



## **English Housing Survey**

Headline Report, 2016-17



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## Introduction and main findings

- 1. The English Housing Survey (EHS) is a national survey of people's housing circumstances and the condition and energy efficiency of housing in England. It was first run in 2008-09. Prior to then, the survey was run as two standalone surveys: the English House Condition Survey and the Survey of English Housing. This report provides the findings from the 2016-17 survey.
- 2. This report is split into two sections. The first, on households, covers tenure (owner occupation and the social and private rented sectors) and the demographic and economic characteristics of the people who live in the three tenures. It then explores how affordability varies between tenures and how this has changed over time, buying expectations among renters, average rental costs in the private and social rented sectors and the extent to which private and social renters claim Housing Benefit to help meet the cost of their rent. Rates of overcrowding and under-occupation by tenure are then examined, followed by analysis of personal well-being and the extent to which this varies by tenure.
- 3. The second section, on homes, provides an overview of the housing stock in England including: the age, size, and type of home; energy efficiency of the housing stock; decent homes; homes affected by damp and mould; and smoke alarms. Additional annex tables provide further detail to that covered in the main body of the report.
- 4. This is the first release of data from the 2016-17 survey. The report will be followed up with a series of more detailed topic reports in July.

### Main findings

Owner occupation rates remain unchanged for the fourth year in a row.

 Of the estimated 23.1 million households in England, 14.4 million or 63% were owner occupiers. The proportion of households in owner occupation increased steadily from the 1980s to 2003 when it reached its peak of 71%. Since then, owner occupation gradually declined to its current level. However, the rate of owner occupation has not changed since 2013-14.

While the overall rate of owner occupation has not changed in recent years, the composition of the group has: there are more outright owners while the proportion of those buying with a mortgage is down.

 In 2016-17, 34% of households were outright owners while 28% were mortgagors. Since 2013-14 there have been more outright owners than mortgagors, and the proportion of mortgagors has declined (from 31% of households in 2013-14 to 28% in 2016-17). The increase in the number and proportion of outright owners is at least partly explained by population ageing, with large numbers of baby boomers reaching retirement age, paying off their mortgages and moving into outright ownership.

## Over the last decade, the drop in the proportion of 25-34 and 35-44 year olds in owner occupation has been particularly pronounced.

- In 2006-07, about three quarters (72%) of those aged 35-44 were owner occupiers. By 2016-17, this had fallen to half (52%). While owner occupation remains the most prevalent tenure for this age group, there has been a considerable increase in the proportion of 35-44 year olds in the private rented sector (11% to 29%). The proportion in the social rented sector did not change.
- While the under 35s have always been overrepresented in the private rented sector, over the last decade or so the increase in the proportion of such households in the private rented sector has been particularly pronounced. In 2006-07, 27% of those aged 25-34 lived in the private rented sector. By 2016-17 this had increased to 46%. Over the same period, the proportion of 25-34 year olds in owner occupation decreased from 57% to 37%. In other words, households with a HRP aged 25-34 are more likely to be renting privately than buying their own home, a continuation of a trend first identified in 2012-13. As with those aged 35-44, the proportion of 25-34 year olds in the social rented sector did not change.

## The private rented sector remains larger than the social rented sector, and is now the most prevalent tenure in London.

- In 2016-17, the private rented sector accounted for 4.7 million or 20% of households. The social rented sector accounted for 3.9 million households or 17% of households. There was no change in the size of either sector between 2015-16 and 2016-17.
- In London, private renting was the most prevalent tenure (30%), followed by outright ownership (25%). A smaller proportion of households were buying with a mortgage (22%) or renting in the social sector (22%). Outside of London, outright ownership predominated (36%), followed by buying with a mortgage (30%), and renting in the private (19%) and social (16%) sectors.

# The composition of the social sector has changed in recent years, with more households renting from housing associations than local authorities; although this is not the case in London.

• In 2008-09, the social rented sector accounted for 18% of households with 9% (2.0 million) renting from housing associations and 9% (1.9 million) renting from local authorities. In 2016-17, 10% (2.4 million) rented from housing associations, 7% (1.6 million) from local authorities.

• In 2016-17, in London, an equal proportion of social tenants rented from a local authority as rented from a housing association (11% each). Outside of London, a greater proportion of social tenants rented from housing associations (10%, compared with 6% renting from local authorities).

## The proportion of social renters who expect to buy has continued to increase. No such increase was observed among private renters.

- In 2016-17, 60% of private renters (2.7 million households) and 30% of social renters (1.2 million households) stated that they expected to buy a property at some point in the future.
- Between 2015-16 and 2016-17, there was no change in the proportion of private renters who expected to buy however the proportion of social renters who expected to buy increased from 27% to 30%.

## Rates of overcrowding did not change but remained higher in the rented sectors.

 In 2016-17, 7% of households in the social rented sector (268,000) and 5% of households in the private rented sector (231,000) were living in overcrowded accommodation. Just 1% of owner occupied households (183,000 households) were overcrowded.

#### Meanwhile, about half of owner occupied households are under-occupied.

- The number and proportion of under-occupied households in the owner occupied sector increased between 1996-97 and 2016-17 from 39% (5.4 million households) to 51% (7.3 million households).
- In contrast, the proportion of under-occupied households in the rented sectors decreased over this period. Under-occupation amongst private renters decreased from 17% in 1996-97 to 15% in 2016-17 and under-occupation amongst social renters decreased from 12% to 8%. At 8%, under-occupation in the social rented sector is the lowest it has been in the last 20 years.

## The energy efficiency of English homes has increased considerably in the last 20 years, but did not increase between 2015 and 2016.

In 2016, the average SAP rating of English dwellings was 62 points, up from 45 points in 1996. This increase was evident in all tenures. However, the increase appears to be slowing and there was no change in the average SAP rating of homes between 2015 and 2016 (in any tenure).

#### The number of dwellings with smart meters has increased.

 In 2016, 9% of dwellings with mains electricity had an electricity smart meter and 8% of dwellings with mains gas supply had a gas one, up from 6% and 4% respectively in 2015.

## The number of homes with working smoke and carbon monoxide alarms has also increased.

- In 2016-17, 90% of households had at least one working smoke alarm, up from 89% in 2015-16 and 84% in 2008-09. The increase between 2008-09 and 2016-17 was observed across all tenures. The increase since 2015-16, was driven by a significant increase in the proportion of private renters with a working smoke alarm, from 83% to 88%.
- In 2016, 33% of all dwellings had a carbon monoxide alarm, up from 28% in 2015. Dwellings with a solid fuel appliance, such as a coal fire or wood burning stove, were more likely to have a carbon monoxide alarm than dwellings with no solid fuel appliance (37% compared with 32%).

### Acknowledgements and further queries

- 5. Each year the English Housing Survey relies on the contributions of a large number of people and organisations. The Ministry of Housing, Communities and Local Government (MHCLG) would particularly like to thank the following people and organisations, without whom the 2016-17 survey and this report, would not have been possible: all the households who gave up their time to take part in the survey, NatCen Social Research, the Building Research Establishment (BRE) and CADS Housing Surveys.
- 6. This report was produced by the EHS team at MHCLG. If you have any queries about it, would like any further information or have suggestions for analyses you would like to see included in future EHS reports, please contact ehs@communities.gsi.gov.uk.
- 7. The responsible analyst for this report is: Reannan Rottier, Housing and Planning Analysis Division, MHCLG. Contact via ehs@communities.gsi.gov.uk

## Section 1

## Households

- 1.1 There are three main housing tenures in England: owner occupation and the private and social rented sectors. Owner occupation includes households that own their home outright and households that have a mortgage. The social rented sector includes both local authority and housing association homes.
- 1.2 This section compares the demographic characteristics of the people who live in these three different tenures, how affordability varies between the sectors, and how this varies by region and has changed over time. It also describes the characteristics of first time buyers, including details on how they funded the purchase of their first home.
- 1.3 It then explores buying expectations among renters, average rental costs in the private and social rented sectors and the extent to which private and social renters claim Housing Benefit to help meet the cost of their rent. Rates of overcrowding and under-occupation by tenure are then examined, followed by analysis of personal well-being and the extent to which this varies by tenure.

#### Trends in tenure

- 1.4 In 2016-17, there were an estimated 23.1 million households in England living in self-contained accommodation, Annex Table 1.1. This figure excludes those living in institutional accommodation such as nursing homes or halls of residence.
- 1.5 Owner occupation remained the largest tenure group, with 14.4 million households, representing 63% of all households in 2016-17. The proportion of households in owner occupation increased steadily from the 1980s to 2003 when it reached its peak of 71%. Since then, owner occupation gradually declined to its current level. However, the rate of owner occupation has not changed since 2013-14, Figure 1.1.

80 70 60 50 40 30 20 10 0 992 993 994 995 966 997 998 8 owner occupiers private renters social renters

Figure 1.1: Trends in tenure (proportions), 1980 to 2016-17

Base: all households

Note: underlying data are presented in Annex Table 1.1

Sources:

1980 to 1991: DOE Labour Force Survey Housing Trailer;

1992 to 2008: ONS Labour Force Survey;

2008-09 onwards: English Housing Survey, full household sample

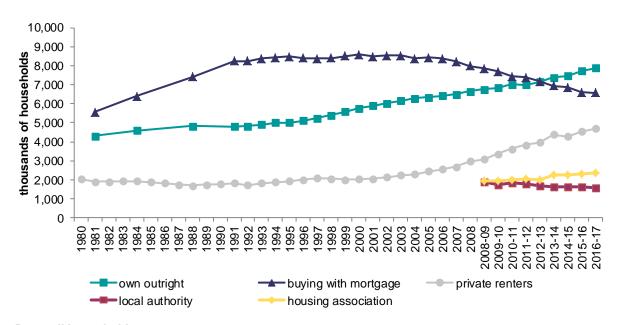
- 1.6 Owner occupation is made up of two distinct groups: outright owners and those buying with a mortgage (referred to throughout this report as 'mortgagors'). In 2016-17, 34% of households were outright owners while 28% were mortgagors<sup>1</sup>.
- 1.7 While the overall rate of owner occupation has not changed in recent years, the composition of the group has: since 2013-14 there have been more outright owners than mortgagors, and the proportion of mortgagors has declined (from 31% in 2013-14 to 28% in 2016-17). The increase in the number and proportion of outright owners is at least partly explained by population ageing, with large numbers of baby boomers reaching retirement age, paying off their mortgages and moving into outright ownership.
- 1.8 In 2016-17, the **private rented sector** accounted for 4.7 million or 20% of households. Throughout the 1980s and 1990s, the proportion of private rented households was steady at around 10%. However, the sector has more than doubled in size since 2002.
- 1.9 The **social rented sector**, at 3.9 million households (17%), remained the smallest tenure, following a long downward trend which has stabilised over the last decade or so.

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<sup>&</sup>lt;sup>1</sup> Does not sum to 63% due to rounding.

The composition of the social sector has changed in recent years. In 2008-09, the social rented sector accounted for 18% of households with 9% (2.0 million) renting from housing associations and 9% (1.9 million) renting from local authorities. In 2016-17, 10% (2.4 million) rented from housing associations, 7% (1.6 million) from local authorities, Figure 1.2.

