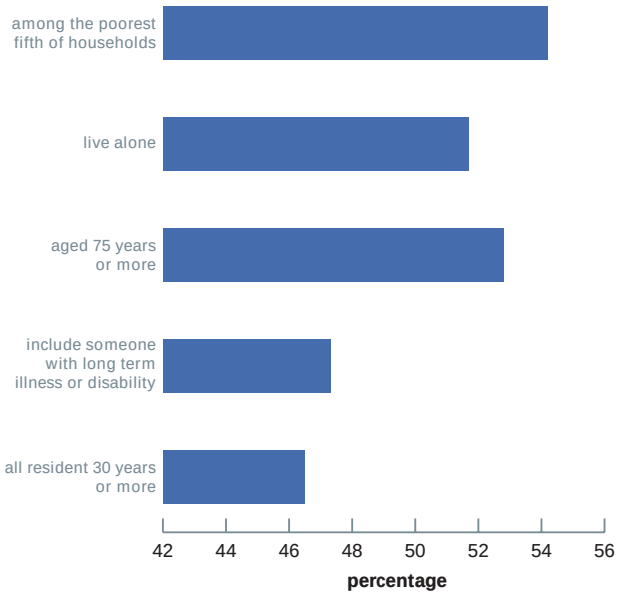
4.29 Some 2 million households in non decent homes have been living in those properties for twenty years or more, including 1.1 million who have been resident for 30 years or more. While it can not be assumed that their homes have been non decent for the entire length of the household's lengthy occupancy, this does indicate a degree of neglect of the dwelling, and likely exposure to problems resulting from its condition, over a considerable period of time.

4.30 Some 47% of those who have been living in their homes for 30 years or more occupy non decent homes, compared to 28% of households who have been resident between 5 and 10 years. Households who have recently moved are also more likely than average to live in a non decent home (35%).

4.31 Some 500 thousand (44%) of the 1.1 million households in non decent homes who have been resident for at least 30 years include people aged 75 years or more. A similar number consist of people living alone. Some 440 thousand (39%) are among the poorest fifth of households and 420 thousand (36%) include someone with a long term illness or disability.

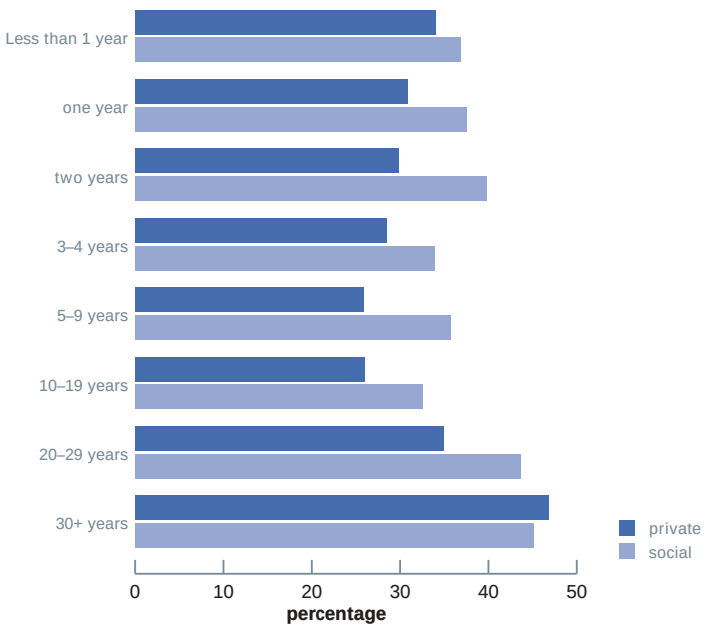
4.32 With the exception of households that include someone with a long term illness or disability the above types of households are all more likely to live in non decent homes than is average for those who have been resident 30 years or more, Figure 4.12.

Figure 4.12 Households resident for 30 years or more living in non decent homes by additional 'risk characteristics', 2001



4.33 The increased likelihood of long term resident households to live in non decent homes is more marked in the private than the social sectors of housing, Figure 4.13. For home owners this concentration of long term residents in non decent homes is more a reflection of insufficient repairs, improvements and ongoing maintenance related to factors such as the owner's falling income and increasing likelihood of incapacity following retirement. However there is also a very high concentration of long-term resident private tenants in non decent homes, which may be associated with the generally neglected old properties within what remains of the rent-regulated part of the sector.

Figure 4.13 Households living in non decent homes by length of residence and housing sector, 2001



4.34 Long term residence is not a significant factor among local authority tenants, although longer-term resident tenants of RSLs are much more likely to be living in non decent homes than others in the tenure group (52% compared to 26%).

Concentration in areas

4.35 This section looks at whether vulnerable households (those in receipt of income or disability related benefits) are more or less likely to live in non decent homes because of the place they live – the regional area, the type of location (urban and rural) and the general level of deprivation in the locality as ranked by the IMD.

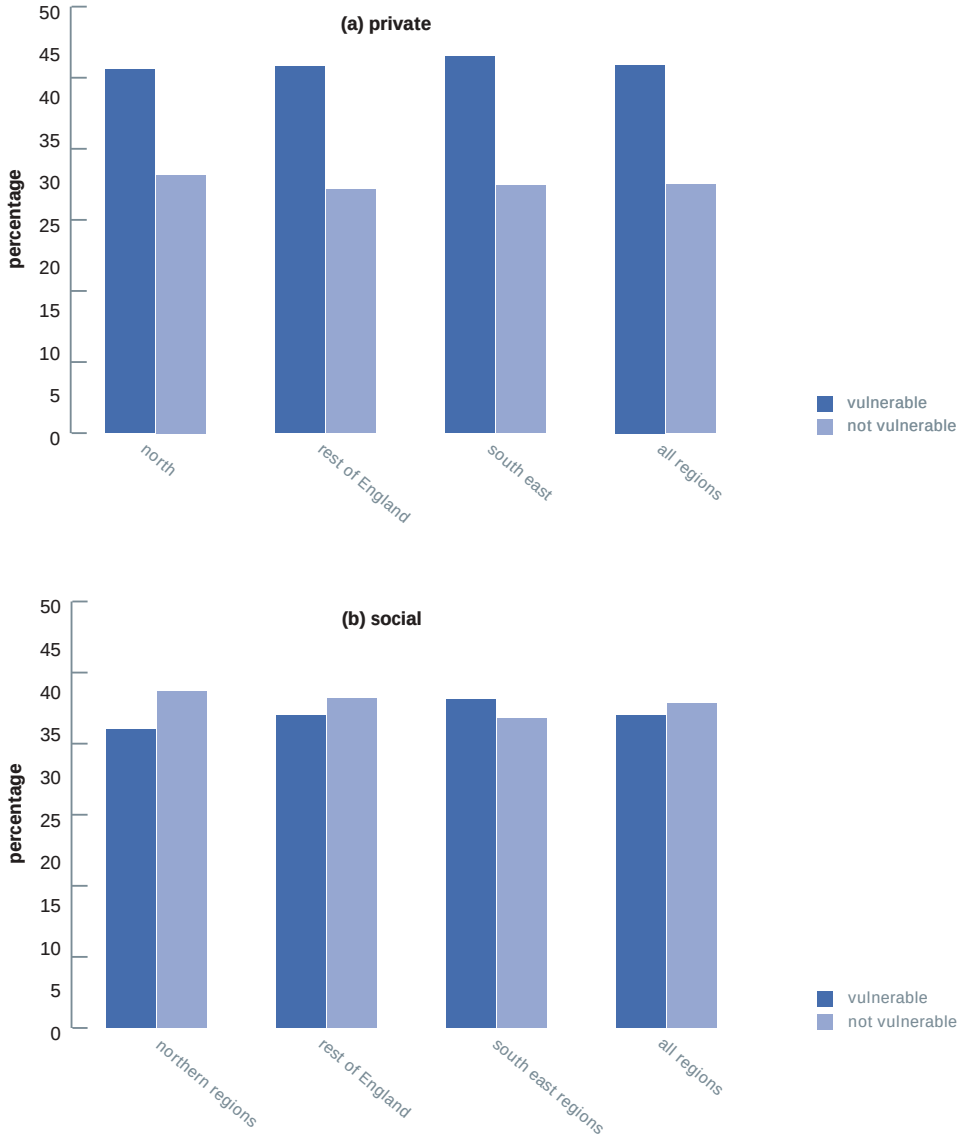
REGIONAL GROUPS

4.36 Chapter three indicated that dwellings in the northern regions were on average a little more likely to be non decent than elsewhere. There are less vulnerable households in the south east regions living in non decent homes in both private and social housing sectors but this largely reflects differences in the wider social, economic and demographic profiles of the regions (that is, there are less vulnerable households living in south eastern regions).

4.37 For the private sector there is no significant difference from the overall average proportion (43%) of vulnerable households living in non decent homes in each of the regional groups. In all regional groups vulnerable households are also much more likely to live in non decent homes than other households – however the difference is greatest in the south east regions (15 percentage points) and least in northern regions (12 percentage points), Figure 4.14a. In other words, differences in the housing conditions between vulnerable and other households within the private sector are most marked in the south east regions.

4.38 For the social sector vulnerable households are less likely to live in non decent homes in northern regions and the rest of England but more likely to live in non decent homes in south east regions, Figure 4.14b.

Figure 4.14 Vulnerable and other households living in non decent homes by regional group and by housing sector, 2001



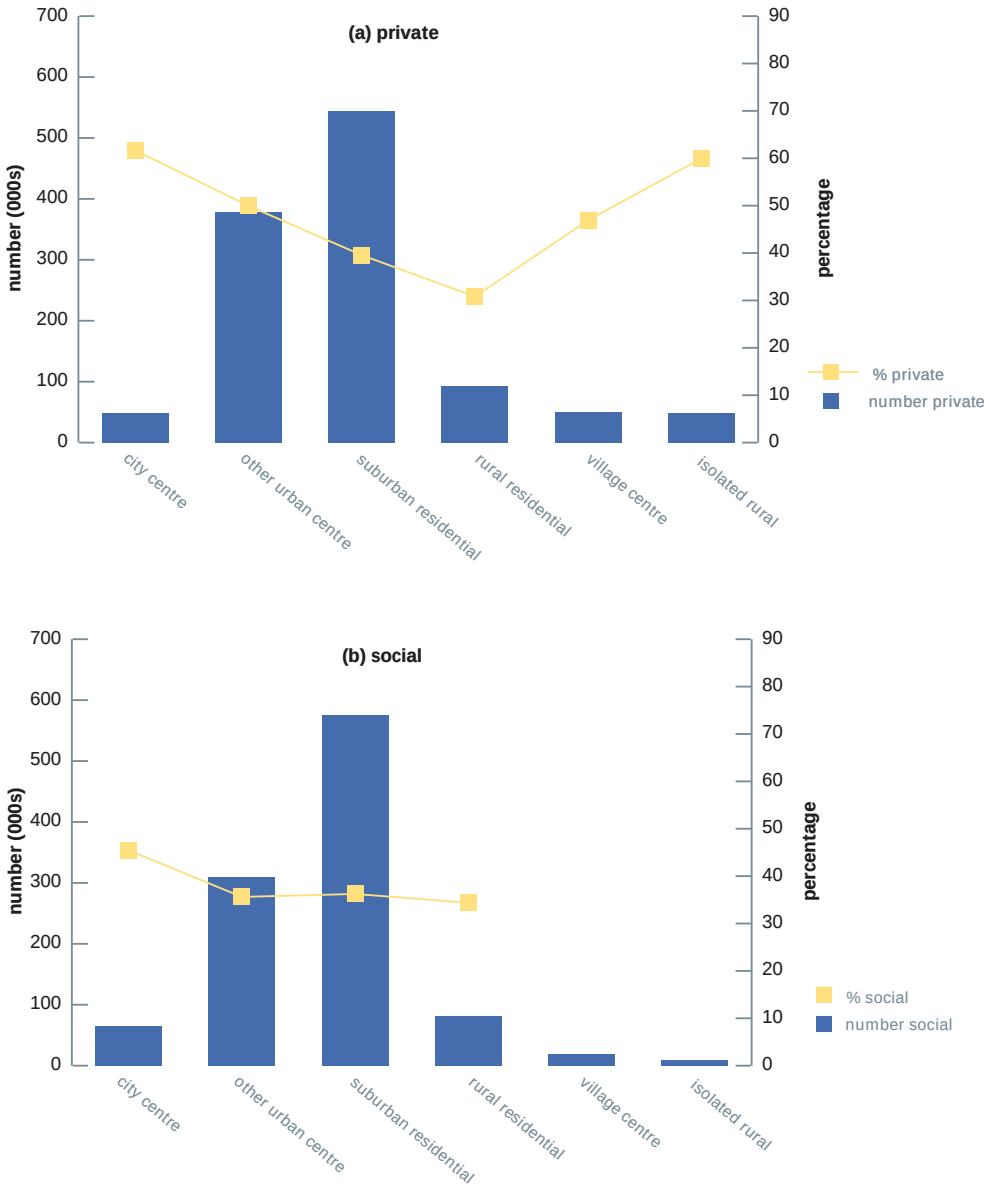
Note: vulnerable households are those in receipt of income or disability related benefits.

URBAN AND RURAL AREAS

4.39 Around half of vulnerable households in non decent homes in both private and social sectors live in the suburbs, where most dwellings are situated.

4.40 However private sector vulnerable households are most likely to live in non decent homes if they reside in city centres or more isolated rural communities (over 60% of vulnerable households in both types of area, compared to the overall average of 43%), Figure 4.15a. They are least likely to live in non decent homes if they reside in rural residential areas (31%). The extent to which vulnerable households are more likely to live in non decent homes than other households is broadly similar across all types of area.

Figure 4.15 Vulnerable households living in non decent homes by type of areas and by housing sector, 2001



Note: vulnerable households are those in receipt of income or disability related benefits. Social sector data are not presented for village centre and isolated rural areas because there are insufficient numbers for reliable estimates.

4.41 Differences are not so marked for the social sector where tenants resident in city centres are the most likely to be living in non decent homes (45% compared to the overall average of 37%), Figure 4.15b.

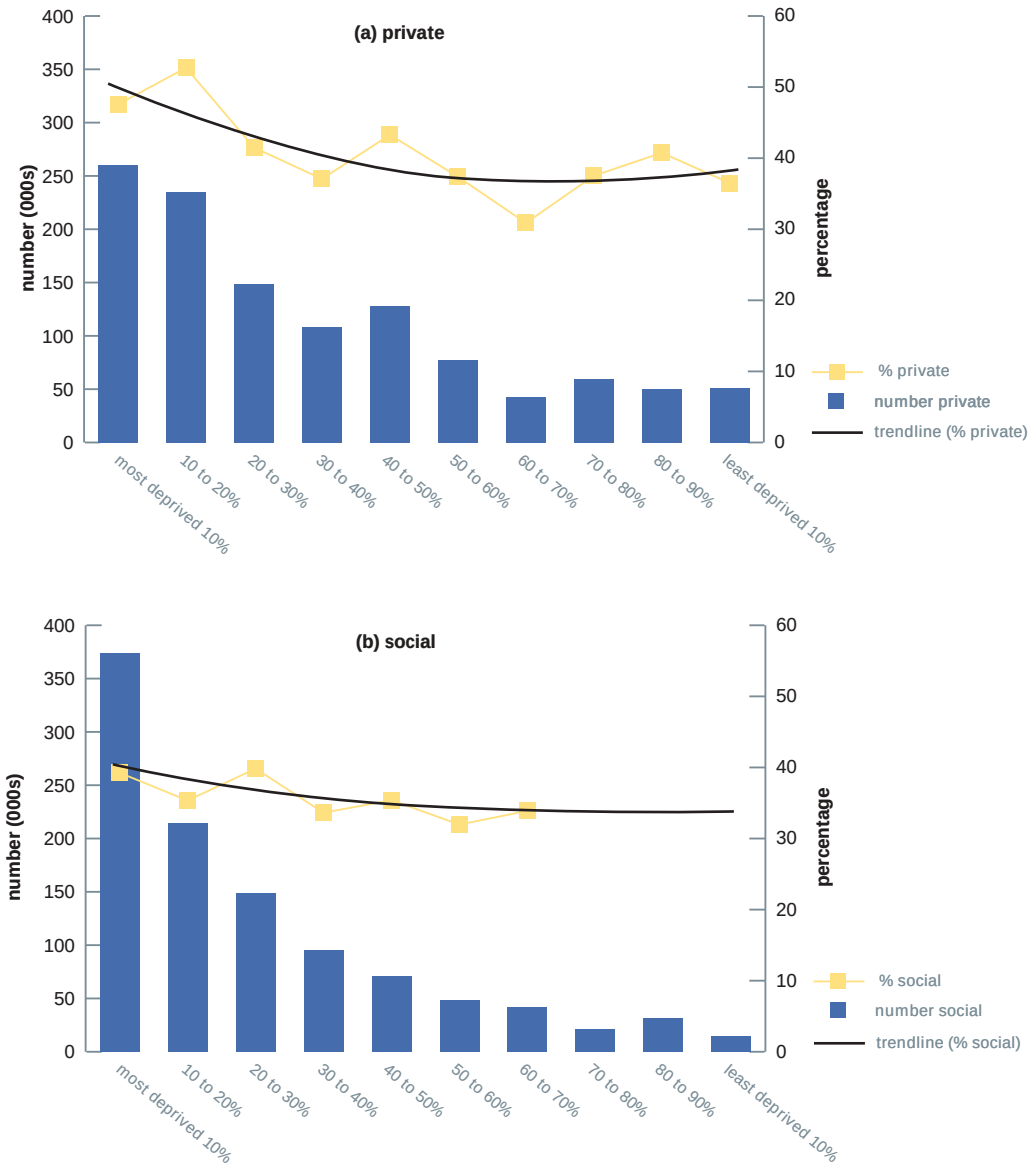
DEPRIVED WARDS

4.42 As might be expected, vulnerable households in non decent homes are much more prevalent in deprived wards for both private and social sectors.[5] Those in the 10% most deprived wards make up 22% of all private sector vulnerable households living in non decent homes and those in the fifth of most deprived wards constitute 43% of all. The respective figures for the social sector are 35% and 55%.

5 Vulnerable households as defined here are inevitably concentrated in the most deprived wards as similar criteria (benefit dependency) feed into the construction of the composite scores on which IMD ranking is based. The particular value of this report is to quantify the relationship between benefit dependency and poor housing conditions within these ward groups.

4.43 For the private sector, around half of vulnerable households who reside in the most deprived wards live in non decent homes, compared to around 35% in the least deprived, Figure 4.16a. Across all ward groups, vulnerable households are more likely to live in non decent homes compared with other households in those wards by around the average of 14 percentage points.

Figure 4.16 Vulnerable households living in non decent homes by deprived ward ranking and by housing sector, 2001



Note: Vulnerable households are those in receipt of income or disability related benefits. Wards are ranked by the IMD2000. Social sector data are not presented for least deprived ward groups because there are insufficient numbers for reliable estimates.

4.44 For the social sector there is less difference across the ward groups. Around 39% of vulnerable tenants residing in the most deprived wards live in non decent homes, falling to around 33% in the less deprived wards, Figure 4.16b. There is little difference in the likelihood of vulnerable and other households living in non decent homes across all ward groups.

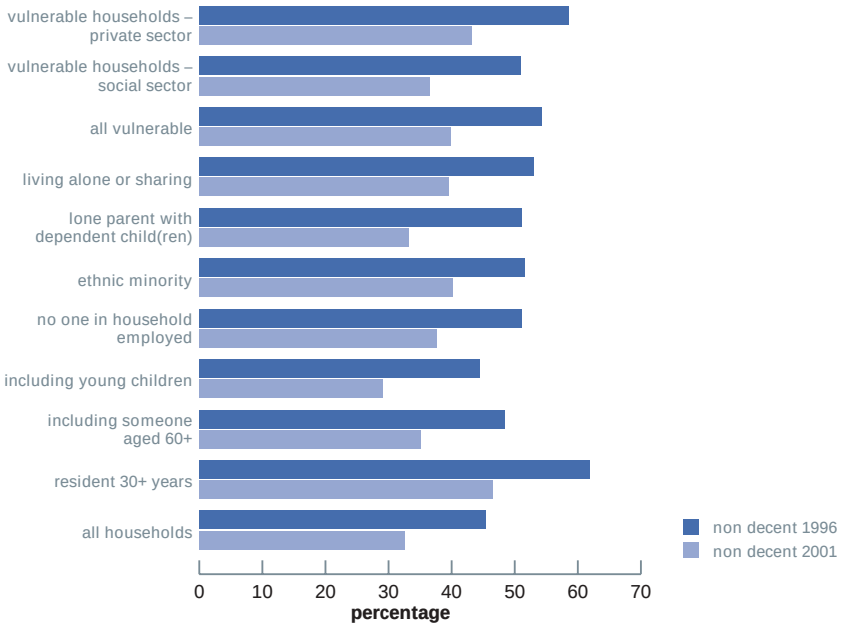
Change 1996–2001

4.45 In 1996 8.9 million households lived in non decent homes, 45% of all households. This has now fallen to 6.7 million households, 33% of all. There has therefore been a net reduction of 2.2 million households and a 12 percentage point reduction in the proportion of households in non decent homes.

4.46 The substantial reduction in the number of households in non decent homes since 1996 appears to have benefited all sections of the population, however defined. The number of private sector vulnerable households living in non decent homes has reduced by 300 thousand to 1.2 million – with a 15 percentage point reduction from 58% to 43%. For the social sector vulnerable households living in decent homes has been reduced by over 500 thousand to just over one million, with a 14 percentage point reduction to 37%.

4.47 Comparison of groups who are more likely to live in non decent homes indicates a rate of progress broadly comparable with the average for all households, Figure 4.17.

Figure 4.17 Vulnerable and other household groups living in non decent homes, 1996 and 2001

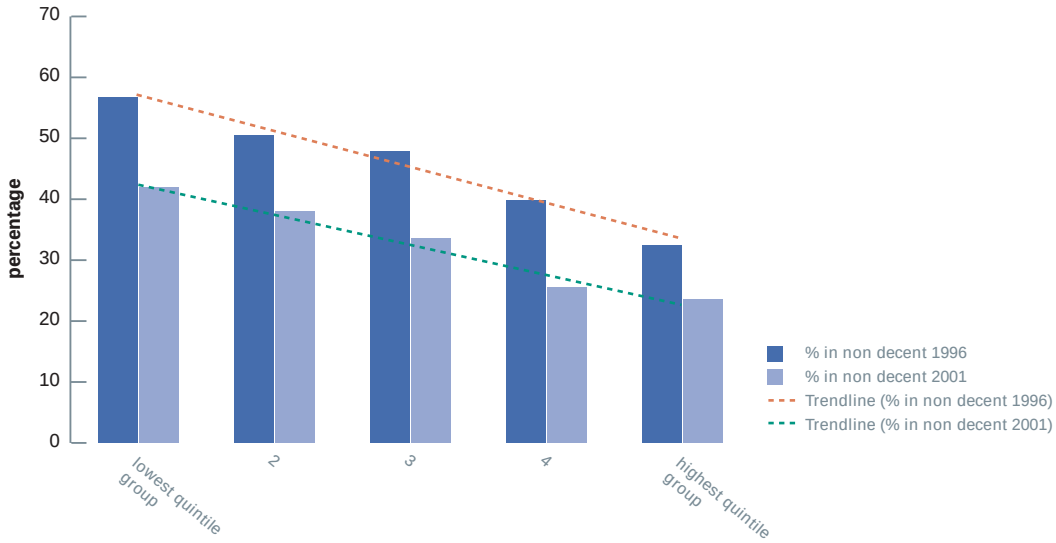


Note: Vulnerable households are those in receipt of income or disability related benefits. Groups are not necessarily exclusive of each other.

4.48 For example, 1.3 million (62% of) households resident 30 years or more lived in non decent homes in 1996, but this had fallen to 1.1 million (47% of) such households in 2001. The same period saw a reduction in the proportion of ethnic minority households living in non decent homes fall from 52 to 40% (although, because of the increased size of the ethnic minority population as a whole, the number of such households living in non decent homes actually rose by around 50 thousand to 574 thousand).

4.49 This general improvement suggests that here has been little significant change in the position of different groups relative to each other, with for example the poorest households in the household income distribution remaining around twice as likely to live in non decent homes as the highest fifth of income earners, Figure 4.18.

Figure 4.18 Percentage of households living in non decent homes by income distribution, 1996–2001



Chapter 5
Decent places

The Government aim is not only to provide everyone with the opportunity of living in a *decent* home but also of residing in a *decent place*. The quality of the local environment and its upkeep are key aspects of whether a decent home is also a decent place to live.[1] This chapter looks first at the extent and distribution of environmental problems within neighbourhoods; at concentrations of housing and environmental problems in 'poor neighbourhoods'; and how these relate to wider social and economic deprivation and vulnerability. It then looks at residents' perceptions of their neighbourhood and its problems – ranging from aspects of the physical environment to criminal and anti-social behaviour.

Summary

- Environmental problems are concentrated in city and other urban centres. Some 2.5 million dwellings overall are affected by substantial problems associated with heavy traffic and parking, 1.0 million by poorly maintained/neglected buildings, private gardens and public spaces, 0.5 million by vandalism, graffiti and other forms of anti-social behaviour, and 0.5 million by concentrations of vacant and boarded up buildings.
- The poorest neighbourhoods with concentrations of housing and environmental problems associated with the misuse and neglect of the area embrace around 2.4 million dwellings (11% of the stock).
- Around half of these are private sector neighbourhoods characterised by old and typically terraced housing concentrated in city and other urban centres. Another 40% are predominantly local authority-built neighbourhoods comprising mainly terraced houses and flats, the majority of which are in suburban locations.
- The majority (53%) of homes in poor neighbourhoods are non decent, over a quarter (28%) have limited demand (mainly those built by local authorities where there is significant evidence of anti-social behaviour), and 38% are located in the 10% most deprived wards.
- Both predominantly private and local authority-built poor neighbourhoods are relatively concentrated in the north of England.
- Ethnic minority households are nearly three times more likely to live in poor neighbourhoods than white households. Poor neighbourhoods have relatively high concentrations of pre-retirement households on low income, those who are unemployed or economically inactive, lone parents, and other people living alone or sharing.
- Residents of poor neighbourhoods are much more likely than those living elsewhere to view their neighbourhood as having a wide range of environmental and behavioural problems. Some 44% or more of those living in poor, predominantly Council-built areas indicate some level of problem with litter and rubbish, fear of being burgled, vandalism and hooliganism, troublesome teenagers/children and the general level of crime.

Environmental problems of neighbourhoods

5.1 Problems in the local environment were assessed by surveyors who defined the neighbourhood boundaries through environmental features such as estates, major roads, railways etc.[2] Typically a neighbourhood consists of between 100 and 300 dwellings, although around 22% of dwellings in predominantly local authority built neighbourhoods are part of estates comprising 500 or more dwellings.

1 Access to services in the local area will be included in a separate report from the 2001 EHCS on Housing Quality Indicators.
2 See the Glossary for a definition of neighbourhoods used in this report.

5.2 Some 67% of all dwellings are located in predominantly private sector neighbourhoods. Some 85% of these dwellings are owner occupied, another 12% privately rented with the remainder rented from social landlords.

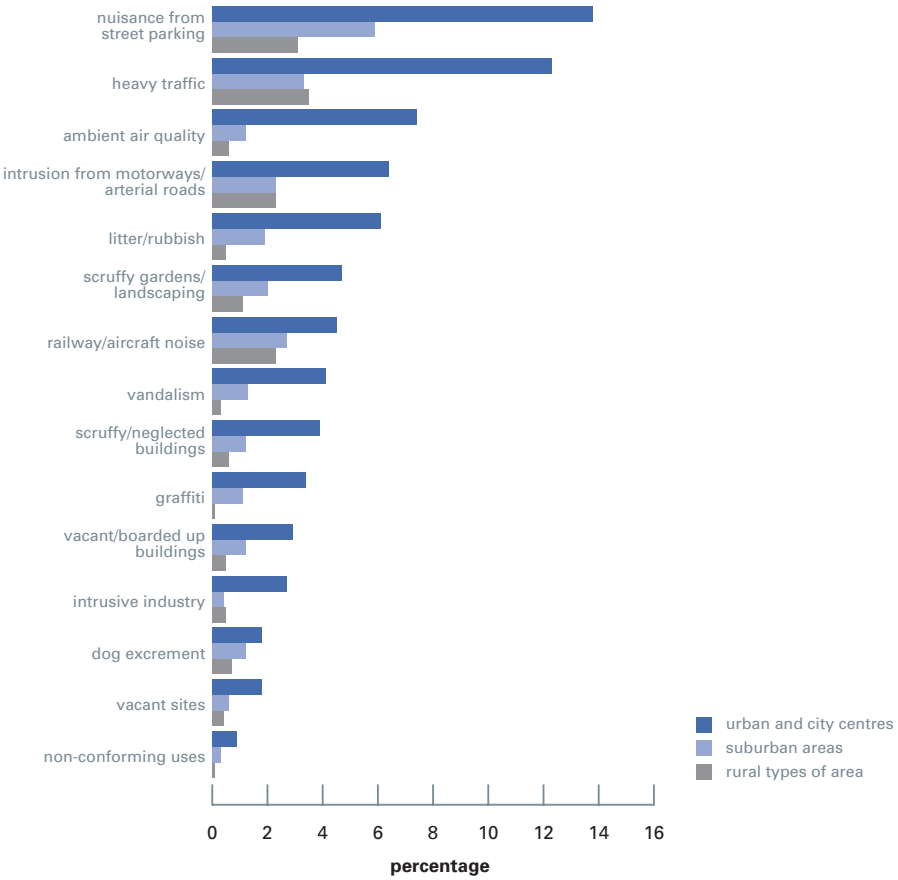
5.3 Another 24% of all dwellings are in predominantly local authority-built neighbourhoods but which now include, alongside Council (45%) and RSL (10%) housing, some 39% of dwellings under owner occupation – many of which will have been sold under Right to Buy legislation.

5.4 For ease of reference the two types of neighbourhoods are referred to as 'private sector' and 'local authority-built' neighbourhoods respectively below.

5.5 The most common substantial environmental problems affecting people's neighbourhoods relate to heavy traffic and street parking.[3] Some 2.4 million dwellings (12% of all) are affected by one or both of these. Just over 1 million dwellings (5%) are in neighbourhoods that suffer serious problems of neglected or poorly maintained buildings, gardens, or landscaping, litter or dumping. Some 0.5 million dwellings are situated in neighbourhoods with serious problems of vandalism or graffiti and a similar number have serious problems with vacant and boarded up buildings and unused brownfield sites in the surrounding locality.

5.6 City and other urban centres are much more likely to experience environmental problems than other types of areas, Figure 5.1.

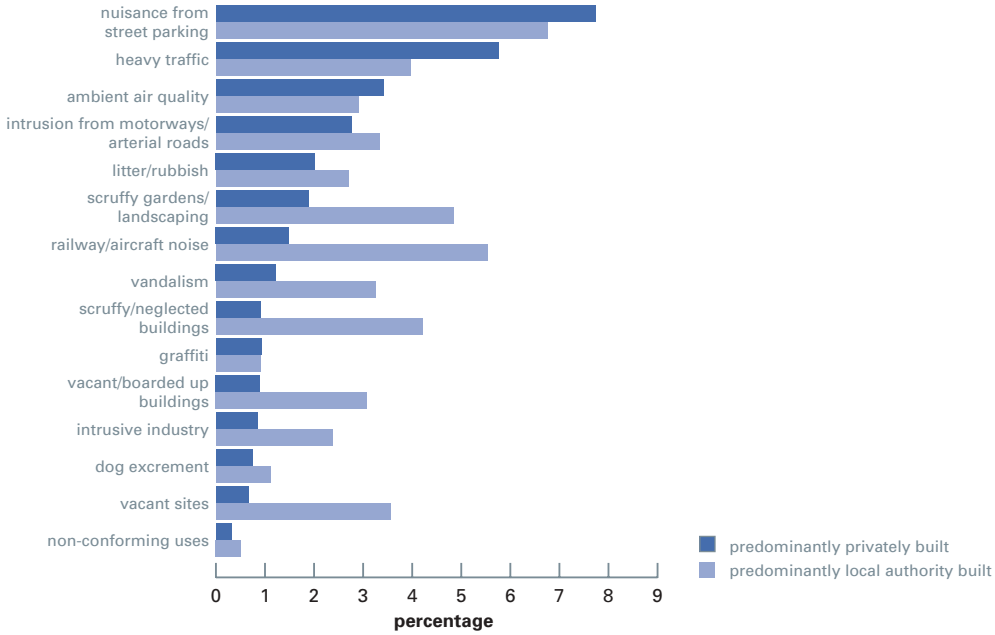
Figure 5.1 Environmental problems in the neighbourhood by type of area, 2001



5.7 While private sector neighbourhoods are more likely to experience substantial problems relating to traffic and parking, predominantly Council-built areas are much more likely to suffer a range of problems associated with neglect, misuse and vandalism, Figure 5.2.

3 Substantial environmental problems are those where the surveyor rated evidence of problems either 4 or 5 on a scale of 1 ('no problems') to 5 ('serious problems').

Figure 5.2 Environmental problems by type of area and predominant tenure, 2001



5.8 Neighbourhoods in the most deprived areas (as ranked by the Index of Multiple Deprivation 2000) are much more likely to experience environmental problems but particularly those arising from neglect, misuse and vandalism within the area, vacant and boarded up buildings.

Poor neighbourhoods

5.9 Around 2.4 million dwellings (11% of all dwellings) are located in "poor neighbourhoods".[4] These refer to neighbourhoods where there are significant problems relating to the quality, condition, use or upkeep of buildings and public spaces indicated by: significant numbers of run down or vacant/boarded up buildings; serious neglect or misuse of the area in terms of vandalism, graffiti, neglected maintenance of gardens and public areas which have become disfigured by litter and dumping.

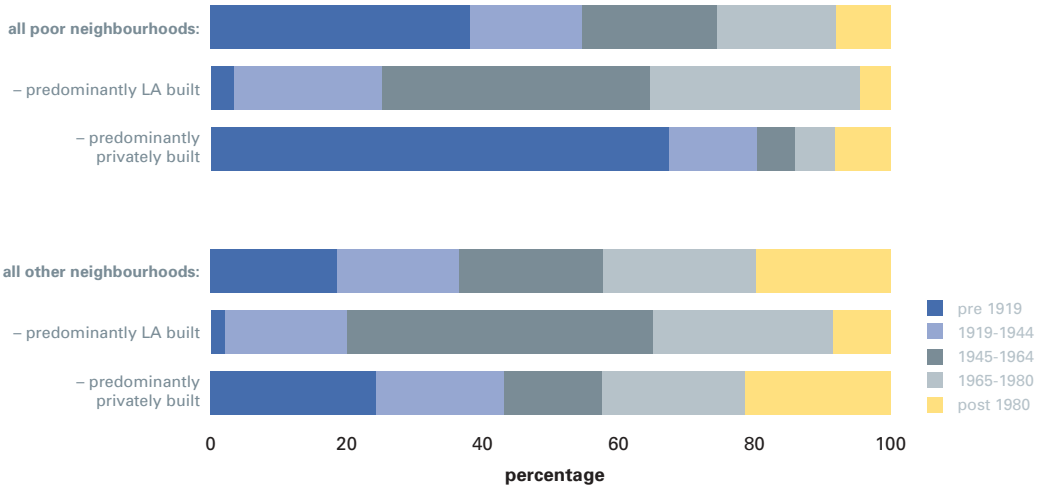
5.10 Just over half (52%) the stock of poor neighbourhoods is in predominantly private sector areas. Another 40% are in local authority-built localities – which is nearly twice the proportion as found elsewhere. The remaining 8% is in neighbourhoods where there is no predominant tenure.

