



Modern Housing

Households' views
of their new homes



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1 Introduction

1.1 Who the review is for

This review is aimed at house builders and their advisors, and others involved in the provision of new houses in England, with the aim of ensuring that new homes are of the highest possible standard and meet the needs of future occupants.

1.2 What is in the review

- Key differences in the housing stock profile between new houses and the older housing stock. For the purposes of this review the following terms have been used:
 - **Modern Housing** is used to define housing which has been built from 1991 to 2001 (inclusive).
 - **All Other Housing** is used to define housing stock built prior to 1991.
 - Housing built from 2002 to 2004 (inclusive) is referred to as **Recent Housing**.
- Identifies the types of household.
- Identifies what households like and dislike about their homes and the key factors they consider important when choosing them.
- Provides a comparison of how satisfied households are with their homes and identifies which types of household are most likely to be satisfied.
- Identifies the problems that households experience in their neighbourhoods.
- Identifies what households like and dislike about their neighbourhoods, and the improvements they would like to make.

1.3 What it will provide

This review provides background information on the English housing stock, specifically looking at Modern Housing nationally and regionally in comparison with All Other Housing and Recent Housing. The research uses information from two national continuous surveys: the English House Condition Survey, supplemented with useful information from the Survey of English Housing.

The findings presented in this review aim to promote a better understanding of the types of household living in Modern Housing and their needs.

1.4 Summary of chapters

Chapter 2 provides information on the English House Condition Survey and Survey of English Housing as well as the methodology used.

Chapter 3 provides background information on the Modern Housing stock profile and its physical attributes in comparison with All Other Housing stock.

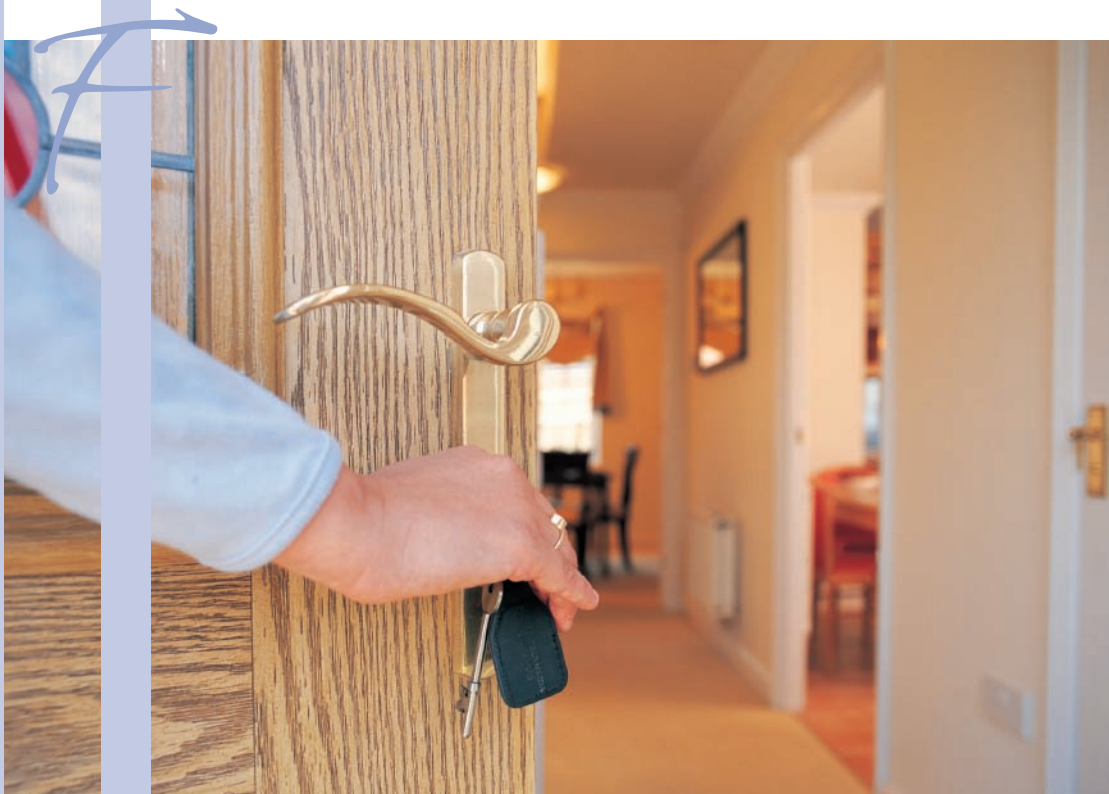
Chapter 4 provides a profile of households that live in Modern Housing compared with households living in All Other Housing and Recent Housing.

Chapter 5 and 6 address the main topic of the review: households' views of Modern Housing.

Chapter 7 provides a summary of the findings and recommendations.

1.5 Shelf life

This review is a snapshot of Modern Housing built prior to 2001 using the information from the English House Condition Survey, supplemented where possible with information from the Survey of English Housing of houses built up until 2004. More recent changes in planning and Building Regulations since 2006 may, in the next five years, start to highlight changes in the housing profile and households' views of their homes. However, a longer period, (10 years or more) will be needed due to the sample size of the English House Condition Survey, to measure accurately any changes in the stock profile and households' views.



2 General background

2.1 The English House Condition Survey and Survey of English Housing

The English House Condition Survey (EHCS) is a national survey of housing in England, commissioned by Communities and Local Government. It covers all tenures and is the only national survey which involves a physical inspection of property by professional surveyors as well as an interview with the household. The information obtained through the survey provides an accurate picture of the type and condition of housing in England, the people living there, and views on their housing and neighbourhoods.

Communities and Local Government also conducts a complementary housing survey, the Survey of English Housing (SEH), which collects a range of detailed household information including satisfaction with the home and local area.

There are a number of component surveys that make up the overall EHCS (the surveys used in this review are outlined below). The methodology of the survey has been developed and refined, and the sample size and structure have also changed, over time. The 2001 EHCS, the source of most of the data used in this review, has a total sample size of 17 500 core cases. These are cases for which both a visual inspection of the property and a household interview have taken place. Vacant properties, for which a visual inspection is undertaken, are also included as core cases.

Interview survey An interview is first conducted with the household. The interview topics include household characteristics, satisfaction with the home and the area, disability and adaptations to the home, work done to the property and income details. There are also different questions for each tenure, for example, renters are asked about responsibilities for repairs and maintenance and their satisfaction with the services they receive. All those being interviewed are guaranteed confidentiality and data is kept anonymous.

Physical survey The interview is followed by a visual inspection of the property by a qualified surveyor, both internally and externally. Data collected includes the number and type of rooms and facilities contained in the property, the condition of a wide range of aspects of the physical structure, details of the heating systems, and parking provision, and

assessment of neighbourhood quality. Where there are shared facilities and common areas, these are also assessed.

Market value survey This is a desk-based exercise. Valuers provide two market valuations for each of the core cases. The first gives the market value of the property in its current condition. The second gives the valuation if necessary repairs are undertaken (identified from the physical survey). Valuers also provide information about the housing market in the immediate neighbourhood in which the property is situated.

2.2 Methodology

Using the EHCS 2001 and the SEH 2004, a category of Modern Housing¹ was created to be compatible with these datasets. This category of housing includes all housing that was built in the years 1991 until 2001 inclusive. The choice of this category relates to the suitability and comparability of the available datasets.

Although the focus of this review will be on this category of housing, information is also presented on housing built prior to 1991 (All Other Housing) and in a few cases homes built after 2001 (Recent Housing), from the SEH data set, as a means of comparison.

The analysis focused on understanding:

- How the Modern Housing stock profile compares with All Other Housing and Recent Housing both regionally and nationally.
- The differences in the type of households living in Modern Housing compared with All Other Housing and Recent Housing.
- How households' views on Modern Housing compare with views on All Other Housing, specifically: satisfaction with their homes, neighbourhoods; priorities in selecting their homes; and likes and dislikes of their homes, neighbourhoods or local area.

The different types of EHCS data are used to explore:

- The physical attributes of dwellings using the expert assessments.
- Household characteristics and views of their homes, and neighbourhoods using the interview survey.

The SEH, which consists of an interview with the household, is used to supplement the EHCS information. Additional information on house building, sourced from Communities and Local Government,² is used to provide details of the amount of Modern Housing built regionally.

Statistical tests are used to determine whether some aspects are different between housing groups. A statistical test calculates the probability (p) that results are due to chance fluctuations between groups or conditions. If p is low (usually 5% or less), the result is considered to be significant. The Chi-Square test is used to determine the probability that the frequency of occurrence of an event is the same in two or more samples or conditions. A low probability suggests that at least one sample or condition in the analysis is significantly different from the rest.

¹ It is important to be aware that this review concerns all housing, and does not differentiate between those built as a housing development and individually built bespoke houses.

² P2m returns from local authorities and returns from National House Building Council (NHBC).



3 The housing stock profile

Using the EHCS 2001 data, this section focuses on the physical attributes of Modern Housing; housing built from 1991 to 2001 inclusive. Housing built before this period (All Other Housing) is used as a means of comparison to illustrate any differences between the two types of housing.

3.1 Quantity of Modern Housing

In 2001, Modern Housing represented 6.5% of the English housing stock. The distribution of Modern Housing varies by Government Office Region with most Modern Housing being built in the South East and Eastern regions, and the fewest homes built in the North East (Figure 1).

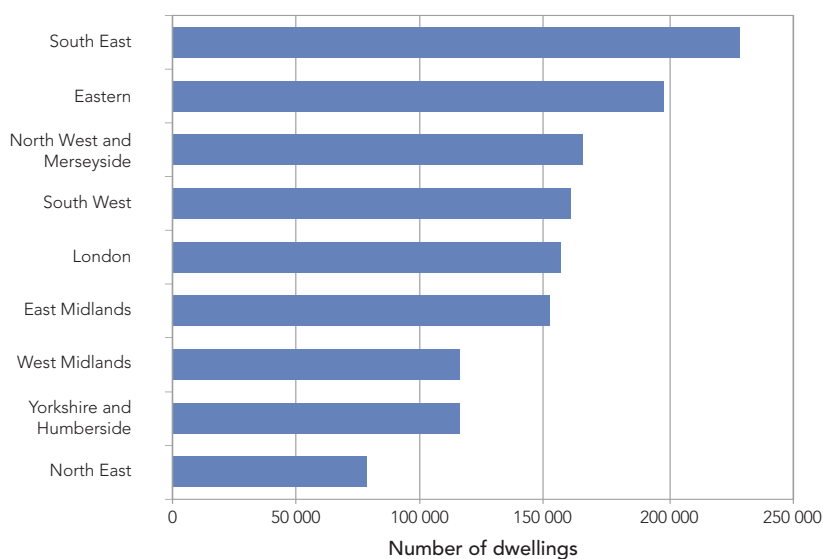


Figure 1 Quantity of Modern Housing built by Government Office Region.

The quantity of Modern Housing built does not necessarily indicate regional housing growth, as it does not show the amount of stock built in each region in relation to the total stock within the region. Some regions have built a lot of Modern Housing, compared with their overall stock and compared with other regions (Figure 2). East Midlands has the highest percentage of Modern Housing in its stock compared with the other regions, even though it has only built an average number of new homes. In contrast, London has built an average number of new homes, but these still represent a low percentage of their overall stock. West Midlands, Yorkshire and Humberside have the lowest percentage of their stock as Modern Housing, and they have also built the smallest number of new homes (Figure 1).

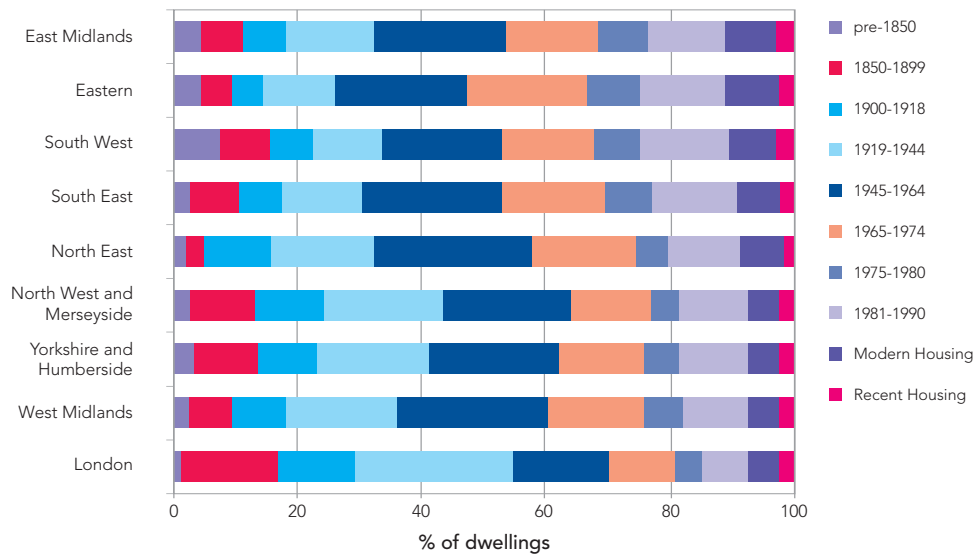


Figure 2 Dwelling age profile by Government Office Region for housing built up to and including 2004.