Figure 1.2: Trends in tenure (thousands of households), 1980 to 2016-17



Base: all households

Notes:

1) underlying data are presented in Annex Table 1.1

2) Separate housing association/local authority estimates are not available prior to 2008-09. This is because a large number of HA tenants wrongly report that that they are LA tenants; most commonly because their home used to be owned by the council but had transferred to a housing association. Since 2008-09, an adjustment has been made for this

Sources:

1980 to 1991: DOE Labour Force Survey Housing Trailer;

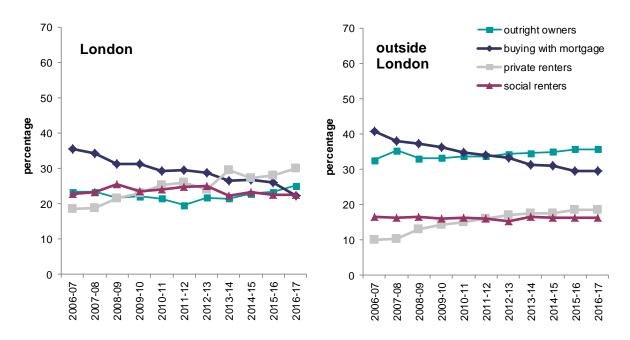
1992 to 2008: ONS Labour Force Survey;

2008-09 onwards: English Housing Survey, full household sample

- When compared with the other English regions, London had a very different tenure profile. In particular, private renting was the most prevalent tenure (30%), followed by outright ownership (25%). A smaller proportion of households were buying with a mortgage (22%) or renting in the social sector (22%), Annex Table 1.2.
- Outside of London, outright ownership predominated (36%), followed by buying with a mortgage (30%), and renting in the private (19%) and social (16%) sectors.
- In London, an equal proportion of social tenants rented from a local authority as rented from a housing association (11% each). Outside of London, a greater proportion of social tenants rented from housing associations (10%, compared with 6% renting from local authorities).

1.14 In the last 10 years, owner occupation declined in and out of London, though the overall decline has abated over the past four years. The fall was driven by declines in the proportion of mortgagors. Over the same period, the private rented sector increased in and out of London. The proportion of households in the social rented sector did not change in either area, Figure 1.3.

Figure 1.3: Trends in tenure, London and outside London, 2006-07 to 2016-17



Base: all households

Note: underlying data are presented in Annex Table 1.2

Sources:

2006-07 to 2007-08: English House Condition Survey, full household sample;

2008-09 onwards: English Housing Survey, full household sample

## Demographic and economic characteristics

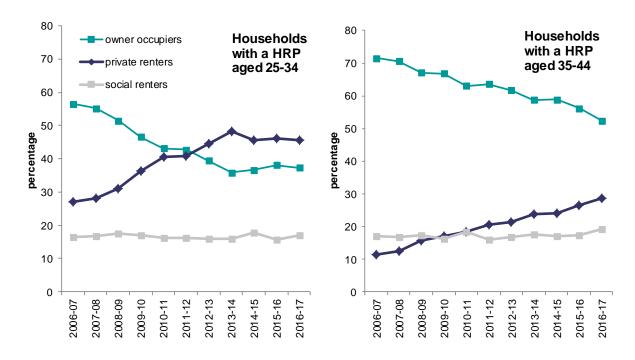
1.15 In this section, the demographic and economic profile of the household reference person (HRP) is explored in more detail. The HRP is the 'householder' in whose name the accommodation is owned or rented (see the glossary for further information).

#### Age

1.16 Not surprisingly, outright owners were concentrated among the older age bands while mortgagors were typically in the middle age bands. In 2016-17, 61% of outright owner households had a HRP aged 65 or over while 60% of households with a mortgage had a HRP aged 35-54. About two thirds (68%) of households in the private rented sector had a HRP aged under 45 years, Annex Table 1.3.

- 1.17 About one fifth (19%) of social rented households had a HRP aged 16-34, with 19% aged 35-44 and 20% aged 45-54. The most prevalent group in the social rented sector were households with a HRP aged 65 or over (27%).
- 1.18 Over the last decade, the decline in owner occupation has been particularly pronounced for 25-34 and 35-44 year olds. In 2006-07, about three guarters (72%) of those aged 35-44 were owner occupiers. By 2016-17, this had fallen to a half (52%). While owner occupation remains the prevalent tenure for this age group, there has been a considerable increase in the proportion of 35-44 year olds in the private rented sector (11% to 29%). The proportion in the social rented sector did not change. However, in 2011-12, the private rented sector overtook the social rented sector to become the second most prevalent tenure for 35-44 year olds, Figure 1.4.
- 1.19 While the under 35s have always been overrepresented in the private rented sector, over the last decade or so the increase in the proportion of such households in the private rented sector has been particularly pronounced. In 2006-07, 27% of those aged 25-34 lived in the private rented sector. By 2016-17 this had increased to 46%. Over the same period, the proportion of 25-34 year olds in owner occupation decreased from 57% to 37%. In other words, households with a HRP aged 25-34 are more likely to be renting privately than buying their own home, a continuation of a trend first identified in 2012-13. As with those aged 35-44, the proportion of 25-34 year olds in the social rented sector did not change.

Figure 1.4: Trends in tenure, households with a HRP aged 25-34 or 35-44, 2006-07 to 2016-17



Base: all households with a HRP (Household Reference Person) aged 25-34 or 35-44 Notes:

- 1) based on the age of the HRP. The HRP is the person in whose name the accommodation is owned or rented.
- 2) underlying data are presented in Annex Table 1.4 Sources:

2003-04 to 2007-08: English House Condition Survey, full household sample;

2008-09 onwards: English Housing Survey, full household sample

#### Household type

- 1.20 Household type varied widely by tenure. Reflecting their older age profile, outright owner households were predominately couples with no dependent children (44%) and one person households (34%), Annex Table 1.3.
- 1.21 Couples with and without dependent children predominate among mortgagors while the social rented sector had the highest proportion of single person households. One in five (21%) social renters were lone females, 18% were lone males.
- 1.22 Not surprisingly, the proportion of households with children varied by tenure. Some 44% of households buying with a mortgage had dependent children compared with just 9% of outright owners. Over a third of private (38%) and social (35%) renters had dependent children, Annex Table 1.5.
- 1.23 Between 2006-07 and 2016-17, the number of households with dependent children in the private rented sector increased by about 966,000. Over the same 10 year period, there was a corresponding decrease of 1.0 million in the

number of households with children who are buying their home with a mortgage.

#### **Economic status and income**

- In 2016-17, 61% of households that owned outright had a retired HRP, consistent with the older age profile of this group. Over a third (36%) of outright owners were working (either full or part-time). In contrast, most (91%) mortgagors were working, with 83% in full-time work and 8% in part-time work. Just 4% of mortgagors were retired, Figure 1.5.
- 1.25 Three guarters (74%) of private renters were working, with 63% in full-time work and 11% in part-time work. Smaller proportions of private renters were retired (9%), in full-time education (6%), or unemployed (4%).
- 1.26 Among social renters, 43% were working, with 29% in full-time work and 13%<sup>2</sup> in part-time work. Over a quarter (27%) of social renters were retired. One in five (21%) were 'inactive' a group which includes those who have a long-term illness or disability and those who were looking after the family or home.

<sup>&</sup>lt;sup>2</sup> Unrounded figures sum to 43%.

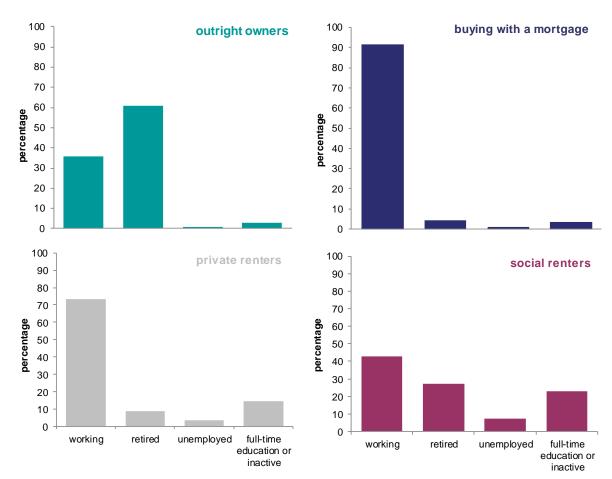


Figure 1.5: Economic activity of HRP, by tenure, 2016-17

Base: all households

Note: underlying data are presented in Annex Table 1.3 Source: English Housing Survey, full household sample

1.27 Social renters were concentrated in the lower income quintiles (45% were in the lowest income quintile; 28% in the second lowest) while mortgagors were concentrated in the highest income quintiles (37% were in the top income quintile; 29% in the second). This is not surprising given the economic statuses of the two groups. Private renters and outright owners were fairly evenly spread across the quintiles.

### First time buyers

1.28 In 2016-17, there were around 671,000 first time buyers in England. That is, buyers who had bought for the first time in the last three years and not owned a property previously, Annex Table 1.6<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> First time buyers are households that have purchased a property that is their main home in the last three years. A three year threshold is used to ensure that the sample is large enough for analysis.

#### Age

1.29 In 2016-17, the average age of first time buyers was 33 years, up from 30 in 2006-07, Annex Table 1.7.

#### Household type

In 2016-17, 43% of first time buyer households were couples without dependent children; 29% were couples with dependent children, while 26% were one person households, Annex Table 1.8.

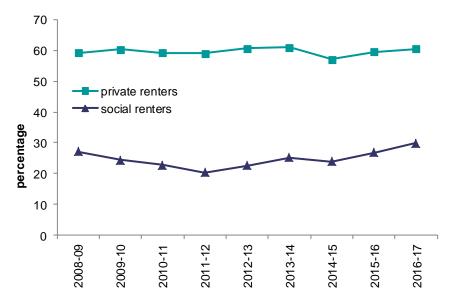
#### Income and mortgage type

- With an average (mean) deposit of £48,591 (£25,000 median), it is not surprising that over half (56%) of first time buyers were in the upper two income guintiles, Annex Tables 1.8 and 1.9.
- 1.32 Almost all first time buyers (98%) had a repayment mortgage. About half (52%) had a mortgage of 30 years or more; 42% had a 20-29 year mortgage. A small proportion (7%) had a 1-19 year mortgage, Annex Table 1.9.
- 1.33 Two thirds (67%) of first time buyers paid a deposit of less than 20% of the purchase price of their property. A small number (40,000 or 7%) bought their first home outright.
- 1.34 Most (80%) first time buyers funded the purchase of their first home with savings: 35% had help from family or friends while 10% used an inheritance. Many first time buyers used a combination of sources.
- 1.35 Half (50%) of first time buyers had bought their first home jointly with a partner or spouse while 47% bought in their name only.

## Future buying expectations

- In 2016-17, 60% of private renters (2.7 million households) and 30% of social renters (1.2 million households) stated that they expected to buy a property at some point in the future, Annex Table 1.10.
- 1.37 Between 2015-16 and 2016-17, there was no change in the proportion of private renters who expected to buy however the proportion of social renters who expected to buy increased from 27% to 30%, Figure 1.6.