5.11 Overall, only 49% of dwellings in poor neighbourhoods are owner occupied, while 26% are rented from local authorities, 10% from RSLs and 16% from private landlords. Rented accommodation – both private and social – is therefore much more common in poor neighbourhoods than elsewhere.

5.12 Private sector poor neighbourhoods have very high concentrations of old stock – 67% of the stock in these neighbourhoods was built before 1919, Figure 5.3. This contrasts sharply with local authority-built poor neighbourhoods where 70% of the stock was built between 1945-80. The profile of private sector poor neighbourhoods is also markedly different to that of other private sector neighbourhoods – where only around 24% of the stock was built before 1919. There are no substantial differences between the age profiles of local authority-built areas in poor and other neighbourhoods.

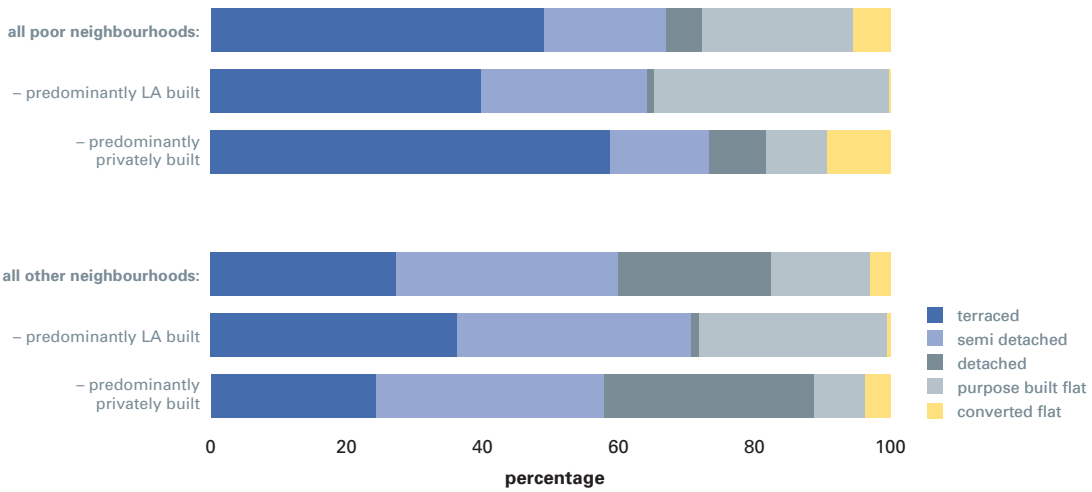
4 The number of dwellings in poor neighbourhoods is not a precise estimate as it is based on scaled assessments of different problems. The strength of this approach is in identifying the worst cases rather than producing a precise count.

Figure 5.3 Age of dwellings in poor and other neighbourhoods by predominant build, 2001



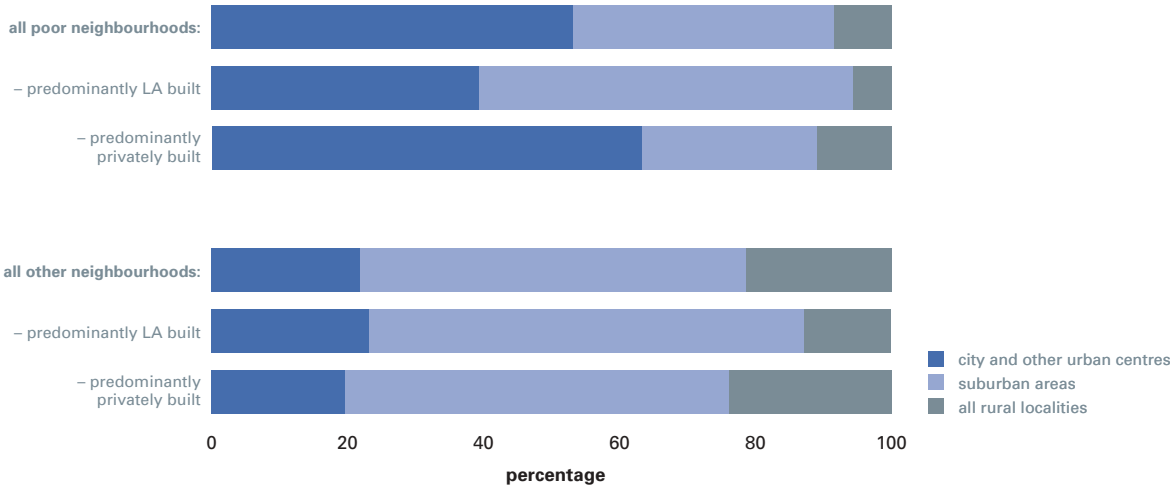
5.13 Private sector poor neighbourhoods have very high concentrations of terraced housing – 60% of all stock in these neighbourhoods, Figure 5.4. There is also a high proportion of terraced housing in local authority-built poor neighbourhoods (40%) but it is the concentration of purpose built flats (36% of all stock in these neighbourhoods) that most markedly differentiates them from private sector poor neighbourhoods. It is the high concentrations of terraced properties in private sector poor neighbourhoods, and purpose built flats in local authority-built poor neighbourhoods, that differentiates them from their counterparts in other areas.

Figure 5.4 Type of dwellings in poor and other neighbourhoods by predominant build, 2001



5.14 Private sector poor neighbourhoods are much more likely to be located in city and other urban centres (63% of all) than their local authority-built counterparts (39%), Figure 5.5. In contrast the majority (55%) of predominantly local authority-built poor neighbourhoods are located in suburban areas.

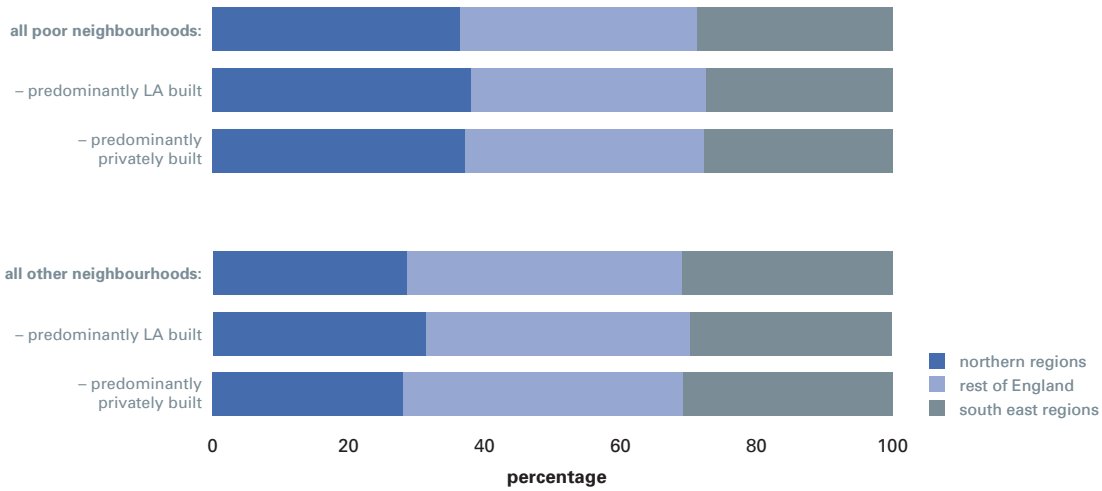
Figure 5.5 Poor and other neighbourhoods by type of area and by whether private or local authority built, 2001



REGIONAL DISTRIBUTION OF POOR NEIGHBOURHOODS

5.15 Poor neighbourhoods are relatively concentrated in northern regions, which account for 36% of all dwellings in poor neighbourhoods in the country, compared to only 29% of dwellings in all 'other' (ie non-poor) neighbourhoods, Figure 5.6. This concentration in northern regions applies equally to predominantly private sector and local authority-built poor neighbourhoods.

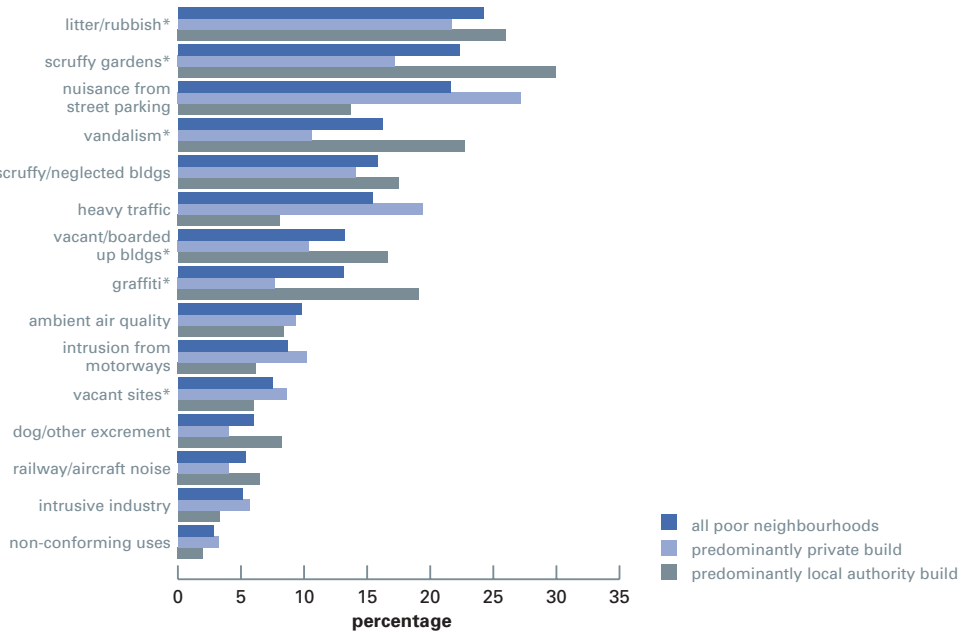
Figure 5.6 Dwellings in poor neighbourhoods by regional group, 2001



ENVIRONMENTAL PROBLEMS OF POOR NEIGHBOURHOODS

5.16 Some environmental problems enter into the classification of poor neighbourhoods so inevitably there are concentrations of those problems in those areas. Nevertheless, the most likely environmental problems of private sector poor neighbourhoods revolve around nuisance from street parking (affecting 27% of all dwellings in these neighbourhoods), litter and rubbish (22%), heavy traffic (19%) and neglected gardens (17%), Figure 5.7. The most likely problems affecting local authority-built poor neighbourhoods are neglected garden areas (30%), litter and rubbish (26%), vandalism (23%), graffiti (19%) and neglected buildings (18%).

Figure 5.7 Environmental problems of poor neighbourhoods by type of neighbourhood, 2001



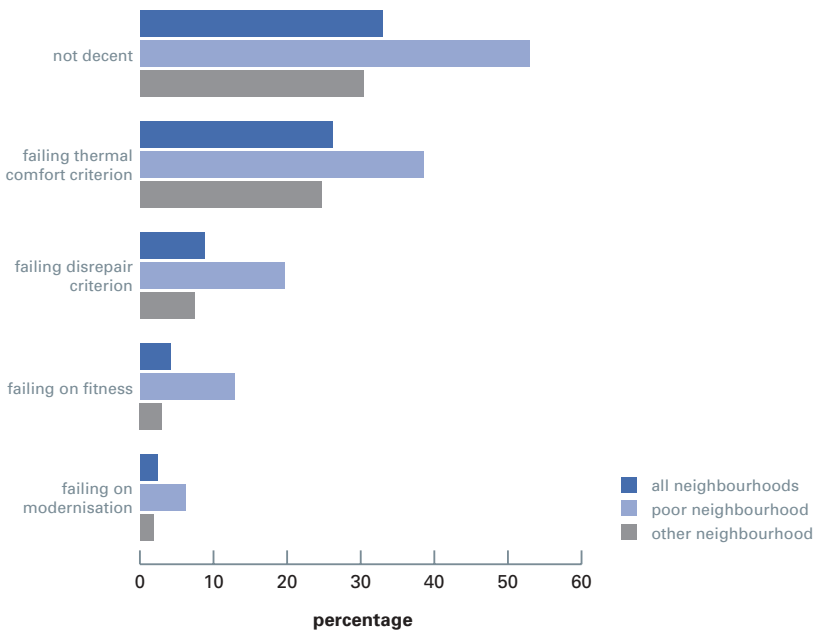
Note: Enivronmental problems marked (*) are included in the definition of poor neighbourhoods.

NON DECENT HOMES IN POOR NEIGHBOURHOODS

5.17 Only a minority of dwellings in poor neighbourhoods are decent – 1.3 million (53%) are not and these make up 18% of all non decent properties in England.

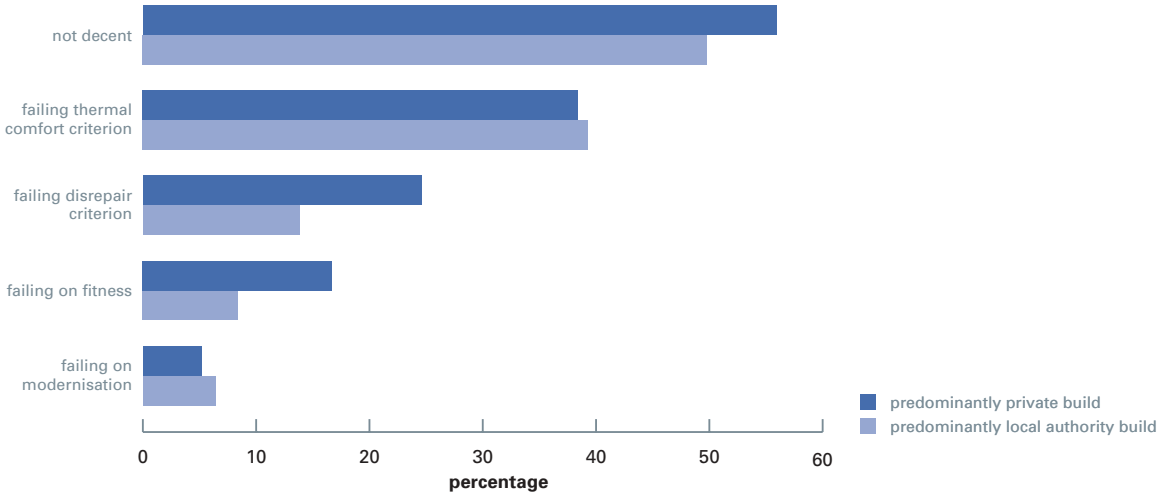
5.18 Dwellings in poor neighbourhoods are much more likely than dwellings in other neighbourhoods to fail the Decent Homes standard on any of its component criteria but particularly for reasons relating to disrepair and the lack of modern facilities and services (four times more likely to fail on these criteria) and fitness (three times more likely to fail), Figure 5.8.

Figure 5.8 Non decent homes in poor and other neighbourhoods by reason for failing, 2001



5.19 Dwellings in private sector poor neighbourhoods (56%) are more likely to be non decent than local authority-built poor neighbourhoods (50%), Figure 5.9. Private sector poor neighbourhoods are also much more likely than their local authority counterparts to fail for reasons associated with disrepair and unfitness.

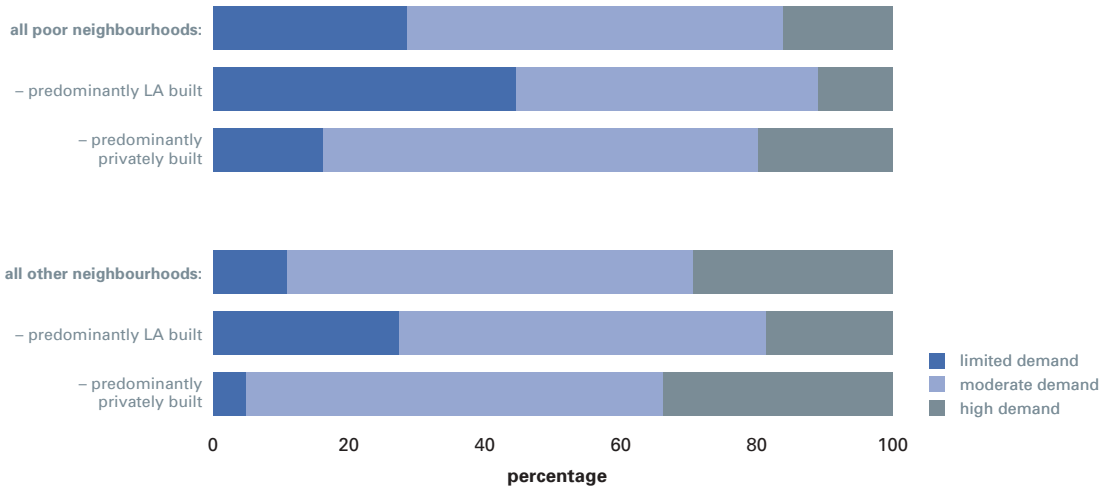
Figure 5.9 Non decent homes in poor neighbourhoods by reason for failing and type of poor neighbourhood, 2001



DEMAND FOR HOMES IN POOR NEIGHBOURHOODS

5.20 Generally there are much lower levels of demand to rent or buy homes in poor neighbourhoods – with around 28% of dwellings (670 thousand) in these neighbourhoods assessed to be in areas of 'limited' demand, compared to around 11% of dwellings in other neighbourhoods, Figure 5.10.[5] However this problem is more acute in predominantly local authority-built poor neighbourhoods, where 44% of dwellings are in areas of 'limited' demand.

Figure 5.10 Dwellings in areas with given level of demand by type of neighbourhood, 2001

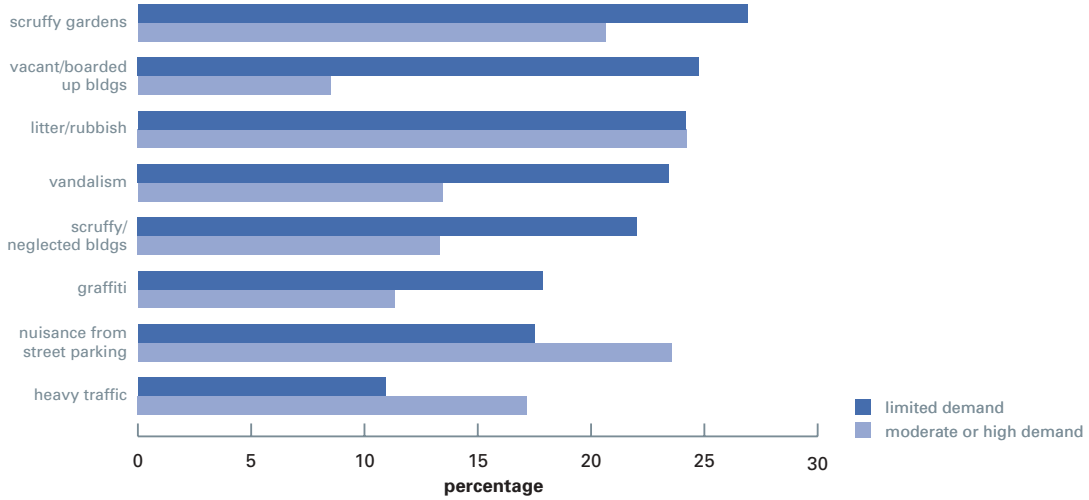


5.21 Dwellings in poor neighbourhoods account for around a third of all dwellings assessed to be in areas that have at best 'limited' demand.

5.22 Within poor neighbourhoods with 'limited' demand the incidence of non decent homes (47%) is a little less than average for poor neighbourhoods as a whole (53%). Besides features obviously related to demand (such as vacant or boarded up buildings) these areas of limited demand tend to have greater problems of anti-social behaviour in the form of vandalism and graffiti, Figure 5.11.

5 Local valuers, using their knowledge of the local housing market, classified the 'level of demand' from a four-point scale. 'Limited demand' is not synonymous with the classification of areas as 'low demand'. The latter is based on wider local evidence of market prices, vacancy and turnover rates etc to provide a more robust estimate of number and identification of areas – see the Glossary.

Figure 5.11 Dwellings in poor neighbourhoods with given environmental problems by level of demand, 2001



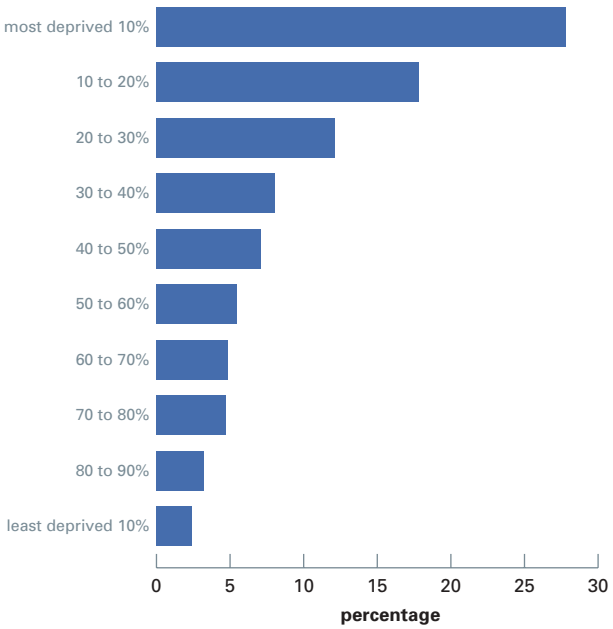
Note: only environmental problems with an incidence of 15% or more in either type of neighbourhood shown.

DEPRIVATION AND POOR NEIGHBOURHOODS

5.23 Poor neighbourhoods tend to be situated in the socially and economically most deprived areas. Some 80% of dwellings in poor neighbourhoods are located in the most deprived 40% of wards, as ranked by the Index of Multiple Deprivation 2000. Some 38% of dwellings in poor neighbourhoods are located in the most deprived 10% of wards – they are three times more likely to be so than other neighbourhoods.

5.24 The link between poor neighbourhoods and social and economic deprivation is stark. Homes within the most deprived 10% of wards are eleven times more likely to be situated in a poor neighbourhood than homes within the least deprived 10% of wards, Figure 5.12.

Figure 5.12 Dwellings in poor neighbourhoods by IMD 2000 ward rank, 2001

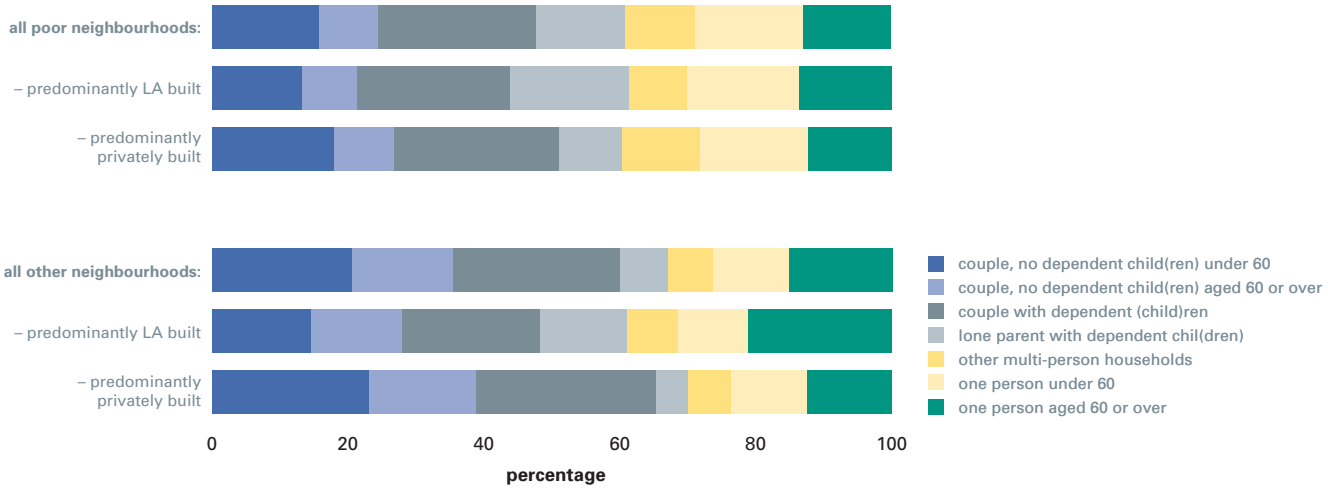


WHO LIVES IN POOR NEIGHBOURHOODS

5.25 Lone parents and younger people (aged under 60 years) living alone or other multi person households comprise 39% of all households in poor neighbourhoods, compared to 25% of those living elsewhere, Figure 5.13. This is particularly the case within predominantly local authority built poor neighbourhoods where around 18% of all

households are lone parents. Generally couple based households and older people living alone are less likely to live in poor neighbourhoods than might be expected from their overall numbers.

Figure 5.13 Households living in poor neighbourhoods by household type, 2001

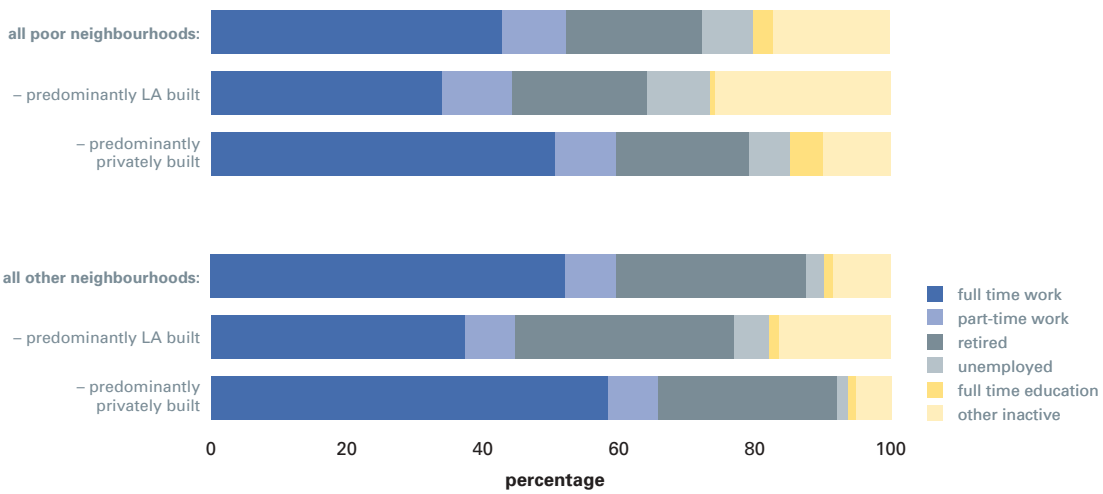


5.26 Ethnic minority households are nearly three times more likely (27%) to live in poor neighbourhoods compared to white households (10%). Some 17% of all households in poor neighbourhoods are from an ethnic minority group, although ethnic minorities make up only 7% of all households.

5.27 Ethnic minority households are particularly concentrated in predominantly private sector poor neighbourhoods, comprising nearly one in five households in such areas. The majority of these households are Asian.

5.28 Householders in poor neighbourhoods are much less likely to be either in full time employment (43%) or retired (20%) compared with their counterparts in other neighbourhoods (52% and 28% respectively), Figure 5.14.[6] Some 25% of those of pre-retirement age in poor neighbourhoods are unemployed or economically inactive – more than twice the rate of other neighbourhoods. This is particularly the case for households in predominantly local authority built poor neighbourhoods where 35% of pre-retirement households are either unemployed or inactive, compared to 22% in predominantly local authority built other neighbourhoods.

Figure 5.14 Households in poor neighbourhoods by employment status of the household reference person, 2001

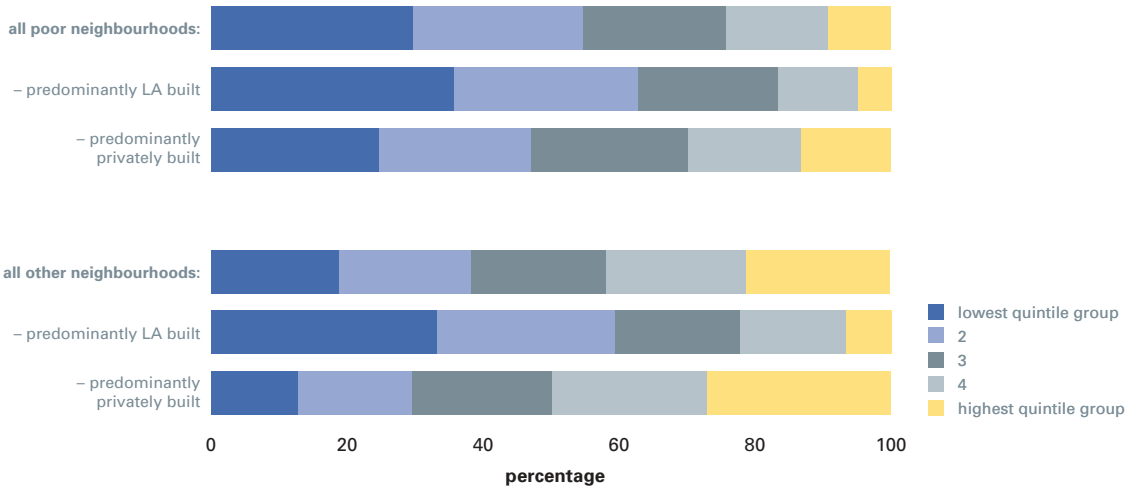


6 Householder employment status is based on the status of the person identified as the household reference person (hrp) for the purposes of the survey – see the Glossary for the definition of the 'hrp'.

5.29 Unsurprisingly therefore 30% of households in poor neighbourhoods are among the poorest fifth of all households in England, figure 5.15. This proportion rises to 36% if predominantly local authority built poor neighbourhoods are considered alone.

5.30 However the difference in income between those residents in poor and other neighbourhoods is much more marked within private sector localities where households in poor neighbourhoods are twice more likely to be among the poorest fifth of households as those in other neighbourhoods (25% compared to 13% respectively).

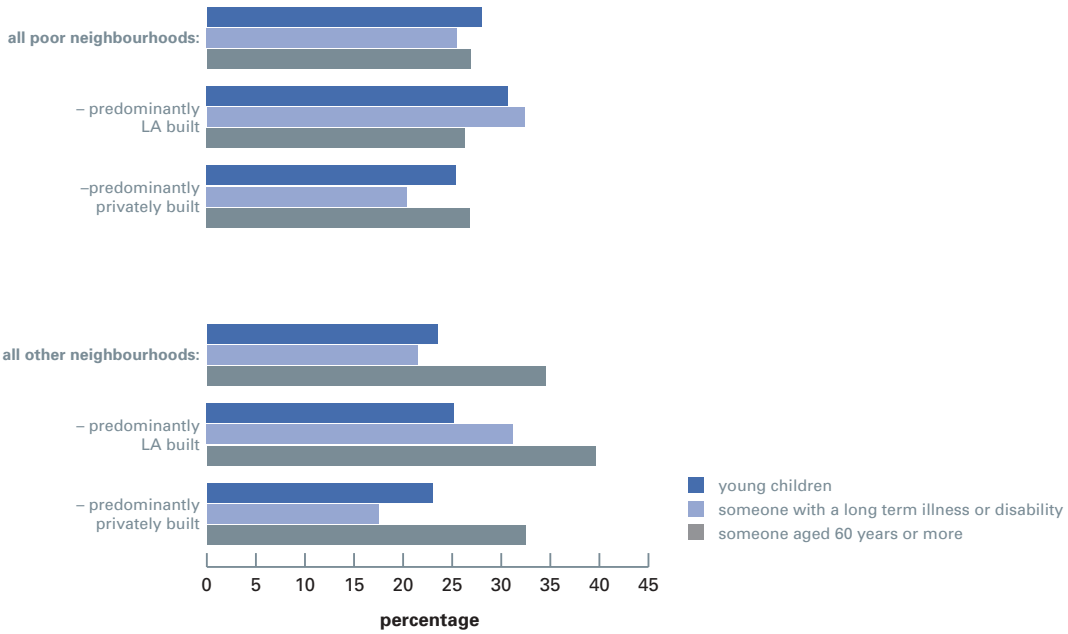
Figure 5.15 Households in poor neighbourhoods by income group, 2001



5.31 There is a mixed picture for households that include one or more people who are vulnerable because of their age or because they have a long term illness or disability.

5.32 Poor neighbourhoods provide residence for proportionately *more* households with young children than elsewhere (28% compared to 23%) and proportionately less households that include older people than elsewhere (27% compared to 35%), Figure 5.16. Much of these differences are accounted for by the residential characteristics of those living in predominantly local authority-built poor neighbourhoods.

Figure 5.16 Households in poor neighbourhoods that include vulnerable people, 2001

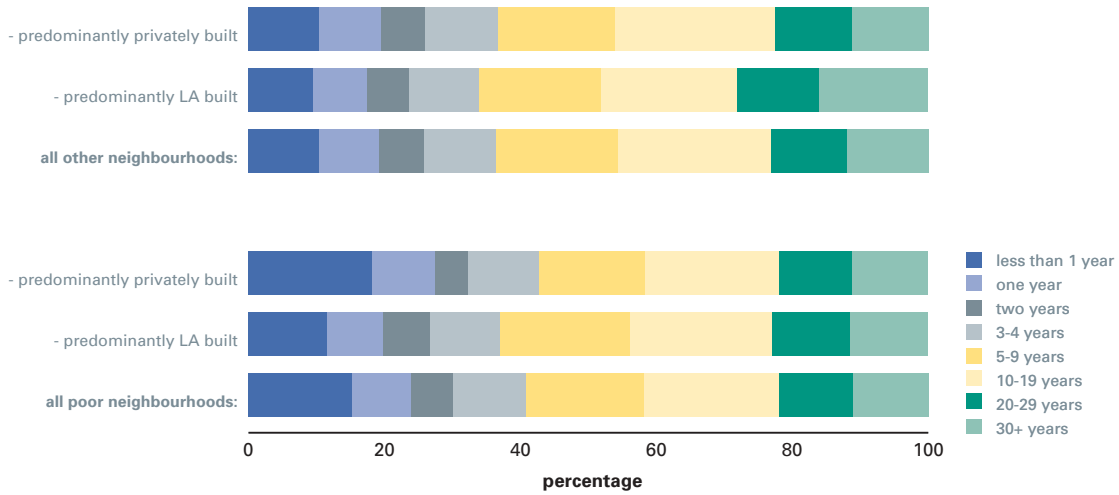


5.33 There is also a relative concentration of households that include people with a long term illness or disability in poor neighbourhoods (26% of households in poor neighbourhoods compared with 21% of households resident elsewhere). Most of this difference is the result of the residential characteristics of those living in private sector poor neighbourhoods.

LENGTH OF RESIDENCE IN POOR NEIGHBOURHOODS

5.34 Overall, households have been resident for shorter periods of time in poor neighbourhoods. This may reflect the generally younger profile of the residents of poor neighbourhoods, a higher than average incidence of private renting, but also the desire, constrained by an ability, to move. Some 30% of households in poor neighbourhoods have been resident in their present homes for two years or less, compared with 26% of those living elsewhere, Figure 5.17. Some 42% of households in poor neighbourhoods have been resident ten or more years compared to 46% elsewhere.