3.2 Dwelling types

The majority of new homes are houses (80.6%), with a third being detached houses. Since the period to which this data relates (1991 to 2001), the proportion of flats to houses built each year in England had risen to 46% by 2006. The rest are low-rise flats (19%) and a few high-rise flats mainly in London (0.4%). The distribution of the dwelling types also varies by region, with the highest proportion of detached houses and the least quantity of flats in the East Midlands. The South West region has the highest number of terraced houses and London has the highest number of purpose built low-rise and high-rise flats (Figure 3).

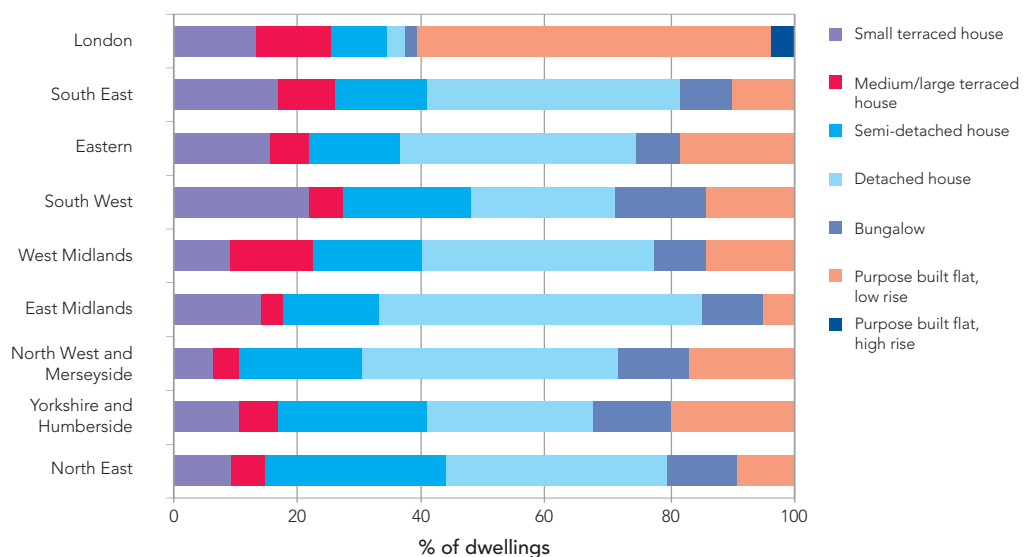


Figure 3 Modern Housing dwelling type by Government Office Region.

Overall, Modern Housing has more detached houses and small terraces as a percentage of its total stock, compared to All Other Housing. It also has a similar percentage of flats, but less medium/large terrace houses and semi-detached houses, than All Other Housing (Figure 4).

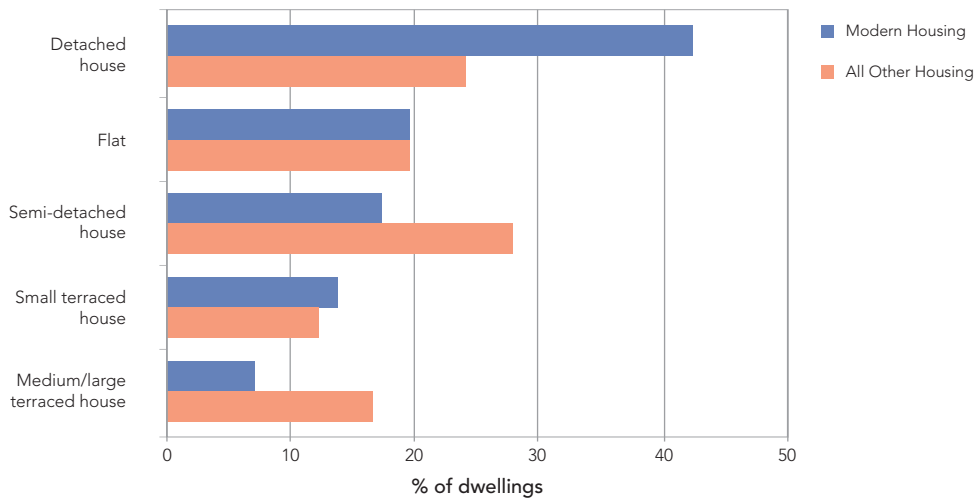


Figure 4 Modern Housing dwelling type compared with All Other Housing.

3.3 Dwelling sizes

3.3.1 Total internal floor area excluding bathrooms

There is no significant statistical difference in the average size of Modern Housing (85 m²) compared with All Other Housing (87 m²), excluding stairs, internal garages and balconies even when controlling for houses and flats; there is just a greater range of size variation for All Other Housing. The smallest size of a new house is 21 m² and the largest 291 m², excluding bathroom/s.

Only two regions, East Midlands, and North West and Merseyside have significantly different dwelling sizes. East Midlands homes tend to be larger (35 to 259 m², average size 97 m²) and North West and Merseyside tend to have much smaller homes (22 to 183 m², average size 86 m²). All other regions have similar sized homes.

3.3.2 Rooms and sizes

The majority of Modern Housing has three to five habitable rooms³ (Figure 5).

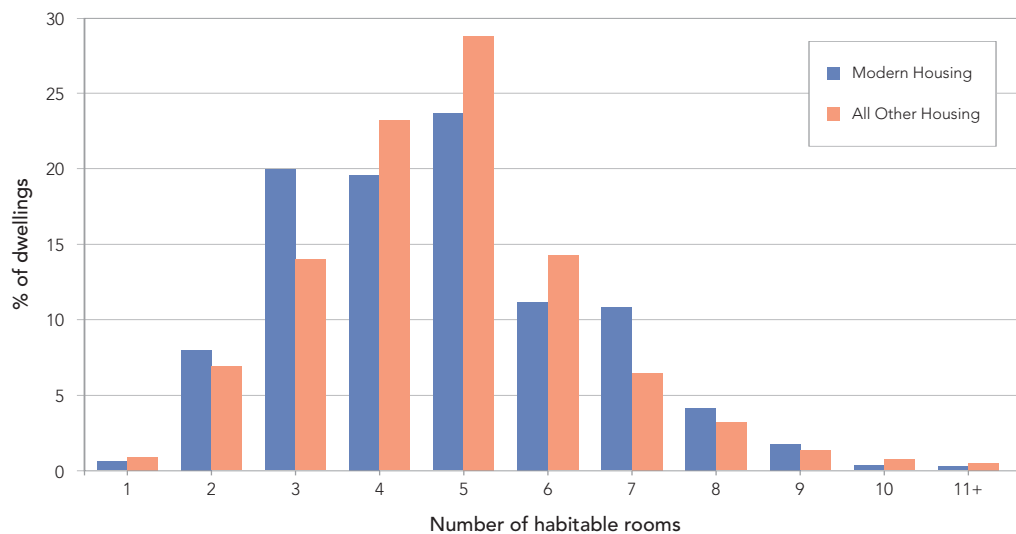


Figure 5 Number of habitable rooms, excluding bathrooms and small kitchens.

³ Habitable room are rooms that can be used for living activities and are properly built for such use, including living rooms, dining rooms or bedrooms. Kitchens, bathrooms and space that have not been properly converted, like cellars and lofts, are not considered habitable rooms.

Comparing the number of habitable rooms in Modern Housing with All Other Housing we find that:

- Modern Housing has more dwellings with two, three, seven or eight habitable rooms.
- All Other Housing has more dwellings with four, five or six habitable rooms.

The majority of Modern Housing (87%) has two to four bedrooms. The greatest proportion of these have three bedrooms (36%), 28% have two bedrooms and 23% have four bedrooms (Figure 6).

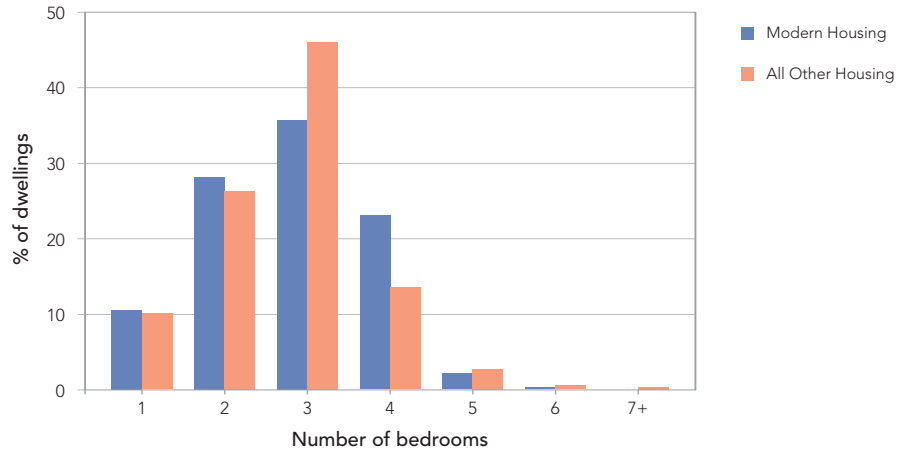


Figure 6 Number of bedrooms.

Comparing the number of bedrooms (Figure 6), we find that Modern Housing has:

- slightly more one, two and four bedroom homes.
- far fewer three bedroom homes and those with more than five bedrooms.

Although the profile of the number of habitable rooms and bedrooms differs slightly between Modern Housing and All Other Housing, there is no significant statistical difference in the room sizes⁴ for these different housing types (including when controlling for dwelling type and the number of rooms/bedrooms). Average room sizes (excluding bathrooms and small kitchens) in Modern Housing mostly fall in the range of 15 to 25 m², which is similar to All Other Housing.

There are slight regional differences in the number of bedrooms in Modern Housing (Figure 7). East Midlands tends to have homes with more bedrooms, which is consistent

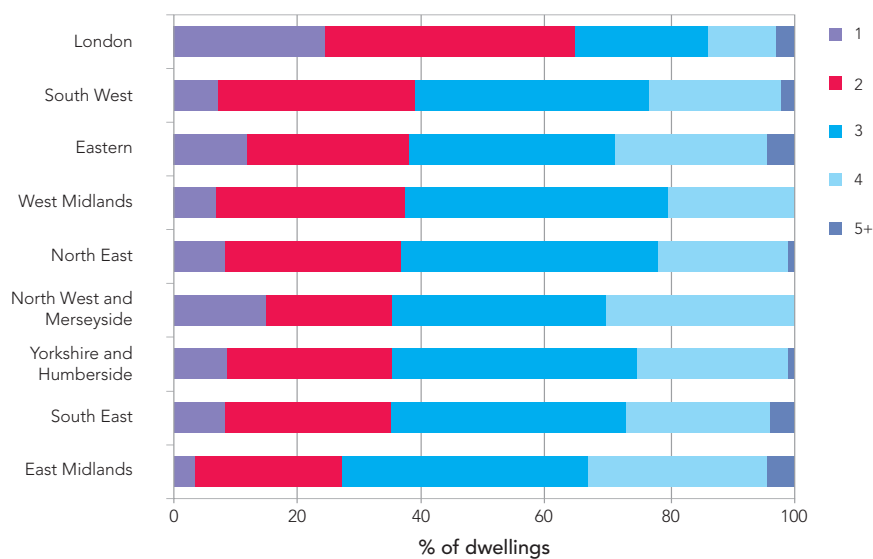


Figure 7 Number of bedrooms for Modern Housing by Government Office Region.

⁴ Room size has been calculated by dividing the number of habitable rooms (which excludes bathrooms and small kitchens) by the total floor area (which includes bathrooms and small kitchens); so room sizes in homes may be fractionally larger than in reality.

with the fact that its homes tend to be larger than in other regions, whereas Modern Housing in London tends to have a lot fewer bedrooms. Typically, the majority of Modern Housing in all regions has two to four bedrooms.

3.4 Location of Modern Housing

The majority of Modern Housing is in urban locations⁵ (74%) with the rest in rural locations⁶ (26%). This is significantly different from All Other Housing, which has only 20% of dwellings in rural locations and 80% in urban locations.