Figure 1.6: Percentage of private and social renters who expect to buy, 2008-09 to 2016-17



Base: all renting households

Note: underlying data are presented in Annex Table 1.11 Source: English Housing Survey, full household sample

- 1.38 Among social renters who expected to buy, 60% of local authority tenants and 39% of housing association tenants expected to buy their current home, Annex Table 1.10. The overall proportion of social tenants who expected to buy their current home increased from 35% in 2010-11 to 47% in 2016-17. Annex Table 1.10.
- Renters who expected to buy a home were also asked how long they thought it would be before they would do so. In 2016-17, 26% of private renters and 15% of social renters said they expected to buy within two years. Meanwhile, 41% of private renters and 57% of social renters expecting to buy thought that it would be five years or more before they did so.

#### Rents

In 2016-17, the average (mean) rent (excluding services but including Housing Benefit) for households in the social sector was £102 compared with £192 per week in the private rented sector<sup>4</sup>, a difference of £90 per week, Annex Table 1.12.

<sup>&</sup>lt;sup>4</sup> There are differences in the methodology of the English Housing Survey compared with ONS experimental quarterly Index of Private Housing Rental Prices (IPHRP). The English Housing Survey average weekly private rents over time reflect changes in price, quality and composition of the private rented stock. In contrast, the IPHRP specifically excludes both changes in composition and quality to ensure only pure price change is captured. See: http://www.ons.gov.uk/ons/rel/hpi/index-of-privatehousing-rental-prices/index.html for more information.

- 1.41 Social and private rents are higher in London than outside of London. Moreover, the gap between social and private rents is greater in London than it is in the rest of England.
- 1.42 In 2016-17, the average private rent in London was £309 per week, about twice the average rent outside London (£158 per week). Social renters in London paid, on average, £132 per week compared with £95 per week outside of London.

### **Affordability**

- In this section, affordability is explored. A simple measure of housing affordability has been derived by calculating the average proportion of income spent on housing. The proportion of income spent on mortgage payments (both the repayment element and the interest element) is compared with the proportion spent on rents in the social and private rented sectors. Housingrelated costs, such as water and fuel bills, insurance, maintenance costs and council tax are not included in calculation. Income is taken to be the gross weekly household income, including and excluding benefits. Outright owners are excluded from this analysis as they have no mortgage costs.
- 1.44 Two different calculations are made: one based on the household income (i.e. the income of all the members of the household), and another based on HRP and partner income only (irrespective of whether there are other adults in the household). For both measures it is not known which members of the household contribute to the rent or mortgage. For the household measure, it is assumed that all household members contribute to the rent or mortgage; for the HRP and partner measure, it is assumed that only the HRP and partner contribute.
- 1.45 On average, those buying their home with a mortgage spent 18% of their household income on mortgage payments whereas rent payments were 28% of household income for social renters and 34% of household income for private renters. Excluding Housing Benefit, the average proportion of income spent on rent was 37% for social renters and 39% for private renters, Annex Table 1.13 and Figure 1.7.

eincluding housing benefit

excluding housing benefit

about 10

buying with private renters local authority housing association

Figure 1.7: Mortgage/rent as a proportion of household income (including and excluding Housing Benefit), by tenure, 2016-17

Base: all households making mortgage or rent payments Notes:

mortgage

- 1) underlying data are presented in Annex Table 1.13
- 2) excludes households without a mortgage (i.e. outright owners), those with part-mortgage and part-rent (i.e. shared owners) and zero rent households
- 3) includes income from all household members irrespective of whether or not they contribute to the rent or mortgage

Source: English Housing Survey, full household sample

- 1.46 Between 2010-11 and 2016-17, the proportion of household income that mortgagors spent on their mortgage did not change. Nor did the proportion of household income (including housing benefit) that private renters spent on their rent change. In the same period the proportion of household income (including housing benefit) that social renters spent increased from 27% to 28%, Annex Table 1.13.
- 1.47 When HRP and partner income is used, those buying their home with a mortgage spent, on average, 19% of their income on mortgage payments whereas rent payments were 31% of income for social renters and 41% of household income for private renters. Excluding Housing Benefit, the average proportion of income spent on rent was 41% for social renters and 46% for private renters.

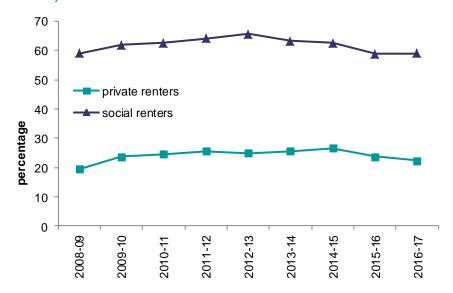
#### Rent arrears

- In 2016-17, 25% of social renters were either currently in arrears or had been in the last 12 months (around 682,000 households), unchanged from 2011-12, Annex Table 1.14.
- 1.49 A smaller proportion (9%) of private renters were either currently in arrears or had been in the last 12 months (around 392,000 households), unchanged from 2011-12.

### **Housing Benefit**

- Housing Benefit is a means-tested benefit provided by the state to low income households living in the two rented sectors. The benefit is usually administered by the local authority in which the rented property is located. This section compares take up of Housing Benefit by households in the social and private rented sectors.
- 1.51 In 2016-17, 59% (2.3 million households) of social renters and 22% (1.0 million households) of private renters received Housing Benefit to help with the payment of their rent, Annex Table 1.15.
- Between 2008-09 and 2014-15, the proportion of private renters in receipt of Housing Benefit increased steadily from 19% to 27%; since then the proportion has declined to its current 22%, Figure 1.8.
- 1.53 Among social renters, the proportion in receipt of Housing Benefit increased between 2008-09 and 2012-13 (from 59% to 66%); since then the proportion has dropped back to 59%.

Figure 1.8: Percentage of private and social renters in receipt of Housing Benefit, 2008-09 to 2016-17



Base: all renting households

Note: underlying data are presented in Annex Table 1.15 Source: English Housing Survey, full household sample

1.54 Social renters in receipt of Housing Benefit received an average of £82 per week, lower than the average amount received by private renters (£103). Between 2008-09 and 2016-17, the average weekly amount of Housing Benefit received increased for social (from £62 per week) but not for private renters.

#### Housing Benefit, by economic status

- 1.55 The increase in the proportion of private renters in receipt of Housing Benefit since 2008-09 was driven by an increase in the proportion of working renters in receipt of the benefit. In 2008-09, 7% of working private renters received Housing Benefit. By 2016-17, this had increased to 14%, although this was lower than the proportion of working private renters in receipt of Housing Benefit in 2014-15 (18%), Annex Table 1.16.
- 1.56 Since 2008-09, the proportion of working social renters in receipt of Housing Benefit increased from 19% to 30%.

## Length of time in current accommodation and tenure

- In 2016-17, owner occupiers had, on average, lived at their current address for 17.5 years. Not surprisingly, outright owners had lived in their current home for longer than mortgagors (23.8 years compared with 10.0 years).
- 1.58 Social renters had lived at their current address for an average of 11.3 years, while for private renters the average length of residence was 3.9 years, Annex Table 1.17. This was unchanged from previous years.
- 1.59 In 2016-17, half (50%) of private renters had lived in the private rented sector for less than 5 years while 24% had been in the sector for 5-9 years and 27% for 10 or more years, Annex Table 1.18°.

#### Household moves

- In 2016-17, 2.1 million households had moved home in the previous 12 months. Of these, 290,000 were new households, 1.4 million (65%) were moves within tenure and the remaining 467,000 were moves between tenures, Annex Table 1.19.
- 1.61 The greatest number of household moves occurred within, into or out of the private rented sector. In total, 860,000 households moved within the tenure (i.e. from one privately rented home to another) and 149,000 new households were created. There were 179,000 moves into the sector, of which 80%, (143,000) were from owner occupation. There were 266,000 moves out of the sector, with 68% (182,000) of these moving to owner occupied accommodation, Figure 1.9.
- 1.62 There was much less movement in the social rented sector. In 2016-17, 156,000 households moved from one social rented property to another and 65,000 new households were created. There were 105,000 households that moved into the sector, with 85,000 households moving from the private rented sector. Around 36,000 households left the social rented sector to move to the private rented sector.
- 1.63 In the owner occupier sector, 365,000 households moved within the tenure and 76,000 new households were created. There were 182,000 households that moved into the tenure from the private rented sector. Around 163,000 households moved out of the sector, with 88% of these (143,000) moving to the private rented sector.

<sup>&</sup>lt;sup>5</sup> The proportions do not add to 100% due to rounding.

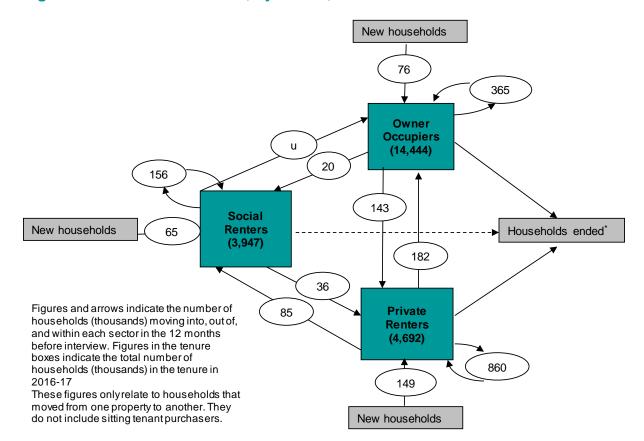


Figure 1.9: Household moves, by tenure, 2016-17

Base: households resident less than a year Notes:

- 1) underlying data are presented in Annex Table 1.19
- 2) a small number of cases with inconsistent responses have been omitted
- 3) survey cannot identify the number of households which have ended
- 4) u indicates sample size too small for reliable estimate

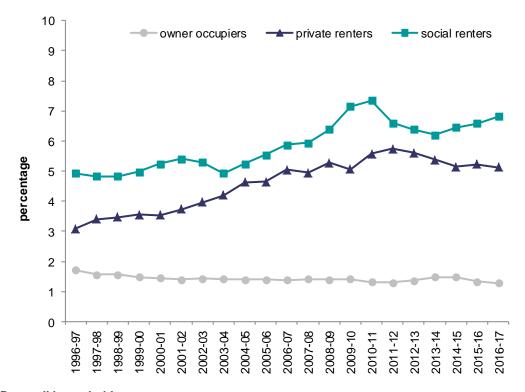
Source: English Housing Survey, full household sample

### Overcrowding and under-occupation

- 1.64 Levels of overcrowding and under-occupation are measured using the bedroom standard (see glossary). This is essentially the difference between the number of bedrooms needed to avoid undesirable sharing (given the number, ages and relationship of the household members) and the number of bedrooms actually available to the household.
- 1.65 Since the number of overcrowded households included in each survey year is too small to enable reliable overcrowding estimates for any single year, data from the three most recent survey years were combined to produce the overcrowding estimates in this section.
- 1.66 The overall rate of overcrowding in England in 2016-17 was 3%, with approximately 682,000 households living in overcrowded conditions, Annex Table 1.20.