Figure 5.17 Households in poor neighbourhoods by length of residence, 2001

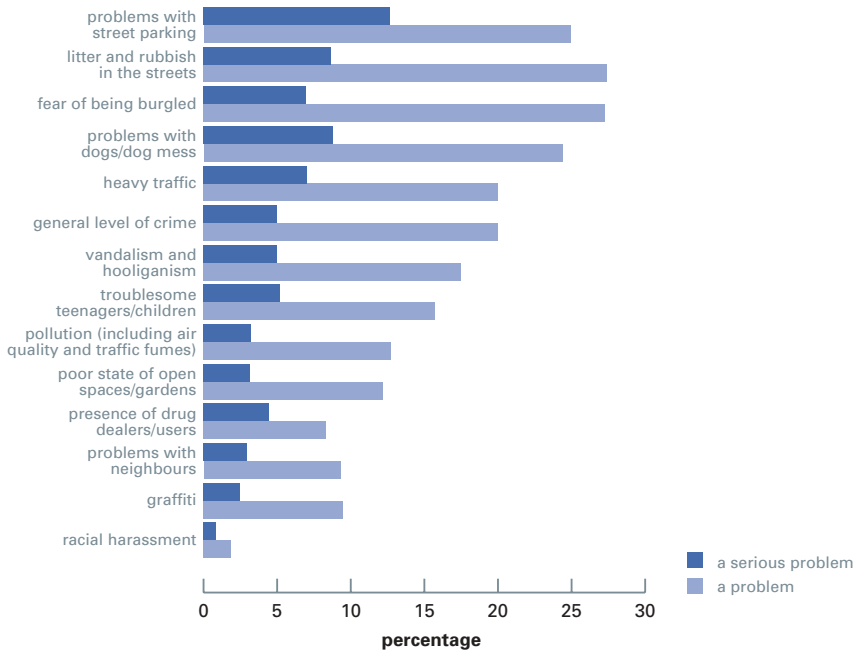


Resident views

NEIGHBOURHOOD PROBLEMS

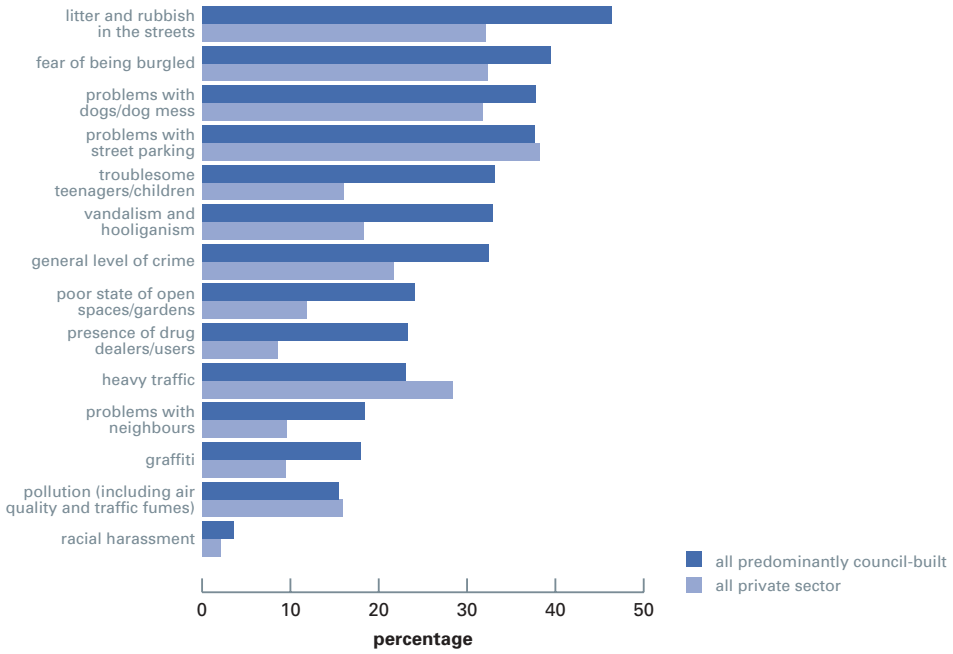
5.35 For all households, the most common neighbourhood problems are those to do with street parking, litter and rubbish in the streets, fear of burglary and problems with dogs or dog mess. At least one third of all households regard these as constituting 'a problem' or 'a serious problem' in their neighbourhood, Figure 5.18.

Figure 5.18 Household views of problems in their neighbourhood, 2001



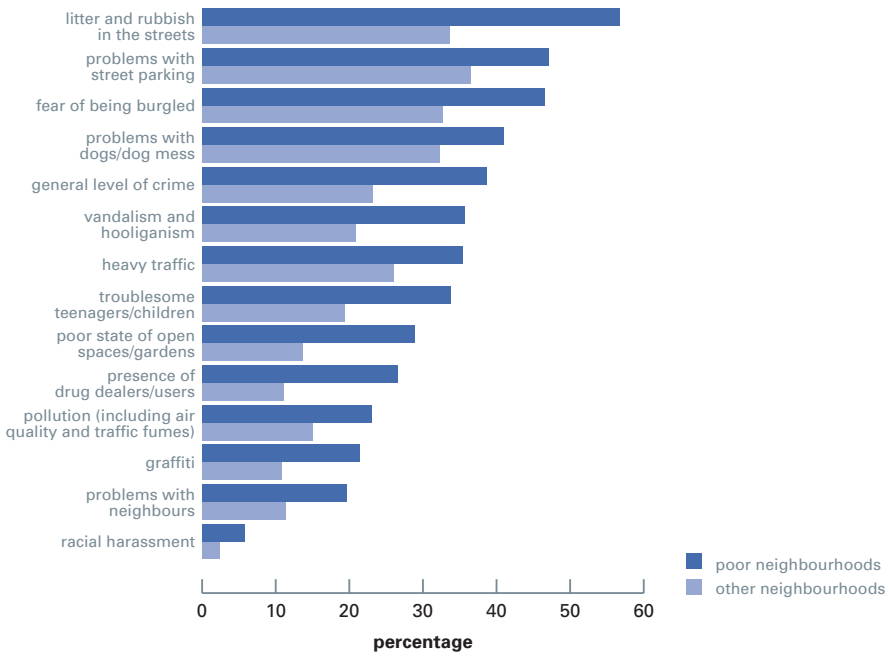
5.36 There are however significant differences in the views of residents living in predominantly Council-built neighbourhoods and those in private sector housing areas. The former are much more likely to emphasise problems with litter and rubbish (46% of households in those neighbourhoods) and with a wide range of criminal and anti-social behaviour – troublesome teenagers or children (33%), vandalism and hooliganism (33%), general crime (32%), drugs (23%), graffiti (18%) and problems with neighbours (18%), Figure 5.19.

Figure 5.19 Household views of problems in their neighbourhood by predominant tenure, 2001



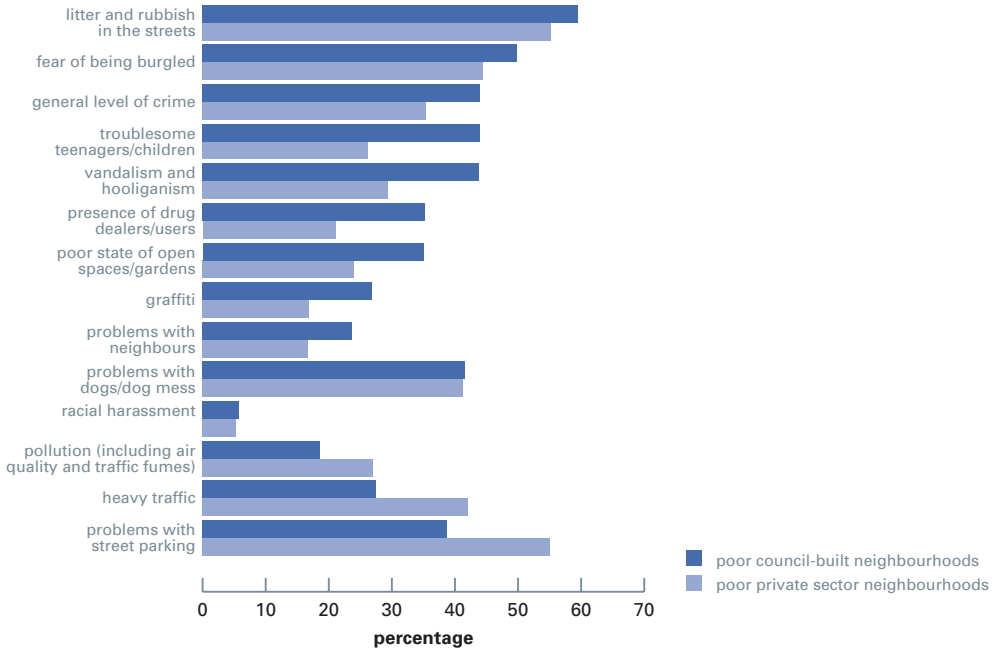
5.37 Households living in poor neighbourhoods are generally much more likely to view where they live as having problems across the broad range of factors identified in the survey, Figure 5.20. However the greatest differences tend to revolve around crime and a broad range of anti-social behaviour. The most prominent difference between households in 'poor' compared to 'other' neighbourhoods is the former's greater likelihood of identifying problems with litter and rubbish (a difference of 23 percentage points). But such differences are also marked for problems concerning drugs (16 percentage points), the general level of crime (15), the state of open spaces and gardens (15), vandalism and hooliganism (15), troublesome teenagers/children (14) and fear of being burgled (14).

Figure 5.20 Household views of problems in their neighbourhood by whether living in a 'poor' or 'other' neighbourhood, 2001



5.38 Differences between perceptions of problems in private and predominantly Council-built neighbourhoods are more marked within poor neighbourhoods as a whole, Figure 5.21. Households within poor predominantly Council-built neighbourhoods are more likely to emphasise issues around criminality and a broad range of anti-social behaviour. Some 60% of households in these neighbourhoods regard litter and rubbish in the street as 'a problem' or 'a serious problem'. Half regard fear of burglary similarly, as do 44% concerning the general level of crime, vandalism/hooliganism and troublesome teenagers.

Figure 5.21 Household views of problems in poor neighbourhoods by predominant tenure, 2001

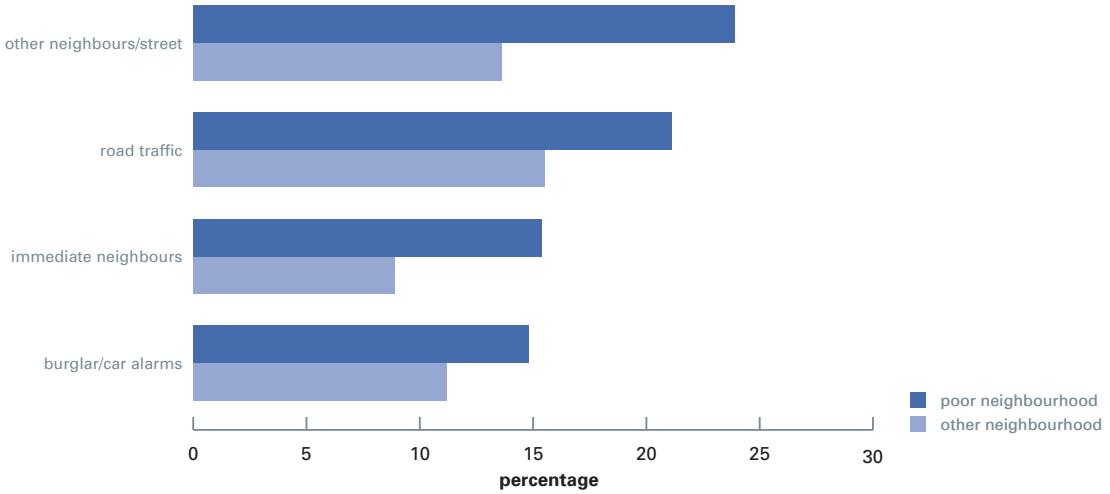


5.39 High proportions of households in poor private sector neighbourhoods also consider their area to have problems with litter/rubbish, burglary and the general level of crime. But they are also more likely to emphasise problems related to vehicle use (parking, heavy traffic and pollution) than their counterparts in poor predominantly Council-built neighbourhoods. Some 55% of households in poor private sector neighbourhoods consider street parking to be a problem as do 42% regarding heavy traffic.

NOISE PROBLEMS

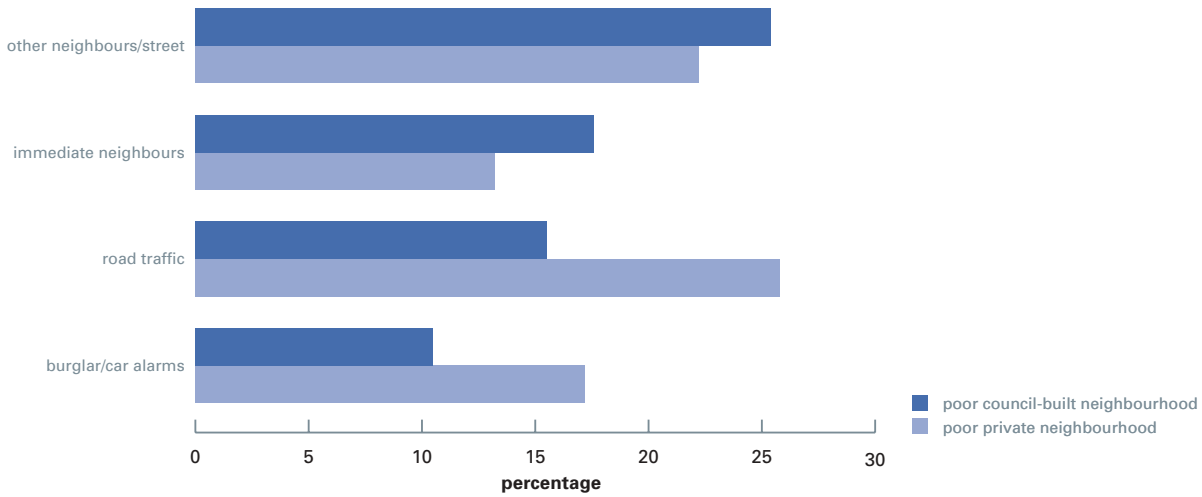
5.40 These perceptions of problems are reflected in views about the source of noise problems in the neighbourhood. A much greater proportion of households in poor neighbourhoods than elsewhere consider there to be noise problems where they live, with 24% of them identifying people's behaviour in the street or locality as a cause, compared to only 14% of households living in 'other' neighbourhoods, Figure 5.22. For the latter, road traffic is the most commonly identified source of noise problems affecting 15% of households.

Figure 5.22 Noise problems in the neighbourhood by 'poor' and 'other' neighbourhoods, 2001



5.41 Within poor neighbourhoods, households in predominantly Council-built areas are more likely to identify their immediate neighbours or other residents/people in the street as the source of noise compared to their counterparts in poor private sector neighbourhoods, Figure 5.23. For the latter road traffic is the most common noise problem and they are also much more likely to consider burglar or car alarms as a source of noise pollution than residents of poor predominantly Council-built neighbourhoods.

Figure 5.23 Noise problems in poor neighbourhoods by predominant tenure, 2001



Chapter 6
Unfitness

The statutory assessment of housing conditions for enforcement action is currently the fitness standard, one key component of the broader measure of condition provided by decent homes. Following on from Chapter 3, this chapter looks at the fitness of the stock in more detail: reasons for failing on unfitness, the severity of problems and the costs to make dwellings fit; how unfitness is concentrated in different sectors and sections of the stock; and how the level of unfitness has changed since 1996.

Summary

- The number of unfit dwellings has fallen by 40% between 1996 and 2001. Some 885,000 homes (4.2% of the housing stock) are now considered to be unfit.
- Homes are still falling into unfitness, but this was far exceeded by the number being made fit between 1996 and 2001.
- The most common reason for unfitness is disrepair (46%), followed by facilities for the preparation and cooking of food, and dampness.
- Some 10% of the pre 1919 stock is unfit, compared to only 1% of the post 1964 stock.
- The dwelling types with the highest rates of unfitness are terraced houses and converted flats, largely reflecting their age. Detached houses are the least likely to be unfit.
- Over half of all unfit homes are owner-occupied, although this is a reduction on 1996. Privately rented homes are proportionately the most likely to be unfit.
- Over 100 thousand vacant dwellings are unfit – 16% of all unoccupied dwellings and four times the rate of unfitness in the occupied stock.
- The average cost of making unfit dwellings fit is £10,136. The proportion of dwellings unfit for more than one reason has increased (from 38% to 45% of all unfit dwellings) since 1996 suggesting that the overall improvement has been focussed on the 'better' unfits, leaving a harder core of those in the worst condition.

6.1 The fitness standard is set out in the 1989 *Local Government and Housing Act*. Section 604 specifies a range of criteria for judging whether any dwelling is fit for human habitation. These cover: disrepair; structural stability; dampness; lighting, heating and ventilation, water supply; drainage; facilities for food preparation and the presence, location and functioning of essential utilities (WC, bath/shower and wash hand basin).[1]

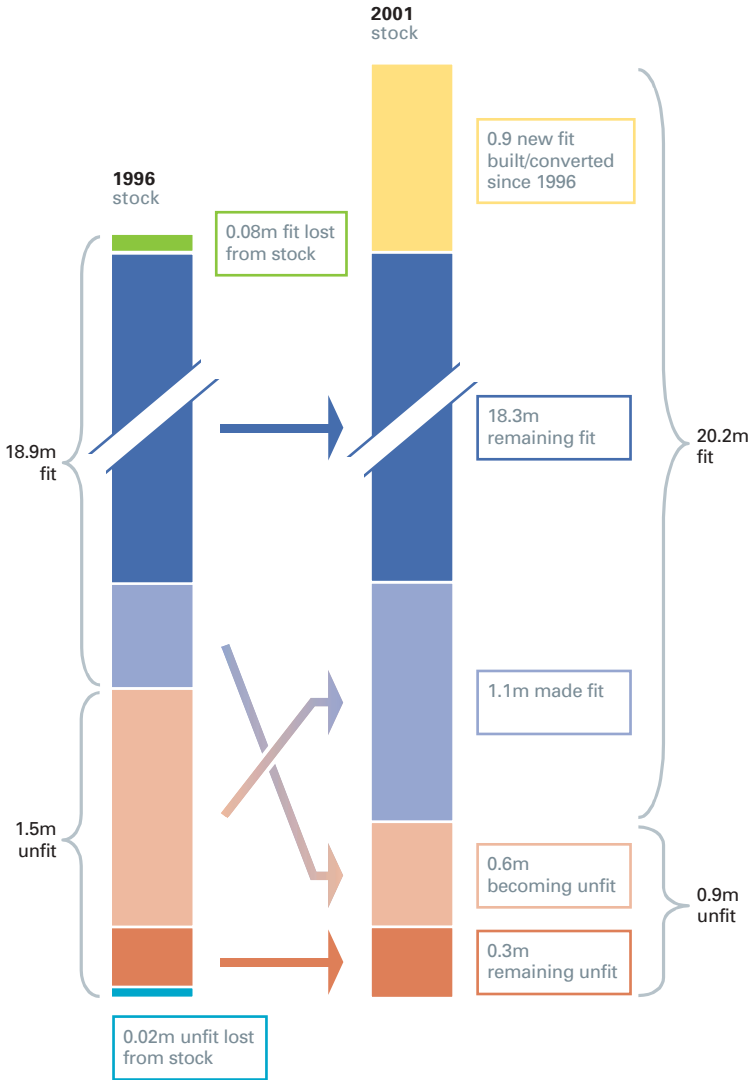
Number of unfit dwellings

6.2 Assessed under these criteria, some 885 thousand dwellings were estimated to be unfit in 2001, representing 4.2% of the stock. This compares to 1.5 million (7.2%) in 1996.

6.3 This does not mean that half a million dwellings have been made fit, with the remainder staying unfit after five years. Homes are continually being improved and falling into unfitness, but the former has happened at a much faster rate over this period, Figure 6.1.

1 A more detailed description of the criteria is set out in the glossary.

Figure 6.1 Change in fitness of the stock, 1996 – 2001 (000s dwellings)



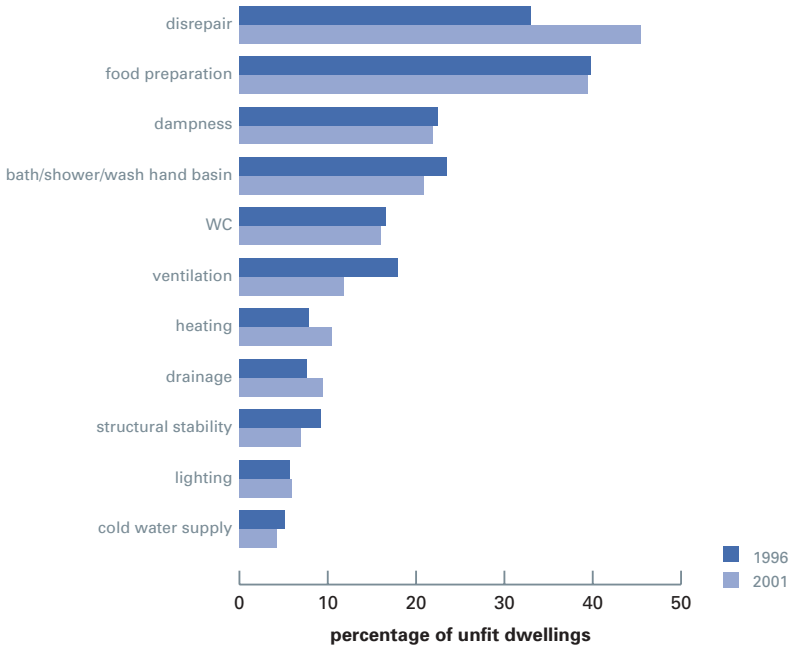
6.4 It is estimated that around three quarters of the unfit dwellings in 1996 were made fit by 2001. A further 23 thousand have been lost from the housing stock (a small number of these have been demolished through slum clearance powers), leaving some 321 thousand homes that have remained unfit between the survey years. Over the same period more than half a million dwellings have fallen into unfitness.[2] This suggests a deterioration rate of around 3% over the five-year period (or 0.6% of the stock becoming unfit in any year), a figure which has remained constant over the last few English House Condition Surveys.

6.5 The significant improvement in the housing stock between 1996 and 2001 is supported by a considerable increase in investment in both private and social housing compared to the previous five-year period when little overall improvement in fitness was found.

Reasons for unfitness

6.6 The most common reason for unfitness is disrepair, with 46% of all unfit dwellings failing on this item, Figure 6.2. This is followed by facilities for the preparation and cooking of food, and dampness. These were also the main reasons for unfitness in 1996 although food preparation was then most common. It would appear that unfit dwellings that have been improved since 1996 are most likely to have had work on kitchens and bathrooms, leaving a harder core of dwellings failing on grounds of disrepair.

Figure 6.2 Reasons for unfitness, 1996 and 2001

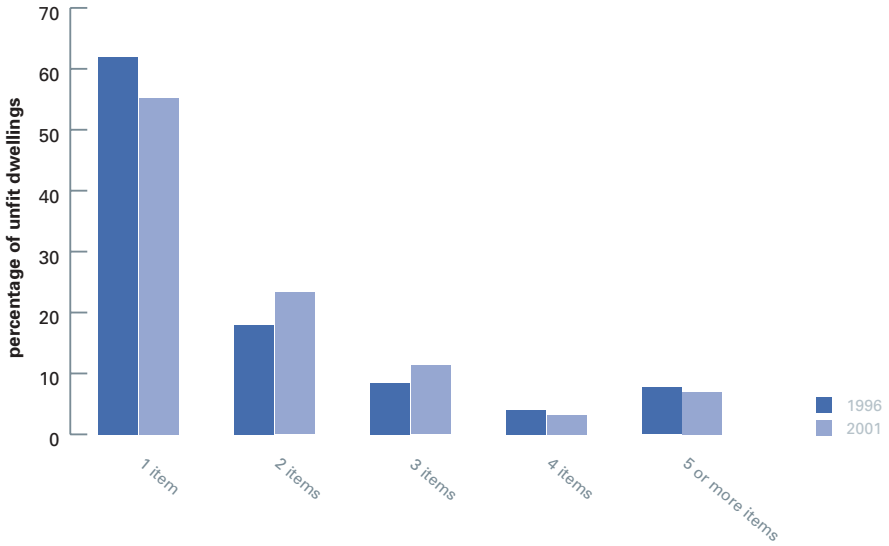


6.7 The EHCS is a non-intrusive survey. Surveyors spend only a limited time at dwellings and do not move furniture, lift carpets or take samples. Hence the estimate of unfitness is likely to be an undercount. This is particularly the case with water quality and may affect other assessments, (for example drainage, as there is no inspection of underground drains, and stability, as there is no ongoing monitoring of structural movement).

6.8 One way of measuring the severity of unfitness is to look at the number of items on which a dwelling fails the fitness standard. As in 1996, the majority of unfit dwellings failed on one item alone. However there has been an increase since 1996 in the proportion of dwellings failing on two or more items – from 38% to 45% of all unfit dwellings, Figure 6.3. Hence, although the unfitness rate has gone down, those that are unfit are failing on more counts and are therefore more likely to be in a worse condition.

2 See Appendix G for an explanation of how these estimates were produced.

Figure 6.3 Number of reasons for unfitness, 1996 and 2001



6.9 Dwellings failing the standard on one item alone tend to do so more because of food preparation (29%), disrepair (24%) and ventilation (12%).

6.10 Dwellings that are unfit for multiple reasons tend to be run down or unmodernised. Those with five items unfit would typically require a package of work to rectify: disrepair, inadequate facilities for the preparation and cooking of food; dampness and run down or missing bathroom and WC amenities. Multiple failure dwellings are likely to be older than other unfit dwellings, and to have much higher costs to make fit. All unfit homes are non-decent by definition.

6.11 Certain items of the fitness standard are clearly related, such as disrepair and dampness, bathroom and WC amenities. Disrepair throughout a house will have a direct effect on other items – a kitchen in substantial disrepair, for example, is also likely to be unfit for the preparation and cooking of food. In many cases the same problem will be double counted: a badly leaking roof may be scored under disrepair, and also dampness; a bricked up window will affect both natural light and ventilation.

Age and type of unfit dwellings

6.12 There is a very strong relationship between unfitness and dwelling age, with 10% of the pre 1919 stock being unfit, compared to 1% of the post 1964 stock. The pattern is much the same as it was in 1996.

6.13 Dwelling types that are largely of older construction are more likely to be unfit. Other factors will also make an impact, for example, the design, the materials used, subsequent use and upkeep of the dwelling, and popularity in the housing market. Hence the level of unfitness is particularly high in converted flats (11%) – which are generally old, often the result of poorly executed conversion work, and generally sold or rented at the lower end of the market. In contrast less than 2% of detached houses are unfit.

Location of unfit dwellings

6.14 Unfitness is found throughout the stock, although the rate increases wherever there are concentrations of older dwellings – in particular terraced houses and conversions.

6.15 Historically, rural dwellings had poorer conditions than urban dwellings, largely due to their older age profile. This position was reversed by 1996, with 8% of the urban stock unfit compared to 5% of rural dwellings. In 2001, the rate of unfitness in both urban and rural areas has levelled out, at around 4%.

6.16 There is no significant variation in the level of unfitness across the three broad regions of the country (Northern regions, South East including London, and the Rest of England). However, in areas of "limited" demand, unfit dwellings are more prevalent (6%), compared to an unfitness rate of only 3% in areas of "high" demand.

6.17 The level of unfitness in the 10% most deprived wards, at 6%, is worse than elsewhere, and only 2% in the least deprived wards. The poor conditions in these most deprived wards are the product of both the profile of their stock (with relative concentrations of older properties and flats) and the social and economic factors that underpin its upkeep over time.

Tenure

OWNER OCCUPIED HOUSING

6.18 Owner occupiers now comprise 54% of all the households in unfit homes, compared to 58% in 1996, Figure 6.4. The rate of unfitness amongst home owners (2.9%) has decreased since 1996 (5.4%), Figure 6.5.

Figure 6.4 Distribution of all households living in unfit dwellings by tenure, 1996 and 2001

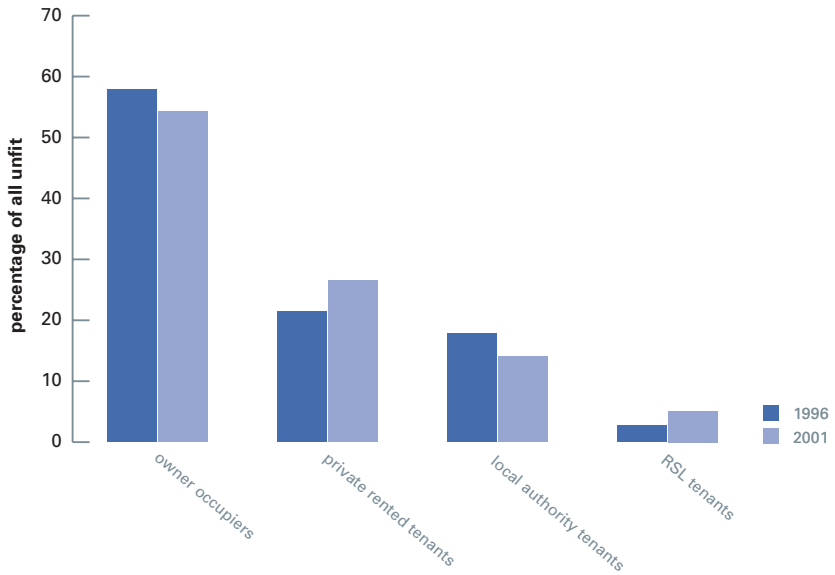
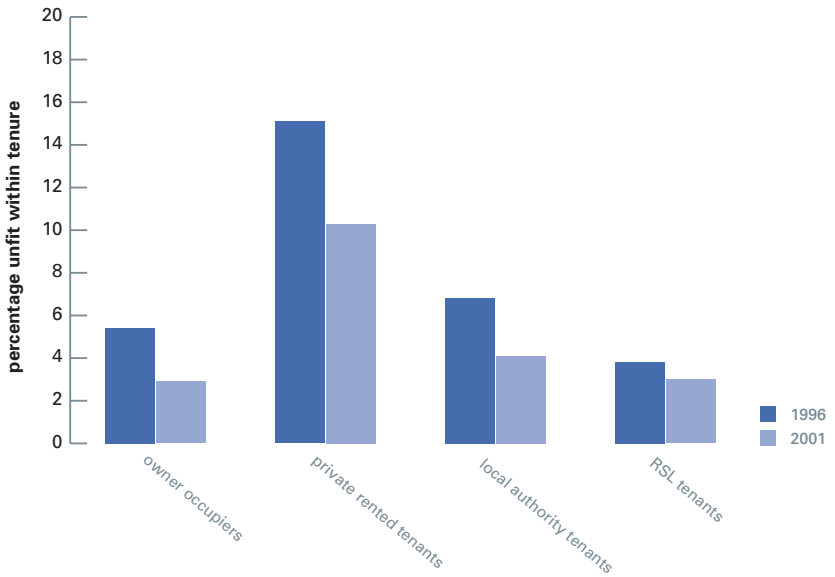


Figure 6.5 Households living in unfit dwellings by tenure, 1996 and 2001



6.19 Nearly half of owner occupiers living in unfit homes live in terraced houses (of any size), Table 6.1. Nevertheless, conditions for households living in these types of properties have improved significantly since 1996, as have those living in flats.

PRIVATE RENTED HOUSING

6.20 Private tenants experience the worst conditions, with 10% in unfit dwellings, and a considerable amount of money, on average, is required to make them fit. However this sector continues to show the improvements recorded during the 1990s – resulting more from the changing profile of its stock than improvements to existing lets by landlords.

6.21 The private rented stock is highly polarised into run down terraced houses and converted flats at the bottom end of the market – which together have an rate of unfitness of 14% – and better condition houses and low-rise purpose built flats ('executive lets') at the top, Table 6.2.

LOCAL AUTHORITY HOUSING

6.22 There has been a reduction in unfitness for local authority tenants from 6.8% in 1996 to 4.1% in 2001. The actual numbers of households living in unfit homes has fallen more sharply in line with the shrinking of this sector as a whole (from 227 thousand households in 1996 to 110 thousand households in 2001).

6.23 There is no significant difference in unfitness rates across different types of local authority dwellings, Table 6.2.

RSL HOUSING

6.24 Unlike other sectors, there has been no significant change in the overall level of unfitness in the housing of RSL tenants (3.8% living in unfit homes in 1996 and 3% in 2001). This is due partly to unfitness being low to start with and partly because an influx of poorer stock from the local authority sector (through large-scale voluntary transfers) has tended to balance out the increase in fit properties arising from new construction and improvement work in the sector.

Table 6.1: Households in unfit dwellings by tenure and dwelling type, 2001

			actual cost to make fit	
	no. living in unfit (000s)	% living in unfit	average for unfits only (£)s	total cost for all (£millions)
owner occupied				
small terraced house	84	5.0	8,373	705
medium/large terraced house	119	5.1	12,169	1,446
semi-detached house	134	2.9	8,911	1,198
bungalow or detached house	58	1.3	10,247	591
flat	29	2.3	3,582	104
all types	424	2.9	9,533	4,045
private rented				
terraced house	91	13.0	10,972	997
other house or bungalow	43	7.8	15,841	689
converted flat	47	15.1	8,639	408
purpose built flat	26	5.9	8,614	223
all types	207	10.3	11,167	2,317
local authority				
terraced house	39	5.5	4,185	164
other house or bungalow	36	4.2	4,180	149
flat	35	3.1	4,324	152
all types	110	4.1	4,228	466
RSL				
house	33	4.8	3,889	129
flat	7	1.1	5,946	40
all types	40	3.0	4,234	169
all households	782	3.8	8,948	6,997

Table 6.2: Unfit dwellings by tenure and dwelling type, 2001

			actual cost to make fit	
	no. unfit dwellings (000s)	% unfit	average for unfits only (£)s	total cost for all (£millions)
owner occupied				
small terraced house	98	5.7	8,892	874
medium/large terraced house	122	5.1	12,300	1,496
semi-detached house	142	3.0	9,309	1,319
bungalow or detached house	74	1.6	19,499	1,439
flat	32	2.5	3,689	118
all types	468	3.2	11,222	5,247
private rented				
terraced house	101	13.2	11,332	1,143
other house or bungalow	54	9.0	18,149	986
converted flat	51	15.0	9,615	491
purpose built flat	32	6.6	8,133	257
all types	238	10.9	12,094	2,877
local authority				
terraced house	45	6.1	4,576	207
other house or bungalow	41	4.7	5,172	214
flat	46	3.9	4,732	217
all types	132	4.7	4,816	638
RSL				
house	37	5.1	3,902	142
flat	11	1.6	6,335	69
all types	47	3.4	4,458	211
all dwellings	885	4.2	10,136	8,973

Fitness for multi-occupation

6.25 As well as the general requirements for fitness under Section 604 of the 1989 Act, bedsits and purpose built HMOs are subject to additional requirements concerning the adequacy of facilities for the preparation of food and essential amenities for multiple occupation alongside adequate means of escape and other fire precautions. These additional requirements are set out under Section 352 of the Housing Act 1985 as amended by Schedule 9 of the Local Government and Housing Act 1989.

6.26 Under the requirements of Section 604 alone, bedsits (13%) along with self contained converted flats (11%) have higher levels of unfitness than shared houses (8%) while houses with lodgers are not much different from the stock as a whole (5%). However the level of unfitness of bedsits under the requirements of both Sections 604 and 352 of the 1989 Act is even higher.

Vacant unfit dwellings

6.27 Some 106 thousand (16% of) vacant dwellings are unfit which nevertheless represents a considerable reduction from the 1996 level of unfitness (28%) in the unoccupied stock. Vacant dwellings as a whole are almost four times more likely to be unfit than occupied dwellings.

6.28 Run-down, unmodernised dwellings are less attractive to potential occupiers than the better stock and any building left unoccupied for a period of time is more likely to experience accelerated deterioration leading to unfitness, either as a result of neglect or through vandalism.