Virtually all Modern Housing in rural locations are houses, not flats. This type of housing in rural locations tends to be larger detached dwellings. Regionally there is quite a lot of variation in the urban/rural split (Figure 8). North West and Merseyside, and the North East region have the lowest percentage of Modern Housing (20%) in rural locations. East Midlands has the highest percentage of this type of housing (40%) in rural locations.

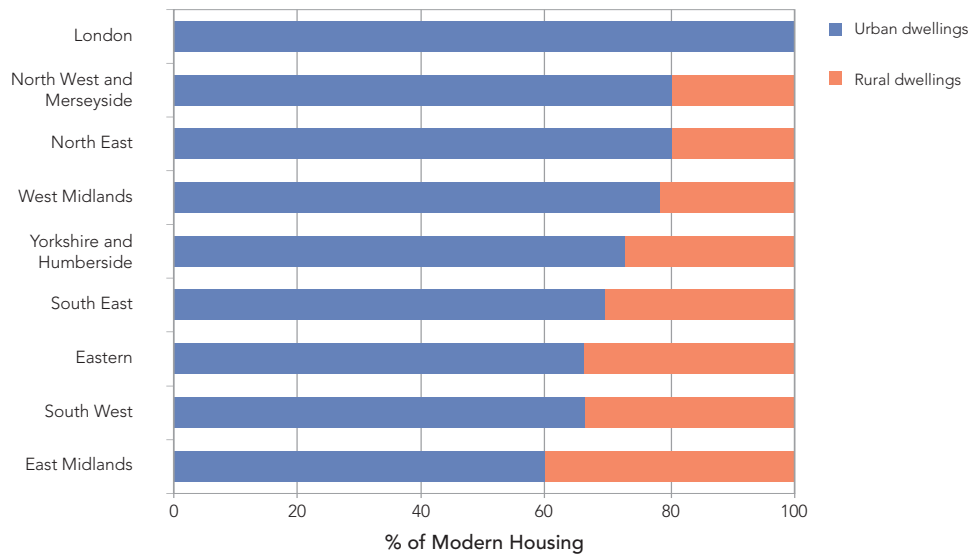


Figure 8 Modern Housing urban/rural split by Government Office Region.

3.5 Cost of Modern Housing

Figure 9 shows the quintile house prices by Government Office Region. Within each region, each property has been placed in one of the quintiles depending on its value in

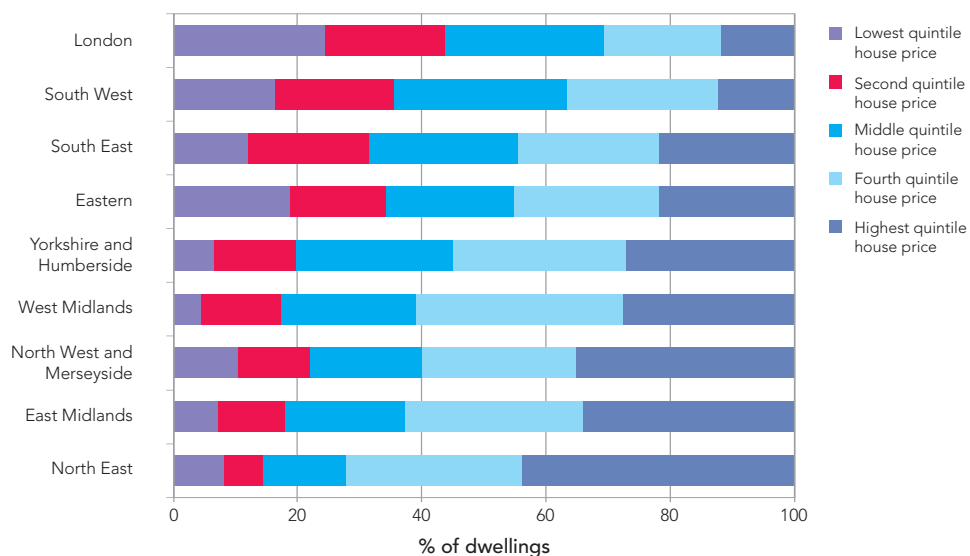


Figure 9 Modern Housing quintile house price by Government Office Region.

⁵ Urban locations are considered to be city centres, large towns and the surrounding suburban areas.

⁶ Rural locations are village centres, rural residential areas (generally around a village centre or a settlement) and isolated hamlets or individual houses, such as farms.

comparison to other properties in the region, giving the property a value ranging from 1 to 5. Dwellings have been priced based on the value of the property as it stands.

Regionally there is a difference in the value of Modern Housing. In the North East and East Midlands, it commands a much higher price in comparison to All Other Housing, while in London and the South West Modern Housing commands a much lower price than All Other Housing. On average, it is significantly more expensive than All Other Housing. Also, in rural locations it tends to command a significantly higher price than those in urban locations.

3.6 Construction type

The majority of Modern Housing has been built using traditional masonry/box wall/cavity wall construction (90.8%). A few dwellings are timber framed (6.8%), and a very few are of other types of construction (2.2%) eg concrete or metal frame. Very few Modern Housing is masonry/box wall/solid construction types, in contrast to All Other Housing where there are more masonry/box wall/solid construction types (26.7%) and 'other' types, and fewer cavity wall (65.8%) and timber framed dwellings (Figure 10).

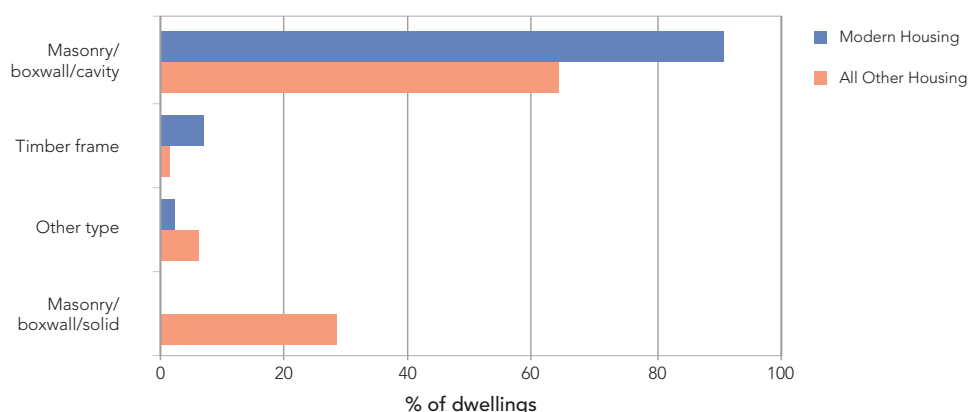


Figure 10 Construction types.

When construction type is split by Government Office Region we find that the East Midlands is the only region with all of its Modern Housing built as masonry/box wall cavity.

3.7 Energy efficiency

Modern Housing has a significantly higher average energy efficiency rating (69 SAP⁷ points using SAP 2001 methodology) when compared with All Other Housing (49 SAP points). On average Modern Housing is 20 SAP points higher than All Other Housing (Table 1). Regionally there is very little difference in the SAP rating for Modern Housing (Table 2).

Modern Housing is slightly more likely to have environmentally friendly features such as double-glazing, condensing boilers and solar panels. Figure 11 shows the percentage of Modern Housing and All Other Housing with these features. It illustrates, unsurprisingly, that a much higher percentage of Modern Housing has these features when compared with All Other Housing.

TABLE 1

Standard Assessment Procedure for Modern Housing and All Other Housing (SAP 2001 methodology)

Housing type	Number (000s)	Mean	Standard Deviation
Modern Housing	1,37	69	10.9
All Other Housing	19,84	49	15.7

⁷ A way of measuring the energy efficiency of dwellings using the government's Standard Assessment Procedure (SAP).

TABLE 2

Standard Assessment Procedure for Modern Housing by Government Office Region (SAP 2001 methodology)

Region	Number (000s)	Mean	Standard Deviation
North East	77	66	8.5
North West and Merseyside	165	70	9.3
East Midlands	152	68	9.5
Eastern	198	68	10.3
Yorkshire and Humberside	116	72	10.3
West Midlands	116	68	10.9
South West	160	69	11.7
South East	229	67	11.8
London	156	71	12.9

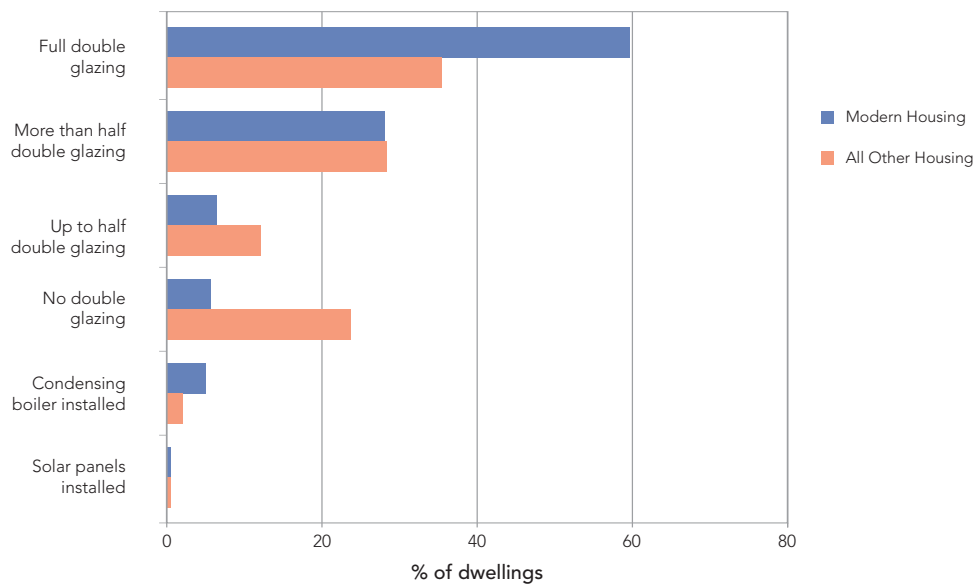


Figure 11 Percentage of dwellings with double-glazing, condensing boilers and solar panels.

Modern Housing is much more likely to be double-glazed than All Other Housing (Figure 11). Sixty per cent of Modern Housing is fully double-glazed, 28% has more than half the windows double-glazed, and 6% have up to half the windows double-glazed. Only 6% has no double-glazing. Across the different regions Modern Housing has a similar percentage of double-glazing. However, a higher percentage has full or more than half double-glazing (93%) when compared with new flats (84%).

Five per cent of Modern Housing has condensing boilers. This is more than All Other Housing (2%). A higher percentage of Modern Housing has condensing boilers (5.4%) in comparison with flats (3.3%). Although there is a large regional variation in the percentage of homes with a condensing boiler, the sample size is too small to know if there are true regional differences. Only a very small number of dwellings have solar panels: 0.41% of Modern Housing and 0.37% for All Other Housing. Unfortunately, the sample size is so small in this category that it cannot be relied upon as an accurate reflection of the population as a whole. However, it does indicate that Modern Housing is slightly more likely to have solar panels than All Other Housing.

3.8 Housing Quality Indicators

Housing Quality Indicators (HQIs) is a rating system designed to help social housing providers to assess (and improve) the quality of proposed new build schemes. It provides a good indication of the overall design quality of housing, especially Modern Housing.

The 10 HQIs are:

- HQI 1 Location
- HQI 2 Site visual impact
- HQI 3 Site open space
- HQI 4 Site routes and movement
- HQI 5 Unit size
- HQI 6 Unit layout
- HQI 7 Unit noise control
- HQI 8 Accessibility within the unit
- HQI 9 Energy, green and sustainability issues
- HQI 10 Performance in use (this one cannot be modelled using EHCS data).

The HQIs calculate a score of up to 100 based on the above criteria.

An HQI rating modelled using the EHCS shows that Modern Housing is significantly different from All Other Housing, scoring a higher average HQI score (50 points) than All Other Housing (45 points). The highest HQI score for Modern Housing is 70 and the lowest score is 29. The range and variation in score for All Other Housing (13 to 73) is slightly larger than for Modern Housing (Table 3). There is no regional difference in the scores for Modern Housing. There is no difference in the HQI score for different house types or flats, and there is no difference in the HQI score for Modern Housing in urban or rural locations.

TABLE 3

Housing Quality Indicator rating for Modern Housing and All Other Housing (SAP 2001 methodology)

Housing type	Number (000s)	Mean	Standard Deviation
Modern Housing	1,37	50	7.1
All Other Housing	19,84	45	7.8

Comparing the average scores for the individual HQIs for Modern Housing and All Other Housing, we find that Modern Housing is significantly better on:

- HQI 2 Site visual impact
- HQI 3 Site open space
- HQI 6 Unit layout
- HQI 7 Unit noise control
- HQI 8 Accessibility within the unit.