- Overcrowding was more prevalent in the rented sectors than for owner occupiers. Only 1% of owner occupiers (183,000 households) were overcrowded in 2016-17 compared with 7% of social renters (268,000) and 5% of private renters (231,000).
- The number and proportion of overcrowded households in the owner occupied sector has remained relatively stable over the last 20 years or so. In the social rented sector, overcrowding peaked at 7% in 2010-11, before dropping to 6% in 2012-13. It remained at 6% until 2014-15 but increased back up to 7% in 2015-16 where it remained in 2016-17, Figure 1.10.
- 1.69 The proportion of overcrowded households in the private rented sector increased from 3% in 1995-96 to a peak of 6% in 2011-12, and since then has decreased to 5%. The rapid overall growth in private renters between 1995-96 and 2016-17 explains the pronounced increase in actual numbers of overcrowded households from 63,000 in 1995-96 to 231,000 in 2016-17.

Figure 1.10: Overcrowding, by tenure, 1996-97 to 2016-17



Base: all households

Notes:

1996-97 to 2007-08: Survey of English Housing;

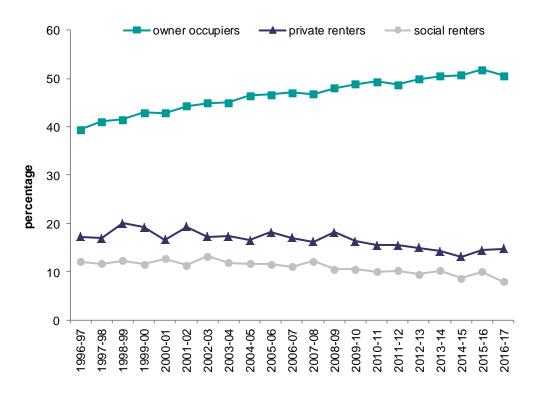
2008-09 onwards: English Housing Survey, full household sample

<sup>1)</sup> data are based on three year averages, which are the average of the three years up to and including the labelled date

<sup>2)</sup> underlying data are presented in Annex Table 1.20 Sources:

- 1.70 The overall rate of under-occupation in England in 2016-17 was 36%, unchanged from 2015-16, with around 8.3 million households living in under-occupied homes, Annex Table 1.21.
- 1.71 Under-occupation was much more prevalent amongst owner occupiers than in the rented sectors. Half (51%) of owner occupied households (7.3 million households) were under-occupied in 2016-17 compared with 15% of private rented (694,000) and 8% of social rented (314,000) households.
- 1.72 The overall number and proportion of under-occupied households in England increased between 1996-97 and 2016-17 from 31% (6.3 million households) to 36% (8.3 million households). This was driven mainly by an increase in under-occupied households in the owner occupied sector, from 39% (5.4 million households) in 1996-97 to 51% (7.3 million households) in 2016-17, Figure 1.11.
- 1.73 In contrast, the proportion of under-occupied households in the rented sectors decreased over this period. Under-occupation amongst private renters decreased from 17% in 1996-97 to 15% in 2016-17 and under-occupation amongst social renters decreased from 12% to 8%.

Figure 1.11: Under-occupation, by tenure, 1996-97 to 2016-17



Base: all households

Note: underlying data are presented in Annex Table 1.21

Sources:

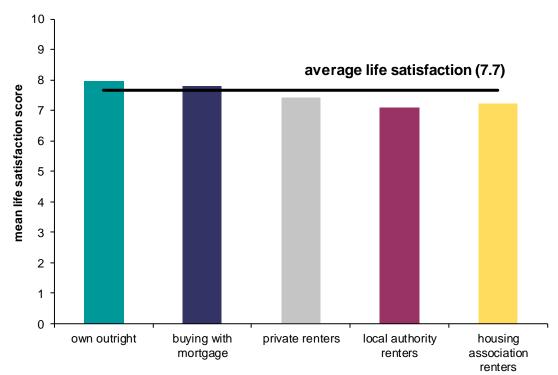
1996-97 to 2007-08: Survey of English Housing;

2008-09 onwards: English Housing Survey, full household sample

### Well-being

- Personal well-being remained relatively high in 2016-17 and the average life satisfaction score was 7.7 (out of ten), although this varied by tenure, Figure 1.12. Average life satisfaction among outright owners was nearly a unit higher than for those living in the social rented sector (8.0 compared with 7.2), Annex Table 1.22.
- 1.75 This finding may lead to the conclusion that the relationship between life satisfaction and tenure is direct. However, there were important differences between the types of household that typically live in each tenure, and these differences may be related to life satisfaction. For example, social renters were more likely to be unemployed or 'other inactive' (this includes long-term sick or carers) than owner occupiers or private renters, Annex Tables 1.3 and 1.22.

Figure 1.12: Mean life satisfaction score, by tenure, 2016-17



Base: all household reference persons

Note: underlying data are presented in Annex Table 1.22 Source: English Housing Survey, full household sample

## Section 2

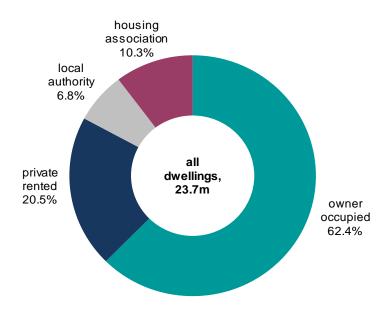
## **Housing stock**

- 2.1 This section begins with an overall profile of the English housing stock, including the age, type and size of dwellings by tenure. It then reports on house condition, including the prevalence of damp and the extent to which the English housing stock meets the Decent Homes Standard.
- 2.2 The energy efficiency of the English housing stock is then explored, followed by a section on smoke alarms and carbon monoxide alarms.

### Stock profile

2.3 In 2016, there were an estimated 23.7 million dwellings in England, including both occupied and vacant homes. Of these, 14.8 million (62%) were owner occupied, 4.9 million (20%) were private rented, 1.6 million (7%) were local authority and 2.4 million (10%) were housing association homes, Figure 2.1 and Annex Table 2.1.

Figure 2.1: Dwellings, by tenure, 2016



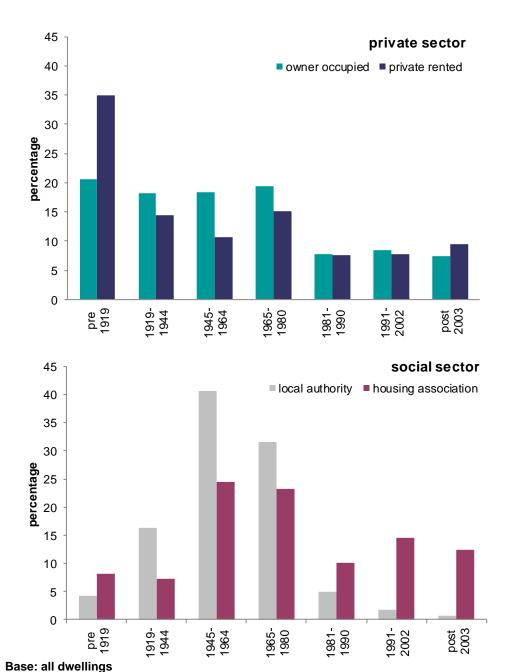
Base: all dwellings

Note: underlying data are presented in Annex Table 2.1 Source: English Housing Survey, dwelling sample

2.4 The age of dwellings varied by tenure. Privately rented dwellings were more likely to be older with a third (35%) built before 1919, compared with 21% of owner occupied and 7% of social sector homes, Figure 2.2.

2.5 Just under three quarters (72%) of local authority housing stock was built between 1945 and 1980, compared with 48% of housing association homes. Just 7% of local authority stock was built after 1980, compared with 37% of housing association homes.

Figure 2.2: Dwelling age, by tenure, 2016

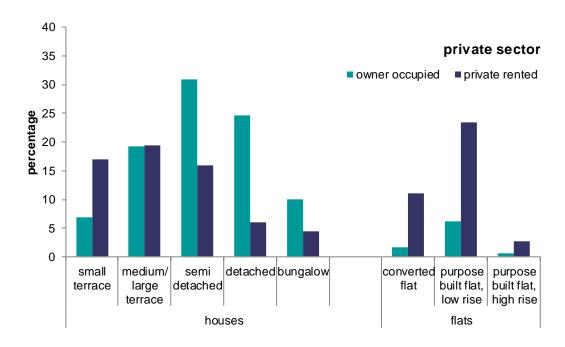


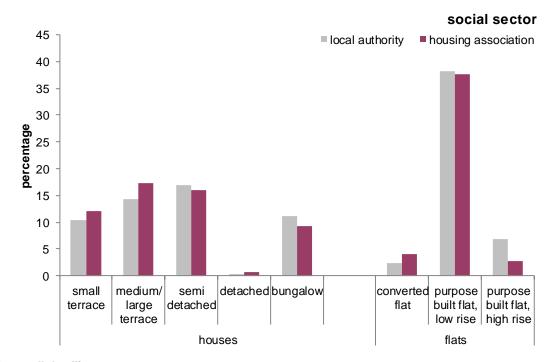
Note: underlying data are presented in Annex Table 2.1 Source: English Housing Survey, dwelling sample

2.6 The majority of owner occupied dwellings were houses and bungalows (92%) compared with 63% of private rented and 54% of social rented stock). There were very few detached houses in the social sector (less than 1%) or private rented sector (6%), but a quarter (25%) of owner occupied properties were detached, Figure 2.3.

- 2.7 The private rented sector had a comparatively high proportion of converted flats (11% compared with 3% of social rented and 2% of owner occupied stock) while the social rented sector had a comparatively high proportion of low rise purpose built flats (38% compared with 23% of private rented and 6% of owner occupied stock).
- 2.8 In 2016, high rise purpose built flats made up 4% of the stock (about 408,000 dwellings). Such flats were more prevalent in local authority (7%) than housing association (3%) stock. Less than 1% of the owner occupied stock and 1% of dwellings in the private rented sector were high rise purpose built flats.

Figure 2.3: Dwelling type, by tenure, 2016



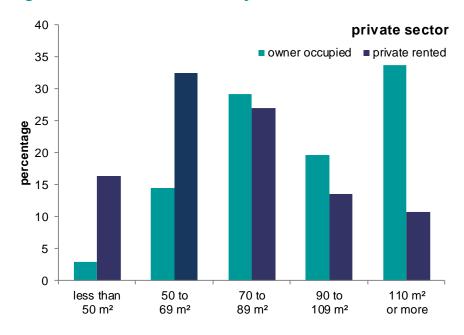


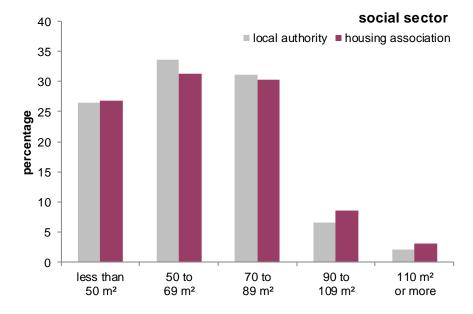
Note: underlying data are presented in Annex Table 2.1 Source: English Housing Survey, dwelling sample

2.9 The average (mean) usable floor area of dwellings in 2016 was 94m<sup>2</sup>. Homes in the social sector tended to be smaller (66m<sup>2</sup>) than homes in the private rented sector (77m<sup>2</sup>). Owner occupied homes (107m<sup>2</sup>) were, on average, larger than social and private rented homes.

