

NHPAU RESEARCH FINDINGS NUMBER 2

Impact of worsening
affordability on
demand for social
and affordable
housing: tenure
choice and
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Impact of worsening affordability on demand for social and affordable housing: tenure choice and household formation

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Summary of Research Findings

1. **If we fail to deliver enough market housing more people in the future will require state support to meet their housing needs.** A key mechanism of pricing people back into the market is to tackle the affordability problem by building the right number of new homes, of the right type, in the right place and at the right time.

2. **Based on emerging regional housing plans we could expect:**

- **A further increase in pressure on intermediate and social housing.** For example there was a rise of over 500,000 households on the housing register between 2002 and 2007 compared with an increase of 73,000 between 1998 and 2002.
- **Household formation to be inhibited by affordability pressures.** Analysis using the CLG Affordability Model suggests that as affordability continues to deteriorate by 2026 around 1 million households would not be able to form.
- A break on household formation to lead to **the end of the downward trend in average household size established since the 1960s.** Our modelling suggests this could reach 2.3 in 2026, as compared to 2.1 persons per household under the official projections.

3. **Solving the affordability problem is not about building more social and low cost homes at the expense of market housing.** We have modelled the effect on affordability of doubling the number of social homes a year from the planned 45,000 by 2011 to 90,000 with an equivalent reduction in the number of market homes delivered. All things being equal, increasing the share of social build worsens the ratio of lower quartile house prices to earnings from 8.7 to 9.6.

4. It is not surprising that delivering more social homes at the expense of market housing does not help improve affordability prospects. While social homes would provide housing for those in need, it does not meet demand for market housing, it provides for those who are priced out.

5. There would be **adverse economic and social consequences of the reduction of household formation if this were caused by affordability pressures.** For example, an increase in overcrowding and households sharing when they would prefer not to.

6. There are **three developments which would support more households forming:**

- **An increase in social rented and intermediate housing in addition to current RSS targets** – Bramley and Leishman estimate a total requirement for around 150,000 homes in these tenures up to 2021 (including an allowance for backlog). Government has set targets for 70,000 new affordable homes by 2011 of which 45,000 are to be social homes, with an aspiration to increase this to 50,000. Any further substantial increase would depend upon the finite resources available through taxpayer funding and contributions secured through the planning system, and competing priorities.

- **A further expansion of the private rented sector.** This sector now caters for about 12 per cent of households in England having grown by 27 per cent since 2001. As a rule of thumb, a 10 per cent increase in the private rented stock would equate to a further 260,000 dwellings.
- **A supply of housing that was more responsive to demand.** If long term price trends were dampened by delivering an adequate supply of market homes this would have an important bearing not only on the number of people able to access home ownership, but also therefore on pressure on the quota of intermediate and social housing.

7. **Increasing the supply of market housing will be vital if the affordability challenge is to be met.** Our modelling indicates that if the level of delivery of new homes increased from 200,000 in emerging RSS plans, to about 300,000 per annum by 2016, then this would ease affordability pressures and enable 500,000 more households to form as owner occupiers in the market by 2026.

8. Finally, it is important to keep an eye on the medium and long term. **A short term cooling in the housing market is not an answer to the affordability problems we face.** Indeed, developments in the financial markets in late 2007 and early 2008 have led to a tightening of mortgage lending criteria by the major banks and building societies. These changes will make it more difficult for first time buyers to purchase a house in the short term.

This research

9. This research was initiated at the request of our regional partners who identified it as a priority area for our 2007-8 research programme. They wanted us to address the question *what is the impact of worsening affordability of market housing on demand for social housing?*

10. We note at the outset that some housing professionals would argue that demand for social housing is not relevant. In theory there is an almost limitless demand because being subsidised the costs of social housing are generally much lower than the alternatives. Since the resources of the state are finite and must be allocated across competing priorities, social housing caters for those in *need* who are unable to access home ownership or the private rented sector through their own means.

11. What we want to understand is how worsening affordability is bound up with matters of tenure choice and household formation. Affordability is about the ability of people to pay for their housing and this is affected by rising house prices, rents, incomes, changes in interest rates and the availability of finance.

12. By any measure the affordability of market housing – which caters for 70 per cent of households – has deteriorated significantly over the past decade. For example, first time buyers' mortgage interest payments are now 19.4 per cent of income and average deposits have more than doubled between 2001 and 2007 to £13,000.

13. So what are the consequences of worsening affordability? Many first time buyers have had to seek help with deposits or have taken out large mortgages to finance their purchase. Many will have moved to more affordable areas and some will have accessed low cost ownership schemes such as those for key workers.