6.29 Some 21% of vacant dwellings owned by local authorities are unfit. This very high level is explained partly by the high levels of vandalism to these dwellings and partly by action taken by local authorities to prevent vandalism or squatting (eg by removing sanitary fittings) which makes the dwelling technically unfit.

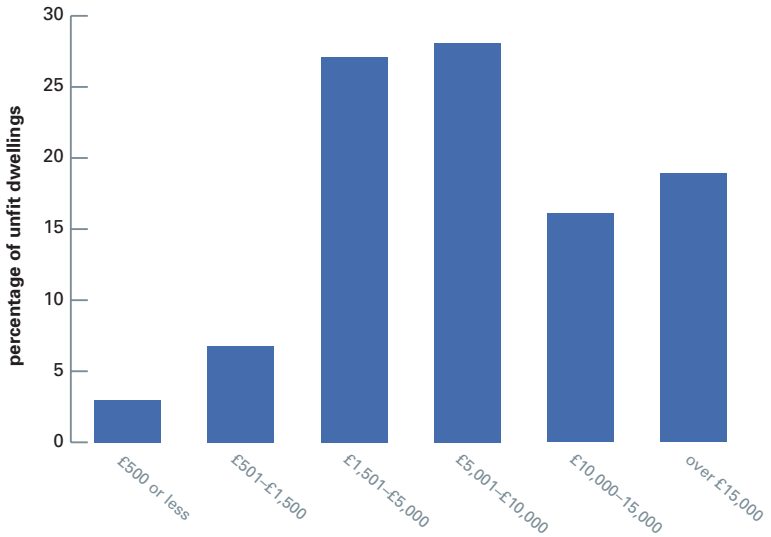
Action on unfit dwellings

COST OF UNFITNESS

6.30 The estimated cost of dealing with unfit dwellings is based on any work to the fabric of the dwelling, remedying relevant design defects or the provision of facilities which is needed to make the dwelling just fit. This necessary work represents only the minimum required to achieve fitness and excludes work that a prudent owner might carry out to safeguard the property for the long term.

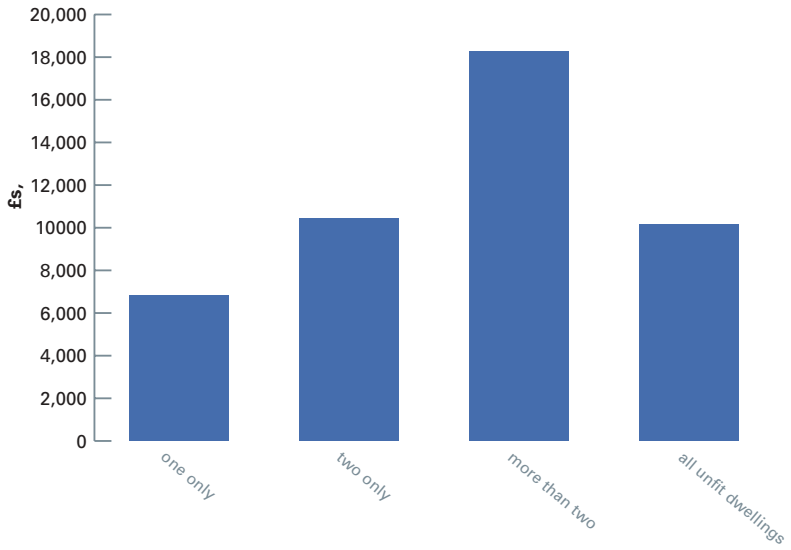
6.31 Around 3% of dwellings can be made fit for less than £500, Figure 6.6. These tend to be unfit for single technical reasons (ventilation, food preparation and WC). At the other end of the scale are 168 thousand dwellings (19%) which require expenditure of more than £15,000 to make them fit. The majority of these are owner occupied dwellings (48%) and around another 24% are vacant.

Figure 6.6 Costs to make dwellings fit, 2001



6.32 While costs will vary depending on the nature of the problems, costs to make dwellings fit generally increase substantially for those that fail for more than one reason, Figure 6.7. While the average cost to address a dwelling failing for a single reason is around £6,800, for those that fail for two reasons it is £10,400 and for those that fail on more than two counts it is £18,300.

Figure 6.7 Average cost to make dwelling fit by number of items failing, 2001



6.33 The cost of remedying unfitness varies with age, type, size and tenure, Table 6.2. Within the owner occupied sector, the average cost of making unfit dwellings fit is around £11,200. The rate of unfitness in bungalows and detached houses is low, but where unfitness does occur the average cost of making detached dwellings fit is over £19,000, compared to around £4,000 for a flat. This difference is driven as much by the different sizes of these dwellings as by their condition.

6.34 The average cost of correcting unfitness in the private rented sector is just over £12,000. The cost to make fit for different types of privately let dwellings again reflects their size, with 'other houses' averaging some £18,000 compared to generally older but smaller terraced houses (£11,000) and converted flats (£10,000).

6.35 The average cost to make fit of under £5,000 for the local authority sector reflects both the size of the sector's dwellings and that work can usually be undertaken on a more cost effective basis because of the economies of scale that can be achieved for capital works.

6.36 Remedying unfitness in the RSL sector is estimated to average around £4,500 per dwelling.

6.37 The total cost required to make all dwellings fit is some £9 billion. The bulk of this cost is in the owner occupied sector (£5.2 billion), followed by the private rented sector (£2.9 billion).

OTHER ACTION

6.38 Not all dwellings identified as unfit will be renovated in practice. In identifying the most appropriate course of action for each dwelling assessed to be unfit, surveyors considered demolition to be most appropriate for around 40 thousand dwellings (5% of all unfit). Just over 100 thousand unfit dwellings (13% of all unfit) were undergoing substantial refurbishment at the time of the survey that is likely to result in them being made fit.

Chapter 7
Disrepair

This chapter looks in detail at disrepair in the stock: the incidence and types of repair problems; the extent of disrepair in different sections of the stock; the cost of remedying disrepair; and change since 1996.

The faults and associated repair costs are not the same as the disrepair component of decent homes reported in Chapters 3. Failure on count of disrepair in the decent homes standard is an indication of replacements and major repairs needed to key selected building elements that have exceeded their planned life i.e. backlog. Disrepair reported here covers all building elements and all levels of faults and work, including minor.

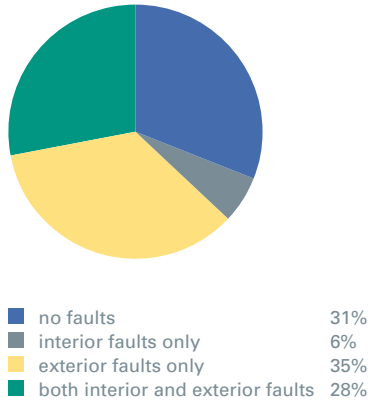
Summary

- Over two thirds (69%) of dwellings have at least some fault to the interior or exterior fabric, but many of these faults are minor and require little or no work to rectify. Private rented and local authority dwellings are the most likely to have faults, RSL are the least.
- The average level of disrepair across the whole stock is £18.70/m^2. For an average size house (floor area 93m^2), this gives a total cost of £1,740.
- However half of all dwellings have a level of disrepair which is less than £4.90/m^2, amounting to around £450 for an average sized house.
- The highest levels of disrepair are found in the private rented sector and the lowest in the RSL. Private rented dwellings are in a much worse state of repair, age for age, than dwellings in other tenures.
- In the local authority sector, semi-detached and small terraced houses have the highest levels of disrepair. High rise flats tend to be in a better state of repair than the average local authority dwelling.
- Since 1996 there has been a discernible reduction in the overall level of disrepair. However, in 2001, 10% of the stock needs repair work in excess of £50/m^2 (about £4,650 for an average sized house).
- There has been little change in the relative disrepair between tenures since 1996.

Disrepair to the building fabric

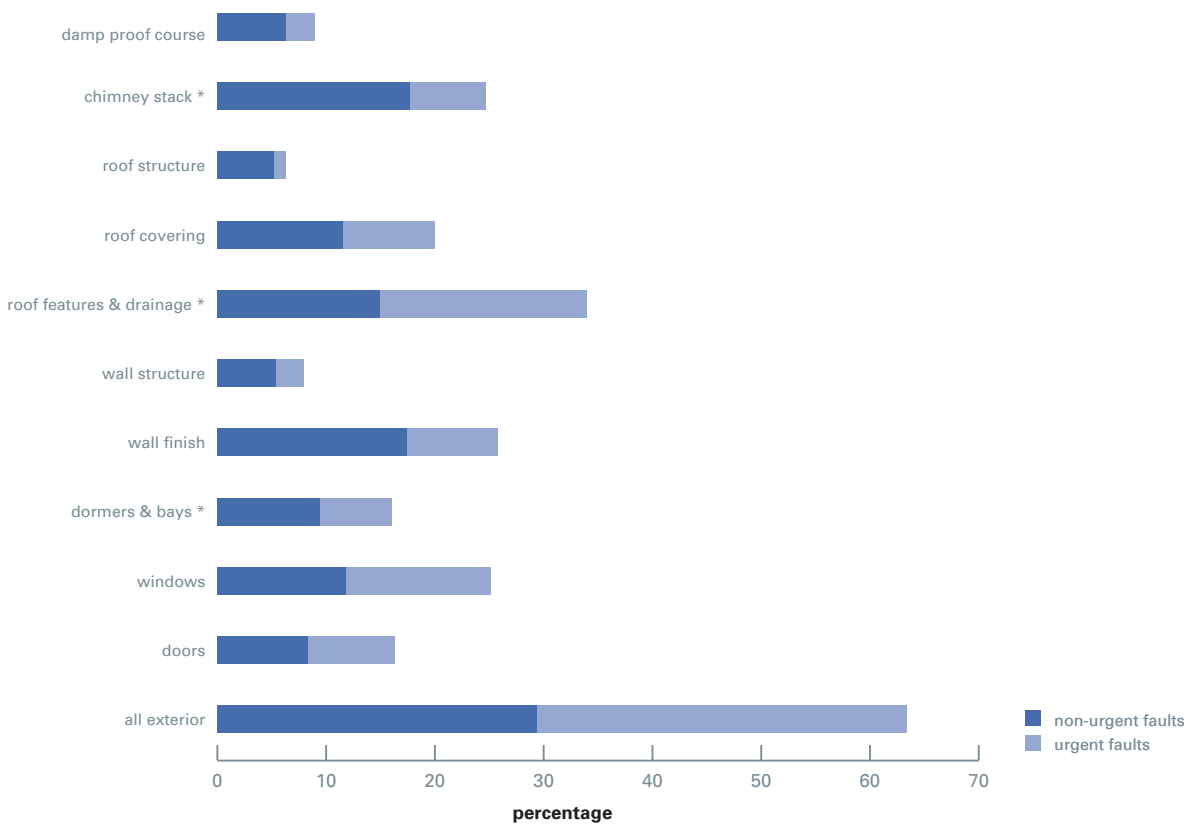
7.1 Just over two thirds (69%) of dwellings have faults recorded to the interior or exterior fabric, Figure 7.1. One in four dwellings (28%) have faults to both the exterior and interior fabric. Dwellings are more likely to have faults with the exterior fabric than the interior (63% compared with 34%). Where dwellings have faults to the exterior, about half of these need urgent attention.

Figure 7.1 Incidence and type of faults, 2001



7.2 The exterior elements most likely to have faults are the roof features and rainwater goods (34%), exterior wall finish (26%), and windows (25%), Figure 7.2.[1] Roof features and rainwater goods are also the most likely to require urgent attention – in particular about one in five dwellings with party parapets or fascias have faults to these components. Looking at the interior fabric, it is ceilings that are the most likely to have faults (22%).

Figure 7.2 Incidence of faults to exterior elements, 2001



* percentages include only those dwellings with these features.

1 For roof features and rainwater goods and for dormers and bays, the percentage quoted is for dwellings with this feature, not the percentage of all dwellings.

7.3 RSL dwellings are less likely to have faults than those in other sectors with just 58% having any faults. This is partly because the stock is newer, although the pre-1919 social rented stock is less likely to have faults than private sector pre 1919 dwellings. Private rented and local authority dwellings are the most likely to have faults generally (78% and 75% respectively).

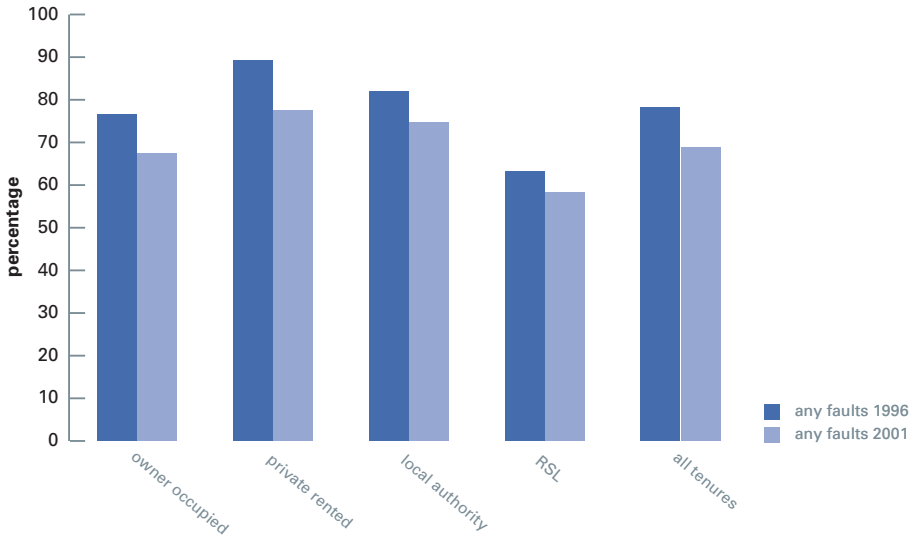
7.4 Not surprisingly, older dwellings are much more likely to have faults than newer ones. Some 91% of pre 1919 homes have faults compared with just 50% of dwelling built since 1964. However, the strong relationship between dwelling age and faults largely reflects the predominance of the private sector where disrepair is particularly concentrated in parts of the older stock. In the social rented sector, other factors including design and materials, high turnover and vandalism play a significant role. Neither the local authority nor RSL stock indicates any concentration of faults in their older properties.

CHANGE IN FAULTS 1996-2001

7.5 Overall the proportion of dwellings with faults has reduced from 78% in 1996 to 69% in 2001. There has been a disproportionate reduction in dwellings with external faults requiring urgent work (47% in 1996 to 34% in 2001). For the exterior fabric, there has been a reduction across virtually all elements, but particularly windows where the percentage of dwellings with faults has reduced from 38% to 25%. This is due mainly to the large increase in double glazing over the period (see Chapter 1). The proportion of dwellings with faults to the damp proof course has remained virtually constant (9% in both years) although there has been a small reduction in the proportion of dwellings with visible rising damp and damp problems overall.

7.6 The proportion of dwellings with faults has not reduced evenly throughout the stock. There has been little change in the pre 1919 stock overall (94% had faults in 1996 compared with 91% in 2001). Private rented dwellings had the highest incidence of faults in 1996 and, along with owner occupied homes, have seen the greatest reduction in the proportion with faults from 89% to 78%. However, the private rented sector still has the highest incidence of faults. The social rented stock has seen less overall improvement, Figure 7.3.

Figure 7.3 Faults by tenure, 1996 and 2001



7.7 The proportion of dwellings with urgent exterior faults has reduced fairly evenly across older and newer dwellings although there are some differences across tenures. Private rented dwellings have seen the most marked fall in the proportion with this type of fault from 65% in 1996 to 47% in 2001 (although this 47% is still considerably higher than any other tenure in 2001). The proportion of RSL dwellings with urgent exterior faults only reduced slightly over the same period with no real change in the pre 1919 RSL stock (from 53% in 1996 to 50% in 2001).

The extent of disrepair

7.8 The presence of faults provides useful information to pinpoint the main problem areas in the stock but does not represent the scale of those problems or the likely cost of remedying them. To address this, estimates of the cost of the repair work specified by the surveyors for each dwelling are made. The survey measured disrepair covering 3 time frames, Box 7.1.

Box 7.1: Categories of repair measured in the survey

urgent repairs	work which needs to be undertaken to prevent further significant deterioration in the short term
basic repairs	urgent repairs plus additional visible work to be carried out in the medium term
comprehensive repairs	the above two categories plus any replacements the surveyor has assessed as being needed in the next 10 years

7.9 The actual costs of the work will vary with the size of dwelling, its tenure and regional variations in building prices. This chapter uses two different measures of repair cost: standardised repair costs (£/m^2) for comparison of the level of disrepair across different sections of the stock; and required expenditure (in pounds) to provide an estimate of what it might cost to remedy the specified defects. These are detailed in Box 7.2.

Box 7.2: Use of repair costs

Standardised repair costs – costs in pounds per square metre (£/m^2) based on prices for the East Midland region and used for comparing the level of disrepair across different sections of the stock. It is assumed that contractors undertake all work on a block contract basis. For flats, the size of the contract is assumed to be the whole block and for all houses it is taken as a group of five dwellings. As such the costs are more closely associated with those which may be incurred by a landlord organising the work on a planned programme basis. By relating costs to floor area the effect of the size of buildings on the amount of disrepair recorded is omitted. These costs do not indicate actual expenditure required for the work.

Required expenditure – total cost per dwelling in pounds and represents the best estimate of what the specified work would actually cost. These costs take into account regional variations in prices and assume different project sizes for work to houses in different tenures. In the private sector, the contract size for work to houses is taken as one. In the social rented sector, the contract size is taken as five unless the house is not on an estate – in which case it is assumed to be a street property with a contract size of one. The costs assume all work is carried out to health and safety regulations by contractors and cover materials and labour but not VAT or a profit mark-up. These costs do not provide the means for comparing differences in the level of disrepair between different tenures or dwelling types as they vary according to dwelling size, tenure and location.

7.10 Within the EHCS it is only possible to cost work that it is reasonable for a surveyor to observe during the survey.[2] Work arising from defects that cannot readily be observed (e.g. underground drains) and elements that cannot readily be evaluated (e.g. lift plant) are not included. This has a greater impact on the social rented sector where there is a higher proportion of flats.

7.11 Standardised repair costs are used for comparing the extent of disrepair across the stock and the statistics used in this chapter are generally based on the 'basic repairs' category. The mean level of disrepair in the whole stock is £18.70/m^2, Table 7.1.[3] For an average size house (floor area 93m^2), this gives a total cost of £1,740. However, nearly a third (32%) of all dwellings have zero basic repair costs. Half of all dwellings have repair costs of £4.90/m^2 or less. This median basic repair cost (£4.90/m^2) gives a cost of just £450 for the average sized house.

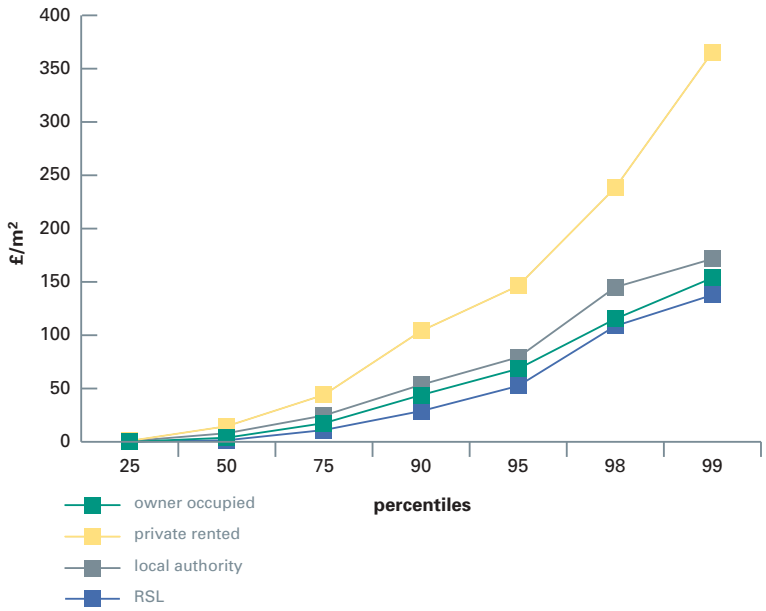
2 Appendix F contains full details of what is included in costs of repair.
3 The mean level of disrepair for urgent work is £12.20/m^2 and for comprehensive work £37.60/m^2.

Table 7.1: Summary of standardised repair costs and expenditure required, 2001

	Standardised basic repair cost			Required expenditure	
	mean	median	urgent	basic	comprehensive
	(£/m²)	(£/m²)	(£s)	(£s)	(£s)
dwelling age					
pre 1919	37.79	19.02	2,877	4,663	7,167
1919-1944	24.45	10.29	1,728	2,937	5,494
1945-1964	15.51	6.07	948	1,615	3,227
post 1964	7.88	0.09	511	822	1,655
dwelling type					
small terraced house	26.54	9.89	1,360	2,166	3,844
medium/large terraced house	21.93	9.30	1,826	3,125	5,298
semi-detached house	16.96	6.13	1,270	2,224	4,108
detached house	10.69	0.44	1,349	2,435	4,362
bungalow	17.03	0.17	1,011	1,604	2,939
converted flat	46.98	19.57	2,213	3,043	4,436
purpose built flat, low rise	14.27	2.67	742	929	1,575
purpose built flat, high rise	20.91	4.54	1,129	1,327	2,026
occupancy					
occupied	17.59	4.69	1,241	2,081	3,732
vacant	50.65	12.30	3,424	4,659	6,312
tenure					
owner occupied	15.93	3.88	1,268	2,235	4,027
private rented	38.62	14.65	2,504	3,628	5,729
local authority	20.85	8.10	962	1,318	2,384
RSL	11.77	1.49	597	813	1,418
all dwellings	18.66	4.88	1,312	2,165	3,816

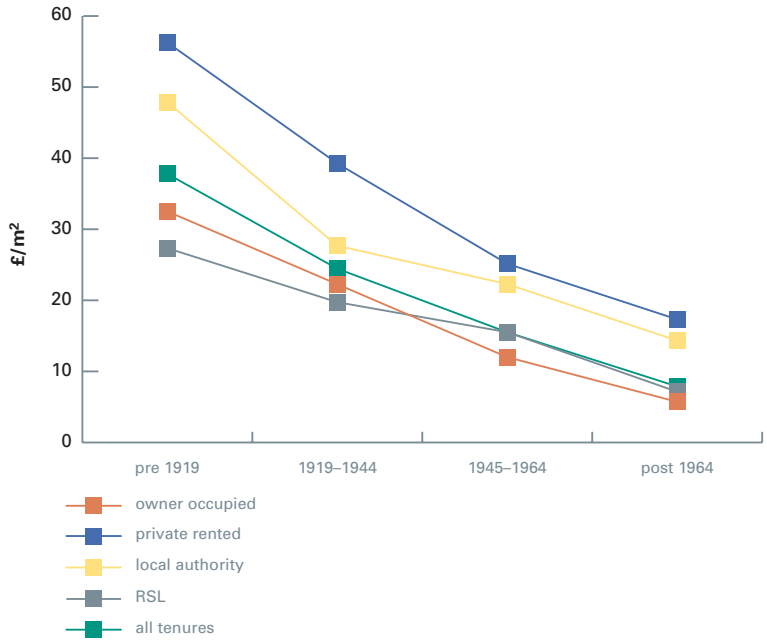
7.12 The level of disrepair varies by tenure, with private rented dwellings having the highest costs (mean £38.60/m², median £14.70/m²) by a considerably margin over the next highest – local authority dwellings (mean £20.90/m², median £8.10/m²).

Figure 7.4 Mean standardised repair costs by tenure, 2001



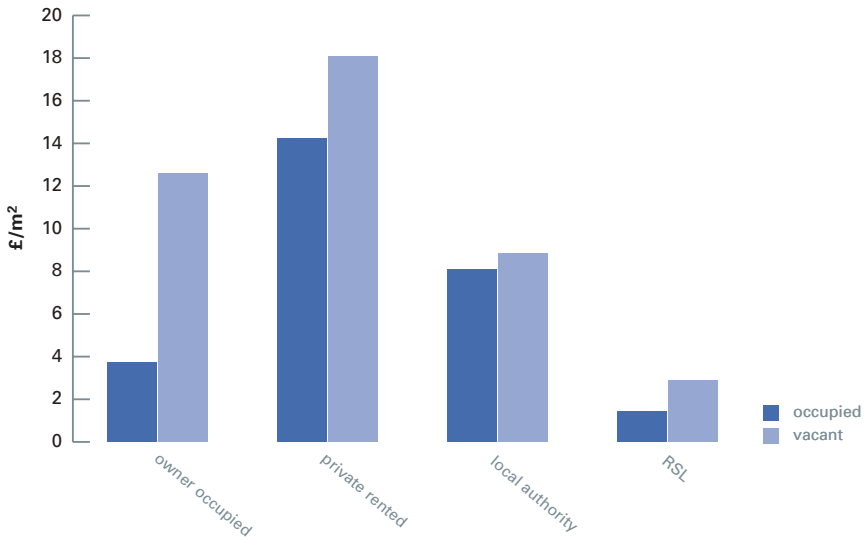
7.13 These differences are not simply due to the different age profiles of the four tenures. Within any given age group, the mean repair costs for the private rented sector remain consistently higher than those for any other sector, and local authority dwellings have consistently higher costs than owner occupied and RSL homes. While the older (pre-1945) RSL stock is in better condition than owner occupied dwellings of a similar age, the newer (post-1944) RSL stock is in worse condition. This may reflect the higher turnover of occupants within this sector and recent large scale transfers of dwellings from local authorities.

Figure 7.5 Mean standardised repair costs by tenure and age, 2001



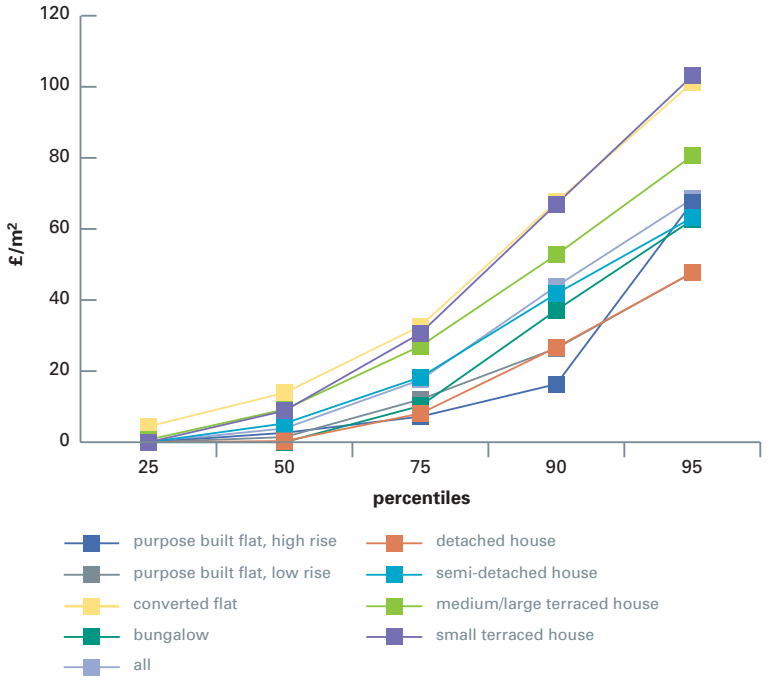
7.14 The mean repair cost for vacant dwellings (£50.70/m^2) is over three times that for occupied homes (£17.60/m^2). The greatest difference between the conditions of occupied and vacants occurs in the owner occupied sector, where the median cost for vacant properties is 3 times that of occupied properties, Figure 7.6. The smallest difference occurs in the local authority sector, where there is a difference of less than £1/m^2.

Figure 7.6 Median standardised repair costs by tenure and occupancy, 2001



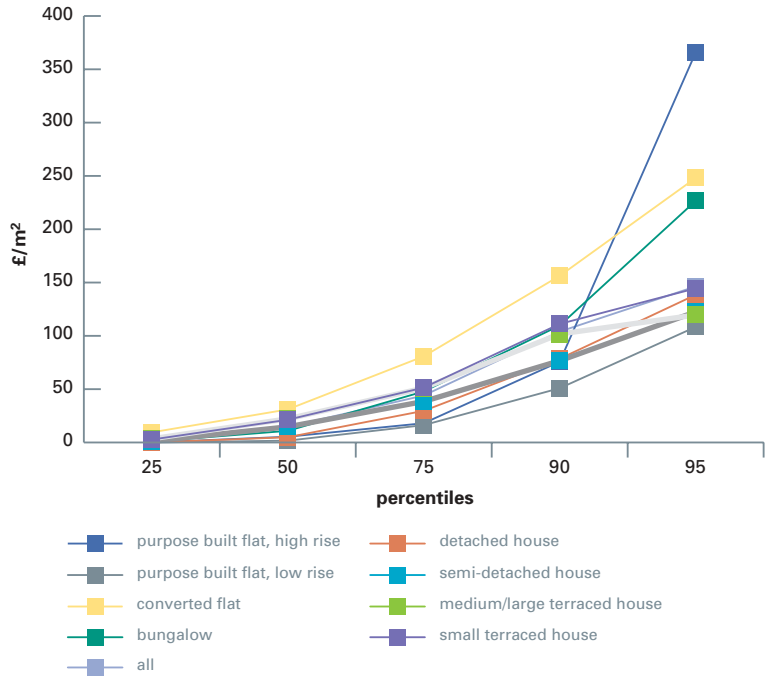
7.15 For owner occupied dwellings, median costs increase steadily with age from zero for dwellings built since 1964 to £16.50/m^2 for pre-1919 dwellings. Nevertheless a quarter of pre 1919 owner occupied dwellings have costs under £4.20/m^2. Of the oldest owner occupied stock, small terraced houses have the highest median costs (£22.00/m^2) and converted flats have the lowest (£11.70/m^2) – possibly because many of the latter have been converted into luxury flats. Detached houses and bungalows have the lowest median costs (under £1/m^2), and represent some of the best condition dwellings in the whole of the stock, figure 7.7.

Figure 7.7 Owner occupied stock: basic standardised repair costs by dwelling type, 2001



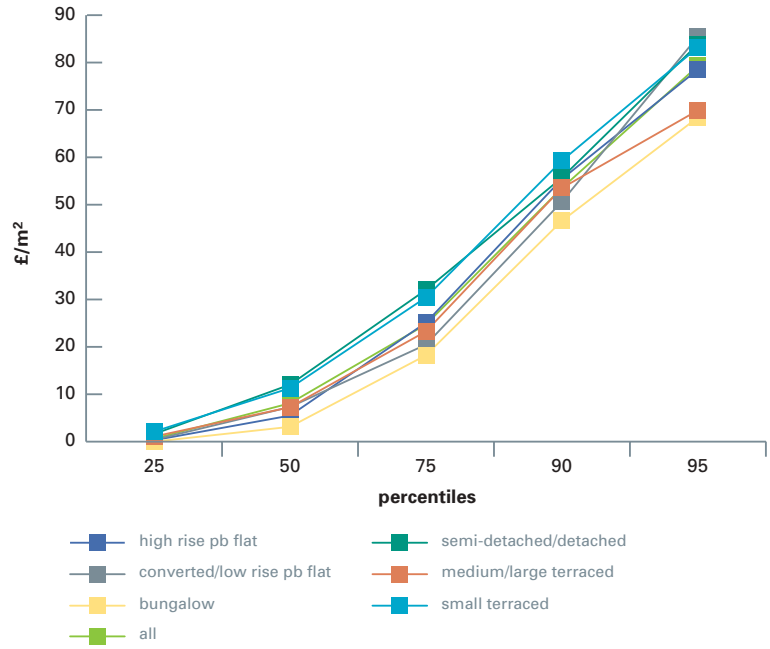
7.16 Although the owner occupied and private rented sectors differ markedly in the overall level of disrepair, their pattern of disrepair regarding the age and types of dwelling is similar, Figure 7.8. In the private rented sector, the median repair cost for pre-1919 dwellings is £28.60/m^2 overall although this falls to just £16.70/m^2 for similarly aged purpose built flats. Overall, converted flats have the highest median costs. The lowest median costs in this sector are for purpose built low rise flats.

Figure 7.8 Private rented stock: basic standardised repair costs by dwelling type, 2001



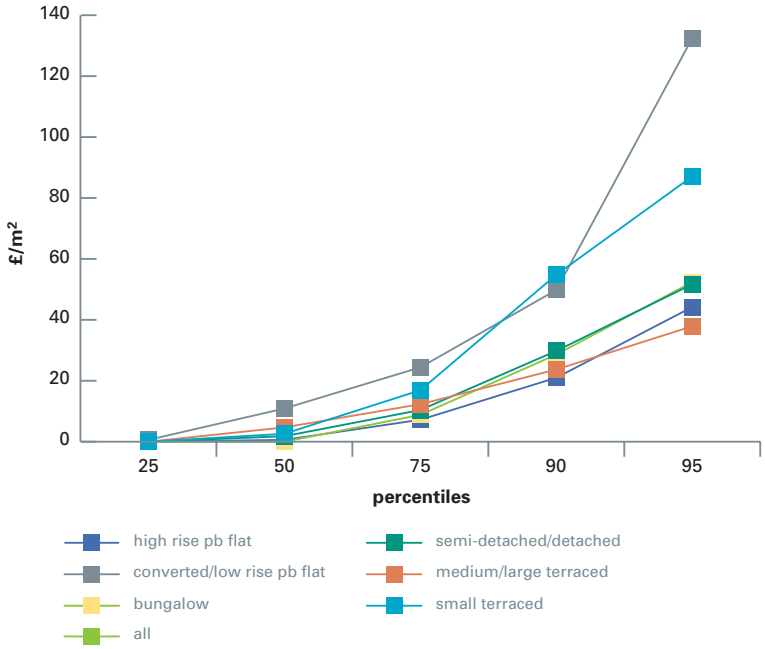
7.17 In the local authority sector, semi-detached houses (£12.00/m^2) and small terraces (£11.30/m^2) have the highest median costs, Figure 7.9. This is largely because these tend to be older than other dwellings in the sector. Bungalows have the lowest median costs at £3.10/m^2 – partly because they tend to be newer and partly because they tend to have lower turnover than the average local authority dwelling. The median costs for high rise flats is £5.50/m^2, less than for the local authority stock as a whole (£8.10/m^2).

Figure 7.9 Local authority stock: basic standardised repair costs by dwelling type, 2001



7.18 In the RSL stock, converted flats (£10.90/m^2) have the highest median costs – over five times the median for the RSL stock as a whole (£1.50/m^2), Figure 7.10. Bungalows owned by RSLs have the lowest costs – half of them have zero costs. Although pre 1919 RSL dwellings have higher median costs than newer dwellings, the relationship between dwelling age and median costs is weaker than in the private sector. A quarter of all pre-1919 RSL homes have costs of less than £1.20/m^2.