Only 10% of dwellings in the social rented sector had a usable floor area of 90m<sup>2</sup> or over, in contrast with 24% of homes in the private rented sector and 53% of owner occupied homes, Figure 2.4.

Figure 2.4: Usable floor area, by tenure, 2016





Base: all dwellings

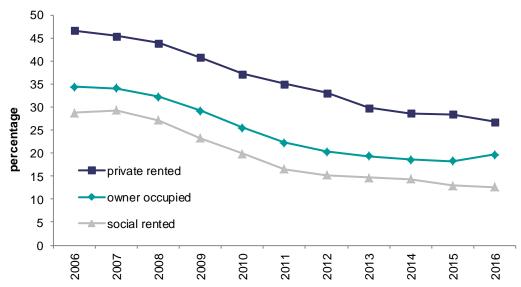
Note: underlying data are presented in Annex Table 2.1 Source: English Housing Survey, dwelling sample

#### House condition

#### **Decent homes**

- In 2016, a fifth of dwellings (20% or 4.7 million homes) failed to meet the Decent Homes Standard, down from 35% (7.7 million homes) in 2006, Annex Table 2.2.
- 2.12 The private rented sector had the highest proportion of non-decent homes (27%) while the social rented sector had the lowest (13%). Among owner occupied homes, 20% failed to meet the Decent Homes Standard in 2016, Figure 2.5.
- 2.13 Across all tenures, the proportion of non-decent homes declined steadily between 2006 and 2016, with year-on-year improvements each year until 2014.

Figure 2.5: Non-decent homes, by tenure, 2006 to 2016



Base: all dwellings

Notes:

- 1) 2010-2012 uses SAP09 instead of SAP05
- 2) 2013-2016 uses SAP12 instead of SAP09
- 3) underlying data are presented in Annex Table 2.2
- 4) The apparent increase in non-decent owner occupied homes is not statistically significant.

2006 to 2007: English House Condition Survey, dwelling sample;

2008 onwards: English Housing Survey, dwelling sample

#### **Damp**

2.14 In 2016, about a million homes (4%) had problems with damp, down from 2.6 million (13%) homes in 1996. There has been little change in the incidence of damp since 2011, Figure 2.6 and Annex Table 2.3.

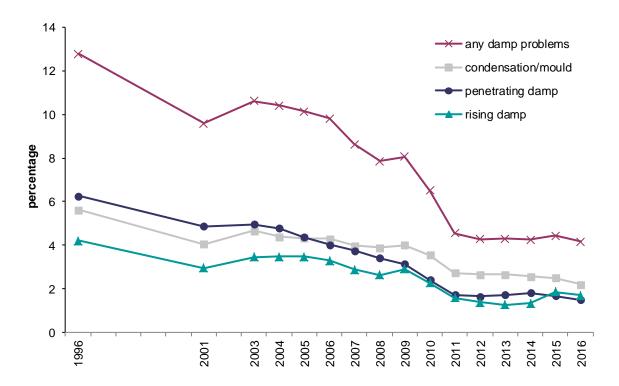


Figure 2.6: Damp problems, 1996 to 2016

Note: underlying data are presented in Annex Table 2.3

Sources:

1996-2007: English House Condition Survey, dwelling sample; 2008 onwards: English Housing Survey, dwelling sample

- 2.15 In 2016, 2% of homes had problems with condensation and mould; 2% were affected by rising damp; 1% by penetrating damp, Annex Table 2.3.
- 2.16 Damp problems were more prevalent in the rented sectors. Some 8% of private rented dwellings had some type of damp problem, compared with 5% of social rented dwellings and 3% of owner occupied dwellings, Figure 2.7 and Annex Table 2.4.
- 2.17 Private rented dwellings were, on average, older and therefore more likely to have defects to the damp proof course, roof covering, gutters, or down pipes, which could lead to problems with rising or penetrating damp affecting at least one room in the property.

12 rising penetrating condensation/ ■ any damp damp damp mould problems 10 8 percentage 6 4 2 0 owner private local housing occupied rented authority association

Figure 2.7: Damp problems, by tenure, 2016

Note: underlying data are presented in Annex Table 2.4 Source: English Housing Survey, dwelling sample

2.18 Between 2015 and 2016, there was a decrease in the proportion of homes in the private rented sector with condensation or mould from 6% to 4%, Annex Table 2.4<sup>6</sup>. There were no changes in the incidence of damp problems in the other tenures.

## **Energy efficiency**

#### **Energy efficiency rating**

The Government's Standard Assessment Procedure (SAP) is used to monitor the energy efficiency of homes. It is an index based on calculating annual space and water heating costs for a standard heating regime and is expressed on a scale of 1 (highly inefficient) to 100 (highly efficient with 100 representing zero energy costs).

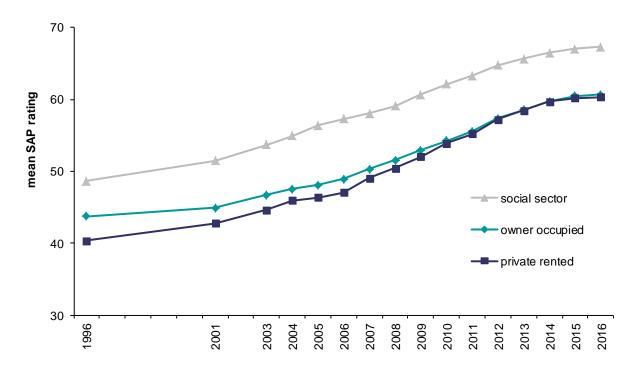
2.20 The energy efficiency of the English housing stock has increased and in 2016 the average SAP rating of English dwellings was 62 points, up from 45 points

<sup>&</sup>lt;sup>6</sup> For 2015 figures see Annex Table 2.5 in English Housing Survey 2015 to 2016: Headline Report, at https://www.gov.uk/government/statistics/english-housing-survey-2015-to-2016-headline-report To ensure that the energy performance findings in this report are as compatible as possible with

energy performance assessments and certificates issued in England during 2016-17, findings presented in this report were calculated using Reduced Data SAP (RdSAP) version 9.92. Please see the SAP entry of the glossary for further details.

- in 1996, Annex Table 2.5. This increase was evident in all tenures. However, the increase appears to be slowing and there was no change in the average SAP rating of homes between 2015 and 2016 (in any tenure), Figure 2.8.
- 2.21 In 2016, social stock had an average SAP rating of 67, higher than private sector stock which had an average SAP rating of 61. The social sector was more energy efficient than the private sector, in part due to wider use of wall insulation, but also because of dwelling type. In particular, the social sector contained a higher proportion of flats, which have less exposed surface area (external walls and roofs) through which heat can be lost, than detached or semi-detached houses, Annex Table 2.1.

Figure 2.8: Mean SAP rating, by tenure, 1996 to 2016



Notes:

- 1) based on SAP 2012 energy efficiency rating
- 2) underlying data are presented in Annex Table 2.5

Sources:

1996 to 2007: English House Condition Survey, dwelling sample;

2008 onwards: English Housing Survey, dwelling sample

- 2.22 The proportion of dwellings in the highest SAP energy efficiency rating (EER) bands A to C increased considerably between 2006 and 2016, from 5% to 30%. Over the same period, the proportion of dwellings in the lowest F and G bands fell from 17% to 5%. In 2016, the majority of dwellings (78%) were in EER bands C or D, up from 42% in 2006, Annex Table 2.6.
- 2.23 In 2016, owner occupied stock had an average SAP rating of 61 and private rented stock had an average SAP rating of 60. While the average SAP ratings

were much the same, the distribution across of EER bands varied. In particular, there was a greater proportion of owner occupied homes in band D (52% compared with 49% of private rented sector dwellings). In the social sector, 93% of dwellings were in EER bands A to D, Figure 2.9.

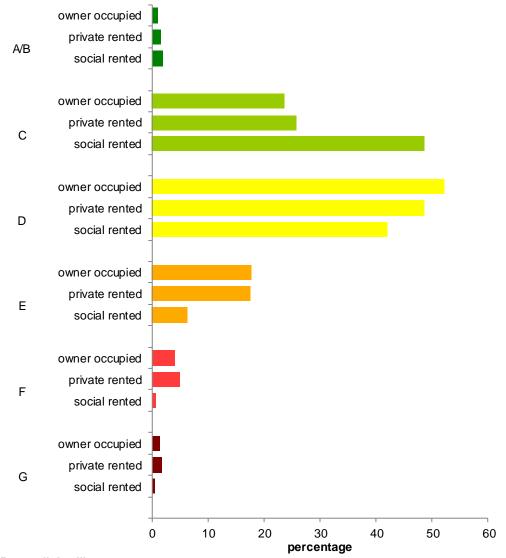


Figure 2.9: Energy efficiency rating bands, by tenure, 2016

Base: all dwellings

Note: underlying data are presented in Annex Table 2.6 Source: English Housing Survey, dwelling sample

2.24 There are two key methods of increasing the energy efficiency of existing dwellings: upgrading the dwelling's heating system and increasing insulation.

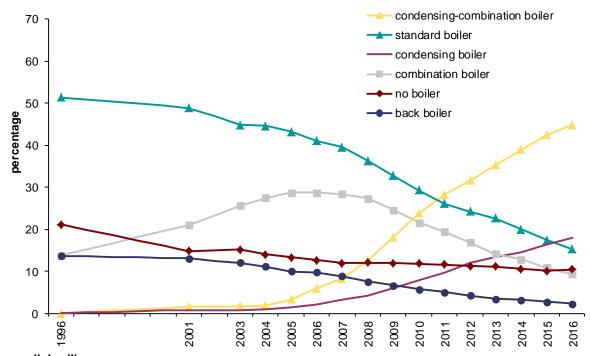
#### **Heating system**

Between 1996 and 2016, the proportion of homes with central heating increased (from 80% to 92%) while the proportion of homes with room heaters as their main heating source - the least cost-effective and most inefficient method of heating – decreased from 12% to 3%. The proportion of homes

with storage heaters also decreased over this period from 8% to 5%, Annex Table 2.7.

- 2.26 In 2016, the private rented sector had the lowest proportion of homes with central heating (84%), followed by housing association homes (88%). Owner occupied and local authority homes had the highest (both 95%). The proportion of dwellings in the private rented sector with fixed room heaters were higher than in other tenures (6% compared to 2% of owner occupied dwelling and 2% of dwellings in the social rented sector), Annex Table 2.8.
- 2.27 Condensing boilers are generally the most efficient boiler type and since the mid-2000s have been mandatory for new and replacement boilers. As expected, the proportion of dwellings with condensing or condensing-combination boilers has increased considerably since 2001. In 2001, just 2% of homes had these boilers types. By 2016 this had increased to 63%, Figure 2.10 and Annex Table 2.9.

Figure 2.10: Boiler types, 1996 to 2016



Base: all dwellings

Notes:

1) condensing and condensing-combination boilers were rare in 1996, so data on these types were not collected. Values of zero have been assumed to reflect this.