Modern Housing is not significantly worse than All Other Housing on any of the indicators. For the remaining HQIs, HQI 4, 5 and 9 (Site routes and movement, Unit size, and Energy, green and sustainability issues), Modern Housing has similar, slightly higher average scores, that are not significantly different to All Other Housing. For HQI 1 Location, Modern Housing has a lower average score (79) than All Other Housing (82), but the difference is not statistically significant.



4 Household characteristics

Using the EHCS 2001 data, section 4 focuses on the characteristics of households living in Modern Housing. The main focus is on Modern Housing, but this is supplemented by information from the SEH where possible; to provide additional information and to check for any differences in Recent Housing (homes built after 2001 up to 2004 inclusive). Housing built before 1991 (All Other Housing) is also used as a means of comparison to illustrate differences.

4.1 Household tenure

The majority of Modern Housing is owner occupied (70%) or is occupied by a Registered Social Landlord household (social housing) (20%) (Figure 12). Only a small percentage is occupied by private rented households.

The tenure split of Modern Housing is slightly different to the rest of the housing stock. It has a similar percentage of owner occupiers, but has less private rented and considerably more social housing households (20%).

Regionally there is a variation of the household tenure of Modern Housing (Figure 13). London stands out as being very different to the other regions, with more Modern Housing occupied by private rented and social housing households.

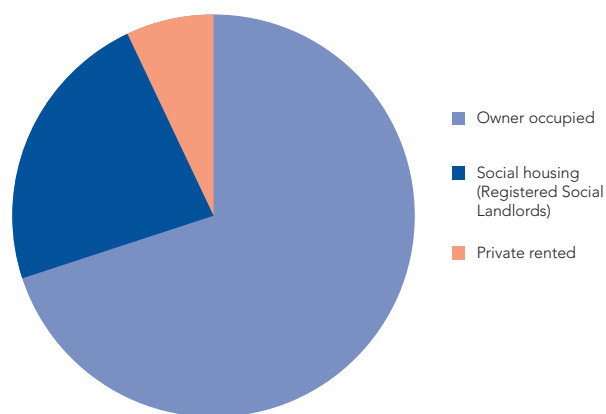


Figure 12 Tenure of Modern Housing.

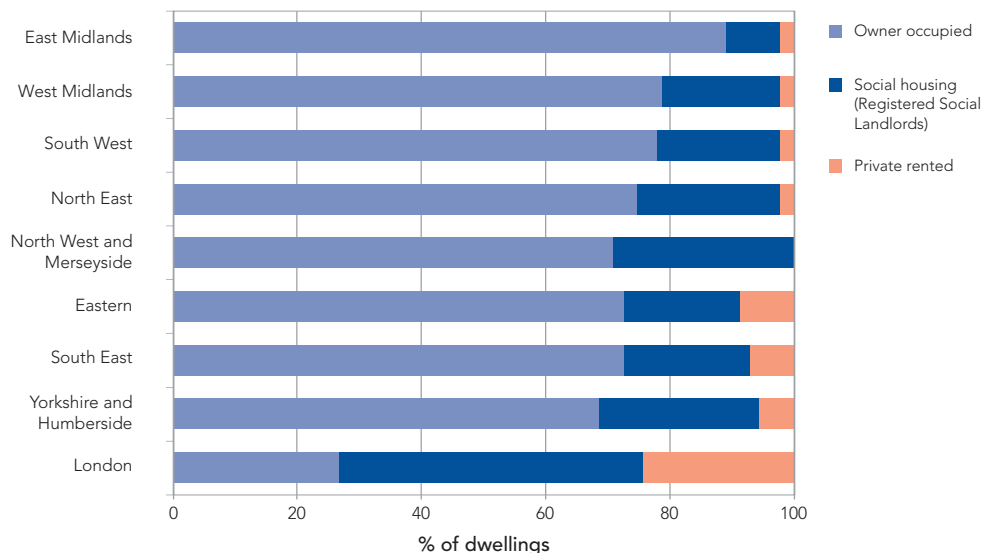


Figure 13 Tenure of Modern Housing by Government Office Region.

East Midlands is significantly different from the other regions, with many more owner occupied households and roughly half the amount of private rented and social housing households. London is also very different to the other regions, with a much higher percentage of Modern Housing occupied by private rented or social housing households.

There is no change in the tenure profiles of Recent Housing.

4.2 Household composition

There are fewer households whose oldest member is aged over 60 (either singles or couples) in Modern Housing than in All Other Housing (Figure 14). There are a higher percentage of households with children in Modern Housing compared with All Other Housing.

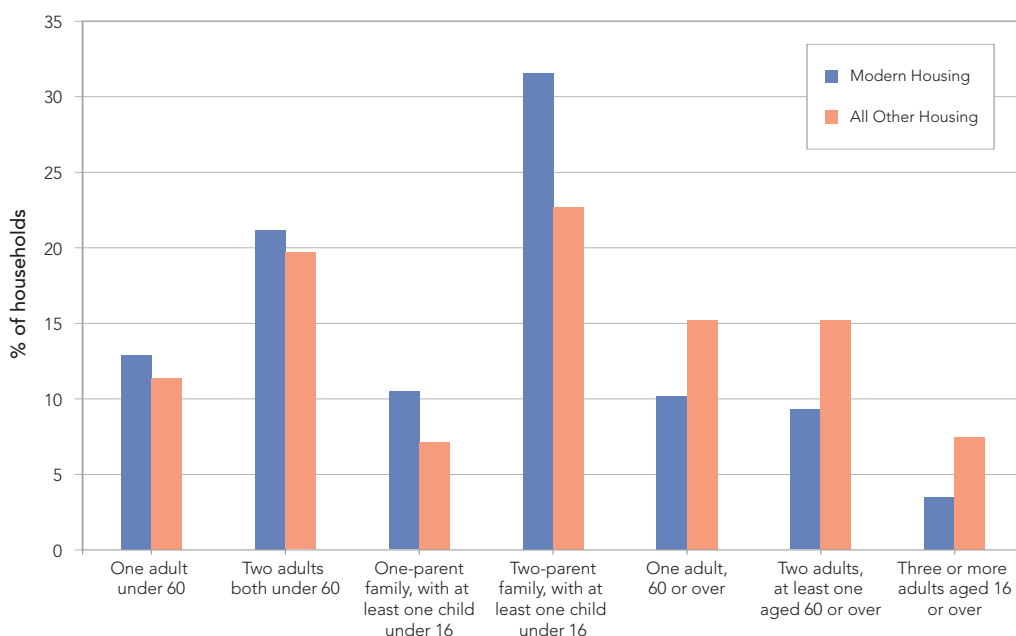


Figure 14 Household composition.

When the age of the household is explored further we find there is a statistically significant difference in the age profile of households living in Modern Housing, compared with All Other Housing and Recent Housing. There are significantly more younger households (whose oldest member is aged under 45 years [$p < 0.001$]) in Modern Housing (59%) than in All Other Housing (40%). There are also significantly more younger

households living in Recent Housing (65%) compared with Modern Housing. Thus the percentage of younger households is greater in newer homes. There is no difference in the age of the household between urban or rural locations.

Flats are more likely to be occupied by households without children. Fifty one per cent of flats are occupied by single households and 28% of flats are occupied by couples without children; houses are more likely to be occupied by households with children (48%); and couples under 60 (23%). This is similar to houses in All Other Housing, except that there are more households whose oldest member is aged over 60, both single people and couples, living in these houses.

Regionally, there are differences in the age groups of households living in Modern Housing (Figure 15). The Eastern region and London have the highest percentage of households under 45 years old. The South West, North West and Merseyside have the lowest percentages of households under 45 living in Modern Housing. North West and Merseyside still have 48% of homes occupied by households under 45, which is still a lot higher than the average of 40% for all other dwellings.

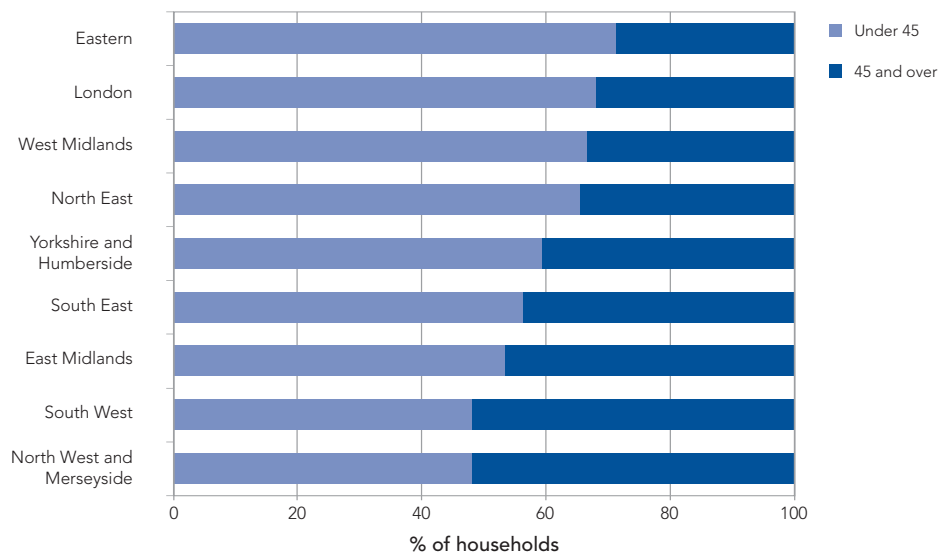


Figure 15 Households in Modern Housing aged under 45, and 45 and over, by Government Office Region.

4.3 Employment status

The majority of households living in Modern Housing have one or more members of the household in employment (71%).⁸ Twenty nine per cent of households are unemployed (16% due to retirement). Compared with All Other Housing, Modern Housing has proportionally more employed households (All Other Housing 61%) and proportionally fewer unemployed households due to retirement (All Other Housing 39% unemployed, with 27% due to retirement).

Regionally, there is variation in the employment status of households living in Modern Housing. Households with the highest levels of employment are in the East Midlands and Eastern regions with over 80% employed. London is the region with the lowest levels of employment with only 45% of households having one or more employed.

⁸ Employment is based on either the household reference person or their partner being employed.

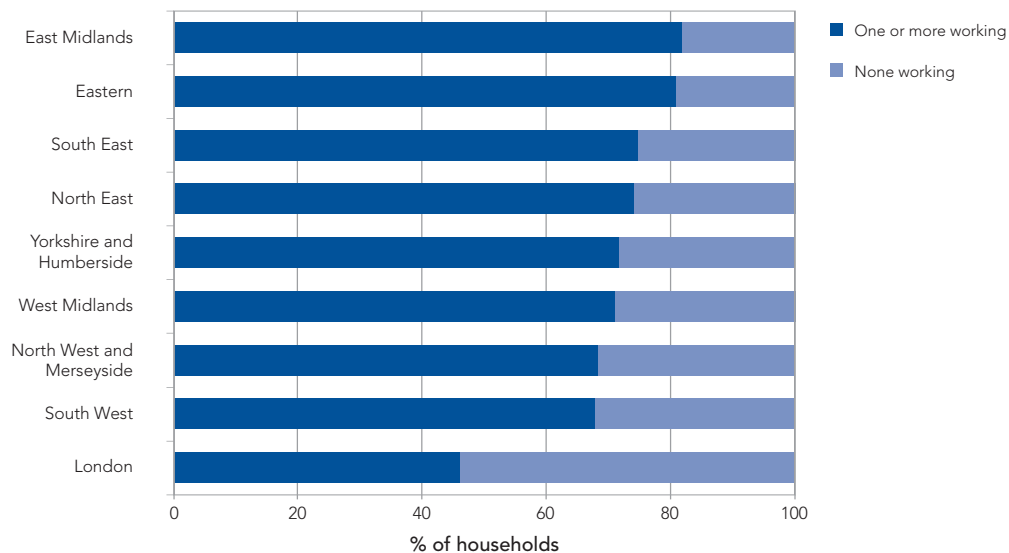


Figure 16 Employment status for households in Modern Housing by Government Office Region.

4.4 Ethnic groups

There is no significant difference in the household ethnic origin in Modern Housing compared with All Other Housing. Ninety four per cent of Modern Housing is occupied by white households, with the remainder occupied by other ethnic groups.⁹

4.5 Disabilities

Six per cent of households living in Modern Housing have either the interviewee or their partner registered disabled. This proportion is not significantly different from All Other Housing.⁹

4.6 Previous accommodation

The SEH asks households who have moved in the last five years about the tenure of their previous accommodation. Figure 17 shows that households living in Modern Housing are much more likely to have previously owned a home, rather than rented, compared with households in All Other Housing. All Other Housing is significantly different, when statistically tested, for both Modern Housing and Recent Housing. Significantly more households were previously renting a home and fewer owned their home before moving. There is no significant difference in the household tenure of their previous accommodation for households living in Modern Housing compared with households living in Recent Housing.