Figure 7.10 RSL stock: basic standardised repair costs by dwelling type, 2001

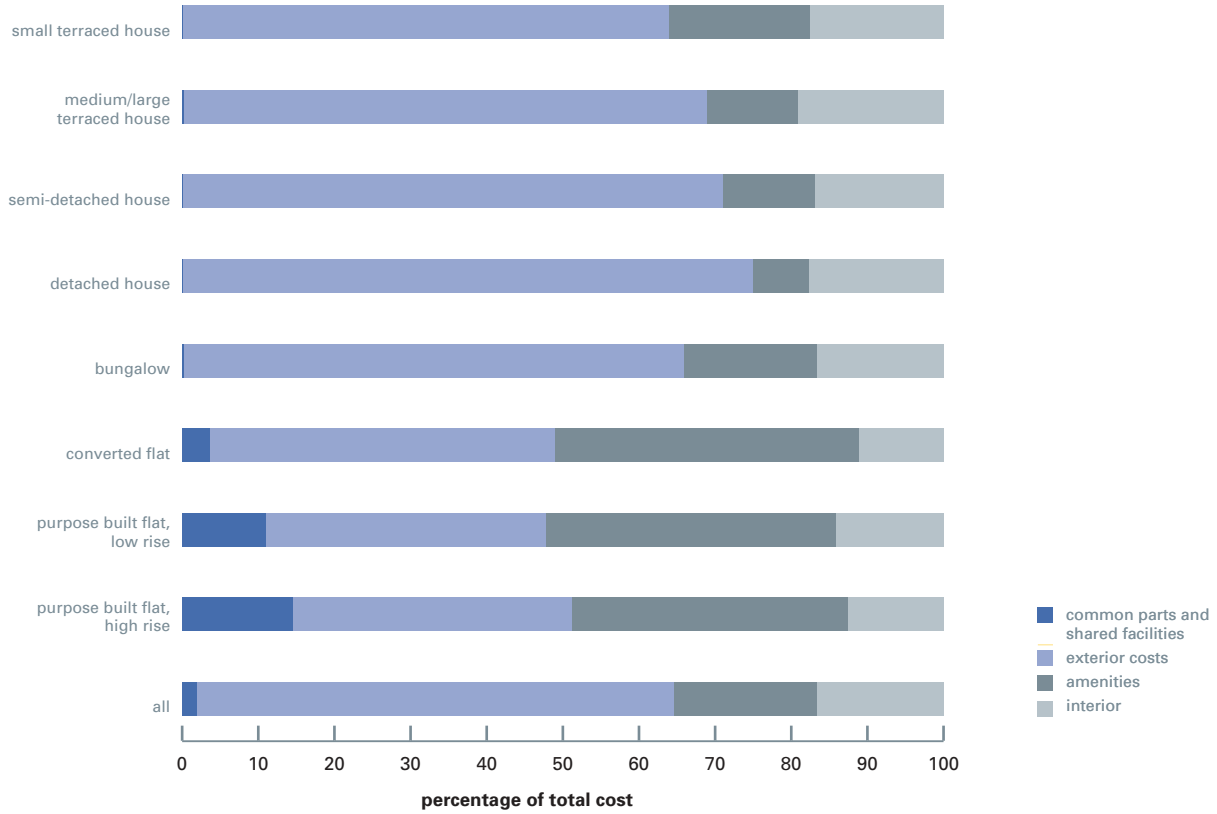


COSTS BY COMPONENTS AND BUILDING ELEMENTS

7.19 Works to the external fabric are the largest component of disrepair across all tenures. Amenity and service repairs make up between 24 and 30% of (standardised basic) total repair costs in the private and social rented sectors, and 14% of costs in the owner occupied sector.

7.20 The breakdown of disrepair varies considerably by dwelling type, Figure 7.11. For all houses and bungalows, exterior repairs account for at least 60% of costs – in detached houses it is 75%. Exterior repairs make up a lower proportion of total costs for flats as these are shared between dwellings within the building and costs to the interior fabric and amenities and services become more significant. Work to common areas and shared facilities make up a significant proportion (15%) of the total cost for high rise flats.

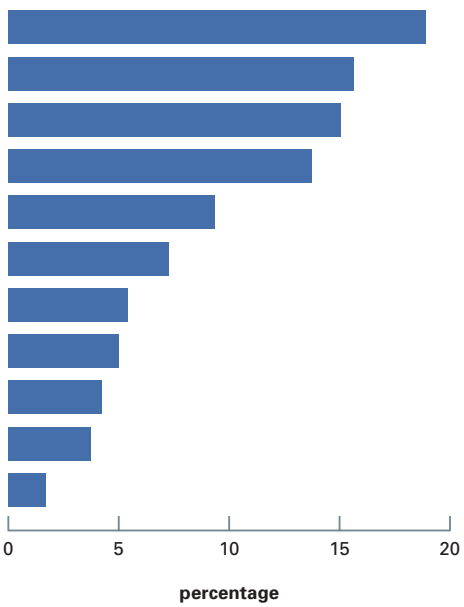
Figure 7.11 Standardised costs for each component of disrepair, 2001



7.21 Breaking down the exterior costs by element, the highest proportions are for work to chimneys, roof features, roof covering and windows, Figure 7.12. These features form the bulk of costs across all tenures and for all house types. Overall, windows is the highest, making up 19% of the total exterior costs for the stock as a whole. Windows account for a higher proportion of costs in the rented sectors than for owner occupied dwellings (22 to 25% compared with 16%).

7.22 Flats have a notably different profile to houses, especially high rise flats where over 90% of the total exterior costs come from just four elements: dormers and bays; windows; wall structure; and wall finish. This is because the ratio of wall area to any other feature is very much larger for a high rise flat compared to any other dwelling types.

Figure 7.12 Standardised exterior costs for each element, 2001



7.23 The distribution of exterior costs also varies with age. Modern (post 1964) dwellings derive most of their costs from roof features and windows (over 50% of exterior costs are due to these two elements), while older (pre 1919) dwellings have a more evenly distributed set of costs, but with notable emphasis on chimneys, roof covering and windows.

Cost of remedying disrepair

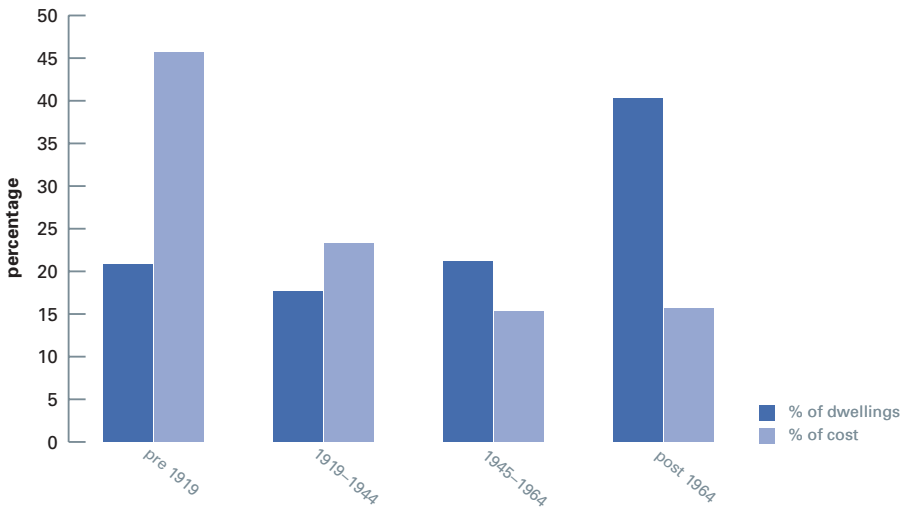
7.24 The previous section looked at the extent of disrepair across the stock, using standardised costs that are independent of tenure, dwelling size and regional variations in the cost of work. This section looks at the amount of money that would have to be spent on the stock if different levels of disrepair were to be remedied. It uses 'required expenditure' (Box 7.1 above) which takes into account different regional building prices and the economies of scale that the public sector can benefit from. However required expenditure does not include VAT or profit mark-ups in the prices that contractors might charge.

7.25 In quoting the total costs for dealing with different levels of disrepair it is not assumed that all work needed is undertaken immediately. In reality decisions on the timing and packaging of work are a matter for the owners of the properties. Surveyors were, however, asked to take a view on when work should be carried out. Urgent repairs were judged to be those necessary to halt further deterioration or to remedy a problem that was viewed as an immediate and significant danger to health. Basic repairs were viewed as work that was needed in the medium term, and comprehensive repairs looked to the longer term (Box 7.2). Each of the different levels of disrepair is considered separately below.

URGENT REPAIRS

7.26 For the stock as a whole the mean required expenditure for effecting urgent repairs is £1,310 per dwelling. This represents a total of £28 billion for the whole stock. The bulk of this expenditure is for owner occupied dwellings as they make up the majority of the stock. The private rented sector accounts for 20% of the total required expenditure on urgent repairs, but only 10% of the stock. Older dwellings require a far greater expenditure than more modern ones, with pre 1919 dwellings making up less than a quarter (21%) of the stock, but accounting for nearly half (46%) of the required expenditure on urgent repairs, Figure 7.13.

Figure 7.13 Proportion of urgent actual costs accounted for by dwellings of each age band (%), 2001



BASIC REPAIRS

7.27 To remedy both urgent and non-urgent basic repairs increases the mean required expenditure by 65% to £2,170 per dwelling. Half of the stock requires expenditure of £770 or less. These costs vary with dwelling type, age and tenure.

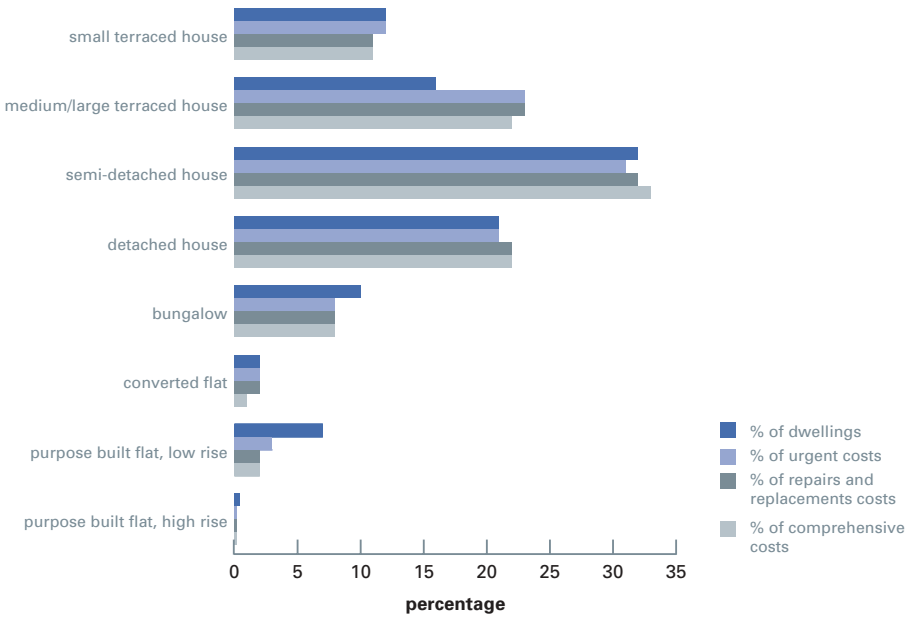
COMPREHENSIVE REPAIRS

7.28 Comprehensive costs include the replacements of external building elements that the surveyor assessed as being necessary in the next ten years. These costs are, on average, 76% higher than for basic repairs. The mean required expenditure for comprehensive repairs is £3,820 per dwelling. Half the stock requires £1,660 or less to be spent on comprehensive repairs.

DISTRIBUTION OF REQUIRED EXPENDITURE

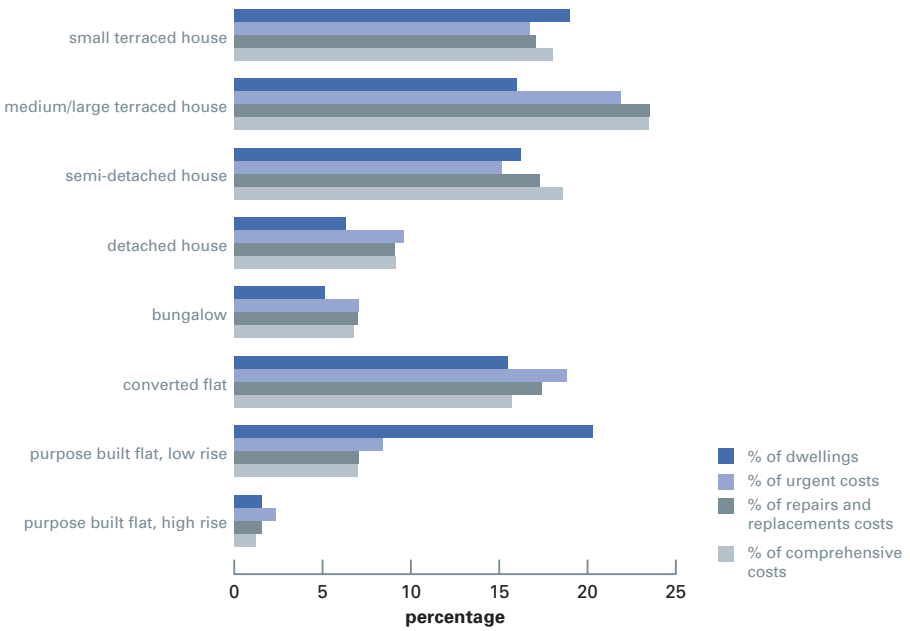
7.29 In the owner occupied stock, medium/large terraced houses require a disproportionately large amount of spending on urgent works, Figure 7.14. They comprise 16% of the stock but require 23% of the expenditure. At the other extreme, purpose built flats which make up 7% owner occupied dwellings only account for around 3% of the total bill for urgent repairs. A similar pattern applies to basic and comprehensive repairs.

Figure 7.14 Owner occupied sector required expenditure by dwelling type, 2001



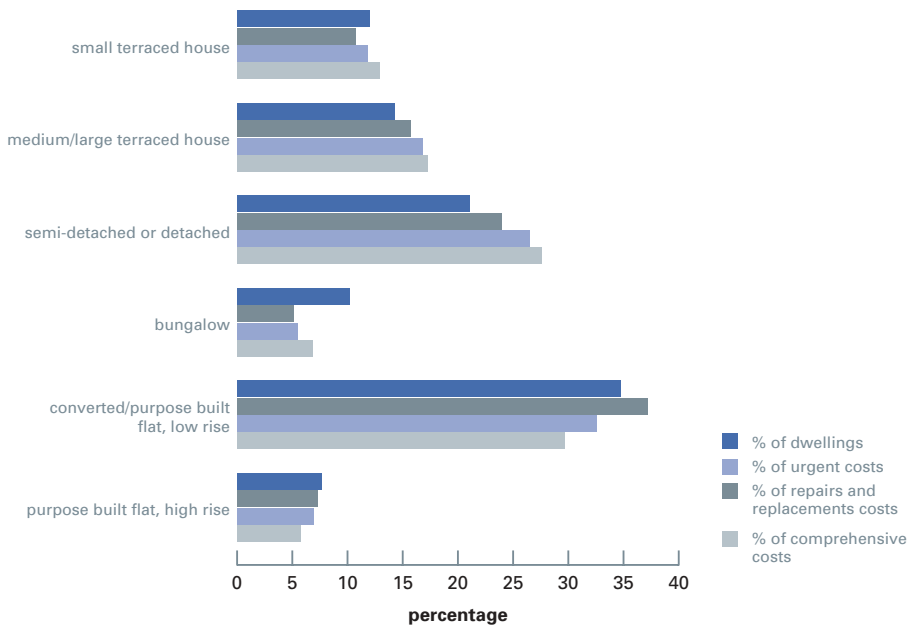
7.30 In the private rented sector purpose built low rise flats make up over 20% of the stock, but just 8% of the total urgent repair bill, Figure 7.15. Detached houses, conversely, make up just 6% of the stock, but account for 10% of urgent repairs required in this sector. Similar patterns are observed with basic and comprehensive repairs.

Figure 7.15 Private rented sector required expenditure by dwelling type, 2001



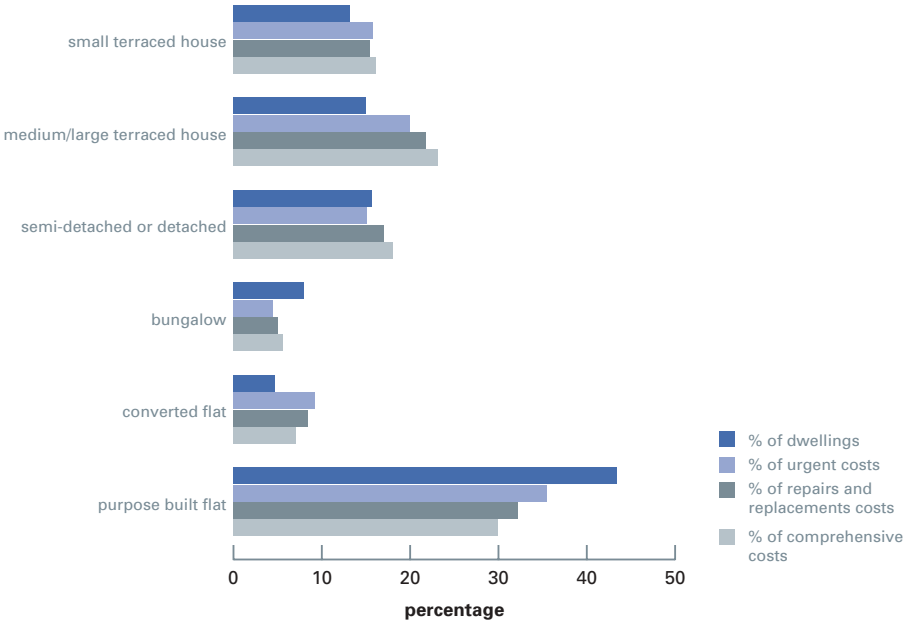
7.31 In the local authority sector, bungalows make up over 10% of the stock, but only 5% of the total urgent repair bill, Figure 7.16. Within this sector there are strong indications that a greater backlog of repairs has accumulated in houses than flats. For all house types, the proportion of required expenditure for comprehensive repairs is higher than the proportion of required expenditure for basic repairs, which is in turn higher than the proportion of required expenditure on urgent repairs. This trend is particularly pronounced for semi-detached houses. For flats, this trend is reversed. The net effect of this is that for urgent repairs, flats account for 45% of the total repair bill, whereas for comprehensive repairs, this reduces to 35%.

Figure 7.16 LA sector required expenditure by dwelling type, 2001



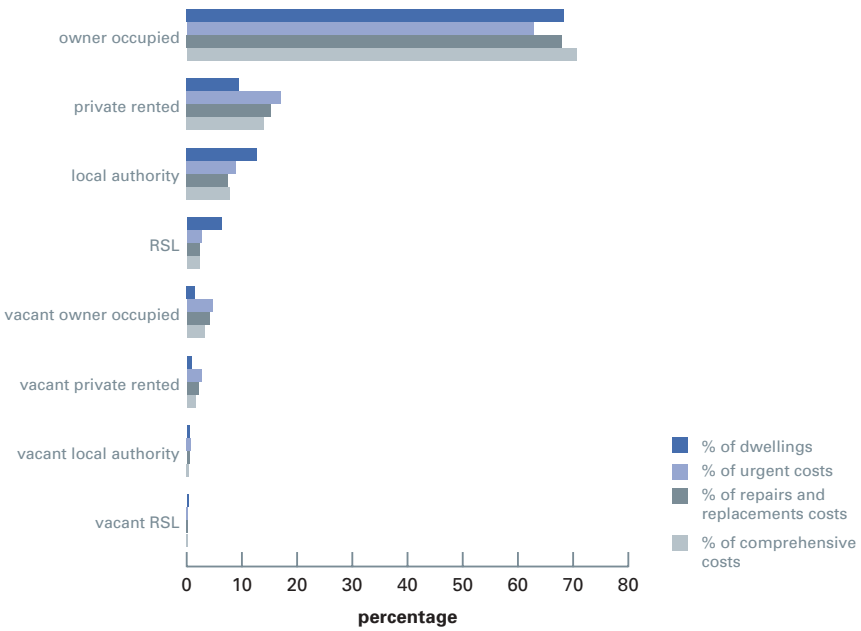
7.32 In the RSL sector, converted flats and medium/large terraced houses account for a disproportionately greater amount of the urgent repair bill, Figure 7.17. Together, they make up 20% of the RSL stock but 29% of the total costs. As with the local authority stock, houses make up a greater proportion of the total comprehensive repair expenditure required than they do for urgent work – suggesting a greater backlog of work in houses compared with flats.

Figure 7.17 RSL sector required expenditure by dwelling type, 2001



7.33 Across the stock as a whole, vacant dwellings account for a disproportionate amount of expenditure. Although they make up just 3% of all dwellings, they account for 8% of total basic repair costs. The picture is particularly pronounced in the owner occupied sector where vacant dwellings account for just 2% of its stock but 7% of costs.

Figure 7.18 Required expenditure by tenure by occupancy, 2001



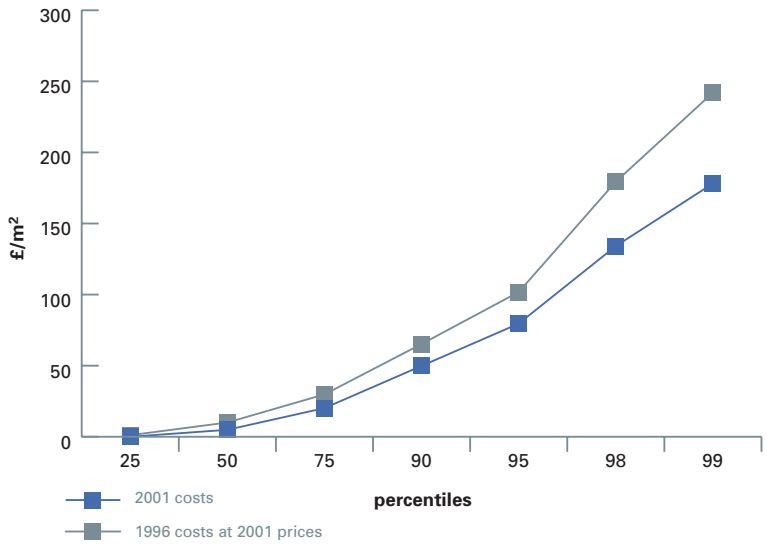
Changes in disrepair since 1996

7.34 The ability to measure change between surveys depends on surveyors making similar judgements about the amount and type of work required to address observed problems. Testing carried out as an intrinsic part of survey quality assurance indicates that 2001 repair costs overall would drop by about 16% from 1996 simply because surveyors were specifying less work to deal with the same problem.[4]

7.35 The mean standardised repair cost for 1996 (at 2001 prices) was £26.40. However comparison with the 2001 average of £18.70 is not straightforward, as it needs to take the change in surveyor judgement into account. On this basis, there has probably been a real improvement in mean repair costs of around 15% over the last five years – about a third (5%) of this being due to new build additions to the stock.

7.36 The distributions of standardised repair costs for 1996 and 2001 are broadly comparable in shape, Figure 7.19. They indicate that, despite the marked improvement, a significant minority of dwellings in very poor repair still exists. Some 10% of the stock are estimated to have basic standardised repair costs over £50/m^2 (equating to £4,650 for an average sized house).

Figure 7.19 Distribution of standardised basic repair costs 1996 and 2001 at 2001 prices



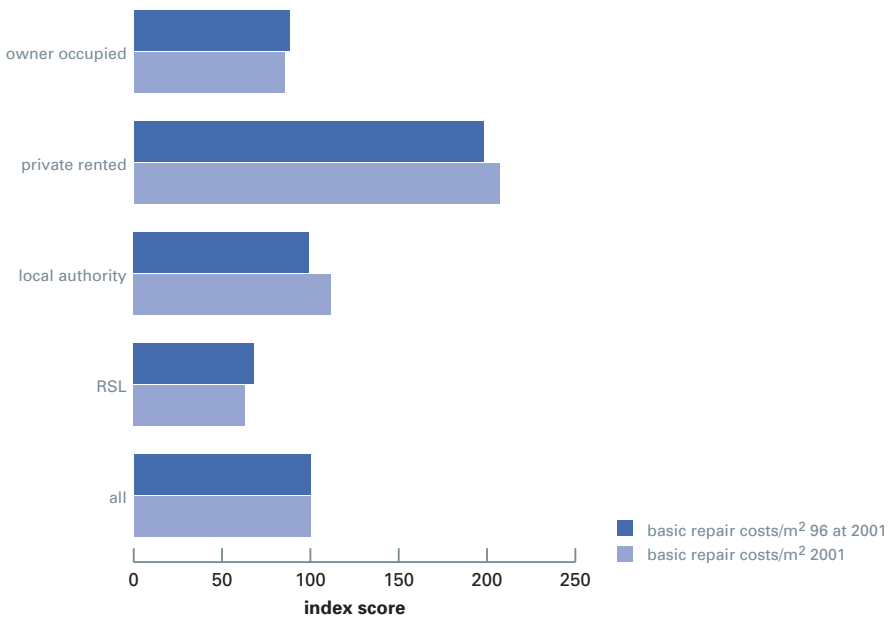
7.37 To compare the shifts in the relative position of different sectors of the stock since 1996, indices have been constructed to relate the mean level of disrepair of different sections of the stock to the overall mean for each respective year (1996 and 2001).[5]

7.38 There has been no real relative change between the tenures or for dwellings in different age bands, Figure 7.20.

4 Further details about the briefing and calibration exercise used to estimate any drift in surveyor judgements are provided in Appendix C.

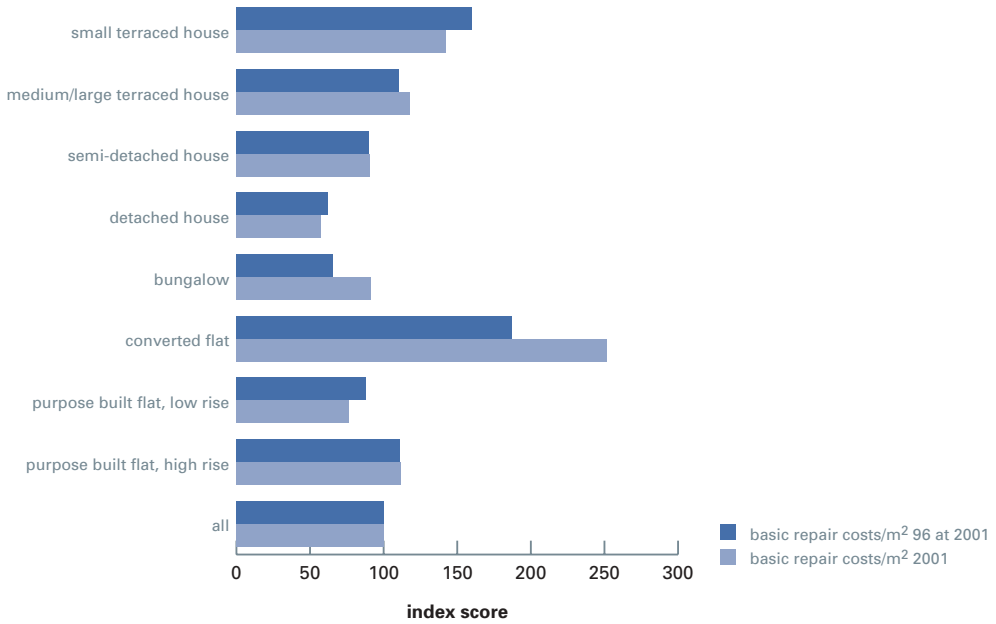
5 The indices use standardised basic costs. For example the basic standardised repair costs for owner occupied dwellings in 2001 is £15.93 and the cost for all dwellings in 2001 is £18.66. The index for owner occupied dwellings is obtained by dividing that mean value by the mean for the whole stock and multiply by 100 (15.93/18.66 x 100 = 85.37). A similar calculation is made for 1996 and relative change is measured by comparing the difference in the 2001 index value from that of 1996.

Figure 7.20 Relative changes in the extent of disrepair for dwellings in different tenures, 1996–2001



7.39 However, there have been some significant changes between dwelling types, Figure 7.21. Bungalows and converted flats in particular have seen a fairly significant increase in their relative level of disrepair since 1996 whereas small terraced houses and purpose built low rise flats have seen a relative decrease.

Figure 7.21 Relative changes in the extent of disrepair for dwellings of different types,1996–2001



Chapter 8 Energy efficiency

This chapter examines the energy characteristics and the energy efficiency of the stock in terms of the presence of some common insulation measures, main space and water heating systems and its energy cost rating based on the Government Standard's Assessment Procedure (SAP). It looks at the distribution of these across different sections of the stock (tenure, dwelling type and age) and how things have changed since 1996.

The thermal comfort criteria of the decent homes standard defines a minimum standard in terms of minimum levels of applied insulation (loft and cavity) and presence of an efficient space heating system (see Chapter 3). Dwellings either meet the minimum standard or fail to meet the standard. In contrast the energy cost rating (SAP) quantifies the combined impact of all insulation measures, the efficiency and control of space and water heating systems and the cost of fuel used on a scale derived from calculated energy costs for space and water heating. All dwellings have a SAP rating where the higher the number the better the standard.

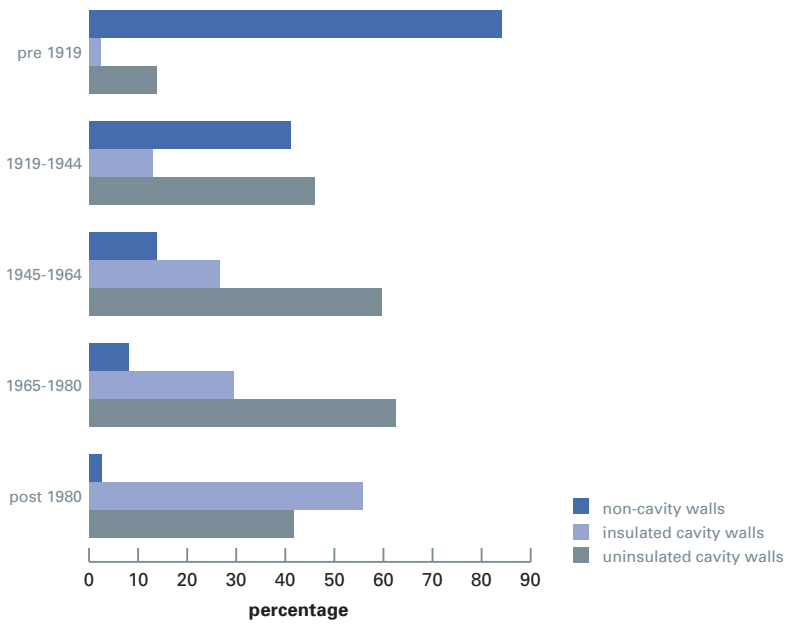
Summary

- The proportion of dwellings with insulated cavity walls has increased significantly over the last 5 years. In 1996 some 21% of dwellings with cavity walls had cavity wall insulation and this figure has now risen to 36%.
- Dwellings in the private rented sector are the least likely to have cavity walls and if they do have cavities they are the least likely of all sectors to have cavity insulation.
- The proportion of dwellings with lofts that are insulated has increased slightly over the last 5 years. In 1996 93% of all lofts were insulated and in 2001 this figure was 95%. However, almost 69% of lofts in 2001 had 100mm or more of insulation compared with just under 60% in 1996.
- Some 86% of dwellings have a central heating system and of these 91% are gas fuelled.
- Communal heating is far more common in the social sector than the private sector (6% and 1% respectively) and almost 70% of all dwellings with communal heating are in the social sector.
- The average energy cost (SAP) rating of the stock in 2001 is 51 and has increased by 5 SAP points over the last 5 years.
- In 2001 just over 9% of dwellings had a SAP of 30 or below while a little over 9% had a SAP rating in excess of 70. In 1996 15% of dwellings had a SAP rating of 30 or below and nearly 6% had a rating in excess of 70.
- In 2001 the RSL sector had the highest average SAP rating (60) with less than 6% having a rating of 30 or below, while the private rented sector had the lowest average SAP rating (45) with 19% having a rating of 30 or below.

Cavity wall insulation

8.1 Some 70% of dwellings have cavity walls and of these 36% have cavity insulation.[1] The presence of cavity walls and cavity wall insulation is closely related to dwelling age. Newer dwellings are far more likely to have cavity walls and cavity wall insulation than older dwellings, Figure 8.1. This clearly reflects the increased emphasis on energy efficiency in the Building Regulations since the early 1980's. Some 57% of post 1980 dwellings with cavity walls have cavity insulation compared with 28% of pre 1980 dwellings with cavity walls. Furthermore, 61% of post 1990 dwellings with cavity walls have cavity wall insulation.

Figure 8.1 Presence of cavity walls and cavity wall insulation by dwelling age 2001



8.2 The main variation with tenure is that dwellings in the private rented sector are the least likely to have cavity walls and cavity wall insulation. This in part reflects the higher proportion of older dwellings in this sector compared to the other tenures. Just under 50% of private rented dwellings have cavity walls and of these some 28% have cavity insulation. In contrast almost 82% of registered social landlord dwellings have cavity walls and 45% of these have cavity insulation.

8.3 The presence of cavity wall insulation varies with dwelling types, which in part reflects the dwelling age. Detached houses, bungalows and low rise purpose-built flats, over half of which were built since 1965, have the highest proportion of cavity walls and cavity wall insulation. Not surprisingly, converted flats, four out of five of which were built pre 1919, have the lowest proportion of cavity walls.

8.4 Vacant dwellings are less likely to have cavity walls and cavity wall insulation than occupied dwellings. This reflects the higher proportion of older dwellings, private rented dwellings, and flats that are vacant compared with occupied dwellings. Some 60% of vacant dwellings have cavity walls, 27% of which have insulated cavities. In contrast 70% of occupied dwellings have cavity walls, 36% of which have insulated cavities.

1 All dwellings with 50% or more of their external walls of cavity construction are described as having cavity walls. All other dwellings have been grouped together as having non-cavity walls.

CHANGE SINCE 1996

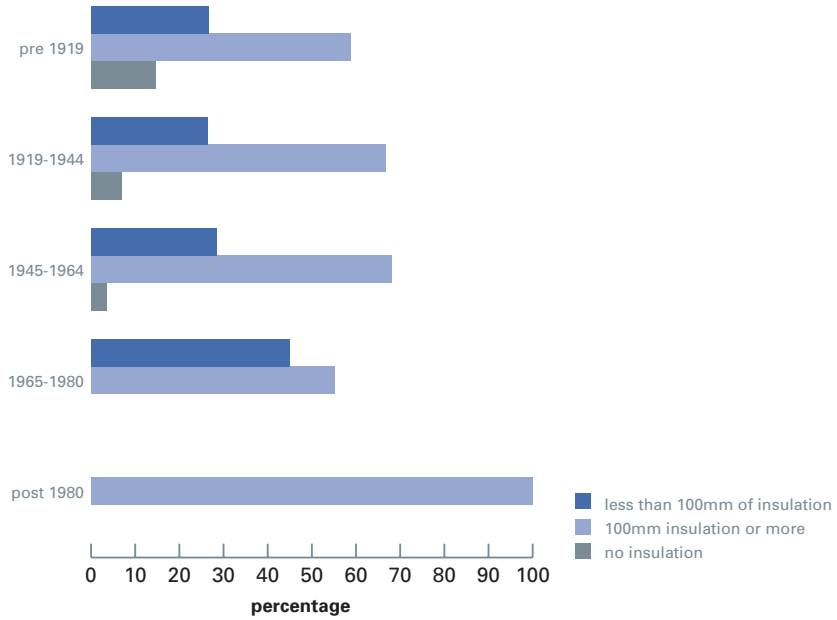
8.5 The proportion of dwellings with insulated cavity walls has increased since the last survey. In 1996 some 21% of dwellings with cavity walls had cavity wall insulation, in 2001 this figure had increased to 36%. The increase is evident in all sectors with the largest percentage increase in the RSL sector.

Loft insulation

8.6 Some 85% of dwellings have a loft space and 95% of these have some loft insulation.[2] Almost 70% of lofts have 100mm or more of loft insulation and 5% have no record of any loft insulation.