2) underlying data are presented in Annex Table 2.9

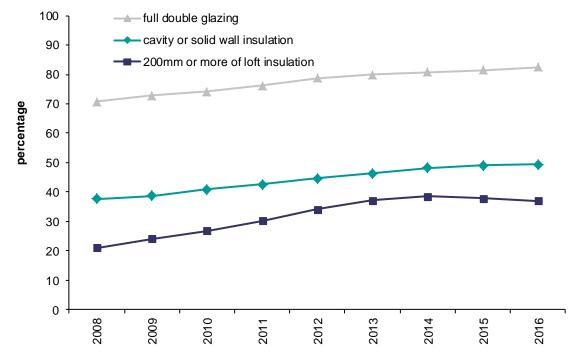
1996-2007: English House Condition Survey, dwelling sample; 2008 onwards: English Housing Survey, dwelling sample

2.28 Older, less energy efficient boiler types were more prevalent in the private sector. In 2016, 19% of owner occupied dwellings and 10% of private rented dwellings had a standard boiler, compared with 7% of social sector dwellings, Annex Table 2.10.

### Insulation

- The second main method of increasing a dwelling's energy performance is by increasing insulation. Standard insulation measures include cavity or solid wall insulation, loft insulation and double glazing.
- 2.30 In 2016, 83% of homes in England had full double glazing, up from 71% of homes in 2008. Half (49%) had cavity or solid wall insulation (up from 38% in 2008) and 37% had 200mm or more of loft insulation (up from 21% in 2008). Figure 2.11 and Annex Table 2.11.

Figure 2.11: Insulation measures, 2008 to 2016



Base: all dwellings Notes:

> 1) Percentages are based on all dwellings, including those with no loft or other wall type. In 2016, only 87% of all dwellings have lofts (the rest are flats not on the top floor), and 98% have cavity or solid

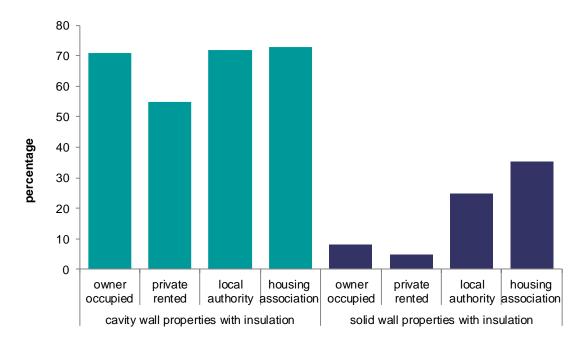
2) Underlying data are presented in Annex Table 2.11. See footnotes in this table for further detail on methodology for cavity and solid wall insulation.

Source: English Housing Survey, dwelling sample

- 2.31 The increase in wall insulation across the stock was mostly driven by an increase in the prevalence of insulated cavity walls. Taking dwellings with predominantly cavity or solid walls separately, 69% of dwellings with predominantly cavity walls had insulation installed compared with only 10% of dwellings with predominantly solid walls, Annex Table 2.12.
- 2.32 Solid wall insulation is either applied externally (e.g. insulated board attached to the external face with a render finish), changing the appearance or the dwelling, or internally (e.g. insulated plasterboard fitted to the external walls

- inside each room, with a plaster finish), somewhat reducing floor size. It can also be more expensive than cavity wall insulation.
- 2.33 Among dwellings with solid walls, the social rented sector had a higher proportion with solid wall insulation (30%) than the private sector (7%), Figure 2.12 and Annex Table 2.12. This is likely to be due to funding arrangements, including initiatives such as the Decent Homes programme, enabling investment in energy efficiency measures in the social sector.
- 2.34 Among dwellings with cavity walls, the private rented sector had a lower proportion of dwellings with cavity insulation (55%) than the other tenures (for example, 71% of owner occupied dwellings), Figure 2.12 and Annex Table 2.12.

Figure 2.12: Wall insulation, by main wall type and tenure, 2016



Base: dwellings with predominantly cavity walls (green); dwellings with predominantly solid walls (blue)

Note: underlying data are presented in Annex Table 2.12

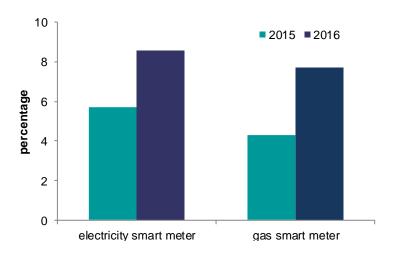
Source: English Housing Survey, dwelling sample

### **Smart meters**

2.35 The government has a target that, by 2020, all households should have been offered a smart meter by their energy supplier. Smart meters are the next generation of gas and electricity meters and offer a range of new functions. For example, they can tell residents how much energy they are using through an in-home display. They also communicate directly with the energy supplier, so that the supplier does not need to visit the home to read the meter. The English Housing Survey now captures information on the presence of gas and electricity smart meters.

In 2016, 9% of dwellings with mains electricity had an electricity smart meter and 8% of dwellings with mains gas supply had a gas one, up from 6% and 4% respectively in 2015, Figure 2.13 and Annex Table 2.138.

Figure 2.13: Dwellings with a smart meter, 2015 and 2016



Base: all dwellings with mains electricity or mains gas Note: underlying data are presented in Annex Table 2.13 Source: English Housing Survey, dwelling sample

The proportion of homes with smart meters increased across all tenures. Housing association dwellings (12%) were more likely to have an electricity smart meter than owner occupied (9%), local authority (8%) or private rented (5%) dwellings. A similar pattern was observed for gas smart meters. Housing association dwellings (10%) were more likely to have gas smart meter than owner occupied (8%), local authority (8%) or private rented (5%) dwellings.

# Subjective overheating

The English Housing Survey now includes a subjective measure for gauging whether residents feel that any part of their home gets uncomfortably hot, and, if so, which parts. This is in addition to the surveyor's objective assessment of excess heat risk as part of the housing health and safety rating system (HHSRS).

<sup>&</sup>lt;sup>8</sup> The EHS results are broadly in line with smart meter statistics from the Department for Business, Energy and Industrial Strategy (BEIS) which show that 5.76 million electric and gas meters (or 12% of all meters) were operated in smart mode by large energy suppliers on 31 March 2017. Differences are likely to reflect the differing time periods for data collection and the definition of smart meters (EHS surveyors may not differentiate between the most modern 'SMETS-compliant' smart meters and 'smart-type meters' or between meters operating in smart and non-smart mode). See BEIS (2017) Smart Meters Quarterly Report to end March 2017 Great Britain for further information: https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/615057/2017\_Q1\_Sma rt\_Meters\_Report\_final.pdf.

2.39 In 2016, 6% of residents reported that at least one part of their home got uncomfortably hot which represents a decrease from 7% in 2015, Annex Table 2.149.

# Smoke and carbon monoxide alarms

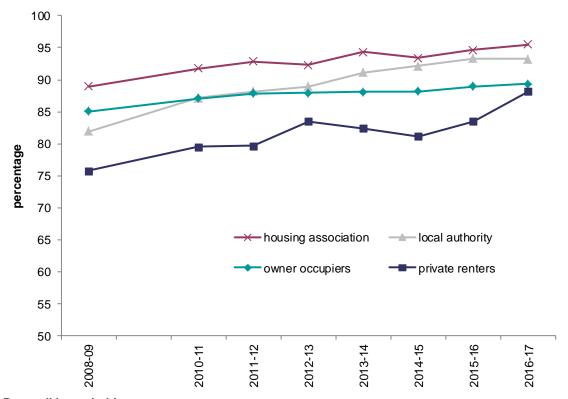
### **Smoke alarms**

- 2.40 In 2016-17, 90% of households had at least one working smoke alarm, up from 89% in 2015-16. The proportion of households with working smoke alarms varied depending on tenure. Housing association tenants were most likely to have at least one working smoke alarm (95%), compared with 89% of owner occupiers, 88% of private renters and 93% of households renting from a local authority, Annex Table 2.15.
- 2.41 Between 2008-09 and 2016-17, the proportion of households with a working smoke alarm increased from 84% to 90%. This increase was observed across all tenures. Since 2015-16, the proportion of private renters with a working smoke alarm has increased from 83% to 88%.

<sup>9</sup> The difference between this finding and that in the 2011 Energy Follow-Up Survey (EFUS) is likely to be due to differences in the questions. The EHS asked whether residents feel their home gets

be due to differences in the questions. The EHS asked whether residents feel their home gets 'uncomfortably hot' whereas EFUS asked if they experienced difficulty keeping particular rooms 'comfortably cool', with 20% saying they did. On EFUS findings, see, BRE for DECC, 28/1/2014, Report 7: Thermal comfort & overheating, at <a href="https://www.gov.uk/government/statistics/energy-follow-up-survey-efus-2011">https://www.gov.uk/government/statistics/energy-follow-up-survey-efus-2011</a>.

Figure 2.14: Households with at least one working smoke alarm, by tenure, 2008-09 to 2016-17



Base: all households

Notes:

1) data were not collected in 2009-10

2) underlying data are presented in Annex Table 2.15 Source: English Housing Survey, full household sample

- 2.42 While the proportion of homes with smoke alarms increased, about a third of households (23%) reported that they had never tested their smoke alarm, Annex Table 2.16<sup>10</sup>.
- In 2016-17, 30% of social renters and 30% of private renters reported that they had never tested their smoke alarm, higher than the proportion of owner occupiers who had never tested their smoke alarm (19%).

### Carbon monoxide alarms

In 2016, 33% of all dwellings had a carbon monoxide alarm, up from 28% in 2015, Annex Table 2.17.

Owner occupied dwellings (35%) were more likely than social rented dwellings (31%) to have a carbon monoxide alarm. The prevalence was higher in both those tenures than in the private rented sector (28%).

<sup>&</sup>lt;sup>10</sup> This was explored in more detail in the 2014-15 Smoke Alarms in English Homes Report https://www.gov.uk/government/statistics/english-housing-survey-2014-to-2015-smoke-alarms-inenglish-homes-report.

- 2.46 Dwellings with a solid fuel burning appliance, such as a coal fire or wood burning stove, were more likely (37%) to have a carbon monoxide alarm than dwellings with no solid fuel appliance (32%).
- 2.47 From October 2015, private sector landlords were required to install a carbon monoxide alarm in any room containing a solid fuel burning appliance. They were also required to ensure the alarm was working at the beginning of each new tenancy.
- 2.48 In 2016, 35% of private rented sector dwellings with a solid fuel appliance had a carbon monoxide alarm. We expect this to increase in the future 11. Because so few dwellings have a solid fuel appliance it is not possible to make meaningful cross tenure comparisons. The small sample of dwellings with solid fuel also means that the apparent increase in the proportion of private rented sector dwellings with a solid fuel appliance that had a carbon monoxide alarm (from 25% in 2015 to 35%) is not statistically significant. However, there has been a statistically significant increase in the proportion of all private sector homes with a solid fuel appliance and a carbon monoxide alarm.

<sup>11</sup> This report is based on data collected between April 2015 and March 2017 (a mid-point of April 2016), so the data collection period covers a considerable time period before the legislation came into force.