4.7 How far households have moved

The majority of households living in Modern Housing have moved under 5 miles (49%) from their previous accommodation or between 5 to 10 miles (34%); and 17% of households have moved further than 50 miles or from abroad. When statistically tested and compared with All Other Housing, households living in Modern Housing are significantly more likely to have moved further than 5 miles from their previous home. In terms of the distance households have moved, there is no significant difference between Modern Housing and Recent Housing. Households with residents aged under 45 have moved similar distances to households with older residents.

⁹ The sample size is too small to view regionally to be statistically robust.

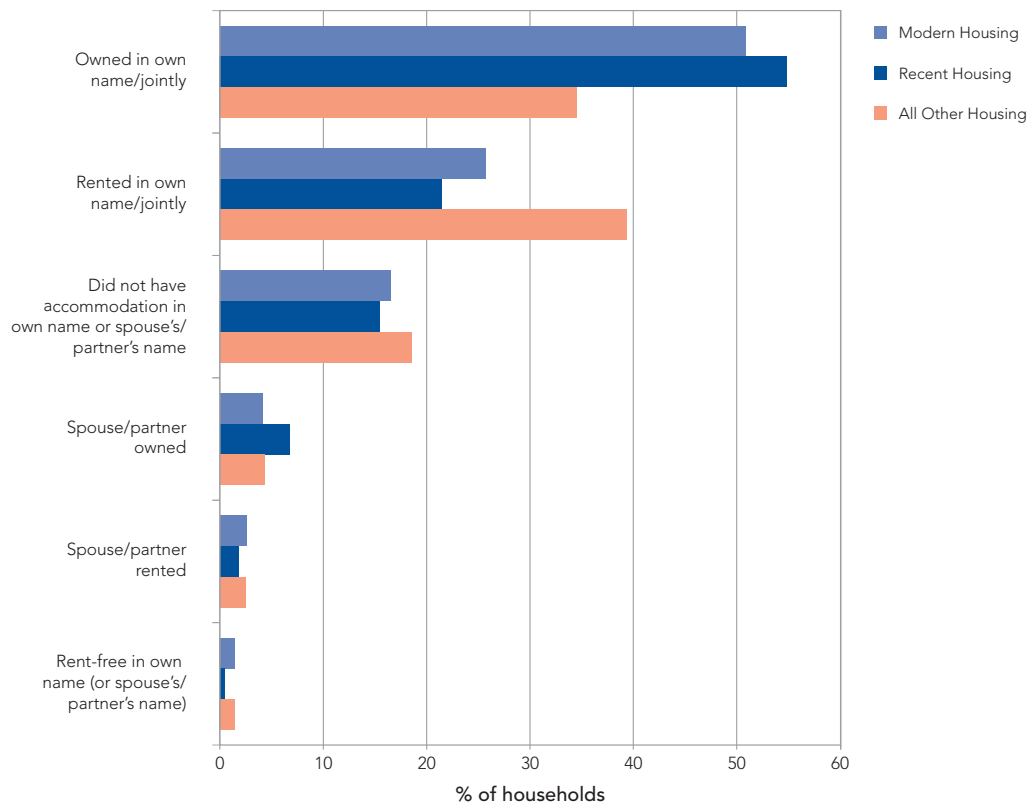


Figure 17 Previous tenure for households that have moved in the last 5 years.

4.8 Reasons for moving

The main reasons for moving to a new home given by households living in Modern Housing are:

- wanting a larger property or one that is better in some way (19.6%)
- moving to a better neighbourhood or area (16.3%)
- wanting to buy a property (11.9%)
- getting married or started to live together (9.3%)
- wanting to own home/live independently (8.7%)
- job related (8.6%)
- other reasons (family or other personal reasons or wanting a smaller property).

These results, and their priority and percentage output, are similar to All Other Housing and Recent Housing. The results show that over a third of households move to improve their home/neighbourhood in some way. One fifth of households move because they want to own a property, and the rest move because of changes in their personal circumstances such as relationship, work or family reasons.



5 Views about the home

Using the EHCS 2001 data this section focuses on the views of households living in Modern Housing (this includes housing built from 1991 until 2001 inclusive). The main focus of this section is on Modern Housing, but this is supplemented by information from the SEH where possible – to provide additional information and to check for any differences in Recent Housing. All Other Housing is also used as a means of comparison to illustrate any differences.

5.1 Satisfaction with their homes

Ninety three per cent of households living in Modern Housing are either very satisfied or fairly satisfied with their homes. Satisfaction is slightly higher when compared with All Other Housing (90%) and is significantly different when statistically tested. The distribution of household satisfaction is not significantly different between Government Office Regions (Figure 18).

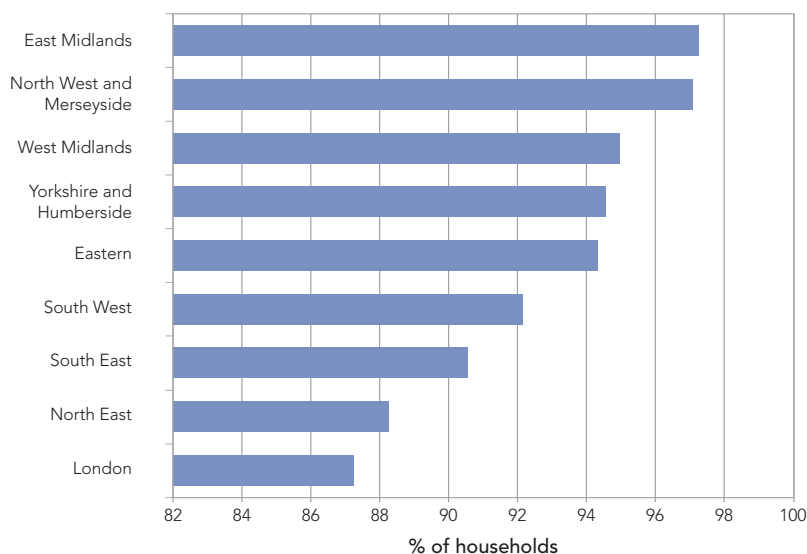


Figure 18 Household satisfaction for those living in Modern Housing by Government Office Region.

Household satisfaction with their homes varies according to the tenure, house type and household. In all types of housing there is significantly lower satisfaction for those who do not own their home, for flat-dwellers compared with people living in houses, and for households of less than 45 years old compared with older households. However, for Modern Housing there is no statistical difference in satisfaction for households that live in flats compared with those in houses. Also it is interesting that the level of satisfaction with the home is so high for Modern Housing since households under 45 years old are more likely to live in these homes. Exploring this further we find that there is a statistically significant difference in satisfaction between younger households (aged under 45) for Modern Housing compared with those living in All Other Housing. A higher percentage of younger households are satisfied with their home in Modern Housing (92%) and fewer are dissatisfied (6%) with their home, compared with those in All Other Housing (Figure 19).

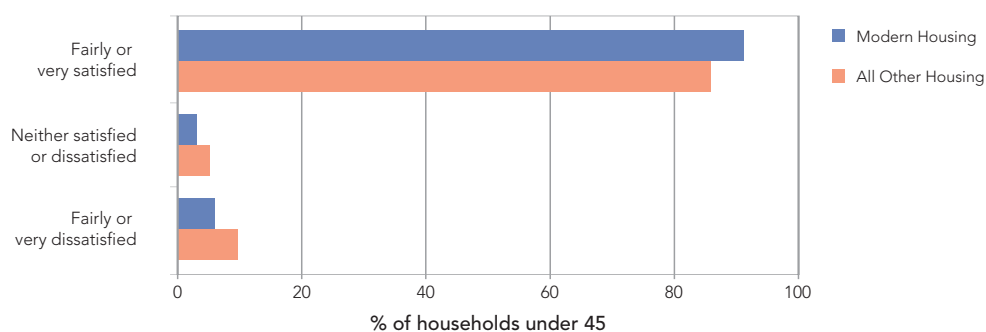


Figure 19 Household satisfaction for households aged under 45.

For households living in both Modern Housing and All Other Housing whose oldest member is over 45 years old, there is no difference in satisfaction with their homes. However, in this age group, satisfaction is already very high. These findings suggest that younger households have different expectations of their homes than those of an older age group and that Modern Housing is more likely to meet their expectations of satisfaction compared with All Other Housing.

The SEH does not ask the household about satisfaction with their homes, but asks them how satisfied they are with their accommodation. Similarly with the EHCS findings, there are differences in satisfaction depending on the age of the household. Older households (45+) are more likely to be satisfied with their accommodation compared with younger households (44 or younger).

Satisfaction is not significantly related to the length of time a household has occupied their home.

5.2 Internal design and layout

The internal design and layout of homes, as either very good or fairly good, is rated by 89% of households living in Modern Housing. This is slightly higher than for All Other Housing, but not significantly different.

Fifty seven per cent of households living in Modern Housing, rate the amount of storage space they have as either very good or fairly good. Thirty two per cent of households rate the amount of storage space in Modern Housing as very or fairly poor. There are slightly more households rating the amount of storage as fairly or very poor compared with All Other Housing, but there is no significant difference between these groups.

5.3 Number of rooms and room sizes

Seventy eight per cent of households living in Modern Housing and All Other Housing think they have the right number of rooms in their home. Twenty per cent of households living in Modern Housing think they have too few rooms compared with 17% in All Other Housing and 2% of households living in Modern Housing state that they have too many rooms compared with 5% for All Other Housing. When statistically tested

it is found that Modern Housing is significantly different to All Other Housing in terms of the number of rooms and their sizes.

Concerning room sizes, 69% of households living in Modern Housing think that their room sizes are about the right size. However, 26% think that the rooms are too small, 5% think some are too big and some are too small, and a negligible percentage of households think the rooms are too big. These results are significantly different to All Other Housing, with 78% of households satisfied with their room sizes, 16% finding their rooms too small and 5% finding some rooms too big.

5.4 Most important factors

In the EHCS, households are asked about the single most important factors about their home. All households tend to agree on these factors with 78% of Modern Housing rating the top four factors as the single most important factors (Figure 20).

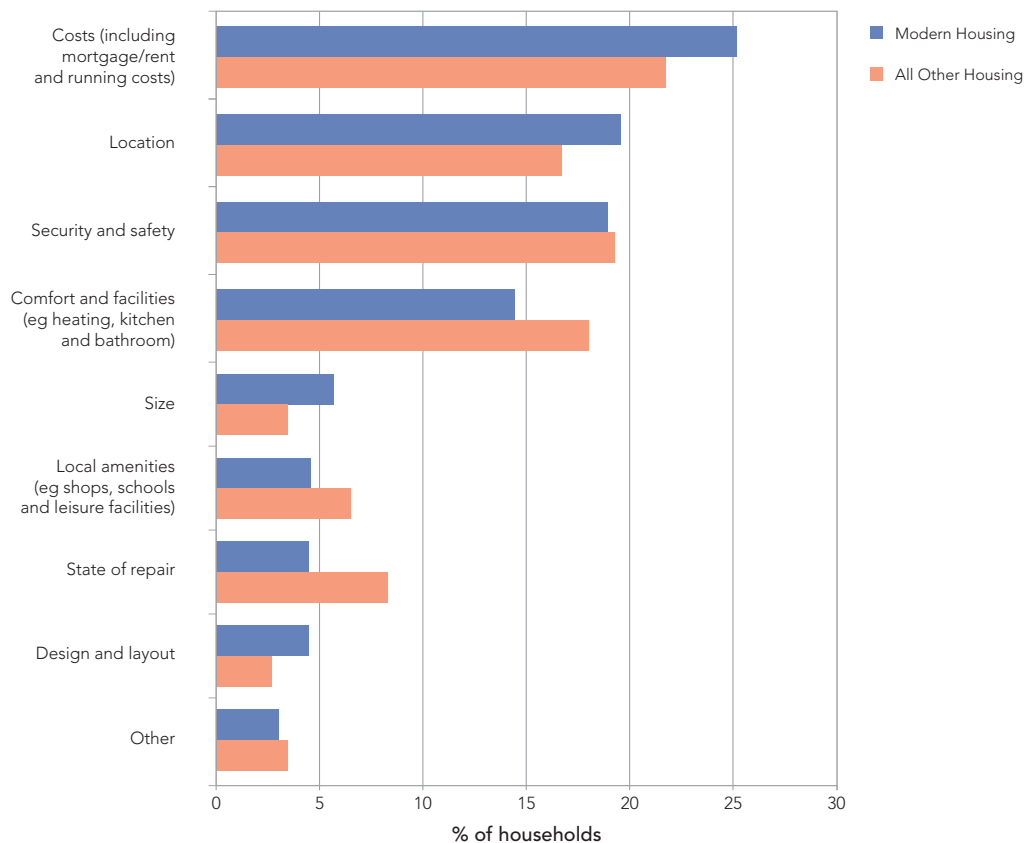


Figure 20 The single most important factors for households.