8.7 Older dwellings are far more likely to have an uninsulated loft than newer dwellings, Figure 8.2. Some 15% of lofts in pre 1919 dwellings have no insulation and these account for almost 60% of all uninsulated lofts in the stock. In contrast all post 1965 dwellings with lofts have some insulation with post 1980 dwellings having 100mm or more.

Figure 8.2 Loft insulation by dwelling age 2001



8.8 The presence of loft insulation varies with tenure. Dwellings in the private rented sector are the least likely to have an insulated loft with only 85% of the dwellings with lofts having some loft insulation. In contrast 98% of lofts in the registered social landlord and local authority sectors have some loft insulation. The depth of loft insulation also varies with tenure. Dwellings in the private rented sector are the least likely to have lofts with 100mm or more insulation (56%) and the registered social landlord sector are the most likely to have lofts insulated with 100mm or more (74%).

8.9 The presence and thickness of loft insulation varies with dwelling type. Not surprisingly, converted flats, 80% of which were built pre 1919, have the highest incidence of uninsulated lofts with around one in seven lofts lacking any insulation. Terraced houses, however, account for almost half of all uninsulated lofts in the stock.

8.10 Vacant dwellings are less likely to have a loft and those with a loft are less likely to be insulated than occupied dwellings. This reflects the higher proportion of older dwellings and private rented dwellings that are vacant. Furthermore, only 62% of vacant dwellings with lofts have 100mm or more of loft insulation compared with 69% of occupied dwellings.

2 Information on loft insulation was only measured for pre 1980 dwellings. For post 1980 dwellings it was assumed that the thickness of loft insulation corresponds to the Building Regulations that applied at the date of construction.

CHANGE SINCE 1996

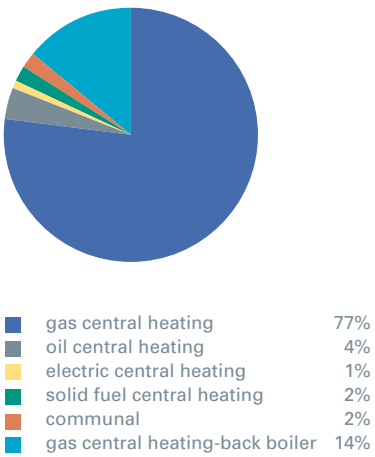
8.11 The proportion of dwellings with an insulated loft space has not significantly changed since 1996. Some 93% of dwellings with a loft space had some insulation in 1996 and in 2001 this figure was 95%. The depth of loft insulation has, however, increased. In 1996, 60% of dwellings with lofts had 100mm or more of loft insulation and in 2001 this figure was 69%.

Main space heating systems

CENTRAL HEATING

8.12 The main form of space heating in 86% of dwellings is a central heating system and the vast majority of these use mains gas, Figure 8.3. A gas back boiler fires some 15% of gas central heating systems. Some 61% of dwellings with gas back boilers are in the owner occupied sector and another 25% are in the local authority stock. 82% of solid fuel central heating systems are found in pre 1965 dwellings and oil central heating is almost exclusively found in private sector dwellings. Communal heating is far more common in the social sector than the private sector with almost 70% of dwellings with such a system being in the social sector. Central heating, in particular gas central heating, is more common in occupied dwellings than vacant dwellings.

Figure 8.3 Type of central heating system 2001



PROGRAMMABLE HEATING

8.13 Some 8% of dwellings have programmable heating and over 98% of these have storage heaters. Storage heaters are particularly popular in purpose built flats (44% of all dwellings heated by storage heaters are purpose built flats) and within both the RSL and private rented stock. Some 14% of dwellings in the RSL stock and 15% in the private rented stock rely on programmable heating as the main form of space heating.

FIXED HEATING

8.14 Some 6% of dwellings have fixed heaters as the main heating provision, 79% of, which have gas room heaters, 12% electric fixed heaters and the remainder have solid fuel heaters. Almost one quarter of these dwellings where the main form of heating is a fixed heater are in the private rented sector and around 41% are pre 1919 dwellings. Electric fixed heaters and solid fuel heaters are most commonly found in the RSL and private rented sectors.

NON-FIXED HEATERS

8.15 In less than 1% of dwellings the only recorded heat source was a portable heater, the great majority of which were portable electric heaters.

CHANGES SINCE 1996

8.16 The proportion of dwellings with central heating has increased since the last survey. In 1996 80% of dwellings had central heating, by 2001 this has increased to 86%. In both 1996 and 2001 some 91% of all central heating systems used gas. The proportion of dwellings with a single purpose gas boiler has increased. In 1996 57% of dwellings had a gas single purpose boiler and in 2001 this figure was 66%. Numerically, the number of dwellings with gas back boilers has not changed over the last five years with some 2.5 million dwellings relying on such a system.

Water heating

8.17 Some 84% of dwellings have central heating systems that provide the main source of hot water and 91% of these use mains gas. A further 12% of dwellings have an immersion heater as the main source of hot water and the remaining 4% either have an instantaneous water heater or a dedicated boiler.

8.18 In all tenures the most common source of hot water is from a central heating system although only 68% of private rented dwellings have such a source compared with 88% of owner occupied dwellings. Immersion heaters are the second most common main source of hot water in all tenures. Some 25% of private rented dwellings have such a source compared with only 9% of owner occupied dwellings.

8.19 Almost 60% of all immersion heaters use economy 7 but this varies with tenure. Some 71% of immersion heaters in registered social landlord dwellings and 62% of owner occupied dwellings use economy 7 compared with 53% of local authority and 54% of private rented dwellings.

8.20 The main source of hot water available in dwellings shows some variation with dwelling age. Immersion heaters are more common in post 1980 dwellings than pre 1980 dwellings with 11% of pre 1980 dwellings and 18% of post 1980 dwellings having this as the main form of water heating.

8.21 The main source of hot water available varies with dwelling types. 88% of houses have a central heating system that is capable of providing hot water compared with only 67% of flats. In contrast 28% of flats have an immersion heater as the main form of water heating compared with only 9% of houses. Instantaneous heaters are more common in flats than houses.

CHANGES SINCE 1996

8.22 The proportion of dwellings that have a central heating system that provides the main source of hot water has increased since the last survey. Three quarters of dwellings had this form of water heating in 1996 and by 2001 this figure had increased to almost 84%. In both 1996 and 2001 some 91% of these systems used gas. The proportion of dwellings that have an immersion heater as the main source of hot water has decreased from 17% to 12%. However, the proportion of immersion heaters using *economy 7* has increased from 50% in 1996 to 60% in 2001.

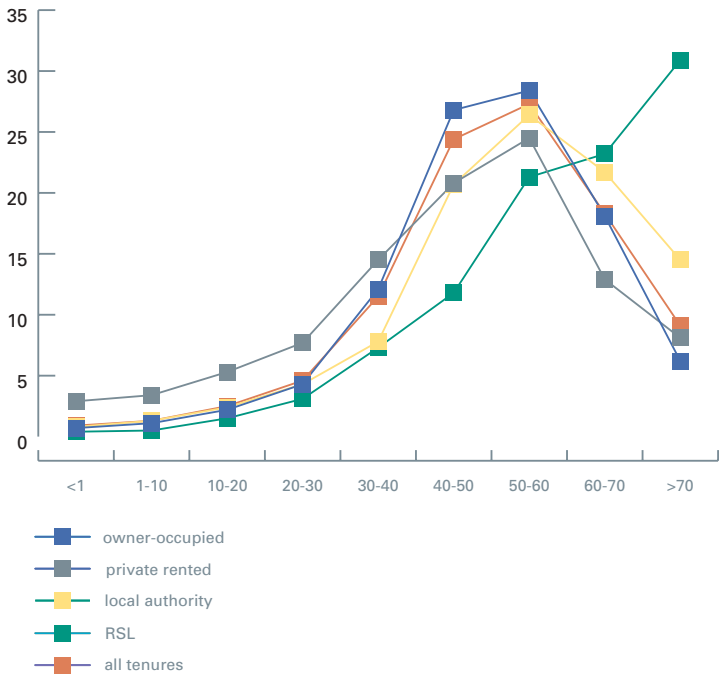
Energy efficiency

8.23 The energy efficiency of each dwelling is assessed through the Government's Standard Assessment Procedure (SAP). This is an energy cost rating which gives a measure of the annual unit energy cost of space and water heating for the dwelling under a standard regime, assuming specific heating patterns and room temperatures. In the SAP rating the higher the number the better the standard.

8.24 The energy cost rating (SAP) takes into account a range of factors that contribute to energy efficiency which include: thermal insulation of the building fabric; efficiency and control of the heating system; the fuel used for space and water heating; and ventilation and solar gain characteristics of the dwelling. It is not affected by the individual characteristics of the household occupying the dwelling or by the geographical location.[3]

8.25 The housing stock in England has an average SAP rating of 51 with just under 5% of dwellings having a rating of 20 or less. However, there is a significant variation between tenures, Figure 8.4. The registered social landlord stock has the highest average SAP rating (60) and just fewer than 3% of these dwellings are rated as 20 or less. The local authority and owner occupied stocks are not far behind in their mean SAP rating ratings (54 and 50 respectively) with 5% of local authority dwellings and some 4% of owner occupied dwellings having a SAP rating of 20 or below. The private rented stock is substantially worse with an average SAP rating of 45 and just under 12% of dwellings in the sector have an SAP rating of 20 or less.

Figure 8.4 Distribution of SAP rating by tenure 2001



8.26 The energy efficiency of dwellings varies between dwelling ages. In general older dwellings are less energy efficient. Post 1980 dwellings have the highest average SAP rating (63) whilst pre 1919 dwellings have the lowest (41).

8.27 The built form of a dwelling influences its energy efficiency as this determines the external surfaces over which heat can be lost through the building fabric. Low-rise purpose built flats have the highest average SAP rating of all built forms (61), with mid terrace dwellings having the second highest at 53. Converted flats were found to have the lowest average SAP rating ratings of 43.

8.28 The relationship between the SAP rating and the insulation measures and heating systems of dwellings described earlier in the chapter is very evident.

CAVITY WALLS

8.29 The energy efficiency of dwellings varies according to the external wall structure. On average dwellings with insulated cavities have a higher SAP rating (60), than those with uninsulated cavities (50), which in turn have a higher average SAP rating than those with non-cavity walls (43). Furthermore the percentage of dwellings with cavity walls increases with increasing SAP rating band and proportionally more dwellings in the higher SAP rating bands have insulated cavities than those in the lower SAP rating band.

3 See Appendix I for a more detailed definition of SAP and its methodology.

LOFT INSULATION

8.30 The energy efficiency of dwellings with lofts tends to increase with increasing thickness of loft insulation. On average dwellings with loft insulation of 100mm or more have a higher SAP rating (52) than those with less than 100mm (46). Furthermore, the percentage of dwellings with lofts that have more than 100mm insulation increases with increasing SAP rating band. Just under 55% of dwellings with a loft and a SAP rating less than 20 have 100mm or more of insulation compared with almost 82% of dwellings with a loft and a SAP rating over 70.

MAIN SPACE HEATING SYSTEM

8.31 The energy efficiency of dwellings tends to reflect the type of heating system present in the home. Dwellings with central heating (53) on average have a higher SAP rating than those with programmable heating (40), fixed heating (30) and non-fixed heating (10). Furthermore, the percentage of dwellings with central heating increases with increasing SAP rating band. Some 40% of dwellings with a SAP rating of 20 or below have central heating compared with almost 97% of dwellings with a SAP rating of over 70.

8.32 The influence on the average SAP rating of the fuel used by central heating systems is also significant. Dwellings with communal, gas and oil central heating having significantly higher SAP rating ratings (81, 54 and 43 respectively) than those with electric or solid central heating systems (25 and 22 respectively).

8.33 The individual influence of the stock characteristics, insulation measures and types of heating system on the dwelling SAP rating has been considered above. The combined effect of these characteristics and measures is summarised below, Table 8.1.

8.34 The proportion of dwellings in each of the SAP rating bands with cavity insulation, 100mm or more of loft insulation and central heating increases with increasing SAP rating. Furthermore the proportion of dwellings with gas central heating increases too. Not surprisingly, the proportion of post 1980 dwellings in each of the SAP rating bands increases with increasing SAP rating as typically these dwellings were built with such measures.

8.35 Private rented dwellings are far more common in the lower SAP rating bands than in the higher ones, reflecting the tendency for this stock to be older and less well insulated. In contrast RSL dwellings are almost 13 times as likely to have a SAP rating in excess of 70 than an SAP rating of 20 or below, reflecting the tendency for this stock to be newer and better insulated.

Table 8.1: Percentage of dwellings in the SAP band with the following stock and energy characteristics, 2001

	stock and energy characteristics:								
	post 1980	pre 1919	flats	*with lofts with 100mm of insulation*	*with non-cavity walls*	*with insulated cavity walls*	*with central heating*	private rented	RSL
SAP band:									
less than 20	2.8	47.9	17.8	55.1	54.5	17.6	39.8	25.1	3.3
20 to 30	6.5	41.3	15.7	57.5	52.1	26.6	47.5	17.4	4.4
30 to 40	5.4	40.0	11.7	59.7	50.6	16.6	72.2	13.1	4.1
40 to 50	4.7	22.2	10.8	64.3	35.5	13.4	90.2	8.8	3.2
50 to 60	14.6	18.3	16.8	70.8	26.4	36.1	93.3	9.3	5.1
60 to 70	37.9	7.9	22.6	80.7	14.1	59.0	94.3	7.3	8.3
over 70	59.2	2.0	48.7	82.2	7.7	54.5	97.1	9.2	22.3
all dwellings	18.5	20.8	18.7	69.0	29.9	35.9	86.0	10.4	6.6

8.36 The combined effect of cavity wall insulation and gas central heating in a post 1980 non-top floor flat results in an average SAP rating of 76. In contrast a pre 1919 house with non-cavity walls, no loft insulation and no central heating results in an average SAP rating of 22.

VACANT DWELLINGS

8.37 Vacant dwellings have a lower average energy rating (48) than occupied dwellings (51). This reflects the higher proportion of older and private rented dwellings that are vacant. Furthermore, vacant dwellings are less likely to have cavity walls, insulated cavities, lofts with 100mm or more of insulation and central heating than occupied dwellings.

CHANGE SINCE 1996

8.38 The average SAP rating of the housing stock has increased by 5 SAP points from 1996 to 2001, Table 8.2. Furthermore, in 1996 15% of the stock had a SAP rating of 30 or below but by 2001 this proportion was 9%.

8.39 The ranking of the tenures has not changed from 1996 to 2001. RSL dwellings had the highest average SAP rating and private rented dwellings the lowest average SAP rating in both 1996 and 2001. The greatest improvement was observed in local authority dwellings, which have shown an increase of over 7 SAP points since 1996. Although private rented dwellings have the lowest average SAP rating they have shown the same improvement as RSL dwellings with an increase of just over 6 SAP points.

8.40 The ranking by dwelling age has not changed since 1996 with modern dwellings having the highest average SAP rating and older dwellings having the lowest average SAP rating. The smallest observed improvement is in pre 1919 dwellings where the average SAP rating only increased by just under 2 SAP points. This is not surprising, as over 80% of these dwellings have non-cavity walls and thus have more limited cost-effective options for energy efficient improvements than more modern dwellings with unfilled cavities.

Table 8.2: Average SAP rating, 1996 and 2001

	Mean SAP	
	1996	2001
owner occupied	45.5	49.9
private rented	39.0	45.3
local authority	46.4	53.6
RSL	53.9	60.3
pre 1919	39.1	41.0
1919-1944	40.2	45.8
1945-1964	44.2	48.3
1965-1980	48.4	55.1
post 1980	60.5	63.3
all dwellings	45.4	50.6

Appendix A Sample structure and weighting

A.1 The 2001 EHCS comprised three separate but related surveys: an interview survey of households, a physical survey of dwellings, and a market value survey. The interview survey was conducted first, and the other three surveys were subsamples of this main sample.

The interview and physical survey samples

A.2 The issued sample for the EHCS had to include sufficient addresses to obtain information about types of dwellings which form a relatively small proportion of the national stock, such as those which are unfit, dwellings owned by LAs, and those which are privately rented. A random sample of addresses in England would have to be very large in order to ensure sufficient numbers of these types of dwellings, and would collect unnecessarily large numbers of more common dwelling types such as owner-occupied properties. Instead, in order to provide a more efficient sample and reduce the size and cost of the survey, a sample stratified by tenure was used. This over-represented rented tenures and under-represented owner-occupied stock. A longitudinal sample was also included to provide information on gross changes to the stock. The table below shows how the tenure distribution of the target achieved sample compares with that of the national stock:

Table A.1: Tenure distribution of target achieved sample compared with the national stock

Tenure	Target achieved sample (000s)	Target achieved sample (%)	National stock (%)
owner-occupied	10,200	51.0	69.7
private rented	2,100	10.5	10.8
LA	5,400	27.0	13.1
RSL	2,300	11.5	6.5
total	20,000	100.0	100.0

A.3 There is no comprehensive sampling frame of addresses or dwellings which provides accurate tenure information, so the main sample was constructed from an address file to which likely tenure had been added, based on postcode-level information. This information was not sufficiently precise to ensure that the main and longitudinal samples together would provide the number of cases required from rented tenures, so additional samples of all rented tenures were selected.

A.4 the combined sample issued for the interview survey comprised nearly 40,500 addresses drawn from sampling frames constructed from:

- the February 1999 postcode address file (PAF);
- addresses issued for, and where a response was obtained in, the 1996 EHCS (the longitudinal sample);
- lists of Registered Social Landlord (RSL) addresses;
- addresses issued for the 2000/01 Survey of English Housing (SEH) where respondents had agreed for their addresses to be passed on.

A.5 From these sources, nearly 28,500 cases were taken from the February 1999 PAF, about 1,300 from the RSL address lists, 1,200 LA addresses and 700 private rented addresses from the SEH respondents, and about 8,800 from the longitudinal sample.

THE PAF SAMPLE

A.6 An initial sample of 200,000 addresses was randomly selected from the PAF file, within Government Office regions. Information on likely dwelling tenure was added from a database compiled by the Buildings Research Centre (BRE). From this sample, 28,500 addresses were selected by tenure and region.

THE RSL TOP-UP SAMPLE

A.7 A list of RSLs was obtained from the Housing Corporation, giving the number of addresses each RSL owned in each region. A sample of 120 RSLs was selected within regions, with selection probability proportionate to the size of their stock in the region. These RSLs were asked to supply address lists of their properties. From these lists, 1,300 addresses were selected by region.

THE SEH TOP-UP SAMPLE

A.8 All tenants who were interviewed by the SEH between April-December 2000 were asked for permission to recontact them for a further survey. The addresses of all those who agreed and who were LA or private rented tenants were included in the sample for this top-up, except where another household at the same address had refused consent.

THE LONGITUDINAL SAMPLE

A.9 More than one fifth of the addresses in the 2001 issued sample had been issued, and had responded, in the 1996 EHCS. Most of these (5,200) were from the new PAF sample for 1996. The remainder were either issued as RSL or LA top-ups in 1996, or had first been issued in the 1991 EHCS.

A.10 In total, 40,500 addresses were issued for the interview survey. Of these, household data were collected for nearly 24,700 addresses, over 1,600 were identified as vacant, and nearly 1,500 were found to have been demolished or were no longer dwellings. All cases where interviews were achieved, and all which were vacant at interview, were then issued for the physical survey. All those for which physical surveys were achieved were issued for the market value survey.

A.11 The analyses in this report come from the information obtained for the achieved sample, ie for addresses at which both an interview and a physical survey were obtained together with that for addresses vacant at interview for which a physical survey was obtained: 17,500 cases in total. Figure 1 shows the flows of sampled addresses in diagrammatic form.

Grossing to national totals

A.12 Before the results of this complex sample survey can give a picture of the national housing stock and the households living in it, the achieved sample has to be grossed up. This involves applying a weight to each sample address so as to scale the achieved sample back to the national total and to remove any biases due to the sample design. It also involves adjusting for the number of dwellings found at each address, the number of households in those dwellings, and adjusting for non-response and response bias.

A.13 In outline, the grossing procedure:

- reversed the processes by which the various subsamples were chosen;
- combined the subsamples together;
- adjusted for response and response bias at each stage of the survey; and
- scaled the results by tenure to national and regional totals.

Two weights were attached to each of the 17,500 addresses, one which grossed them to total numbers of dwellings in England, and one which grossed to total households.

A.14 The sample for the 2001 EHCS was stratified by region and tenure, with subsamples of addresses drawn from a number of different sampling frames. These selection processes had to be taken into account by the grossing for each subset, so that each group of dwellings contributed correctly to the national total. Because the sampling frames were constructed at different dates, adjustments had to be made for those dwellings built subsequently.

A.15 The grossing also took account of differential response rates and response bias at each of the four stages of the survey, with adjustments made separately for each region. The four stages are:

- interviewer making contact at an address;
- interviewer completing a questionnaire at a contacted address;
- surveyor making contact at an address where an interview was achieved or which was vacant at interview;
- surveyor completing a survey at a contacted address.

A.16 At the interview stage, non-contacts were found to be more frequent in some subgroups of the sample than others, so contacted cases in these subgroups were given higher weights. Similar adjustments were made for non-response to the interview survey, and for non-contact and non-response to the physical survey.

A.17 At the interview contact and response stages, adjustments were made to occupied addresses by dwelling type (house, low-rise flat, high-rise flat); whether the address was in a multiethnic area; and whether the area had a high proportion of young occupiers, such as singles and students.

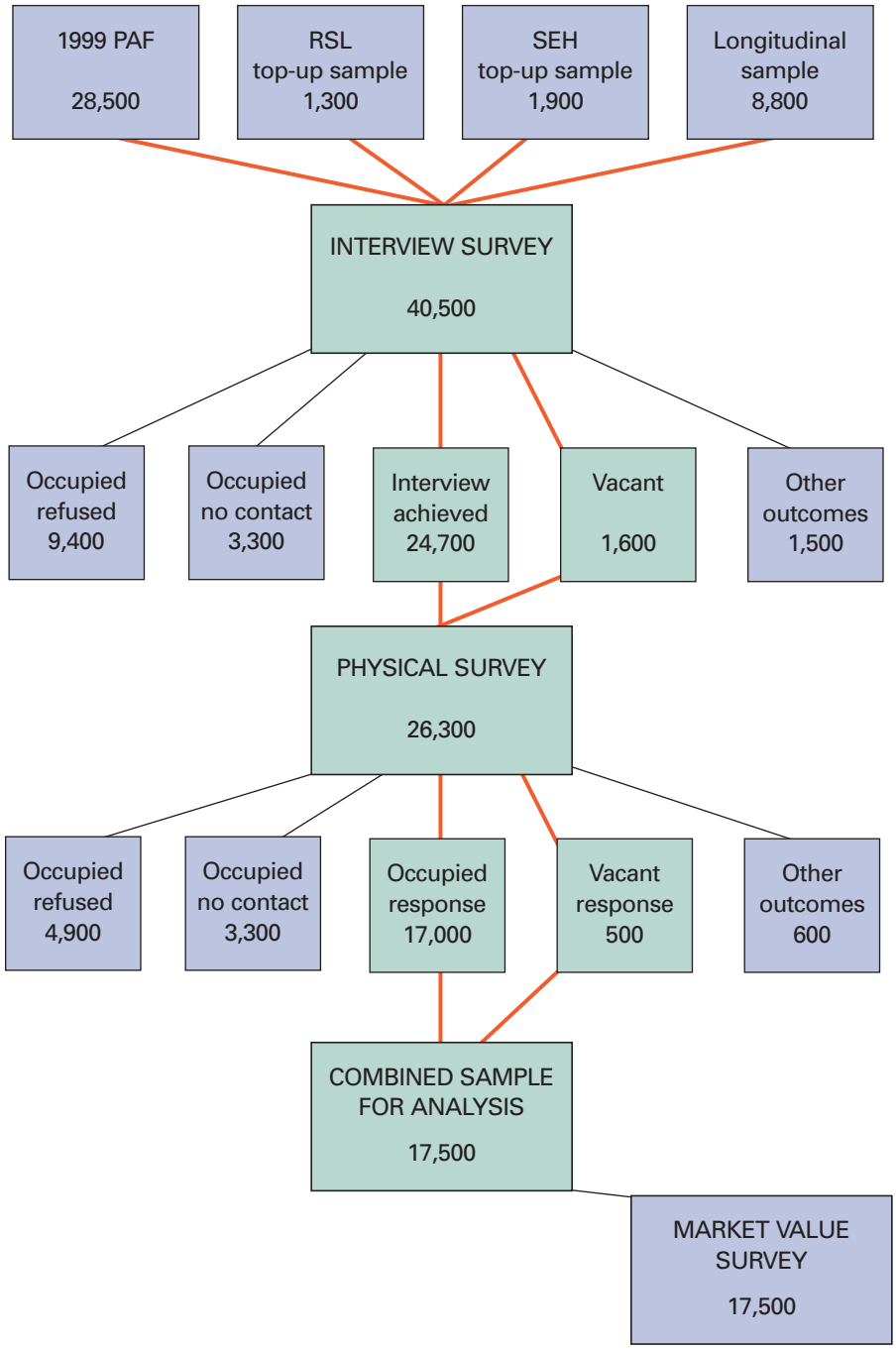
A.18 At the physical survey stage, the key variables relating to whether the surveyor made contact were dwelling type, household composition and tenure.

A.19 Higher response to the physical survey, once contact had been made, was achieved at local authority dwellings than at RSL ones; again adjustments were made for these differences.

A.20 Further response biases were taken into account by using control distributions for two key household variables: age of head of household and household size. Finally, the grossed totals were adjusted so that the numbers of dwellings in each tenure by region agreed with figures collected from other sources[1].

[1] Local authority housing stock figures were taken from the estimates supplied by authorities on the HIP1 form as part of the Housing Investment Program. RSL dwelling stock figures were taken from responses to the Housing Corporation's RSR form. Numbers of households in owner-occupied and private rented accommodation were adjusted to agree with results from the Survey of English Housing.

Figure A.1: The 2001 EHCS Sample Structure



Appendix B Survey methodology

The interview survey

B.1 As in 1996 the interview survey with householders was undertaken as the first stage in the sequence of EHCS surveys. A total of 40,486 addresses were issued for the interview survey. 63 of these addresses became available from The Survey of English Housing during fieldwork and were issued to interviewers in March. MORI was responsible for managing the survey fieldwork, and its own field force of interviewers undertook 50% of the interviews, with NOP contracted to carry out the other 50%. For the first time EHCS interviews were conducted using lap-top computers (CAPI) which helped to both speed up the interview process and improve the quality of the data collected. In total 475 interviewers from the two companies administered the CAPI questionnaires across England at the pre-selected addresses.

B.2 Following piloting in autumn 2000 and face to face briefings in January 2001 the interview survey fieldwork ran from January until July 2001. Interviewers were required to make a minimum of 6 calls at each address. These calls included at least one call during the evening and one at the weekend, plus one further evening or weekend call. At least 10% of all interviews were back checked by telephone. The questions were asked of the head of household or partner/spouse. Where the address contained more than one household the household with primary responsibility for the upkeep of the home was selected for interview. Where an occupier could not be contacted the interviewer had to establish whether the dwelling was occupied or vacant by asking questions of neighbours.

B.3 The interview content was reviewed for 2001 to ensure it continued to reflect the information needs of the Department and to reduce where possible the overall length of the interview. The information collected on both work done to the home and health and disability was significantly reduced. Permission to contact gas and electricity suppliers was no longer collected.

B.4 A wider range of attitudinal questions was included covering the home, its quality and condition, and the local area. Household attitudes to various aspects of the property were collected including its appearance, facilities, amenities and security. Owners were asked about dealing with builders/trades people to repair and maintain their home and the problems they may have experienced. More information was also collected on the adaptations needed by disabled people, or already provided, and the suitability of the accommodation in which they lived. The core questionnaire however remained largely unchanged from 1996 focusing on household characteristics, attitudes to the state of repair of the home, housing related costs, income, responsibility for maintenance and satisfaction with landlords. The average interview length was reduced from an hour in 1996 to forty five minutes in 2001, which contributed to the high response to this stage of the survey. (See Appendix A)

B.5 As part of their initial contact procedure interviewers were also asked to provide for every address in the sample a 'first impression' rating of the property and the neighbourhood on a scale of 1-7. As in 1996, when 'first impressions' were collected by surveyors, this information was used solely for the purposes of analysis of possible non-response bias in the survey results.

B.6 As part of the interview, private sector tenants were asked for permission to contact their landlord and to provide their landlord contact details. Those cases where this permission was given and contacts could be successfully traced, formed the sample for the *EHCS Private Landlord Survey*. This survey is used to determine the size and composition of different groups of landlords, their property portfolio, why they are involved in renting, how they approach the maintenance and management of their properties, their future plans and their views on a range of issues within the private sector market. This survey was conducted in late 2001 and will form the subject of a separate EHCS report.

The physical survey

B.7 The physical survey began in mid June 2001 following a six day residential briefing of all 200 surveyors. The fieldwork period was extended from end September to the end of December in order to maximise the return of full surveys. The number of surveyors working on the survey was nearly doubled compared to 1996 and rules set out about the maximum number of surveys any one surveyor could complete and the number that could be completed within any government office region. These changes were implemented to address issues that arose in the 1996 survey related to the impact of surveyor variability. The rules were designed to minimise the effect any one surveyor could have on the results of any one region or category of property. Although some allocation rules were relaxed towards the end of fieldwork, the principles of minimising the number of surveys completed by anyone surveyor both overall and in any one region were adhered to throughout. These rules therefore contributed to improving the statistical reliability of the survey and providing more robust measures of housing condition below the national level. Full details of the impact of surveyor variability on survey results are given in Appendix C. A 10% telephone back check was conducted of all surveys.

B.8 As in 1996 surveyors were asked to try and undertake a full inspection at all addresses at which a successful interview took place and all addresses that were identified as vacant. Overall, a sample of 26,300 addresses were issued for the physical survey. In addition surveyors completed a further set of surveys which formed part of a separate piloting exercise for the continuous survey to assess the impact of using a clustered sample design.

B.9 The physical survey questionnaire remained largely unchanged from 1996. Data collection continued to be paper based requiring surveyors to record details of the nature and type of each dwelling; the presence and condition of facilities and services; the condition of the internal and external building fabric; the presence and condition of shared facilities and services in blocks of flats or on estates and an assessment of the environment in which the dwelling was located. In addition to the completed survey form photographs of the dwellings and the local environment were taken. For the first time photographs were collected using digital cameras to improve image quality and processing efficiency. The survey took an average of 70 minutes.

B.10 A few additional questions were added to the form as part of a pilot exercise for the new Housing Health and Safety Rating System. The EHCS 2001 collected information on 5 major hazards – falls on stairs, falls on the level, falls between levels, fire, hot surfaces and materials. This information has informed development work on the implementation of the HHSRS. A separate report will be produced on the overall methodological approach and the key findings.

B.11 A limited number of new questions were also included to enable Housing Quality Indicators to be modelled for sample dwellings. The full HQI is a tool-kit to assess the design and quality of plans for new developments but can also be applied to existing dwellings. A separate report will be produced, outlining the overall methodological approach and key findings.

B.12 Given the introduction of new elements such as the HHSRS, it was important to reduce other elements of the form to keep the survey a manageable length. A separate pilot exercise revealed that it is possible to reduce the number of rooms that are inspected without impacting significantly on core data such as repair costs. For the 2001 survey, up to 5 rooms could be reported on in detail and these were pre-specified (living rooms, bedroom, kitchen, bathroom and circulation space).

B.13 Surveyors were also asked for the first time to record actual gas and electric meter readings as an initial step in work on energy modelling and fuel poverty. The energy section was revised to collect better information on the age and condition of electrical systems.

B.14 More detailed briefing was given to surveyors on age of elements to help in the classification of non-decent homes. The household questionnaire module was also shortened and modified to collect better information on the age of the property and some of its key elements, particularly major refurbishment on kitchens and bathrooms.

B.15 The key models for generating repair costs, energy ratings and income were updated and streamlined to help speed up the delivery of key indicators for analysis. The methodological approach however remained unchanged from 1996 thus enabling direct comparisons of results between the two surveys after allowing for cost updating.

B.16 As in previous surveys, including the 1996, calibration videos were used as a means of detecting any shift in surveyor markings of disrepair between surveys. This shift in the way surveyors may over time change the way in which they diagnose faults and specify remedial action needed is referred to as "surveyor drift". The information from the calibration videos is used to identify the scale of this drift and how it may be affecting repair costs between surveys (see Appendix F).

B.17 Alongside the traditional video approach, a new method of calibration was introduced in 2001, based on a series of workbook exercises. These were introduced following a successful pilot exercise that showed they provide useful additional information on the way in which surveyors are working in the field. The workbook approach uses a range of different photo examples and can cover a greater range of different dwelling types and elements. The workbooks were completed at the surveyor debriefing exercise after the majority of fieldwork had been completed. The workbook exercise has established a 2001 baseline and will be repeated for each annual phase of the new continuous survey operational from April 2002. This will provide a robust means of identifying and measuring any shift in the way surveyors are recording disrepair.

B.18 Surveyors were instructed to make every reasonable attempt to carry out full surveys, including at dwellings that were known to be vacant, and to complete the standard survey schedule. A total of 17,500 full surveys were achieved including 500 at vacant properties.

The market value survey

B.19 The market value survey was undertaken following completion of the physical survey. The Valuation Office Agency were contracted to value all dwellings for which a full physical survey had been achieved. Data was collected via a dedicated web site, set up and managed by MORI, that displayed for each property the digital photographs and a brief description of the dwelling and repair work needed taken from the physical survey. Local valuers from across the country were given on-line access to their individual quota of addresses and recorded two valuations as at 1st April 2001 – the value of the property in current condition and value if all necessary repairs were undertaken. Range checks were built into the web site to validate entries as they were made. Additionally for 2001, valuers were asked to provide information on the nature of the rental market and the level of demand for accommodation in the locality of each sampled dwelling. This information has contributed to analysis of the private rented sector and in identifying properties considered to be in areas of low demand.

Appendix C Data quality

C.1 This appendix outlines the main sources of error affecting the quality of results from the EHCS:

- the impact of non-response and missing data;
- sampling and measurement error;
- surveyor variability.

Non-response and missing data

C.2 It is essential that the EHCS provides a representative picture of the condition of housing stock in England. The complex sampling structure was designed to provide such a picture.

C.3 However, a certain number of the cases originally issued dropped out at various stages of the survey, due to non-response or incomplete data. In order to produce good quality, representative results from the survey, it is important to check whether these cases are typical of those that remain and if not, to counter any resulting response bias in the grossed data set.

C.4 Where non-response biases were found at any stage of the survey, adjustments were made to the responding cases in the grossing procedures for that stage. More information about this process is set out in Appendix A.

C.5 The 2001 EHCS data set reported on here is a core set for which full surveys were obtained. As a result, it contains very few variables with incomplete data. Where this does occur, for the purposes of analysis the affected dwellings or households have been distributed proportionally among the unaffected cases.

Sampling and measurement error

C.6 Any sample survey will suffer from two types of error:

sampling error, from using a sample of a population to draw conclusions about the whole population

measurement error, due to inaccuracies in individual measurements of survey variables because of the inherent difficulties of observing, identifying and recording what has been observed. Measurement error may occur randomly, or may reflect a problem experienced by most or all interviewers or surveyors.