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# **Technical notes and glossary**

## Technical notes

- 1. Results for the first section of this report, on households, are presented for '2016-17' and are based on fieldwork carried out between April 2016 and March 2017 on a sample of 12,970 households. Throughout the report, this is referred to as the 'full household sample'.
- 2. Results in the second section of the report, which relate to the physical dwelling, are presented for '2016' and are based on fieldwork carried out between April 2015 and March 2017 (a mid-point of April 2016). The sample comprises 12,292 occupied or vacant dwellings where a physical inspection was carried out. Throughout the report, this is referred to as the 'dwelling sample'.
- 3. Where the numbers of cases in the sample are too small for any inference to be drawn about the national picture, the cell contents are replaced with a "u". This happens where the cell count is less than 5. When percentages are based on a row or column total with unweighted total sample size of less than 30, the figures are italicised. Figures in italics are therefore based on a small sample size and should be treated as indicative only.
- 4. Where comparative statements have been made in the text, these have been significance tested to a 95% confidence level. This means we are 95% confident that the statements we are making are true.
- 5. Additional annex tables, including the data underlying the figures and charts, are published on the website: https://www.gov.uk/government/collections/englishhousing-survey alongside many supplementary tables, which are updated each year (in the summer) but are too numerous to include in our reports. Further information on the technical details of the survey, and information and past reports on the Survey of English Housing and the English House Condition Survey, can also be accessed via this link.

# Glossary

**Arrears:** If the HRP or partner are not up to date with rent or mortgage payments they are considered to be in arrears.

**Bedroom standard:** The 'bedroom standard' is used by government as an indicator of occupation density. A standard number of bedrooms is calculated for each household in accordance with its age/sex/marital status composition and the relationship of the members to one another. A separate bedroom is allowed for each married or cohabiting couple, any other person aged 21 or over, each pair of

adolescents aged 10-20 of the same sex, and each pair of children under 10. Any unpaired person aged 10-20 is notionally paired, if possible, with a child under 10 of the same sex, or, if that is not possible, he or she is counted as requiring a separate bedroom, as is any unpaired child under 10.

This notional standard number of bedrooms is then compared with the actual number of bedrooms (including bed-sitters) available for the sole use of the household, and differences are tabulated. Bedrooms converted to other uses are not counted as available unless they have been denoted as bedrooms by the respondents; bedrooms not actually in use are counted unless uninhabitable.

Households are said to be overcrowded if they have fewer bedrooms available than the notional number needed. Households are said to be under-occupying if they have two or more bedrooms more than the notional needed.

**Boiler type:** The report covers a number of boiler types:

- **standard**: provides hot water or warm air for space heating with the former also providing hot water via a separate storage cylinder.
- **back**: located behind a room heater and feeds hot water to a separate storage cylinder. They are generally less efficient than other boiler types.
- combination: provides hot water or warm air for space heating and can provide
  hot water on demand negating the need for a storage cylinder, therefore requiring
  less space.
- **condensing**: standard and combination boilers can also be condensing. A condensing boiler uses a larger, or dual, heat exchanger to obtain more heat from burning fuel than an ordinary boiler, and is generally the most efficient boiler type.

**Damp and mould:** There are three main categories of damp and mould covered in this report:

- rising damp: where the surveyor has noted the presence of rising damp in at least one of the rooms surveyed during the physical survey. Rising damp occurs when water from the ground rises up into the walls or floors because damp proof courses in walls or damp proof membranes in floors are either not present or faulty.
- penetrating damp: where the surveyor has noted the presence of penetrating damp in at least one of the rooms surveyed during the physical survey.
   Penetrating damp is caused by leaks from faulty components of the external fabric e.g. roof covering, gutters etc. or leaks from internal plumbing, e.g. water pipes, radiators etc.

• condensation or mould: caused by water vapour generated by activities like cooking and bathing condensing on cold surfaces like windows and walls. Virtually all dwellings have some level of condensation. Only serious levels of condensation or mould are considered as a problem in this report, namely where there are extensive patches of mould growth on walls and ceilings and/or mildew on soft furnishings.

**Decent home:** A home that meets all of the following four criteria:

- it meets the current statutory minimum standard for housing as set out in the Housing Health and Safety Rating System (HHSRS – see below).
- it is in a reasonable state of repair (related to the age and condition of a range of building components including walls, roofs, windows, doors, chimneys, electrics and heating systems).
- it has reasonably modern facilities and services (related to the age, size and layout/location of the kitchen, bathroom and WC and any common areas for blocks of flats, and to noise insulation).
- it provides a reasonable degree of thermal comfort (related to insulation and heating efficiency).

The detailed definition for each of these criteria is included in A Decent Home: Definition and guidance for implementation, Department for Communities and Local Government, June 2006<sup>12</sup>.

**Dependent children:** Any person aged 0 to 15 in a household (whether or not in a family) or a person aged 16 to 18 in full-time education and living in a family with his or her parent(s) or grandparent(s). It does not include any people aged 16 to 18 who have a spouse, partner or child living in the household.

**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 are surveyed as representing two windows).

**Dwelling:** A unit of accommodation which may comprise one or more household spaces (a household space is the accommodation used or available for use by an individual household). A dwelling may be classified as shared or unshared. A dwelling is shared if:

• the household spaces it contains are 'part of a converted or shared house', or

<sup>&</sup>lt;sup>12</sup> https://www.gov.uk/government/publications/a-decent-home-definition-and-guidance

- not all of the rooms (including kitchen, bathroom and toilet, if any) are behind a door that only that household can use, and
- there is at least one other such household space at the same address with which it can be combined to form the shared dwelling.

Dwellings that do not meet these conditions are unshared dwellings.

The EHS definition of dwelling is consistent with the Census 2011.

**Dwelling age:** The date of construction of the oldest part of the building.

**Dwelling type:** Dwellings are classified, on the basis of the surveyor's inspection, into the following categories:

- **small terraced house:** a house with a total floor area of less than 70m<sup>2</sup> forming part of a block where at least one house is attached to two or more other houses. The total floor area is measured using the original EHS definition of useable floor area, used in EHS reports up to and including the 2012 reports. That definition tends to yield a smaller floor area compared with the definition that is aligned with the Nationally Described Space Standard and used on the EHS since 2013. As a result of the difference between the two definitions, some small terraced houses are reported in the 2014 Housing Supply Report as having more than 70m<sup>2</sup>.
- medium/large terraced house: a house with a total floor area of 70m<sup>2</sup> or more forming part of a block where at least one house is attached to two or more other houses. The total floor area is measured using the original EHS definition of useable floor area which tends to yield a small floor area compared with the definition used on the EHS since 2013.
- **end terraced house:** a house attached to one other house only in a block where at least one house is attached to two or more other houses.
- mid terraced house: a house attached to two other houses in a block.
- semi-detached house: a house that is attached to just one other in a block of two.
- **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.
- converted flat: a flat resulting from the conversion of a house or former nonresidential building. Includes buildings converted into a flat plus commercial premises (such as corner shops).

- purpose built flat, low rise: a flat in a purpose built block less than six 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 six storeys high.

**Economic status:** Respondents self-report their situation and can give more than one answer.

- working full-time/part-time: full-time work is defined as 30 or more hours per week. Part-time work is fewer than 30 hours per week. Where more than one answer is given, 'working' takes priority over other categories (with the exception that all those over State Pension Age (SPA) who regard themselves as retired are classified as such, regardless of what other answers they give).
- unemployed: this category covers people who were registered unemployed or not registered unemployed but seeking work.
- retired: this category includes all those over the state pension age who reported being retired as well as some other activity. For men the SPA is 65 and for women it is 60 if they were born before 6th April 1950. For women born on or after the 6th April 1950, the state pension age has increased incrementally since April 2010<sup>13</sup>.
- full-time education: education undertaken in pursuit of a course, where an average of more than 12 hours per week is spent during term time.
- other inactive: all others; they include people who were permanently sick or disabled, those looking after the family or home and any other activity.

On occasions, full-time education and other inactive are combined and described as other economically inactive.

**Energy efficiency rating:** A dwelling's energy costs per m<sup>2</sup> of floor area for standard occupancy of a dwelling and a standard heating regime and is calculated from the survey using a simplified form of SAP. The energy costs take into account the costs of space and water heating, ventilation and lighting, less cost savings from energy generation technologies. They do not take into account variation in geographical location. The rating is expressed on a scale of 1-100 where a dwelling with a rating of 1 has poor energy efficiency (high costs) and a dwelling with a rating of 100 represents zero net energy cost per year. It is possible for a dwelling to have a SAP rating of over 100 where it produces more energy than it consumes, although such dwellings will be rare within the English housing stock.

<sup>&</sup>lt;sup>13</sup> For further information see: www.gov.uk/browse/working/state-pension

The detailed methodology for calculating SAP to monitor the energy efficiency of dwellings was updated in 2012 to reflect developments in the energy efficiency technologies and knowledge of dwelling energy performance. These changes in the SAP methodology were relatively minor compared with previous SAP methodology updates in 2005 and 2009. It means, however that a SAP rating using the 2009 method is not directly comparable to one calculated under the 2012 methodology, and it would be incorrect to do so. All SAP statistics used in reporting from 2013 are based on the SAP 2012 methodology and this includes time series data from 1996 to the current reporting period (i.e. the SAP 2012 methodology has been retrospectively applied to 1996 and subsequent survey data to provide consistent results in the 2013 and following reports).

**Energy efficiency rating (EER) bands:** The 1-100 SAP energy efficiency rating is also presented in an A-G banding system for an Energy Performance Certificate, where Band A rating represents low energy costs (i.e. the most efficient band) and Band G rating represents high energy costs (the least efficient band). The break points in SAP (see below) used for the EER Bands are:

- Band A (92–100)
- Band B (81–91)
- Band C (69–80)
- Band D (55–68)
- Band E (39–54)
- Band F (21–38)
- Band G (1–20)

**First time buyer:** First time buyers are defined as households that have purchased a property that is their main home in the last three years, and in which neither the HRP or partner have previously owned a property. It includes households who have purchased their property outright as well as those who are buying with the help of a mortgage or loan.

**Heating system:** There are three main types of heating covered in this report:

- central heating system: most commonly a system with a gas fired boiler and
  radiators which distribute heat throughout the dwelling (but also included in this
  definition are warm air systems, electric ceiling/underfloor and communal
  heating). It is generally considered to be a cost effective and relatively efficient
  method of heating a dwelling. Communal systems use heat generated in a
  centralized location for residential space and water heating. This could be from
  - o a central boiler using any fuel which supplies a number of dwellings
  - waste heat from power stations distributed through community heating schemes
  - heat from a local CHP (combined heat and power) system

- storage heaters: predominately used in dwellings that have an off-peak electricity tariff. Storage heaters use off-peak electricity to store heat in clay bricks or a ceramic material, this heat is then released throughout the day. However, storage heating can prove expensive if too much on peak electricity is used during the day.
- room heaters: this category includes all other types of heaters such as fixed gas, fixed electric or portable electric heaters. This type of heating is generally considered to be the least cost effective of the main systems and produces more carbon dioxide emissions per kWh.

Household: One person or a group of people (not necessarily related) who have the accommodation as their only or main residence, and (for a group) share cooking facilities and share a living room or sitting room or dining area.

The EHS definition of household is slightly different from the definition used in the 2011 Census. Unlike the EHS, the 2011 Census did not limit household membership to people who had the accommodation as their only or main residence. The EHS included that restriction because it asks respondents about their second homes, the unit of data collection on the EHS, therefore, needs to include only those people who have the accommodation as their only or main residence.