The four most important factors for Modern Housing are:

- running cost of home (25%)
- location (19%)
- safety and security (19%)
- comfort of internal facilities (14%).

Although all housing types tend to agree, there are some significant differences between Modern Housing and All Other Housing. There are significantly more households living in Modern Housing who rate the single most important factor as either the size of home or design and layout when compared with All Other Housing. Also there are fewer households living in Modern Housing that rate the state of repair as the single most important factor compared with All Other Housing. These findings suggest that most households agree on most important factors, but have different concerns. Households living in Modern Housing are more likely to be concerned about the size, design and

layout of their home and to be less concerned with the state of repair, than those in All Other Housing.

Figure 21 shows the top three to four most important factors rated by households regarding their homes. It has been ordered by the highest percentage response for households living in Modern Housing compared with All Other Housing.

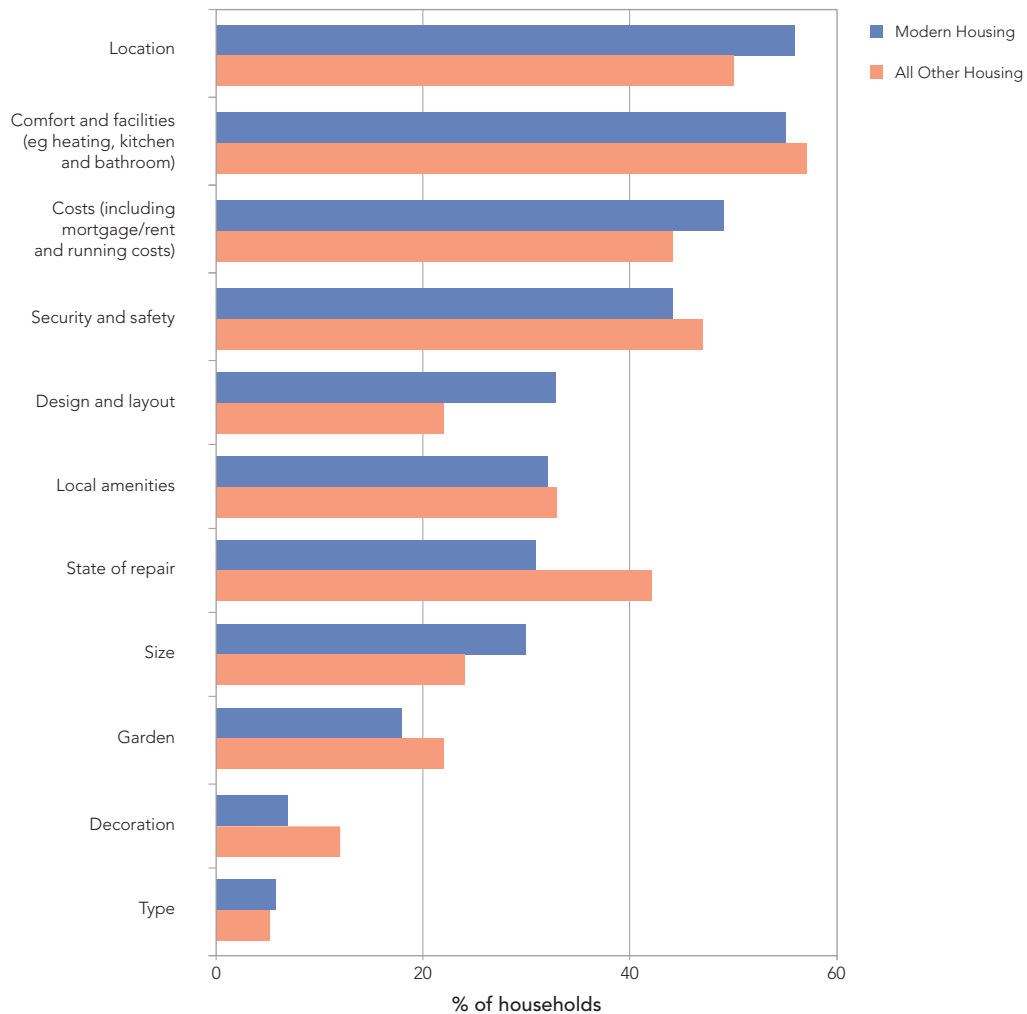


Figure 21 Households' three or four most important factors.

Figure 21 illustrates that the top priorities for households remain the same, as their most important factors, except the ranking of them changes slightly from Figure 20. It also shows that households living in Modern Housing agree on the four most important factors when compared with All Other Housing, the only difference is the ranking of them changes. The most ranked item for households in All Other Housing is the 'comfort of the internal facilities': they also rate 'safety and security' higher than 'costs'. These findings are hardly surprising, as the comfort of the internal facilities and safety and security are more likely to be better, or more predictable in Modern Housing.

Both Figure 20 and 21 show that design and layout are considered important by a few households, but for the majority of households they are not considered to be one of the most important factors of their home.

5.5 External design appearance

Ninety three per cent of households living in Modern Housing rate their homes as either fairly or very attractive. This is significantly different from All Other Housing, where only 82% rate the external design appearance as either fairly or very attractive. For Modern Housing there are no regional differences in household views on the external design appearance of their home.

5.6 Garden

Seventeen per cent of all households have no garden and this is similar to households in All Other Housing (Figure 22). Views about the size of the garden are significantly different between Modern Housing and All Other Housing. Although the majority of all households living in Modern Housing tend to agree the size of their garden is about right (65%). Slightly more households find their garden too small (13%) and slightly fewer households find their gardens too big (5%) when compared with All Other Housing.

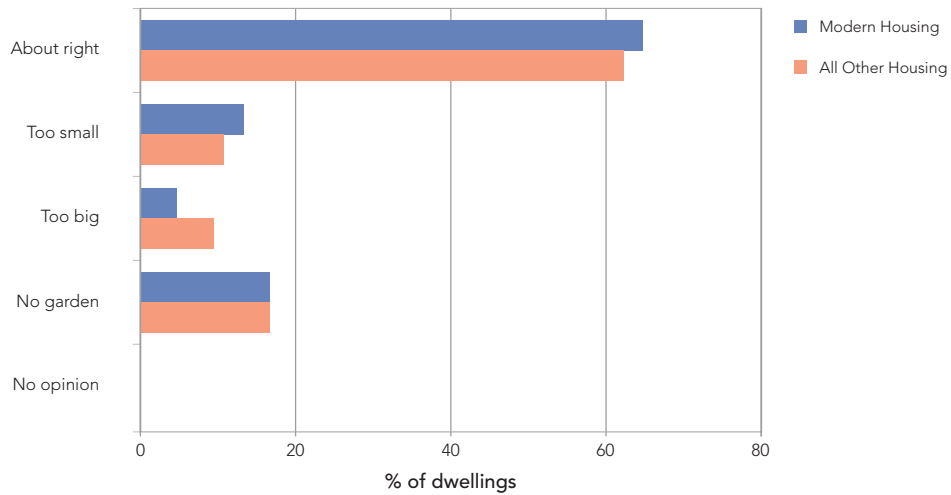


Figure 22 Households' views of garden sizes.



6 Views about the neighbourhood or local area

Using the EHCS 2001 data, this section focuses on household views of the surrounding area living in Modern Housing. The data is also supplemented by the SEH to provide additional information, and to check for any differences, in Recent Housing.¹⁰ All Other Housing is also used as a means of comparison to illustrate any differences.

6.1 Level of satisfaction

All households have very high levels of satisfaction with their neighbourhood with 85% of households living in Modern Housing being either very satisfied or fairly satisfied. There is no difference in satisfaction with the neighbourhood compared with All Other Housing.

6.2 Car and parking problems

Figure 23 compares the problems created by cars in the neighbourhood for Modern Housing and All Other Housing. Although households living in Modern Housing generally experience far fewer problems than All Other Housing, Figure 23 shows that 25% of households living in Modern Housing have problems with street parking, 16% with heavy traffic and 11% with road traffic noise.

There is no significant difference in the number of cars that households own between Modern Housing and Recent Housing. However, although recent planning policy (Planning Policy Statement 3)¹¹ has tried to restrict the provision of land for car parking, it does not seem to have had an impact on car ownership. Figure 24 shows the number of cars per household for Modern Housing.

¹⁰ The EHCS and SEH asked households about their locality; the EHCS used the term 'neighbourhood' and the SEH used the term 'local area'. These terms are used in the text to distinguish between the two different surveys.

¹¹ Communities and Local Government, 2006. Planning Policy Statement 3: *Housing*.

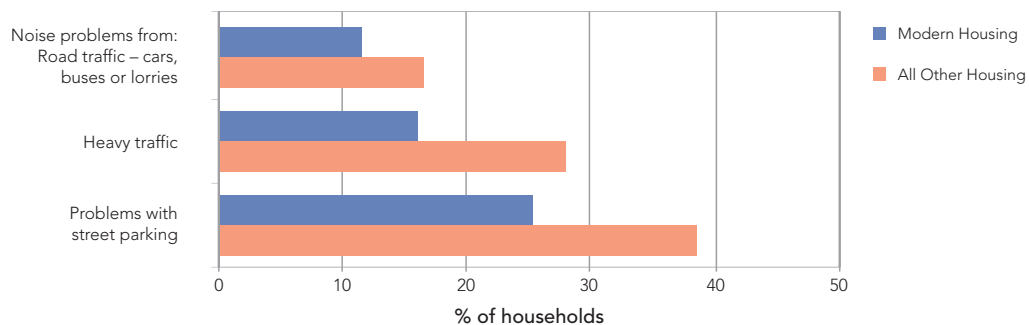


Figure 23 Car and parking problems.

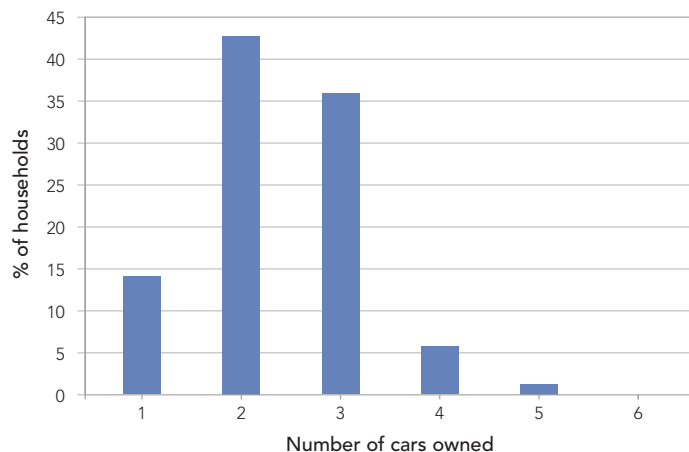


Figure 24 Number of cars owned by households living in Modern Housing.

6.3 Other problems in the neighbourhood or local area

Problems in the neighbourhood related to the public space are less for households living in Modern Housing compared with All Other Housing. Households living in Modern Housing experience a similar amount of problems from graffiti, teenagers and untidy gardens, but they experience fewer problems from dogs, litter and fear of being burgled.

6.4 Safety in the neighbourhood or local area

Most households living in Modern Housing consider themselves safe when they are out in their neighbourhood during the day or night. More households feel safer during the daytime in their neighbourhood (95%) than at night-time (61%). Three and a half per cent of households feel unsafe during the daytime out in their neighbourhood and 21.5% feel unsafe after dark. This is not significantly different from the results for All Other Housing.

However, households living in Modern Housing perceive themselves to be safer when alone in their own homes than those in All Other Housing. Figure 25 shows that more households living in Modern Housing consider themselves to be very safe (71%) and fewer households consider themselves to be a bit unsafe (3%), or very unsafe (0.5%). It is possible that a few more households in Modern Housing feel very safe because their homes have better security measures.

The SEH asks households how concerned they are about walking alone outside at night in their local area; there is no difference in their perception of safety for those living in Modern Housing or All Other Housing.