Sampling error

C.7 Estimates of dwelling and household characteristics produced from a sample survey such as the EHCS may differ from the true population figures because they are based on a sample rather than a census. This difference is known as sampling error, and it is important to be able to estimate the size of this error when interpreting the survey results.

C.8 The size of the sampling error depends on the size of the sample; in general, sampling error is potentially larger in smaller samples. For example, a larger sampling error will be associated with estimates for converted flats than estimates for semi-detached or terraced houses, which are more numerous in the EHCS sample.

C.9 A frequently-used method of assessing the magnitude of sampling errors is to calculate a confidence interval for an estimate. This is an interval within which one can be fairly certain that the true value lies. The following section explains how to calculate 95% confidence intervals, using a method from standard statistical theory for large samples.

CONFIDENCE INTERVALS FOR PERCENTAGES

C.10 The 95% confidence interval for a percentage estimate, p, is given by the formula:

$p+/-1.96*se(p)$

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

$se(p)=\sqrt{(p(100-p)/n)}$

where n is the unweighted sample size.

C.11 Estimating standard errors for results based on a simple random sample, which has no stratification, are fairly straightforward. However, the sample for the EHCS is not a *simple* random one and 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, the design effects for the 2001 EHCS were assumed to be small and so no adjustment has been made in the examples which follow.

C.12 A 95 per cent confidence interval for a percentage may be estimated using Tables C.1 and C.2 below. The width of the confidence interval depends on the value of the estimated percentage and the sample size on which the percentage was based, as shown in Table 1. For percentages based on the whole core sample, the sample size, n, is the unweighted sample total; ie 17,532 dwellings or 16,750 households. For estimates based on sub-samples, Table C.2 lists the unweighted sample sizes for selected characteristics. The confidence interval can then be calculated by reading off the closest figure from Table 1, where the estimated percentages are shown as columns and the unweighted sample sizes as rows, and then adding and subtracting it from the estimated percentage.

Examples:

i) The estimated number of unfit dwellings is 885,000 or 4.2%. This percentage is based on the core sample of 17,532 dwellings. The corresponding number from the first cell in the top row of Table C.1 is 0.3%, giving a confidence interval of 3.9% to 4.5%[1].

ii) The estimated percentage of non-decent dwellings built before 1919 is 51.1%. This percentage is based on the sample of dwellings built before 1919, which is 3,470 (from Table 2). The corresponding number from the 11th row & 6th column of Table C.1 is 1.8%, giving a confidence interval of 49.6% to 53.2%.

iii) Confidence intervals can be calculated more accurately by using the formula above. For example (ii),

$se(p)=\sqrt{(51.1*48.9)/3470}=0.849$

so the confidence interval is 51.1 +/- 1.96*0.849, or 49.44% to 52.76%.

Table C.1: Look-up table for calculating 95 percent confidence intervals for a percentage

	5%	10%	20%	30%	40%	50%	60%	70%	80%	90%	95%
17,532	0.3	0.4	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.4	0.3
14,000	0.4	0.5	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.5	0.4
12,000	0.4	0.5	0.7	0.8	0.9	0.9	0.9	0.8	0.7	0.5	0.4
10,000	0.4	0.6	0.8	0.9	1.0	1.0	1.0	0.9	0.8	0.6	0.4
9,000	0.5	0.6	0.8	0.9	1.0	1.0	1.0	0.9	0.8	0.6	0.5
8,000	0.5	0.7	0.9	1.0	1.1	1.1	1.1	1.0	0.9	0.7	0.5
7,000	0.5	0.7	0.9	1.1	1.1	1.2	1.1	1.1	0.9	0.7	0.5
6,000	0.6	0.8	1.0	1.2	1.2	1.3	1.2	1.2	1.0	0.8	0.6
5,000	0.6	0.8	1.1	1.3	1.4	1.4	1.4	1.3	1.1	0.8	0.6
4,000	0.7	0.9	1.2	1.4	1.5	1.5	1.5	1.4	1.2	0.9	0.7
3,000	0.8	1.1	1.4	1.6	1.8	1.8	1.8	1.6	1.4	1.1	0.8
2,000	1.0	1.3	1.8	2.0	2.1	2.2	2.1	2.0	1.8	1.3	1.0
1,000	1.4	1.9	2.5	2.8	3.0	3.1	3.0	2.8	2.5	1.9	1.4
900	1.4	2.0	2.6	3.0	3.2	3.3	3.2	3.0	2.6	2.0	1.4
800	1.5	2.1	2.8	3.2	3.4	3.5	3.4	3.2	2.8	2.1	1.5
700	1.6	2.2	3.0	3.4	3.6	3.7	3.6	3.4	3.0	2.2	1.6
600	1.7	2.4	3.2	3.7	3.9	4.0	3.9	3.7	3.2	2.4	1.7
500	1.9	2.6	3.5	4.0	4.3	4.4	4.3	4.0	3.5	2.6	1.9
400	2.1	2.9	3.9	4.5	4.8	4.9	4.8	4.5	3.9	2.9	2.1
300	2.5	3.4	4.5	5.2	5.5	5.7	5.5	5.2	4.5	3.4	2.5
200	3.0	4.2	5.5	6.4	6.8	6.9	6.8	6.4	5.5	4.2	3.0
100	4.3	5.9	7.8	9.0	9.6	9.8	9.6	9.0	7.8	5.9	4.3

[1] It should be noted that the sample design sought to minimise the error associated with the national estimate of unfitness. Thus, the confidence interval quoted in this example would be narrower if a sample design factor was taken into account.

Table C.2: Sample sizes of main variables for calculating confidence intervals

a) households

Variable	No. of households (weighted) (thousands)	Percentage of households (weighted)	Sample size (unweighted)
All households	20,510	100	16,750
Extended Tenure			
own with mortgage	8,673	42.3	5,034
own outright	5,816	28.4	3,450
privately rent – unregulated	1,435	7.0	951
privately rent – regulated	169	0.8	136
privately rent – not accessible	403	2.0	281
rent from local authority	2,685	13.1	4,324
rent from RSL	1,329	6.5	2,569
Household type			
couple, no dependent child(ren), under 60	4,085	19.9	2,756
couple, no dependent child(ren), aged 60 or over	2,925	14.3	2,348
couple with dependent child(ren)	4,986	24.3	4,029
lone parent with dependent child(ren)	1,597	7.8	1,753
other multi-person households	1,443	7.0	1,237
one person under 60	2,397	11.7	1,750
one person aged 60 or over	3,077	15.0	2,877
Ethnic Identity			
white	19,081	93.0	15,461
black	497	2.4	495
all asian	644	3.1	538
other	289	1.4	237
Other ethnic groups			
indian	258	1.3	182
pakistani & bangladeshi	275	1.3	267
all ethnic minorities	1,429	7.0	1,270
Employment status			
Full time employment	10,458	51.0	7,057
Part-time employment	1,597	7.8	1,362
Retired	5,568	27.1	4,850
Unemployed	649	3.2	800
Full time education	297	1.4	233
Other inactive	1,940	9.5	2,437
Income quintiles			
lowest quintile group	4,102	20.0	4,505
2	4,103	20.0	3,905
3	4,102	20.0	3,182
4	4,102	20.0	2,723
highest quintile group	4,101	20.0	2,435
Vulnerability			
Youngest person in household under 11	4,913	24.0	4,379
of which are under 5	2,746	13.4	2,438
Oldest person in household over 60	6,919	33.7	6,047
of which are over 75	2,739	13.4	2,337
Long term illness or disability	4,501	21.9	4,497
On means tested benefits	4,707	22.9	6,065
Length of residence			
Less than 1 year	2,212	10.8	1,673
one year	1,811	8.8	1,489
two years	1,318	6.4	1,095
3-4 years	2,198	10.7	1,898
5-9 years	3,648	17.8	3,045
10-19 years	4,584	22.3	3,651
20-29 years	2,274	11.1	1,893
30+ years	2,465	12.0	2,003

Table C.2: Sample sizes of main variables for calculating confidence intervals

a) households (continued)

Variable	No. of households (weighted) (thousands)	Percentage of households (weighted)	Sample size (unweighted)
Region			
North	5,954	29.0	5,715
South East	8,219	40.1	6,662
Midlands and Rest of England	6,337	30.9	4,373
Type of area			
City centre	601	2.9	575
Urban	4,531	22.1	4,097
Suburban residential	11,269	54.9	9,083
Rural residential	2,787	13.6	1,983
Village centre	774	3.8	571
Rural	548	2.7	392
IMD2000			
most deprived 10%	3,115	15.2	3,739
10 to 20%	2,876	14.0	2,727
20 to 30%	2,435	11.9	2,080
30 to 40%	2,163	10.5	1,650
40 to 50%	1,793	8.7	1,370
50 to 60%	1,793	8.7	1,248
60 to 70%	1,553	7.6	1,035
70 to 80%	1,520	7.4	974
80 to 90%	1,578	7.7	954
least deprived 10%	1,685	8.2	888
Whether a household is living in a decent or non decent home			
Decent	13,838	67.5	10,827
Not decent	6,672	32.5	5,923
Whether a household passes or fails the components of decent homes			
Thermal Comfort			
Pass	15,203	74.1	12,067
Fail	5,307	25.9	4,683
Disrepair			
Pass	18,758	91.5	15,226
Fail	1,752	8.5	1,524
Fitness			
Pass	19,728	96.2	16,077
Fail	782	3.8	673
Modernisation			
Pass	20,031	97.7	16,256
Fail	478	2.3	494
Whether a household lives in a poor neighbourhood or not			
Poor neighbourhood	18,039	88.0	14,252
Other neighbourhood	2,232	10.9	2,283
Unsure	238	1.2	187

Table C.2: Sample sizes of main variables for calculating confidence intervals

b) dwellings

Variable	No. of dwellings (weighted) (thousands)	Percentage of dwellings (weighted)	Sample size (unweighted)
All dwellings	21,140	100.0	17,532
Tenure			
All dwellings			
owner-occupied	14,771	69.9	8,708
privately rented	2,191	10.4	1,545
local authority (LA)	2,790	13.2	4,547
registered social landlords (RSL)	1,388	6.6	2,732
Occupied dwellings			
owner-occupied	14,546	68.3	14,446
privately rented	2,106	9.5	2,002
local authority (LA)	2,682	12.7	2,682
registered social landlords (RSL)	1,327	6.3	1,327
Vacant dwellings			
owner-occupied	329	1.5	326
privately rented	198	0.9	189
local authority	108	0.5	108
registered social landlords	61	0.3	61
all occupied	20,457	96.8	16,750
all vacant	683	3.2	782
Dwelling age			
pre 1919	4,406	20.8	3,470
1919-1944	3,739	17.7	3,212
1945-1964	4,476	21.2	4,368
1965-1980	4,604	21.8	4,022
post 1980	3,915	18.5	2,460
Dwelling type			
terraced house	6,005	28.4	5,358
semi-detached house	5,853	27.7	4,640
bungalow or detached house	5,328	25.2	3,408
flat	3,955	18.7	4,126
all houses	17,186	81.3	13,406
all flats	3,955	18.7	4,126
Type of area			
city centre	633	3.0	617
urban	4,728	22.4	4,354
suburban residential	11,559	54.7	9,453
rural residential	2,858	13.5	2,057
village centre	795	3.8	591
rural	568	2.7	408
Government office region			
north	6,200	29.3	6,025
midlands, east and south west	8,437	39.9	6,939
south east (including london)	6,503	30.8	4,568

Table C.2: Sample sizes of main variables for calculating confidence intervals

b) dwellings (continued)

Variable	No. of dwellings (weighted) (thousands)	Percentage of dwellings (weighted)	Sample size (unweighted)
Whether dwelling is decent			
Decent	14,147	66.9	11,213
Non-decent	6,993	33.1	6,319
Fitness of dwelling			
pass	20,255	95.8	16,742
fail	885	4.2	790
Disrepair of dwelling			
pass	19,270	91.2	15,881
fail	1,870	8.8	1,651
Modernisation of dwelling			
pass	20,638	97.6	17,011
fail	502	2.4	521
Thermal comfort of dwelling			
pass	15,581	73.7	12,537
fail	5,560	26.3	4,995
Whether dwelling is in a poor neighbourhood			
Poor neighbourhood	18,517	87.6	14,809
Other neighbourhood	2,372	11.2	2,493
Unsure	251	1.2	202

Measurement error

C.13 There are rather more practical difficulties in assessing the condition of an individual dwelling than the characteristics of a household. These difficulties mainly stem from the technical problems in the diagnosis and prognosis of any defects found in the dwelling. Difficulties are found particularly in the assessment of unfitness because of the subjective nature of the fitness standard, but also in the assessment of the state of repair. As a consequence, it is quite possible that two surveyors inspecting a given dwelling may have different views on whether or not it is unfit and also on the extent and severity of disrepair and the work needed to remedy it. Assessments of the condition of the area surrounding the dwelling are also prone to subjective variation.

C.14 Estimates of unfitness or disrepair rates in the dwelling stock are based upon individual surveyor assessments and are dependant on the 'average performance of all the surveyors. If a different surveying force had been used, then the estimate of the number of unfit properties would have been slightly different. Thus there is some uncertainty or error associated with such estimates, and the greater the variability between surveyors the greater is this error. It is therefore important to control this variability as much as possible and to understand the effect that any residual variability can have on the survey results.

Surveyor variability

C.15 Experience has shown that surveyor variability cannot be completely eliminated or even reduced to an insignificant level, but precautions were taken during the 2001 EHCS to control its impact:

> by selecting a larger sample of survey dwellings and stratifying them by tenure to increase the proportion of poorer condition dwellings, to minimise the impact of any deviant observations (see Appendix A);

- by using a large number of surveyors, and ensuring that they each work in more than one region wherever possible;

- by ensuring that the surveyors were provided with a rigorous and uniform 6-day briefing, designed to minimise subjectivity, which was backed up by survey manuals and supervision in the field.

C.16 Despite the rigorous surveyor training program, it is natural that a degree of personal judgement and subjectivity will still affect surveyors' assessments. As an example, some surveyors will be more likely, after weighing the evidence, to conclude that a particular dwelling is fit, whereas others will be more likely to conclude that the same dwelling is unfit. This is an additional source of variance in estimates from the physical survey data.

MEASURING BETWEEN-SURVEYOR VARIABILITY

C.17 An experiment was conducted during the physical survey fieldwork to estimate the impact that subjective surveyor assessments have on the precision of measurements from the physical survey. A subset of nearly 10,500 of the addresses issued to surveyors was divided geographically into 216 tranches, and the 160 participating surveyors were divided into 80 pairs, some of which were allocated to each tranche. The addresses in each tranche were allocated to one of these surveyor pairs, then randomly allocated between the two surveyors in the pair. Physical surveys were achieved at over 7,200 of the addresses issued in this way. The experiment relies on the assumption that the dwellings issued to each surveyor in a pair will tend to have similar characteristics, so enabling an estimate of between-surveyor variability to be made.

C.18 From the results of this experiment, the extent of the effect of surveyor assessments was calculated as the estimate of the *correlated surveyor variance* ρ_s; this is defined as the ratio of the between-surveyor variance to the total variance of an estimate[2]. Thus ρ_s lies between 0 and 1. If ρ_s is relatively large, it indicates that the between-surveyor variance forms a large proportion of the total variance, or, put another way, that the differences between surveyors in the way they make assessments are relatively large compared with the variability within each individual surveyor's assessments.

C.19 The results of the experiment indicate that the estimates of correlated surveyor variance vary considerably from one measure to another. Many of the largest values (greater than 0.1, ie 10% of total variance) are associated with situations where a considerable amount of subjective interpretation by surveyors is required. For example, this estimate is relatively high for measures of unfitness or disrepair coded as 'acceptable' or 'satisfactory', which involve a fairly subjective distinction, but much lower where 'unfit' or 'defective' is coded, where these outcomes are more objectively defined: see Examples 1 and 2 below. High values of correlated surveyor variance are also observed, for example, in assessments of whether a dwelling in very poor condition should be repaired or demolished, and on local area problems such as traffic noise or air quality.

C.20 The results also show that, for some variables, the correlated surveyor variance tends to be higher for dwellings built after 1945 than those built earlier, and higher in urban rather than rural areas. Tenure and dwelling type, however, make little difference.

C.21 It is important to note that the correlated surveyor variance estimates are much lower for derived variables, such as 'fails decent homes standard: thermal comfort', which are calculated from several different pieces of information recorded by the surveyors.

C.22 Examples:

i) The EHCS 2001 estimates that 50.81% of dwellings have an overall fitness assessment of 'satisfactory'.

[2] Kevin Pickering (2003) *Estimating Surveyor Variability in the English House Condition Survey.* London: National Centre for Social Research

The standard error (se_1) for this estimate is 0.3776. This estimate of the standard error allows for the differential weighting, but not for the surveyor effect. The estimate of the correlated surveyor variance from Table C.3 can be used to obtain an estimate of the standard error which does allow for the surveyor effects.

The correlated surveyor variance (ρ_s) for this measure was estimated to be 0.1240. This can be combined with the average surveyor allocation (M = 17,532/160 = 109.6) to estimate the design factor (DEFT), a measure of the effect of clustering, as follows:

$DEFT = \sqrt{(1+(M-1)\ \rho_s)} = \sqrt{(1+(109.6-1) \times 0.1240)} = 3.803$

This estimate of the DEFT can be used to estimate the true standard error (se_c):

$se_c = DEFT \times se_1 = 3.803 \times 0.3776\% = 1.436\%$.

The value of DEFT shows that the true standard error is a little under four times larger than that estimated from the weighted survey data alone. Using the survey data alone would have given a confidence interval of (50.1%, 51.6%), whereas the true confidence interval should be (48.0%, 53.6%).

ii) The EHCS 2001 estimates that 4.16% of dwellings have an overall fitness assessment of 'unfit'.

The standard error (se_1) for this estimate is 0.1508%. The correlated surveyor variance (ρ_s) for this measure was estimated to be 0.0034. The estimate of the design factor (DEFT) is:

$DEFT = \sqrt{(1+(M-1)\ \rho_s)} = \sqrt{(1+(109.6-1) \times 0.0034)} = 1.170$

and the estimate of the true standard error (se_c) is:

$se_c = DEFT \times se_1 = 1.170 \times 0.1508\% = 0.176\%$.

The value of DEFT shows that the true standard error is 17% larger than that estimated from the weighted survey data alone. Using the survey data alone would have given a confidence interval of (3.86%, 4.45%), whereas the true confidence interval should be (3.81%, 4.50%).

Table C.3: Values of correlated surveyor variance

Description	Correlated surveyor variance
Tenure	
owner occupier	0.0000
PRS	0.0000
LA	0.0000
RSL	0.0000
Dwelling type	
House	0.0000
Low-rise	0.0000
High-rise	0.0000
Construction date	
Pre-1919	0.0000
1919-1944	0.0000
1945-1964	0.0011
1965-1980	0.0000
post 1980	0.0000
Thickness of insulation in roof	
50mm or less	0.0134
75mm	0.0106
100mm	0.0134
150mm	0.0000
>150mm	0.0275
no insulation	0.0000
Do shared facilities exist?	
yes	0.0092
Nature of area	
city centre/urban	0.0587
suburban residential	0.0497
rural	0.0189
Visual quality of area	
best (1-2)	0.0260
good (3)	0.0165
average (4)	0.0264
poor/worst (5, 6, 7)	0.0530
Problems with...	
litter, rubbish, graffiti, vandalism, dog mess	0.0791
vacant sites & buildings, intrusive industry, non-conforming use	0.1014
air quality, traffic, m'ways, railways, planes, parking	0.1326
scruffy gardens or buildings	0.0820
Fitness assessment of food preparation areas	
unfit/defective	0.0095
acceptable	0.0801
satisfactory	0.0842
Date kitchen last refurbished	
pre 1970	0.0000
1970s	0.0035
1980s	0.0000
1990s/in progress	0.0017
original	0.0000
Fitness assessment – bathroom	
unfit/defective	0.0074
acceptable	0.0994
satisfactory	0.1024
Date bathroom last refurbished	
pre 1970	0.0004
1970s	0.0000
1980s	0.0005
1990s/in progress	0.0000
original	0.0114
Fitness assessment WC	
unfit/defective	0.0000
acceptable	0.1173
satisfactory	0.1138
Overall fitness assessment	
unfit	0.0034
defective	0.0340
acceptable	0.0915
satisfactory	0.1240
Is there cavity wall insulation?	
yes	0.0072
no	0.0072
Not decent	
fails thermal comfort	0.0000
fails unfit	0.0036
fails disrepair	0.0064
fails modernisation	0.0000
Appropriate course of action for dwelling	
repair/demolish	0.1117

Appendix D Decent homes – definition

D.1 This appendix gives a detailed definition of the decent home standard and explains the four criteria that a decent home is required to meet. These are:

- it meets the current statutory minimum standard for housing;
- it is in a reasonable state of repair;
- it has reasonably modern facilities and services;
- it provides a reasonable degree of thermal comfort.

D.2 The decent home definition provides a minimum standard. Landlords and owners doing work on their properties may well find it appropriate to take the dwellings above this minimum standard.

Criterion A: the dwelling meets the current statutory minimum standard for housing

D.3 The current minimum standard for housing is the Fitness Standard (s604 of the Housing Act 1985 amended by Schedule 9 of the 1989 Local Government and Housing Act). Dwellings unfit under this legislation fail this criterion. Under the Fitness Standard, a dwelling is fit for human habitation unless, in the opinion of the local housing authority, it fails to meet one or more of various requirements. These are listed in the Glossary.

Criterion B: the dwelling is in a reasonable state of repair

D.4 A dwelling satisfies this criterion unless:

- one or more key building components are old and, because of their condition, need replacing or major repair; or
- two or more other building components are old and, because of their condition, need replacement or major repair.

BUILDING COMPONENTS

D.5 Building components are the structural parts of a dwelling (eg wall structure, roof structure), other external elements (eg roof covering, chimneys) and internal services and amenities (eg kitchens, heating systems).

D.6 Key building components are those which, if in poor condition, could have an *immediate* impact on the integrity of the building and cause further deterioration in other components. They are the external components plus internal components that have potential safety implications and include:

External Walls

Roof structure and covering

Windows/doors

Chimneys

Central heating boilers

Gas fires

Storage Heaters

Electrics

D.7 If any of these components are old and need replacing, or require immediate major repair, then the dwelling is not in a reasonable state of repair and remedial action is required.

D.8 Other building components are those that have a less immediate impact on the integrity of the dwelling. Their combined effect is therefore considered, with a dwelling not in a reasonable state of repair if 2 or more are old and need replacing or require immediate major repair.

'OLD' AND IN 'POOR CONDITION'

D.9 A component is defined as 'old' if it is older than its expected or standard lifetime. The component lifetimes used are consistent with those used for resource allocation to local authorities and are listed at the end of this appendix.

D.10 Components are in 'poor condition' if they need major work, either full replacement or major repair. The definitions used for different components are at listed at the end of this appendix.

D.11 One or more key components, or two or more other components, must be both old and in poor condition to render the dwelling non-decent on grounds of disrepair. Components that are old but in good condition or in poor condition but not old would not, in themselves, cause the dwelling to fail the standard. Thus for example a bathroom with facilities which are old but still in good condition would not trigger failure on this criterion.

D.12 Where the disrepair is of a component affecting a block of flats, the flats that are classed as non-decent are those directly affected by the disrepair.

Criterion C: The dwelling has reasonably modern facilities and services

D.13 A dwelling is considered not to meet this criterion if it lacks three or more of the following facilities:

- a kitchen which is 20 years old or less;
- a kitchen with adequate space and layout;
- a bathroom which is 30 years old or less;
- an appropriately located bathroom and WC;
- adequate noise insulation;
- adequate size and layout of common entrance areas for blocks of flats.

D.14 The ages used to define the 'modern' kitchen and bathroom are less than those for the disrepair criterion. This is to take account of the modernity of kitchens and bathrooms, as well as their functionality and condition.

D.15 There is some flexibility inherent in this criterion, in that a dwelling has to fail on three criteria before failure of the decent homes standard itself. Such a dwelling does not have to be fully modernised for this criterion to be passed: it would be sufficient in many cases to deal with only one or two of the facilities that are contributing to the failure.

D.16 These standards are used to calculate the national standard and have been measured in the English House Condition Survey (EHCS) for many years. For example, in the EHCS:

- a kitchen failing on adequate space and layout would be one that was too small to contain all the required items (sink, cupboards, cooker space, worktops etc) appropriate to the size of the dwelling;
- an inappropriately located bathroom or WC is one where the main bathroom or WC is located in a bedroom or accessed through a bedroom (unless the bedroom is not used or the dwelling is for a single person). A dwelling would also fail if the main WC is external or located on a different floor to the nearest wash hand basin, or if a WC without a wash hand basin opens on to a kitchen in an inappropriate area, for example next to the food preparation area;

- inadequate insulation from external airborne noise would occur where there are problems with, for example, traffic (rail, road or aeroplanes) or factory noise. Reasonable insulation from these problems should be ensured through installation of double glazing;

- inadequate size and layout of common entrance areas for blocks of flats would occur where there is insufficient room to manoeuvre easily, for example where there are narrow access ways with awkward corners and turnings, steep staircases, inadequate landings, absence of handrails, low headroom etc.

Criterion D: the dwelling provides a reasonable degree of thermal comfort

D.17 The definition requires a dwelling to have both:

- efficient heating; and

- effective insulation.

D.18 Under this standard, efficient heating is defined as any gas or oil programmable central heating or electric storage heaters/programmable solid fuel or LPG central heating or similarly efficient heating systems[1]. Heating sources which provide less energy efficient options fail the decent home standard.

D.19 Because of the differences in efficiency between gas/oil heating systems and the other heating systems listed, the level of insulation that is appropriate also differs:

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

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

Component lifetimes and definition of 'in poor condition' used in the national measurement of the disrepair criterion

COMPONENT LIFETIMES

D.20 Table D.1 shows the component lifetimes within the disrepair criterion to assess whether the building components are 'old'. These are used to construct the national estimates of the number of dwellings that are decent and those that fail.

[1] for example efficient heating based on renewable sources

Table D.1: Component lifetimes used in the disrepair criterion

Building components (key components marked*)	Houses and bungalows	All flats in blocks of below 6 storeys	All flats in blocks of 6 or more storeys
Wall structure*	80	80	80
Lintels*	60	60	60
Brickwork (spalling)*	30	30	30
Wall finish*	60	60	30
Roof structure*	50	30	30
Chimney*	50	50	N/A
Windows*	40	30	30
External doors*	40	30	30
Kitchen	30	30	30
Bathrooms	40	40	40
Heating – central heating gas boiler*	15	15	15
Heating – central heating distribution system	40	40	40
Heating – other*	30	30	30
Electrical systems*	30	30	30

IN POOR CONDITION

D.21 Table D.2 sets out the definitions used within the disrepair criterion to identify whether building components are 'in poor condition'. These are consistent with EHCS definitions and will be the standard used to monitor progress nationally through the EHCS. The general line used in the EHCS is that, where a component requires some work, repair should be prescribed rather than replacement unless:

- the component is sufficiently damaged that it is impossible to repair;
- the component is unsuitable, and would be even it were repaired, either because the material has deteriorated or because the component was never suitable; (for external components) even if the component were repaired now, it would still need to be replaced within 5 years.

Table D.2: Component lifetimes used in the disrepair criterion

	Definition of 'in poor condition' used in EHCS
Wall structure	Replace 10% or more or repair 30% or more
Wall finish	Replace/repoint/renew 50% or more
Chimneys	1 chimney needs partial rebuilding or more
Roof structure	Replace 10% or more to strengthen 30% or more
Roof covering	Replace or isolated repairs to 50% or more
Windows	Replace at least one window or repair/replace sash or member to at least two (excluding easing sashes, reglazing painting)
External doors	Replace at least one
Kitchen	Major repair or replace 3 or more items out of the 6 (cold water drinking supply, hot water, sink, cooking provision, cupboards
Bathroom	Major repair or replace 2 or more items (bath, wash hand basin,
Electrical system	Replace or major repair to system
Central heating boiler	Replace or major repair
Central heating distribution	Replace or major repair
Storage heaters	Replace or major repair

Appendix E Costs to make decent

E.1 These are the estimated costs of all outstanding work required to bring currently non decent dwellings up to standard. They are based on the items that the dwelling currently fails on and therefore do not take account of any additional work that may subsequently arise to keep the dwelling to standard (for example, necessary work that may arise in future due to the ageing of components or amenities or general deterioration). The cost do not therefore include work a prudent owner might carry out at the same time in respect of anticipated future problems or other repair and improvement work that is not covered or required to bring the property up to standard or maintain it at that standard. These costs take into account different regional building prices, access costs (such as scaffolding) and the economies of scale that the public sector can benefit from but do not include VAT or profit mark-ups that would be expected in prices quoted by contractors.

THERMAL COMFORT

E.2 The costs for thermal comfort represent the most economic way of achieving the standard. For example if a dwelling has storage heaters and less than 200mm of loft insulation, the cost to improve the loft insulation is used rather than the cost to replace the heating system with mains gas. The costs used for heating are derived from standard costs produced by the Valuation Office Agency for ODPM use in for example the calculation of the Major Repairs Allowance. The costs are scaled to reflect actual dwelling size.

DISREPAIR

E.3 The costs for dealing with disrepair are repair costs derived from the repair cost model (see Appendix F) and reflect the work needed to deal with all aspects of current disrepair.

MODERNISATION

E.4 Where dwellings fail the modernisation component, the costs include work to remedy all items that currently fail. Technically, where a dwelling failed on three items fixing just one of them would make the dwelling decent. The cost base for work to modernise kitchens, bathrooms and windows is the same as that for dealing with thermal comfort, scaled for dwelling size and/or window area as appropriate. The costs for other work was derived price books.

UNFITNESS

E.5 Where dwellings are unfit, the costs to make fit are used (see under 'repair costs' in the Glossary).

E.6 Where a problem causes failure under more than one heading, for example a kitchen requires replacing due to both disrepair and modernisation aspects, any double-counting of costs is removed.

Appendix F Repair costs

Calculating base repair costs

F.1 The EHCS uses 4 types of information to calculate base repair costs:

- Surveyors assessments of the type of repair needed and its extent (see Box 1 for details).
- The surveyor's description, for external items, of the materials from which the element is constructed.
- Building dimensions and configuration derived from surveyors measurements and observations.
- Unit prices for different types of job from the 1996 National Schedule of Rates (NSR), adjusted for inflation using the BICS national price index.

Box 1: Types of work included in and excluded from repair costs

Included:

- all work to the external fabric of the building, chimneys, roof, roof and soil drainage, windows, doors, dormers, bays, porches, balconies, damp proof course, treatment of inappropriate gradients/levels of ground adjacent to the dwelling;
- additional work to deal with structural instability: e.g. underpinning, tying in of walls, treatment of fungal or insect infestation, replacement of cavity wall ties, etc;
- work to the internal fabric: ceilings, floors, internal and partition wall surfaces, internal doors and stairs;
- work to amenities and services inside the dwelling: kitchen, bathroom, WC, electrical wiring, plumbing, gas pipes, heating, and water heating;
- work to common areas and access ways in blocks of flats: floors, walls, ceilings, doors, screens, windows, lighting and balustrades;
- work to shared facilities on estates: All stores and common rooms, communal parking facilities, surfaces and fences and common services.

Excluded:

- work to fences and boundary walls;
- work to underground drainage;
- hidden work to structure or foundations;
- work to plant associated with shared facilities, e.g. lift motors, communal boilers, washing machines in laundry rooms, etc.

F.2 The surveyor makes the assessment element by element, usually surveying the interior first, and then the exterior of the dwelling. Internally an assessment of a sample of representative rooms is made – two living rooms plus hall and kitchen and bathroom. The work identified as needed in the sample of rooms is scaled up to reflect the total number of rooms in the dwelling. All the internal facilities and services are surveyed individually.

F.3 For the common areas in blocks of flats surveyors select only part of the common areas to survey and these are taken as representative of the whole of the common areas and scaled up accordingly.

F.4 Externally the surveyor considers each element in turn looking at the building from 2 vantage points (views) which between them encompass the whole building.

F.5 Surveyors' assessments are based on the following assumptions and instructions:

- dwellings have an indefinite life;
- surveyors to treat work as a programme of actions stretching into the future. Where replacement of elements or major work can be delayed by immediate less drastic repairs, this is to be done;
  - to repair rather than replace unless:
  - this is impossible;
  - it means that the element will still need replacing within 5 years;
  - the element needs replacing for other reasons e.g. element is unsuitable for intended purpose.
- standard of work should result in element being fully functional without any question of modernisation, upgrading or purely cosmetic improvements;
- not to employ economies of scale when deciding on how much of an element to treat.

F.6 The surveyor describes how much work is needed by assessing:

- the proportion of elements needing work from areas;
- the number of units needing work for elements that can be treated as individual entities, e.g. doors, windows, baths;
- linear metres of work to elements not measurable by area.

F.7 For the last two the quantity given is multiplied by the unit cost for doing the job specified. For the elements where the work is specified as a proportion this is first converted to a quantity from the dimensions taken of the dwelling/building and then the quantity is multiplied by the cost/sqm for the type of work specified. In all cases it is assumed that a like for like replacement is undertaken and the costs selected reflect the materials from which the element is currently constructed, e.g. a slate roof is always replaced with a slate roof.

F.8 The cost calculated is for the individual dwelling so in the case of flats, the cost of works to the common areas and exterior, recorded for the whole building, is divided by the number of flats and this is added on to the interior, amenities and services costs for the individual dwelling.

F.9 If the work recommended by the surveyor to any element exceeds the cost of totally replacing that element, the latter is used as the cost.

Dealing with missing data

F.10 The cases included in the physical survey database are those for which a full survey was conducted. But even where the form was completed fully the surveyor may have omitted to provide some information needed for the assessment of disrepair.

F.11 Imputation to deal with this missing data is carried out in the following staged process:

A) DWELLING DIMENSIONS

Dimensions may be implausible or simply missing. For flats there can be inconsistencies between the size of the module surveyed and the number of dwellings reported in the module. Where possible, errors are identified and corrected by cross correlating data from different parts of the survey schedule and checking against the distribution of dimensions of dwellings of similar type. If this process does not produce an acceptable result, the dimensions are set to the average dimensions for dwellings of that type and age.

B) MISSING COMPONENTS OF AN ELEMENT WITHIN A SINGLE VIEW

For example, a roof might be recorded as 5/10th pitched and 5/10th flat but only the work required to the pitched part has been filled in. Here it is assumed that the proportion in need of treatment in the component with no data is the same as that in the components with data.

C) MISSING VIEWS WITHIN AN ELEMENT

This is where an element (e.g. roof covering) has data in one view, but missing data in the other view. The missing view is treated as needing the same proportion of work as the observed view.

D) WHOLE MISSING ELEMENTS

If work to an entire element (e.g. windows) is missing, the repair costs for the element is estimated by averaging over those elements for which data is available.

E) ANY FURTHER MISSING DATA

Any dwellings that are still missing costs after this stage use the average cost for dwellings of a similar age and type.

Add-ons, uplifts, prelims and modifications to base costs

F.12 In addition to the base costs described above there are more complex factors to account for in calculating realistic repair cost measures. These are:

- preliminaries required before the work can commence;
- access equipment such as scaffolding to get safely to where the work is needed;
- corrections to model the economies of scale.

F.13 In practice the price that is paid for a job to be done will vary in relation to the scale of the contract under which the work is carried out and also the region in which the work is undertaken. In terms of scale, the cost of any one job will depend on how much more work is being done to the dwelling at that time, or whether the work is being carried out to more than one dwelling. For example re-roofing a house in a contract of 50 similar jobs will cost less than if it is done as a one-off. Prices paid vary depending on the region of England and regional price factors are included in the cost model.