Household reference person (HRP): 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. The EHS definition of HRP is not consistent with the Census 2011, in which the HRP is chosen on basis of their economic activity. Where economic activity is the same, the older is taken as HRP, or if they are the same age, HRP is the first listed on the questionnaire.

Household type: The main classification of household type uses the following categories, some categories may be split or combined in different tables:

- couple no dependent child(ren)
- couple with dependent child(ren)
- couple with dependent and independent child(ren)
- couple with independent child(ren)
- lone parent with dependent child(ren)
- lone parent with dependent and independent child(ren)
- lone parent with independent child(ren)
- two or more families
- lone person sharing with other lone persons
- one male
- one female

**Housing Benefit**: A benefit that is administered by local authorities, which is designed to assist people who rent their homes and have difficulty meeting their housing costs. Council tenants on Housing Benefit receive a rent rebate which means that their rent due is reduced by the amount of that rebate. Private and social housing tenants usually receive Housing Benefit (or rent allowance) personally, although sometimes it is paid direct to the landlord.

**Housing Health and Safety Rating System (HHSRS):** A risk assessment tool used to assess potential risks to the health and safety of occupants in residential properties in England and Wales. It replaced the Fitness Standard in April 2006.

The purpose of the HHSRS assessment<sup>14</sup> is not to set a standard but to generate objective information in order to determine and inform enforcement decisions. There are 29 categories of hazard, each of which is separately rated, based on the risk to the potential occupant who is most vulnerable to that hazard. The individual hazard scores are grouped into 10 bands where the highest bands (A-C representing scores of 1,000 or more) are considered to pose Category 1 hazards. Local authorities have a duty to act where Category 1 hazards are present, and may take into account the vulnerability of the actual occupant in determining the best course of action. For the purposes of the decent homes standard, homes posing a Category 1 hazard are non-decent on its criterion that a home must meet the statutory minimum requirements.

The EHS is not able to replicate the HHSRS assessment in full as part of a large scale survey. Its assessment employs a mix of hazards that are directly assessed by surveyors in the field and others that are indirectly assessed from detailed related information collected. For 2006 and 2007, the survey (the then English House Condition Survey) produced estimates based on 15 of the 29 hazards. From 2008, the survey is able to provide a more comprehensive assessment based on 26 of the 29 hazards. See the EHS Technical Note on Housing and Neighbourhood Conditions<sup>15</sup> for a list of the hazards covered.

**Income:** Two measures of income are used in this report.

• gross income of the HRP and partner: The gross annual income of the HRP and partner from wages, pensions, other private sources, savings and state benefits. This does not include any housing related benefits or allowances. This measure is divided by 52 to calculate weekly income. Income is presented in quintiles throughout this report (see income quintiles definition – below).

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<sup>14</sup> https://www.gov.uk/government/collections/housing-health-and-safety-rating-system-hhsrs-quidance

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/211302/Housing\_and\_ Neighbourhood Conditions.pdf

gross household income: The gross annual income of all adults living in a household from wages, pensions, other private sources, savings and state benefits. This does not include any housing related benefits or allowances. This measure is divided by 52 to calculate weekly income. Income is presented in quintiles throughout this report (see income quintiles definition – below).

**Income quintiles**: All households in the EHS sample are divided into five equal groups based on their income (i.e. those in the bottom 20%, the next 20% and so on). These groups are known as quintiles. These can be used to compare income levels of particular groups to the overall population.

**Insulation:** There are two main types of insulation covered in this report:

### wall insulation

cavity walls: where a dwelling has external walls of predominantly cavity construction, it is defined as having cavity wall insulation if at least 50% of the cavity walls are filled with insulation. This could have been fitted during construction or retrospectively injected between the masonry leaves of the cavity wall.

solid walls: where a dwelling has external walls of predominantly masonry solid construction, it is defined as having solid wall insulation if at least 50% of the solid walls are fitted with insulation. This could be applied either externally (e.g. insulated board attached to the external face with a render finish) or internally (e.g. insulated plasterboard fitted to the external walls inside each room, with a plaster finish).

other walls: these are any dwellings with predominantly non-cavity or masonry solid walls (e.g. timber, metal or concrete frames).

loft insulation: the presence and depth of loft insulation is collected for all houses and top-floor flats. Insulation could be found between joists above the ceiling of the top floor of the dwelling or between the roof timbers where the loft has been converted to a habitable space. Where insulation could not be observed, information was taken from the householder or from imputed estimates based on the age and type of the dwelling.

**Insulation – new cavity wall insulation variable:** For the 2015 Headline Report, the English Housing Survey introduced a new measure of cavity wall insulation (variable wins95x). This new measure incorporates more up-to-date information regarding the insulation of buildings built since 1991 and aligns the English Housing Survey methodology to a common method for calculating energy efficiency of buildings.

In compliance with new Building Regulations, an increasing proportion of dwellings built in 1991 or after with cavity walls had insulation fitted at the time of construction (known as 'as built' cavity wall insulation), although compliance could also be achieved through other techniques. The non-intrusive survey undertaken in the EHS would not always be able to identify as built insulation, and the Survey has to assume that these properties have insulation. To align with current RdSAP methodology and to improve our methodology, the English Housing Survey has for 2015 data introduced a new variable, which assumes that properties built in 1995 or after has as built insulation. This is the assumption used in the RdSAP model, which in turn reflects that cavity wall insulation was not used as often as previously thought to comply with the new Building Regulations in the early 1990s.

In the earlier variable (wins90x), properties built in 1991 or after were assumed to be insulated, as it was thought builders used cavity wall insulation to comply with the new Building Regulations. Due to changes in data collection the new variable can only be taken back to 2008. Trends from earlier reports hold, though the exact numbers produced by the new variable are lower (as properties built in 1991 up to 1995 without evidence of retrofitted cavity wall insulation are no longer assumed to be insulated).

**New household:** Where neither the household reference person (HRP) nor their spouse/partner occupied the HRP's previous permanent accommodation, in either of their names. The EHS does not differentiate between previous accommodation within England and outside of England (including abroad).

**Non-dependent children:** any person aged over 18 or those aged 16-18 who are not in full-time education living in a family with his or her parent(s) or grandparent(s).

**Overcrowding:** Households are said to be overcrowded if they have fewer bedrooms available than the notional number needed according to the bedroom standard definition. See bedroom standard.

**Private accommodation:** The majority of homes in all three tenures, excluding hotels, bed and breakfast accommodation and institutional residences such as student halls, army barracks and care homes. The EHS only covers private accommodation.

**Standard Assessment Procedure (SAP):** The Standard Assessment Procedure (SAP) is the methodology used by the Government to assess and compare the energy and environmental performance of dwellings. The SAP is used to calculate the energy efficiency rating (EER) of dwellings. The EER is an index based on calculated energy costs for a standard heating regime and is expressed on a scale of 1 (highly inefficient) to 100 (highly efficient with 100 representing zero energy cost). It is possible for a dwelling to have a rating of over 100 where it produces more energy than it consumes, although such dwellings will be rare within the English housing stock.

Reduced Data SAP (RdSAP) was introduced in 2005 as a lower cost method of assessing the energy performance of existing dwellings. RdSAP is used in the calculation of the energy ratings on the Energy Performance Certificate, a document which is required every time a home is put up for sale or rent. Since the 2015 survey, the EHS has provided a number of indicators on energy performance calculated using an approach which is in line with RdSAP 2012 version 9.92. To ensure that the findings in this report are as compatible as possible with energy performance assessments and certificates issued in England during 2016-17, the energy performance findings presented in this report were calculated using RdSAP version 9.92. The version of RdSAP (9.93) introduced for use from 19 November 2017 will be used to calculate energy performance indicators from the 2017-18 EHS.

**Social housing rents:** Most social housing rents are calculated according to 'rent restructuring' policy, introduced in 2001. The overall intention of the policy was that similar properties in similar areas should have similar levels of rents. The formula calculates rents for each individual property based on 30% of the relative property values at 1999 levels, 70% on relative local earnings and the size of the property. The formula rent had been increased annually at the rate of Retail Price Index inflation at the previous September + 0.5% until 2015-16 when it was increased by CPI +1%.

In 2012, the Government introduced Affordable Rent as another main type of social housing rents, which can be set at up to 80% of the market rate of the property, inclusive of service charges.

Between 2016-17 and 2019-20, social housing rents will be reduced by 1% a year, for 4 years except from supported housing, almshouses, community land trusts and fully mutual housing co-ops which will be excepted during the first year.

There is also a different arrangement for rents for intermediate rent properties (which falls within the statutory definition of social housing).

**Tenure:** In this report, households are typically grouped into three broad categories known as tenures: owner occupiers, social renters and private renters. The tenure defines the conditions under which the home is occupied, whether it is owned or rented, and if rented, who the landlord is and on what financial and legal terms the let is agreed.

- **owner occupiers:** households in accommodation which they either own outright, are buying with a mortgage or as part of a shared ownership scheme.
- social renters: this category includes households renting from Local Authorities (including Arms' Length Management Organisations (ALMOs) and Housing Action Trusts) and Housing Associations, Local Housing Companies, cooperatives and charitable trusts.

A significant number of Housing Association tenants wrongly report that they are Local Authority tenants. The most common reason for this is that their home used to be owned by the Local Authority, and although ownership was transferred to a Housing Association, the tenant still reports that their landlord is the Local Authority. There are also some Local Authority tenants who wrongly report that they are Housing Association tenants. Data from the EHS for 2008-09 onwards incorporate a correction for the great majority of such cases in order to provide a reasonably accurate split of the social rented category.

• **private renters:** this sector covers all other tenants including all whose accommodation is tied to their job. It also includes people living rent-free (for example, people living in a flat belonging to a relative).

**Under-occupation:** Households are said to be under-occupying their property if they have two or more bedrooms more than the notional number needed according to the bedroom standard definition. See bedroom standard.

**Usable floor area:** The total usable internal floor area of the dwelling as measured by the surveyor, rounded to the nearest square metre. A new modelling approach adopted since the 2013 report uses assumptions aligned with the Nationally Described Space Standard which was published as part of the Housing Standards Review. It excludes integral garages, balconies, stores accessed from the outside only and the area under external walls. The area remaining represents the total of all room areas, hallways and circulation space including cupboards and stairs. The area under internal partition walls is also included. Loft space is not included unless the loft is habitable, with a fixed stair in place to access it. Dwellings are also grouped into the following five categories:

- less than 50m<sup>2</sup>
- 50 to 69m<sup>2</sup>
- 70 to 89m<sup>2</sup>
- 90 to 109m<sup>2</sup>
- 110m<sup>2</sup> or more.

**Vacant dwellings:** The assessment of whether or not a dwelling is vacant is made at the time of the interviewer's visit. Clarification of vacancy is sought from neighbours. Both properties in between lets and those that are vacant for a longer period are classified as vacant on the EHS. Surveyors are required to gain access to vacant dwellings and undertake full inspections.

In accordance with the Statistics and Registration Service Act 2007 the United Kingdom Statistics Authority has designated these statistics as National Statistics, signifying that they are fully compliant with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

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Ministry of Housing, Communities and Local Government Fry Building 2 Marsham Street London SW1P 4DF Telephone: 030 3444 0000

Email: ehs@communities.gsi.gov.uk

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