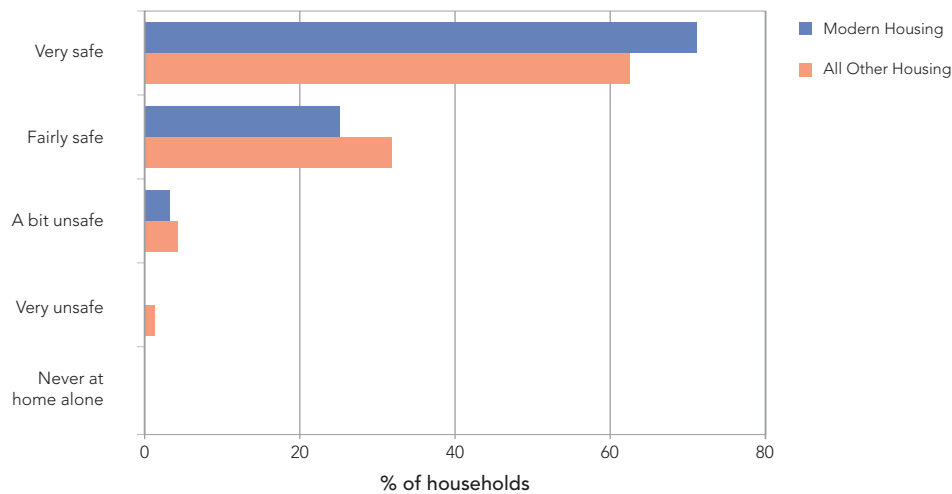


Figure 25 Views on safety in the home.

6.5 Access to facilities in the neighbourhood or local area

The EHCS asks households about the distance they have to walk to access facilities in their neighbourhood (Figure 26).

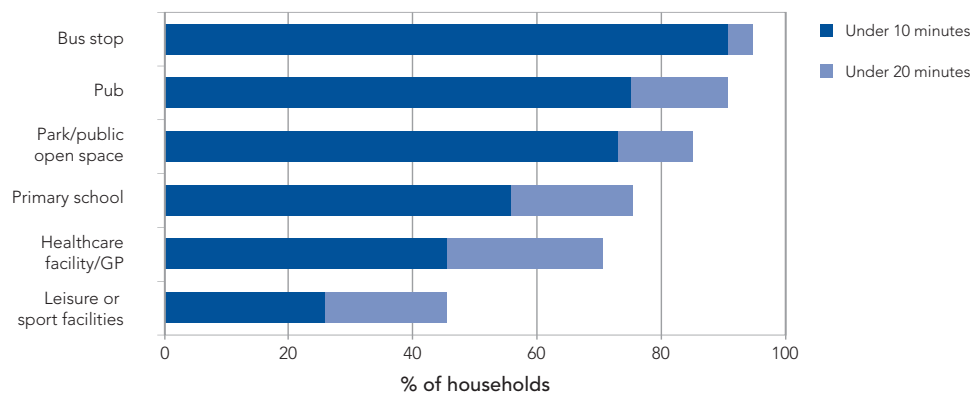


Figure 26 Distance to local facilities (less than 20 minutes walk) for households living in Modern Housing.

When access to facilities for households living in Modern Housing is compared with All Other Housing we find:

- There is no significant difference in access to public bars, healthcare facilities/GPs, and leisure or sports facilities: both households are a similar walking distance from these amenities.
- There is a significant difference, with slightly more households in All Other Housing, in having better access to bus stops (3% more), primary schools (9% more), and parks and public open spaces (4% more).

6.6 The most important aspects of the neighbourhood

In the EHCS, households are asked to rate four things they like best about their neighbourhoods. Those in Modern Housing and All Other Housing tend to agree on what they like best (Figure 27). The most rated items are: quiet, friendly people/neighbours, close to amenities and good, local shops and markets.

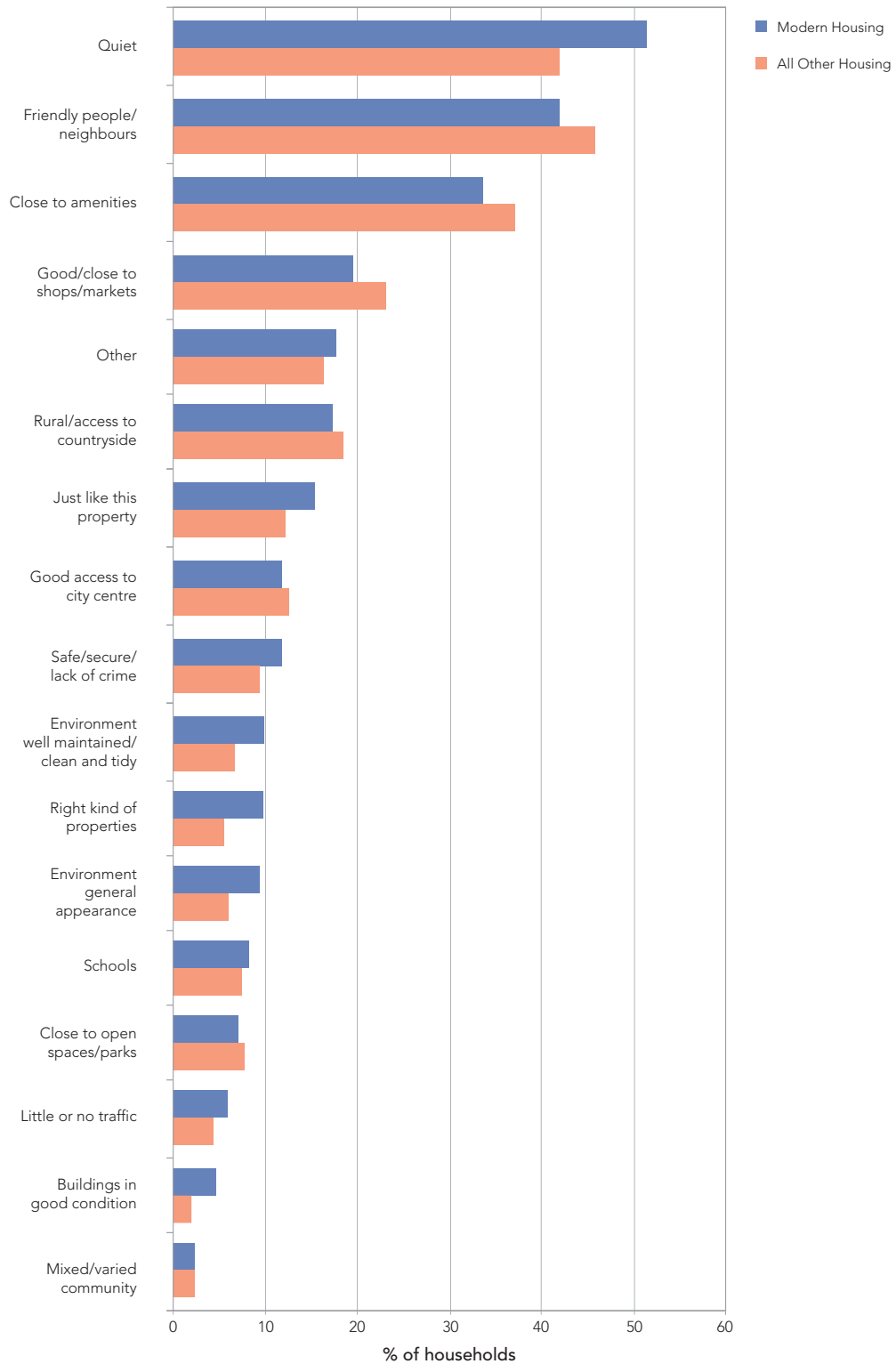


Figure 27 What households like best about their neighbourhoods.

6.7 Improvements to the local area

In the SEH, households are asked to select three things, from a list of 10 items, which they think are most important to improve in their local area (Figure 28).

The most highly rated item is reduction in crime and vandalism with 31% of households living in Modern Housing wanting this improvement. The other priorities are improvements to local amenities, parks and leisure facilities (14%) and the amount and quality of housing (13%)

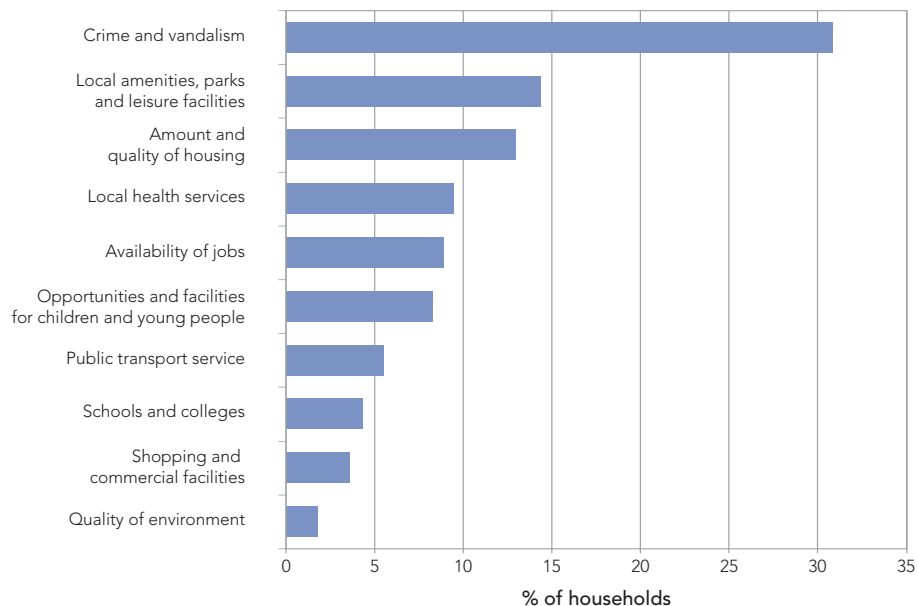
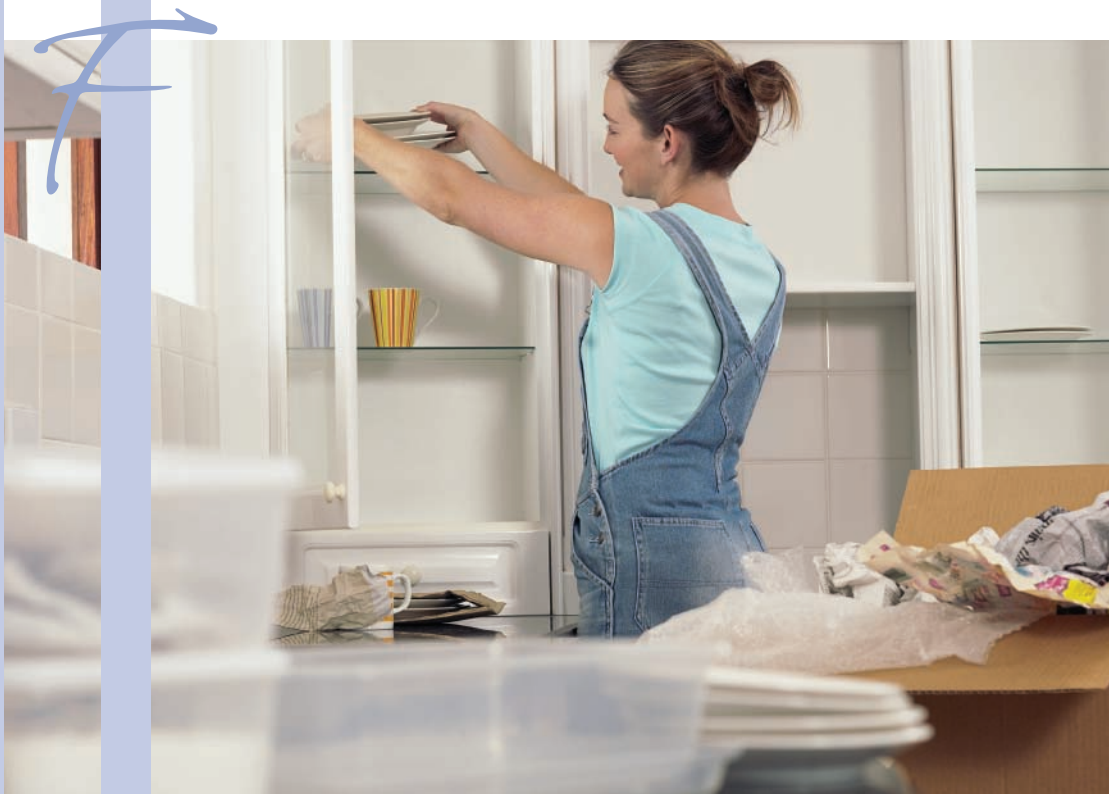


Figure 28 Most important aspects for improving the local area for households living in Modern Housing.

Views are very similar for households living in Recent Housing. These households have the same priorities with the exception of 'the amount and quality of housing'. The difference is that no households value 'the amount and quality of the housing' and slightly more households value 'local health services' and 'schools and colleges'.