The two types of cost measure

F.14 How all the cost components are put together depends on how the repair costs are being used. Two measures are constructed for the survey.

- a measure of the extent of disrepair so we can investigate whether parts of the stock tend to be in better or worse state of repair than others – standardised costs.
- a measure of how much it would cost to carry out the specified work to the dwelling to give some idea of the likely level of investment needed – required expenditure.

F.15 These 2 different cost measures are constructed as follows:

STANDARDISED COSTS

These are costs in £ per square metre (£/m^2) based on prices for the East Midlands region. It is assumed that all work is undertaken by contractors on a block contract basis. The size of the contract is assumed to be five dwellings.

REQUIRED EXPENDITURE

These are total costs per dwelling in pounds (£s) and represent the best estimate of what the specified work would actually cost. These costs take into account regional variations in prices and assume different project sizes for work to houses in different tenures. In the owner occupied and private rented sectors, the contract size for work to houses is taken as one. In the social rented sector, the contract size is taken as being the number of dwellings on the estate, unless the dwelling is not on an estate, in which case the contract size is assumed to be one For flats, the contract size for exterior works is the size of the block regardless of tenure. In all cases it is assumed that the work is carried out by a building contractor regulations. These costs should not be used for assessing differences in condition between different tenures or dwelling types as they vary according to dwelling size, tenure and location.

Urgent repairs, repairs and replacements and comprehensive repairs

F.16 The extent of the work required in a given timescale depends on the assumptions made by the surveyor about the timing of that work as repair costs are presented with reference to three different time frames.

URGENT REPAIRS

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 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 includes all interior work.

REPAIRS AND REPLACEMENTS (BASIC REPAIRS)

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.

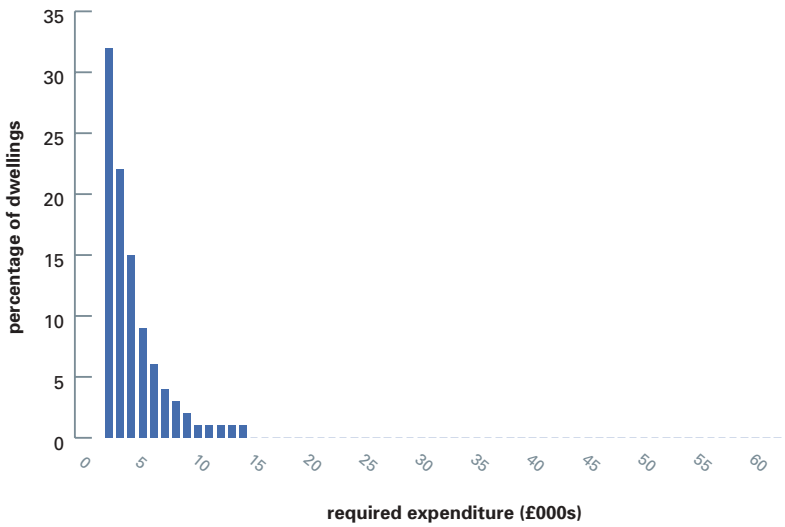
COMPREHENSIVE REPAIR

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.

Distributions and average values

F.17 The distributions of any repair cost variables are not statistically normal (Gaussian) and correspond more closely to a log-normal distribution as shown below.

Figure F.1 Distribution of required expenditure for repairs and replacements for the whole stock, 2001



F.18 There are a large proportion of cases with zero or very low costs and a very small number with very high costs. The effect of this is that the 'average' as represented by the mean, is closer to the 75th percentile than the median. The mean values can be used, together with the number of dwellings to give some idea of the total repair bill for a group of dwellings but they do not represent the 'typical' case for that group of dwellings. This typical case is best represented by the median value.

Indexing of standardised costs

F.19 Absolute comparisons between the outputs from the 1996 and 2001 cost models are not possible because surveyors specified less work for a given fault in 2001 than in 1996. This was established through the calibration tests undertaken as part of the briefing of surveyors (see Appendix B, B.16). Change is therefore measured by using relative shifts which look at how the distribution of disrepair has changed between 1996-2001. To do this, the distributions are indexed taking the median point as 100 and seeing how the medians in sub-groups compare with this. For example: The mean standardised repair cost for all households in 1996 is £26.39, for those in RSL homes it is £17.95 creating an index of 17.95/26.39*100=68 for this tenure in 1996. In 2001 the mean for all households is £18.66, for those in RSL homes it is £11.77 creating an index of £11.77/18.66*100=63.

F.20 As the index for the dwellings in the RSL stock has decreased from 68 in 1996 to 63 in 2001 this suggests a small improvement in their position relative to other tenures. It may not in fact have improved in real terms at all as other tenures may simply have deteriorated. What we do know is that there has been relative change between this tenure and other tenures.

Appendix G Measuring change 1996-2001

G.1 This appendix looks at the way in which change in levels of unfitness and non-decency has been measured across the stock between 1996 and 2001.

G.2 Much of the analysis on change is reported as the simple difference in the two positions as measured by the 1996 and 2001 surveys respectively ie it is a measure of net change. Such measures, while useful, can mask significant compensating movements in the period between the two surveys and do not therefore reflect the true dynamics of the changing condition of the housing stock.

G.3 To enable more detailed analysis of such dynamics the EHCS sample was designed to incorporate a 'longitudinal' component so that a proportion of addresses first surveyed in 1996 were revisited in 2001. (See Appendix A) Using this longitudinal sample it is possible to track movements between tenures, losses from the stock, moves between decency and non decency and fitness and unfitness. Ie to measure gross flows rather than the more static net position.

G.4 In making such measures of gross change in condition, it is particularly important to establish that the change identified is real change rather than a reflection for example of a change in survey methodology or different standards adopted by surveyors. The approach adopted in quality assuring such measures is described below.

Measuring gross flows in unfitness

G.5 Through the EHCS longitudinal sample, it is possible to view movements in the unfit stock in two directions ie look at what has happened to dwellings by 2001 that were identified as unfit in 1996, and the condition in 1996 of those dwellings identified as unfit in 2001. However, such a comparison is not straight forward because of the need to allow for some degree of surveyor variability (See Appendix C). Some of the dwellings where the fitness assessment had changed between 1996 and 2001 (from fit to unfit or vice versa) may actually have seen no real significant change in condition. The difference in the rating will have arisen because the two different surveyors involved in each year came to a different judgement when faced with the same evidence. This is more likely to happen in circumstances where the decision as to whether a dwelling is fit or not is borderline.

G.6 To unravel the issue of surveyor variability from that of real change, a data and hand analysis was undertaken of all dwellings that had gone from 'fit to unfit' and 'unfit to fit' between the two survey years, which could not be supported by other evidence from the survey. For example, if a previously unfit dwelling was now classified as fit, but there was no evidence of any work being undertaken over the intervening years, the survey forms, interview schedules and photographs from the two years were examined by a BRE EHCS trained Environmental Health Officer to validate whether significant change had indeed taken place, or whether the judgement should have been the same – either fit or unfit in both survey years.

G.7 At the end of this exercise estimates of real change were produced using the revised judgements (although these were not changed for other analysis) and then scaled to represent the total housing stock in both years, to provide the figures used in Figure 6.1.

G.8 As well as the changes to dwellings that existed in both years, survey data was used to estimate how many of the dwellings that were surveyed in 1996 had been lost from the stock by 2001, and whether they had previously been classed as fit or unfit. All new dwellings added to the stock since 1996 were classified as fit.

Measuring gross flows in decent homes

G.9 Like the unfitness gross flows, the longitudinal sample has been used to estimate the movements in and out of decent/non-decent homes between 1996 and 2001. Each component of decent homes (disrepair, modernisation, unfitness and thermal comfort) was examined individually as the processes of improvement and deterioration are different for each. The aim was to estimate how much of the apparent improvement and deterioration was real and could be substantiated by other data e.g. on work carried out to the dwelling and how much was likely to be the result of surveyor variability. The estimates for the individual aspects were then combined, taking account of any overlaps, to produce an overall picture for decent homes.

G.10 The modernisation component of decent homes has 6 individual indicators and a dwelling must fail on 3 or more of these to be considered non-decent (see Appendix D). Four of the components relate to design features and location of the dwelling, so dwellings are extremely unlikely to deteriorate on any of these. The other two relate to the age of kitchen and bathroom amenities which will pass beyond the age threshold simply with the passage of time. For modernisation, the sample was split into 4 groups as below:

	2001 passes	2001 fails
1996 passes	Group 1	Group 2
1996 fails	Group 3	Group 4

G.11 For each group, each of the 6 individual measures was examined at in turn. For group 2, those passing in 1996 but failing in 2001, data on age of amenities in both1996 and 2001 was compared to indicate whether the element had reached the age threshold and hence deterioration was real. For group 3, those failing in 1996 but passing in 2001, only those dwellings where relevant work had been carried out 1996-2001 (from the interview survey data) or those where the occupants had changed were deemed to have been likely to have improved. Similar analysis was carried out with those cases that remained decent or still failed (groups 1 and 4). This data on whether change in each of the 6 items was real was then combined to create a new estimate of decent homes modernisation in 2001.

G.12 For disrepair, the sample was again split into the same 4 groups, but this time based on disrepair in 1996 and 2001. For the two groups (groups 2 and 3) where there was a change, each of the 13 individual building elements was examined in turn. Dwellings can deteriorate on disrepair for one of two reasons:

- The element was already in poor condition in 1996 but not quite old enough to fail then. If that element had no work carried out to it and passed over the age threshold by 2001, it would become non-decent.

- The element was beyond its lifetime in 1996 with some disrepair, but not bad enough to be deemed to fail. If no work was carried out to that element, it would deteriorate sufficiently to fail by 2001.

G.13 These assumptions were modelled on the 1996 data to estimate whether a dwelling was 'incipient non-decent' in 1996, ie likely to fail by 2001 if no work was carried out to it and the element had reached its age threshold. Looking at group 2 (those fine in 1996 but failing by 2001) the deterioration was only taken as real if they were classed as 'incipient non-decent' in 1996 and there was no evidence of relevant work carried out and there had been no change of occupant. For those moving from non-decent to decent, evidence of work done or a new occupant or newly vacant was taken to indicate that the change was likely to be real. Data for all elements was then combined, removing any double-counting, to obtain overall estimates for disrepair.

G.14 For fitness, the estimate was obtained from the method discussed in 'measuring gross flows in unfitness'.

G.15 For thermal comfort, it was assumed that dwellings were extremely unlikely to deteriorate: the main instances would be where gas central heating had been replaced with storage heaters without any upgrading of insulation or where heating system components had been removed from vacant dwellings to prevent them being stolen or vandalised. Any apparent deterioration was therefore assumed to be the result of surveyor variability. The 2001 data on heating and insulation was more reliable for than in 1996 so any dwellings passing in 1996 but failing by 2001 were assumed to have really failed in 1996. Hence for estimating real change in this component only, the 1996 assessment was revised.

G.16 Using the longitudinal sample, a revised overall decent homes measure for 2001 was created by combining the four revised components. This was then tabulated against the revised 1996 estimate of decent homes. Finally, these estimates from the longitudinal sample were scaled to the final grossed totals for decent homes in 1996 and 2001 to produce the final estimates of gross flows.

Appendix H Treatment of incomes

H.1 Household net income in this report refers to the annual net income of the Household Reference Person (HRP) and any partner from wages, pensions, savings and benefits. It does not include any Council Tax Benefit, Housing Benefit, Income Support Mortgage Interest (ISMI) or any payments made under a Mortgage Payment Protection Insurance policy (MPPI). This net income is modelled from raw data collected on gross incomes with missing data imputed as described below.

H.2 The interview survey collected information on the main components of income for the household reference person and any partner. These included:

- earnings from main job employee or as self-employed;
- earnings from other work;
- earnings from Government schemes;
- state benefits including state pensions;
- occupational pensions, private pensions and annuities;
- savings and investments;
- any other regular income such as rent from lodgers, maintenance payments etc.

H.3 The data was thoroughly checked for inconsistencies and errors although data was only corrected where it was totally implausible. Many of these errors occurred due to miscoding of time periods in relation to amounts so a £10,000 per year occupational pension could appear as £10,000 per week. Where respondents said that they were in receipt of benefits but were unable to specify the amount, an estimate was inserted using basic allowances where possible. Households were only allocated income from benefits that they said that they received. If they were entitled to other benefits but were not claiming them, then estimates for these were not included. Where respondents were working and amounts were missing, data from the New Earnings Survey on average incomes by sex, age and socio-economic group was used to fill these missing values. Where they were receiving a private or occupational pension, mean amounts from respondents where we had data split by age, sex and socio-economic group were used to fill in missing data.

H.4 Tax and national insurance payable was calculated, where appropriate, and these amounts were deducted to give total net annual household income. Where the calculated annual net income was lower than the household's basic calculated income support, the amount was changed as follows:

- where these households were receiving any means tested benefits they were allotted their basic income support plus any disability premiums that they might qualify for.
- where were not in receipt of these benefits, their income was reset to missing (as it was assumed key components had been missed or seriously underestimated).

For households where the income was missing, this data was filled in using the mean for households as defined by working status, socio-economic group and whether HRP had a partner. Table H.1 illustrates the number and percentage of cases having different types of data imputed.

Table H.1: Type of imputation used in EHCS income modelling for achieved sample

	Frequency	(%)
None, all data OK	10,239	61.1
Some private sources imputed	1,861	11.1
Some benefit amounts imputed or changed	1,687	10.1
Some private and some benefits imputed	479	2.9
HHold total imputed using group mean	530	3.2
Was below basic IS – imputed using group mean	328	2
Was below basic IS – imputed using basic IS	1,497	8.9
Was below basic IS – imputed using basic IS plus disability premiums	129	0.8
Total	16,750	100

H.5 Information was collected on savings for HRP and partner. Some 30% of cases had missing information on savings. Segmentation analysis using CHAID was carried out to develop a model for dealing with these missing values. Information was also collected on total income of other benefit units in the household, Housing Benefit, Council Tax Benefit, ISMI and MPPI but not included in the income described in this report.

H.6 Comparisons carried out with incomes reported in the Expenditure and Food Survey (EFS) showed close agreement apart from households containing additional adults; Table H.2. For these households, the EHCS incomes used in this report are lower as household income just includes HRP and any partner only whereas the EFS household income includes all household members. However, when EHCS incomes include other benefit units in the households, the figures are much closer.

Table H.2: Comparisons between EHCS and EFS net weekly income

	EFS Weekly Income (£)	EHCS 2001 Weekly Income (£)	
		HRP and partner (as reported here)	All benefit units in the household
Household Composition			
One Adult	215	199	199
One Adult Retired	108/208	147	147
One Adult Not Retired	263	256	256
One Adult, One Child	222	195	196
One Adult, Two or More Children	237	250	251
One man, one woman	440	403	428
One man, one woman retired	169/350	283	298
One man, one woman not retired	508	489	522
One man, one woman, one child	526	542	553
One man, one woman, two children	571	543	548
One man, one woman, three children	533	555	559
Two adults, four or more children	467	433	436
Three adults	592	392	628
Three adults, one or more children	638	467	614
Four or more adults	840	418	860
Four or more adults, one or more children	630	444	800
Tenure			
Owner Occupied	476	428	473
Private Rented	368	303	374
Local Authority	211	181	209
RSL	229	188	214
HRP Age			
Under 30	383	331	395
30-49	494	466	501
50-64	450	395	466
64-74	276	227	257
75 and over	210	173	188

H.7 Data on households in receipt of means tested benefits as defined here (excluding Council Tax Benefit) showed good agreement with data from the Family Resources Survey (FRS); Table H.3.

Table H.3: Proportion of households receiving means tested benefits[1]

	FRS	EHCS
Owner occupied	8	9
Private rented	30	30
Social rented	70	69
All households	22	23

[1] excluding Council Tax Benefit

Appendix I Energy cost rating (SAP)

SAP rating

I.1 SAP is the UK Government's standard methodology for home energy cost ratings[1]. SAP ratings allow comparisons of energy efficiency to be made, and can show the likely improvements to a dwelling in terms of energy use. The Building Regulations require a SAP assessment to be carried out for all new dwellings and conversions. Local authorities, housing associations, and other landlords also use SAP ratings to estimate the energy efficiency of existing housing. The latest version is SAP 2001, effective from April 2002 in England and Wales. This is the version used throughout this report.

I.2 The SAP ratings give a measure of the annual unit energy cost of space and water heating for the dwelling under a standard regime, assuming specific heating patterns and room temperatures. The fuel prices used are averaged over the previous three years across all regions in the UK. The SAP takes into account a range of factors that contribute to energy efficiency, which include:

- thermal insulation of the building fabric;
- the shape and exposed surfaces of the dwelling;
- efficiency and control of the heating system;
- the fuel used for space and water heating;
- ventilation and solar gain characteristics of the dwelling.

I.3 SAP is not affected by the individual characteristics of the household occupying the dwelling or by the geographical location.

SAP scale

I.4 The SAP rating is expressed on a logarithmic scale, which normally runs from 1 (very inefficient) to 120 (very efficient). In extreme cases, however, the formula that defines the rating can result in figures outside this range and when applied to the EHCS sample produces some negative values and some values greater than 120. In practice when issuing SAP ratings the negative values would be reset to 1 and those values greater than 120 to 120. For the purpose of this report, the values produced by the SAP formula that fall outside the defined scale have been retained so as not to distort the profiles of energy efficiency within the housing stock.

Calculation of SAP ratings from 2001 EHCS data

I.5 A computerised version of the SAP 2001 methodology is used to calculate the SAP rating for each dwelling included in the 2001 EHCS physical sample. Most of the data required for the calculation of the SAP is available from the survey, either directly from the questions asked or as a result of further modelling. Those data items that are not collected have very little impact on the final calculated rating. Where data items are missing these are dealt with using default information based on information from dwellings of the same age, built form, tenure, number of floors and size.

Changes to the SAP methodology between 1996 and 2001

I.6 Between 1996 and 2001 the SAP methodology was changed significantly. Consequently, the average SAP for the EHCS 1996 data was recalculated using the 2001 methodology and model. The effect of this was to increase the average SAP by approximately 1.5 SAP points. This shift in SAP occurs as a direct result of the following amendment to the SAP methodology:

> The indexing formula for the SAP rating has been revised to make the SAP rating essentially independent of floor area for a given built form. This formula was devised so that the SAP96 calculation and the SAP2001 calculation for a dwelling would be the same if the floor area was equal to a nominated average value. The EHCS sample contains more than 17,000 dwellings of varying build type and floor area and in this case the application of the formula causes a shift in the average SAP due to the distribution of the floor area for the sample.

I.7 There is also a shift in the SAP due to differences introduced by the revised energy cost deflator in SAP2001 (again this is based on some average distribution of fuel type consumed that differs from that given by EHCS data).

I.8 The calculated difference is explained completely by these two reasons. All of the results presented in this report have been calculated using the 2001 SAP methodology.

Glossary of definitions and terms

AGE/CONSTRUCTION DATE OF DWELLING

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

BASIC AMENITIES

Dwellings lack basic amenities where they do not have all of the following:

- kitchen sink;
- bath or shower in a bathroom;
- a wash hand basin;
- hot and cold water to the above;
- inside WC.

BEDROOM STANDARD

The bedroom standard is the same as that used by the General Household Survey, and is calculated as follows:

- a separate bedroom is allocated to each co-habiting couple, any other person aged 21 or over, each pair of young persons aged 10-20 of the same sex, and each pair of children under 10 (regardless of sex);
- unpaired young persons aged 10-20 are paired with a child under 10 of the same sex or, if possible, allocated a separate bedroom;
- any remaining unpaired children under 10 are also allocated a separate bedroom.

The calculated standard for the household is then compared with the actual number of bedrooms available for its sole use to indicate deficiencies or excesses. Bedrooms include bed-sitters, box rooms and bedrooms which are identified as such by informants even though they may not be in use as such.

AREA TYPE

city centre: this is the area immediately around the core of large cities;

urban/other urban centre: this is the area around the core of towns and small cities, and also older urban areas which have been swallowed up by a metropolis;

suburban residential: this is the outer area of towns or cities, characterised by large planned housing estates;

rural residential: these are the suburban areas of villages, often meeting the housing needs of people who work in nearby towns and cities;

village centre: these are traditional villages or the old heart of villages which have been suburbanised;

isolated rural: these areas are predominantly rural e.g. agricultural with isolated dwellings or small hamlets.

City and other urban centres and suburban residential areas are sometimes referred to generically as 'urban' with the remaining categories as 'rural'.

COST TO MAKE DECENT/FIT

See 'repair costs'.

DECENT HOMES

A decent home is one that satisfies all of the following four criteria:

- it meets the current statutory minimum standard for housing – at present this is the fitness standard;
- it is in a reasonable state of repair;
- it has reasonably modern facilities and services;
- it provides a reasonable degree of thermal comfort.

See Appendix D for further details.

DOUBLE GLAZING

This covers factory made sealed window units only. It 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).

TYPE OF DWELLING

Dwellings are classified, on the basis of the surveyors' inspection, into the following categories:

small terraced house: a house less than 70m^2 forming part of a block where at least one house is attached to two or more other houses;

medium/large terraced house: a house 70m^2 or more forming part of a block where at least one house is attached to two or more other houses;

semi-detached house: a house that is attached to one other house;

detached house: a house where none of the habitable structure is joined to another building (other than garages, outhouses etc.);

bungalow: a house with all of the habitable accommodation on one floor. This excludes chalet bungalows and bungalows with habitable loft conversions, which are treated as houses;

purpose built flat, low rise: a flat in a purpose built block less than 6 storeys high. Includes cases where there is only one flat with independent access in a building which is also used for non-domestic purposes;

purpose built flat, high rise: a flat in a purpose built block of at least 6 storeys high;

converted flat: a flat resulting from the conversion of a house or former non-residential building. Includes buildings converted into a flat plus commercial premises (typically corner shops).

EMPLOYMENT STATUS OF HRP

full time employment: working at least 30 hours per week as an employee or as self-employed. It includes those on government-supported training schemes but excludes any unpaid work;

part-time employment: working less than 30 hours per week as an employee or as self-employed. It excludes any unpaid work;

retired: fully retired from work i.e. no longer working, even part time. Includes those who have retired early;

unemployed: includes those registered unemployed and those who are not registered but seeking work;

other inactive: includes people who have a long term illness or disability and those looking after family/home;

employed full or part time: as above.

FITNESS

The Fitness Standard is defined by the 1989 Local Government and Housing Act:

section 604: under Section 604 covering all the stock a dwelling is fit for human habitation unless in the opinion of the local housing authority it fails to meet one or more of the following requirements and by reason of that failure is not reasonably suitable for occupation: it is free from disrepair; it is structurally stable; it is free from dampness prejudicial to the health of the occupants (if any); it has adequate provision for lighting, heating and ventilation; it has an adequate piped supply of wholesome water; it has an effective system for the draining of foul, waste and surface water; it has a suitably located WC for the exclusive use of the occupants; it has for the exclusive use of the occupants (if any) a suitably located bath or shower and wash-hand basin, each of which is provided with a satisfactory supply of hot and cold water; and there are satisfactory facilities in the dwelling home for the preparation and cooking of food, including a sink with a satisfactory supply of hot and cold water.

section 352: in addition to the requirements for dwellings laid down in Section 604, the additional requirements for an HMO as laid down in Section 352 are: there are 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; it has an adequate number of suitably located water-closets for the exclusive use of the occupants; it has, for the exclusive use of the occupants, an 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; there are adequate means of escape; and there are adequate other fire precautions.

For cost to make fit, see under ‘repair costs’.

FLOOR SPACE

The usable internal floor area of the dwelling as measured by the surveyor, rounded to the nearest square metre. It excludes integral garages, balconies, stores accessed from the outside only and the area under partition walls.

FLOOR SPACE PER PERSON

The total useable internal floor area of the dwelling in square meters divided by the number of people in the dwelling.

HEATING SYSTEM

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 any boiler;

programmable heating: electric storage heaters which run on off-peak electricity and programmable gas convector heaters;

fixed heaters: other individual heaters/fires, either fixed to the fabric of the building or not readily moved;

non-fixed heaters: individual heaters/fires which are not fixed or wired into a fused spur which can be easily carried by a single person from room to 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.

HOUSEHOLD REFERENCE PERSON (HRP)

This is the person in whose name the dwelling is owned or rented or who is otherwise responsible for the accommodation. In the case of joint owners and tenants, the person with the highest income is taken as the HRP. Where incomes are equal, the older is taken as the HRP. This procedure increases the likelihood that the HRP better characterises the household's social and economic position.

HOUSEHOLD TYPES

The classification is based on the primary family unit within the household only. This means that households in the first 4 categories (couple based and lone parents) may include other people in other family units. For example, a couple with dependent children who also have an elderly parent or a grown up non-dependant child living with them are still classed as a couple with dependent children. The types are:

couple aged under 60 with no dependent children: includes married and cohabiting couples aged under 60 with no children or with non-dependent child/children only;

couple aged 60 or over with no dependent children: includes married and cohabiting couples aged 60 or more, with no children or with non-dependent child/children only;

couple with dependent children: includes married and cohabiting couples with dependent child/children (i.e. persons aged under 16, or single persons aged 16 to 18 and in full-time education);

lone parent with dependent children: single parent with dependent child/children (i.e. persons aged under 16, or single persons aged 16 to 18 and in full-time education);

other multi-person household: includes house/flat sharers, lone parents with non-dependent children and households containing more than one couple or lone parent family;

one person under 60: single person household where occupant is aged under 60;

one person aged 60 or over: single person household where occupant is aged 60 or more.

HOUSES IN MULTIPLE OCCUPATION (HMO)

An HMO is a dwelling or a converted residential building which is occupied by more than one household. This is a very wide definition used for research purposes that uses the following classification of HMOs:

bed-sit houses, or traditional HMOs: houses (and flats) which have been converted to provide flatlets, bedsitters and rooms, each occupied by a separate household. Within these houses, two or more households will share one or more facilities (e.g. bathrooms) or will have common circulation space between the rooms that are for their exclusive use;

shared houses: dwellings occupied on a shared basis, typically by students or other groups of people who club together to rent a house or flat. Only those dwellings occupied by two or more non-related adults who are not partners, are included in this definition. Individuals buying a house together are excluded;

households with lodgers: households catering for lodgers on a small scale, and not living as part of the main household. Lodgers would share one or more facilities with the main household without having the facilities to prepare their own food independently. Meals are usually provided;

purpose built HMOs: this group is similar to category (l) but units have been purpose built to this specification. They are often sheltered accommodation with private rooms, but shared kitchens and bathrooms. Includes student halls of residence and nurses homes;

self-contained converted flats: dwellings which are (converted to) fully self-contained with all amenities behind their own front door, but which were originally constructed as one house.

A further group of HMOs can be included in the definition but are not covered by this report because they provide commercially based accommodation:

hostels, guest houses, boarding houses, B&Bs: these HMOs provide accommodation on a commercial basis, most often meals are with accommodation, but some provide kitchen facilities and are self catering.

INCOME

This is the annual net income of household reference person and any partner from wages, pensions, savings and benefits. It does not include council tax benefit, housing benefit, Income Support Mortgage Interest or any payments made under a Mortgage Payment Protection Insurance policy. See Appendix H for more details.

INDEX OF MULTIPLE DEPRIVATION (IMD) 2000

This is a ward level composite index, based on six ward level 'domain' indices. The domains are: income; employment; health deprivation and disability; education, skills and training; housing; and geographical access to services. They replace the 1998 Index of Local deprivation. Further information is provided in *Measuring Multiple Deprivation at the Small Area Level: The Indices of Deprivation 2000* (DETR, 2000).

LIMITED DEMAND

See 'market value'.

LONG TERM ILLNESS OR DISABILITY

Whether anybody in the household has a long-tern illness or disability. The respondent assesses this and long-term is defined as anything that has troubled the person, or is likely to affect them, over a period of time.

MARKET VALUE

The market value survey asks experienced professional valuers to provide a market value for each case in the survey. The valuers are given photographs and details of the property including information such as the number of bedrooms, type of garden, parking provision, visual appearance of the area, and a list of the repairs needed to the property. From this information and their own intelligence of the local market, the valuers estimate the price that the property would sell for to an owner-occupier on the open market. For the social sector properties, this is the price that the sitting tenant would expect to pay before any discount is applied.

The valuers also provide an assessment of the relative demand for housing in the area, using the categories 'high', 'moderate', 'limited' and 'negligible'. For this report, 'limited' and 'negligible' are combined under a general category of 'limited' demand. Neither 'limited' or 'negligible' demand equate to the ODPM estimate of low demand but does seek to identify the general popularity of certain neighbourhoods in comparison to others.

MEANS TESTED BENEFITS (IN RECEIPT OF)

Households where the HRP or partner receives Income Support, income-based Job Seekers Allowance, Working Families Tax Credit, Disabled Persons Tax Credit or Housing Benefit. Note that Council Tax Benefit is excluded from this definition.

PARKING

adequate street parking: street parking is generally available outside or adjacent to the house/module. The road should be sufficiently wide to allow easy passage of traffic.

inadequate street parking: it is difficult to park outside the survey house/module. This might be due to the volume of cars competing for spaces or due to legal restrictions on parking, or the street being too narrow.

POOR NEIGHBOURHOODS

Poor neighbourhoods refer to local areas where the surveyor visually assessed whether any one or more of the following problems apply:

- over 10% of dwellings in the local area are visually assessed to be *seriously* defective;
- the presence of serious problems related to any of the following: vacant sites or derelict buildings; vacant or boarded up buildings; litter, rubbish or dumping; vandalism; graffiti or scruffy buildings, gardens or landscaping; neglected buildings;
- *very poor* visual quality of the local area.

Two types of poor neighbourhood are identified according to whether their stock was predominantly built for public or private sector housing. Public sector housing may have subsequently been subject to large scale transfer to other social housing providers or to individual purchase by sitting tenants. The two types of neighbourhood are termed *local-authority-built* and private sector neighbourhoods respectively. A small percentage of neighbourhoods have no predominant stock character and these are not included in the detailed comparisons of the two major types.

REGIONAL GROUPS

south east regions: includes the following Government Office Regions: London, South East;

northern regions: includes the following Government Office Regions: North East, North West, and Yorkshire and the Humber;

rest of England: includes the following Government Office Regions: East Midlands, West Midlands, South West, East of England.

REPAIR COSTS

faults: a fault is any problem which is not of a purely cosmetic nature and which either represents a health or safety hazard, or threatens further deterioration to the specific element or any other part of the building.

faults requiring urgent treatment: is where surveyors recorded work to be carried out to an exterior building element, they indicated whether the work specified was urgent. This is defined as work that needs to be undertaken immediately to remove threats to the health, safety, security and comfort of the occupants and to forestall further rapid deterioration of the building.

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

basic repairs: 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.

comprehensive repairs: 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 that would form part of a planned programme of repair by landlords.

standardised costs: these are costs in pounds per square metre (£/m^2) based on prices for the East Midland region. It is assumed that all work is undertaken by contractors on a block contract basis. For flats, the size of the contract is assumed to be the whole block and for houses it is taken as a group of 5 dwellings. As such, the costs are more closely associated with those which may be incurred by a landlord organising the work on a planned programme basis. By reducing costs to a £/m2 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 driven by the size of the building. The common price base and contract type eliminate other price variations. These costs should not be used as an indication of the expenditure required to remedy.

required expenditure: is total cost per dwelling in pounds (£s) and represents the best estimate of what the specified work would actually cost. These costs take into account regional variations in prices and assume different project sizes for work to houses in different tenures. In the owner occupied and private rented sectors, the contract size for work to houses is taken as one. In the social rented sector, the contract size is taken as the size of the estate unless the house is marked as not on an estate and it is assumed to be a street property with a contract size of one. For flats, the contract size for exterior works is the size of the block. These costs should not be used for assessing differences in condition between different tenures or dwelling types as they vary according to dwelling size tenure and location.

cost to make fit: the costs of undertaking all 'urgent' repair and replacement 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.

standardised costs to make fit per square metre: these are the standardised costs (common to all tenure groups) of urgent work, plus any additional costs to rectify the problems of unfitness, divided by the floor area of the dwelling. They are used to compare the condition of dwellings regardless of their size or tenure.

costs to make decent: are the costs of making the dwelling fully decent (see Appendix F). They represent the required expenditure (i.e. take into account regional and tenure variations in building prices).

SAP

The main measure of energy efficiency used in the report is the energy cost rating as determined by the Government's Standard Assessment Procedure (SAP). This is an index based on calculated annual space and water heating costs for a standard heating regime and is expressed on a scale of 1 (highly energy inefficient) to 120 (highly energy efficient).

SECURE WINDOWS AND DOORS

Homes with secure windows and doors have both of the following:

- main entrance door is solid or double glazed; the frame is strong; it has an auto deadlock or standard Yale lock plus mortise lock;
- all accessible windows (ground floor windows or upper floor windows in reach of flat roofs) are double glazed, either with or without key locks.

TENURE

Four categories are used for most reporting purposes:

owner-occupied: includes all households who own their own homes outright or buying them with a mortgage/loan. Includes shared-ownership schemes;

private rented or private tenants: includes all households living in privately owned property which they do not own. Includes households living rent free, or in tied homes. Includes un-registered housing associations tenants;

local authority: includes all households who rent from a local authority or (former) new town;

registered social landlord (RSL): includes all households living in the property of registered housing associations.

Alternative categories include:

homeowner with mortgage: includes all households who have bought their home with a mortgage/loan;

homeowner no mortgage/outright owner: includes all households who own their homes outright;

private deregulated tenancy: includes tenancies created after January 1989 where the rent (or assured) is a market tenancy rent freely negotiated by the private landlord and tenant;

private regulated tenancy: includes tenancies created prior to January 1989 where either the tenant or private landlord may apply to the rent officer for registration of a fair rent;

private, not accessible to the public: includes lettings by employers to their employees and rent-free lettings to friends or relatives of the landlord in private houses or flats.

UNFITNESS

See 'fitness'. For 'cost to make fit' see 'repair costs'.

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 to gain access to vacant dwellings and undertake full inspections. Two types of vacant property are used:

transactional vacancies: are those which, under normal market conditions, might be expected to experience a relatively short period of vacancy before being bought or re-let;

problematic vacancies: are those which remain vacant for long periods or need work before they can be re-occupied.

Dwellings vacant for up to 1 month are classified as transactional vacancies and those unoccupied for at least 6 months are treated as problematic vacancies. Dwellings vacant for between 1 and 6 months can be problematic or transactional depending on whether they are unfit for human habitation and therefore require repair work prior to being re-occupied.

VULNERABLE HOUSEHOLDS

Households who are in receipt of the following benefits: Income Support; Income-based Job Seeker's Allowance; Housing Benefit; Working Families Tax Credit; Disabled Person's Tax Credit; Disability Living Allowance: Care Component; Disability Living Allowance: Mobility Component; Industrial Injuries Disablement Benefit; War Disablement Pension and Attendance Allowance.

Further Information

Copies of a ***Key Facts*** document, Product code: 03HD01501, are available from the ODPM web site or gratis from the ODPM Publications Centre (see below).

ODPM web site: www.odpm.gov.uk/housing/

Further information on the results from the EHCS 2001 is available in:

English House Condition Survey 2001 – Regional report,
ISBN 1 85112 656 2, £32

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English House Condition Survey 2001 – Supporting tables
A set of background tables that provide a key statistical reference document and underpin the results printed in the survey report. Available as a web document or photocopy on request from ***ehcs@odpm.gov.uk***