On the whole, households in all housing groups tend to agree about the main improvements to the neighbourhood. The key differences are:

- A higher percentage of households living in Modern Housing rate 'The amount and quality of housing' (17%) and 'Availability of jobs' (12%) as important.
- A lower percentage of households living in Modern Housing rate 'Local amenities, parks and leisure facilities' (10%), 'Local health services' (8%) and 'Schools and colleges' (3%).



7 Summary of findings and recommendations

The aim of this review is to highlight the differences between Modern Housing, All Other Housing and Recent Housing, specifically to understand:

- How the Modern Housing stock profile compares with All Other Housing both regionally and nationally.
- The differences in the characteristics of households living in Modern Housing compared with All Other Housing.
- How household views on Modern Housing compare with views on All Other Housing. Specifically satisfaction with their homes and neighbourhoods, priorities in selecting their homes, and likes and dislikes concerning their homes and neighbourhoods.

This review highlights significant differences in Modern Housing between regions, and when compared with All Other Housing.

7.1 Findings

7.1.1 The housing stock profile

The focus of section 3 is on Modern Housing built from 1991 and prior to 2002. It finds that:

- House type, size and location are slightly different than All Other Housing. The proportion of Modern Housing (including flats) is similar to All Other Housing, but Modern Housing tends to be smaller in dwelling size, with two to four bedrooms, being mainly small terraced houses or detached properties. There is significantly more Modern Housing in rural locations (26%), compared with All Other Housing (20%). Modern Housing in rural locations tends to be the larger detached homes.
- There is no difference in room sizes in Modern Housing compared with All Other Housing, even though more households in Modern Housing (26%) compared with All

Other Housing (16%) would prefer to have larger rooms. This illustrates that expert views are often not consistent with those of households.

- Modern Housing is more likely to have energy efficiency measures such as double-glazing and condensing boilers, and to have much better energy efficiency. Typically, homes are 20 SAP pointers higher than in All Other Housing.
- Modern Housing on average achieves a significantly better HQI rating (typically five points higher) than All Other Housing and is significantly better on five of the indicators. It has a similar score to All Other Housing for four HQI indicators: HQI 1 Location, HQI 4 Site routes and movement, HQI 5 Unit size and energy, HQI 9 Energy, green and sustainability issues. This suggests potential areas of improvement for future housing.
- House prices for Modern Housing are on average significantly higher than for All Other Housing.
- Regionally, there are differences in Modern Housing. London and the East Midlands stand out as the regions that have the most differences when compared with the other regions.
 - East Midlands has the highest percentage of Modern Housing stock. It has the fewest flats, and the houses tend to be significantly larger, with more detached homes. It has the highest percentage of dwellings in rural locations. Modern Housing in this region tends to command higher prices than in other regions.
 - London has the most flats and rented accommodation (new homes) in its housing stock.

7.1.2 Household characteristics

Section 4 focuses on Modern Housing, and where necessary is supplemented with information from the SEH (for Recent Housing). The findings are that households living in Modern Housing:

- are more likely to be younger than those in All Other Housing, with 60% of Modern Housing occupied by households under 45 (65% for Recent Housing). Also, there are a higher percentage of households with children in Modern Housing compared with All Other Housing.
- are just as likely to own their home as all other households, but a new rented home is more likely to be a Registered Social Landlord household than a privately rented one.
- are much more likely to be employed and less likely to be retired when compared with All Other Housing.
- are slightly more likely to have moved more than 5 miles compared with All Other Housing, even though 49% of households living in Modern Housing have moved less than five miles.
- are significantly more likely to have previously owned a home than households in All Other Housing.
- move for the same reasons as all other households.

It also found that:

- there is no difference in the percentage of households with disabilities and non-white households in Modern Housing compared with All Other Housing.
- regionally there are a higher number of owner-occupied households in the East Midlands, and these households are also more likely to be employed. The South West region has the lowest percentage of households under 45 years old; however the percentage of under 45 households is still higher than for All Other Housing.

7.1.3 Household views

Views about their homes

Section 5 focuses on Modern Housing, and where necessary is supplemented with information from the SEH. For household views related to their home it finds that:

- ninety three per cent of all households living in Modern Housing are satisfied with their home. This is significantly higher than for All Other Housing, which also has very high levels of satisfaction (90%).
- where household satisfaction is high in Modern Housing, we also find that those with bigger homes are more likely to live in houses compared with flats, for example in the East Midlands in contrast to London. These high levels of satisfaction might also relate to the household's perception of whether they are getting value for money in their local housing market, for example, getting bigger homes compared with other areas where they might only get a small flat.
- satisfaction with the home is linked to the age of the household; typically younger households are less likely to be satisfied than older households. In Modern Housing there are significantly more households under the age of 45, so expected satisfaction should be lower. However, households under 45 have higher levels of satisfaction in Modern Housing than those in All Other Housing.
- these high levels of satisfaction would suggest that the most important concerns about their home are being met. These are:
 - location
 - comfort of the internal facilities
 - cost
 - safety and security.

Getting the factors right must be the key for keeping households satisfied.

- The design and layout of their home is rated by extremely few households as their first priority, and for most households it is not even rated in their top three priorities. These findings suggest that households' priorities in selecting their home are more likely to be linked to pragmatic issues, where they explicitly understand the impact that it will have on their quality of life, such as the location, affordability, safety and comfort. Asking households generally about 'design and layout' may not be the best way to gauge the impact of this on their life, as it is probably a very nebulous concept for them to relate to, and raises the following questions.
 - Does 'design' relate the structural qualities of their home or the finishes?
 - Do they relate design only to internal parts of the home, or is it related to the external parts?
 - Is design to do with functionality or aesthetics?
- All households in Modern Housing and All Other Housing tend to agree on the most important factors about their home; however, their priorities do differ slightly. Unsurprisingly, more households in Modern Housing are concerned about the size of their home and its design and layout and a lot less are concerned about the state of repair than those in All Other Housing.
- When households living in Modern Housing are asked to rate the three or four most important factors about their home, design and layout is ranked as the fifth most important factor. This suggests that although it is not the most important factor for the majority of households, it is still one of the most important factors for a few households living in Modern Housing.
- Satisfaction is probably not the best way to gauge people's views on their likes and dislikes such as the functional or aesthetic aspects of their home, especially as the research findings suggest that these are not a top priority in choosing their home.

Therefore satisfaction with the home can not be used as a 'proxy' for well designed homes. Especially since many households satisfied with their home are still dissatisfied with some of the design aspects of their home:

- a fifth of households living in Modern Housing would like more rooms
- a quarter of households living in Modern Housing would like larger rooms (this is significantly more than households in All Other Housing) although room sizes for different households are similar
- one third of households living in Modern Housing, similar to those in All Other Housing, would like more storage space.
- Overall the majority of households living in Modern Housing rate the above features of their homes positively. Significantly more households living in Modern Housing like the external design appearance (93%) of their homes compared with All Other Housing (82%), and so almost all of households like the way their homes look.

Views of their neighbourhood or local area

Section 6 focuses on Modern Housing, and where necessary is supplemented with information from the SEH. For household views on their neighbourhoods it finds that:

- The majority of households living in Modern Housing (85%) are satisfied with their neighbourhood which is similar to All Other Housing. Although satisfaction is high and similar in all households, households living in Modern Housing generally experience fewer problems in their neighbourhood compared to All Other Housing. Although they experience fewer problems in their neighbourhood, 25% of households experience problems with parking, and 16% experience problems with heavy traffic and 11% with problems from road noise. Cars ownership for households in Modern Housing has not changed for housing built after 2002.
- Safety in the neighbourhood for those living in Modern Housing is similar to households in other types of housing; however, a few more households living in Modern Housing consider themselves to be safer in their homes compared with All Other Housing.
- Access to facilities is slightly different in Modern Housing with All Other Housing, with households living in Modern Housing having less access to schools, bus stops and public parks. This is possibly due to a higher percentage of Modern Housing being in rural locations.
- All households rate similar things that they like best about their neighbourhood with Modern Housing rating quiet, friendly people/neighbours and being close to amenities as the top three things, indicating that people's likes are similar in all types of housing.
- A third of households living in Modern Housing rate the reduction of crime and vandalism as the most desired improvement in their neighbourhood.

The above conclusions indicate that Modern Housing seems to be of better quality than housing built before, but there are many factors that can affect household views of their home. The issue of room sizes illustrates that expert opinion does not necessarily reflect household views. It therefore represents a considerable challenge to produce Modern Housing that all parties, experts and households, will be equally content with.

7.2 Recommendations

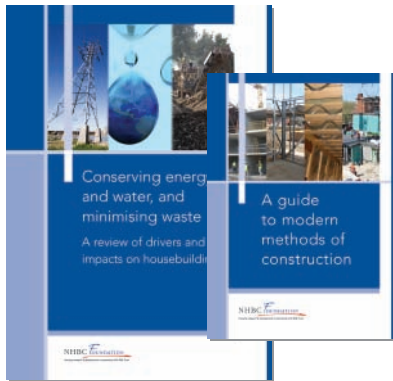
The focus of this review has been to compare Modern Housing to All Other Housing, especially household views of Modern Housing, to highlight any improvements that could be made.

The findings of this review highlight that the design of future homes could be improved by:

- increasing room sizes
- providing more storage
- providing more parking provision (although planning policy restricts this)
- implementing measures to reduce crime and vandalism
- provision of better local facilities such as public transport
- using measures to assess the design quality of housing schemes prior to them being built (HQIs in this review highlight areas of improvement).

However, it is important to consider that the majority of households are currently satisfied with many of these aspects of their housing.

NHBC Foundation publications



A guide to modern methods of construction

NF1, December 2006

Conserving energy and water, and minimising waste

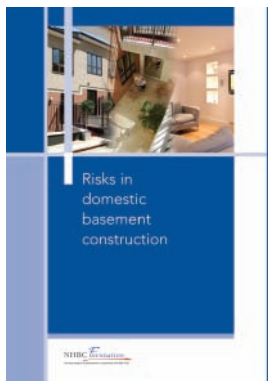
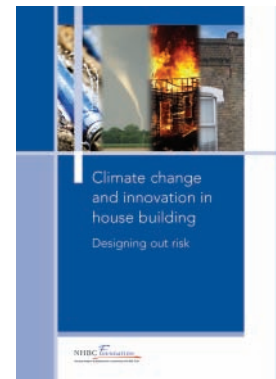
A review of drivers and impacts on house building

NF2, March 2007

Climate change and innovation in house building

Designing out risk

NF3, August 2007



Risks in domestic basement construction

Including basements in houses increases the floor area and living space, and the value to the owner. Basements can allow higher housing densities, which offers increased value to the developer. However, these increases in value may be accompanied by a need for greater site investigation and more detailed design to minimise the risks in construction and use. Construction site skills must also be taken into account.

This guide summarises current trends in basement provision, and the regulatory, performance, risks and planning issues that affect basements.

NF4, October 2007

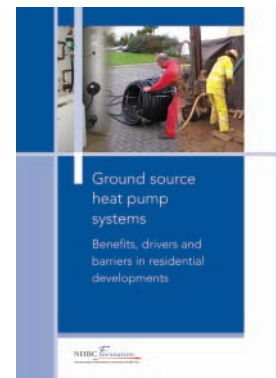
Ground source heat pump systems

Benefits, drivers and barriers in residential developments

Ground source heat pump systems use low level heat energy created by solar gain in the near surface layers of the earth for space and water heating. This potentially limitless supply of energy appears to be a good route to a sustainable energy supply.

This review has been produced at a time when the take-up of these systems is on the increase. It provides a valuable tool for specifiers, developers and builders looking to incorporate this new technology.

NF5, October 2007



NHBC Foundation publications in preparation

- Hydraulic lime mortars
- Microgeneration and renewable energy technologies
- Site waste management plans

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Modern Housing

Households' views of their new homes

This review compares Modern Housing (homes built since 1991), older housing stock (pre-1991) and housing built between 2002 and 2004, using data from Communities and Local Government's English House Condition Survey and Survey of English Housing.

The review summarises the results and statistics from these surveys and provides a snapshot of households' views on their homes and neighbourhoods, including suggestions for potential improvements to future housing.

Offering a powerful resource tool the review details information on topics as varied as satisfaction levels, demographics, spatial issues, safety and perceptions of neighbourhoods overall.



The NHBC Foundation has been established by NHBC in partnership with the BRE Trust. It facilitates research and development, technology and knowledge sharing, and the capture of industry best practice. The NHBC Foundation promotes best practice to help builders, developers and the industry as it responds to the country's wider housing needs. The NHBC Foundation carries out practical, high quality research where it is needed most, particularly in areas such as building standards and processes. It also supports house builders in developing strong relationships with their customers.