14. But what happens to those unable to buy? And what are the prospects for communities and future generations based on what we know about existing housing plans? If households cannot afford the market price of housing won't they still need to be housed? What are the options for people priced out of market housing?

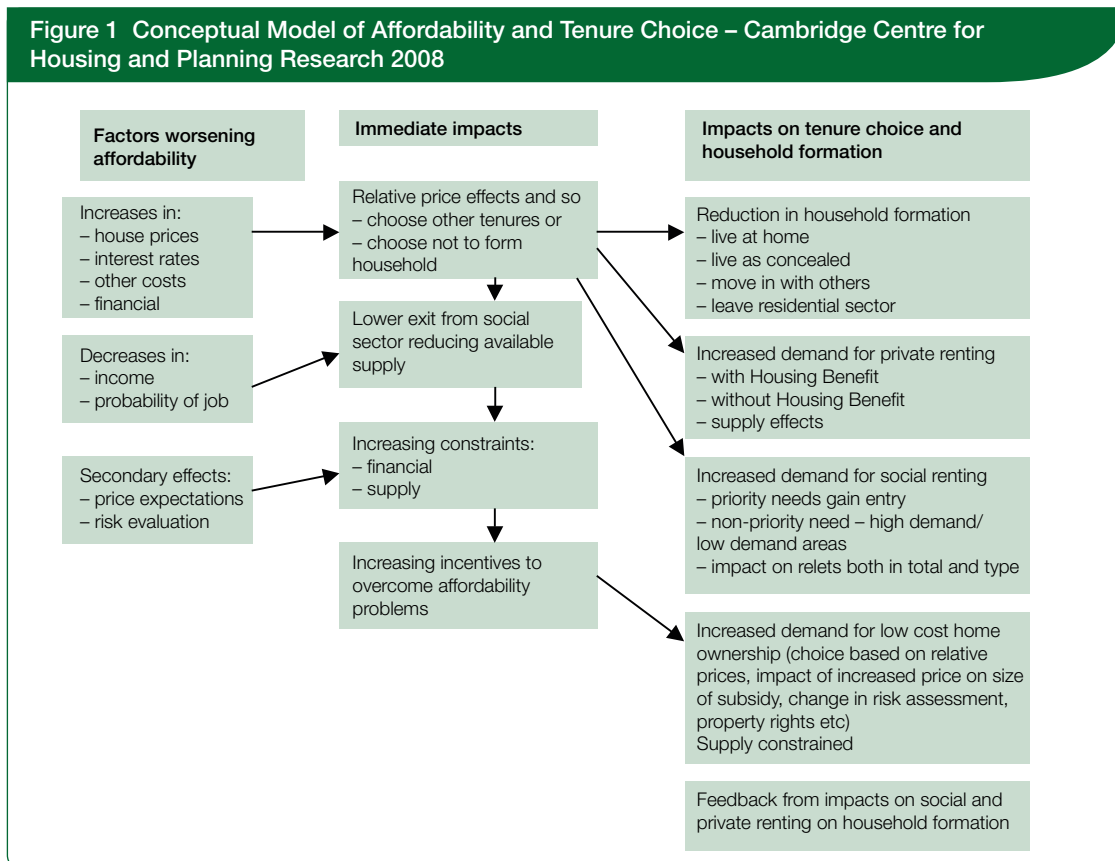
15. This paper will address the questions posed by:

- Drawing on a literature review conducted for NHPAU by Cambridge Centre for Housing and Planning Research. This work provides a conceptual framework for our research and highlights important developments, such as those in housing and planning policy.
- Identifying trends in key housing indicators including those related to tenure choice, affordability and household formation.

- Considering results from the Bramley-Leishman affordability model about requirements for social and low cost housing.
- Setting out new analysis by NHPAU using the CLG Affordability Model, developed by Reading Business School, about the impact of affordability prospects on household formation, and of the impact of building more social housing on the affordability of market housing.

A simple model of affordability, household formation and tenure choice

16. In order to understand the impact of worsening affordability of market housing on social housing we need to recognise the sector's relationship with other tenures, and more broadly the effects on household formation. Figure 1 provides a useful overview of these relationships and effects.



17. While in principle there is no hierarchy of housing tenures – for example, there are some households for whom private or social renting is more desirable than owner-occupation – the analysis inherently concentrates on the margin where changes in affordability tend to impose such a hierarchy.

18. The main observable outcomes of worsening affordability on potential household formation outcomes are:

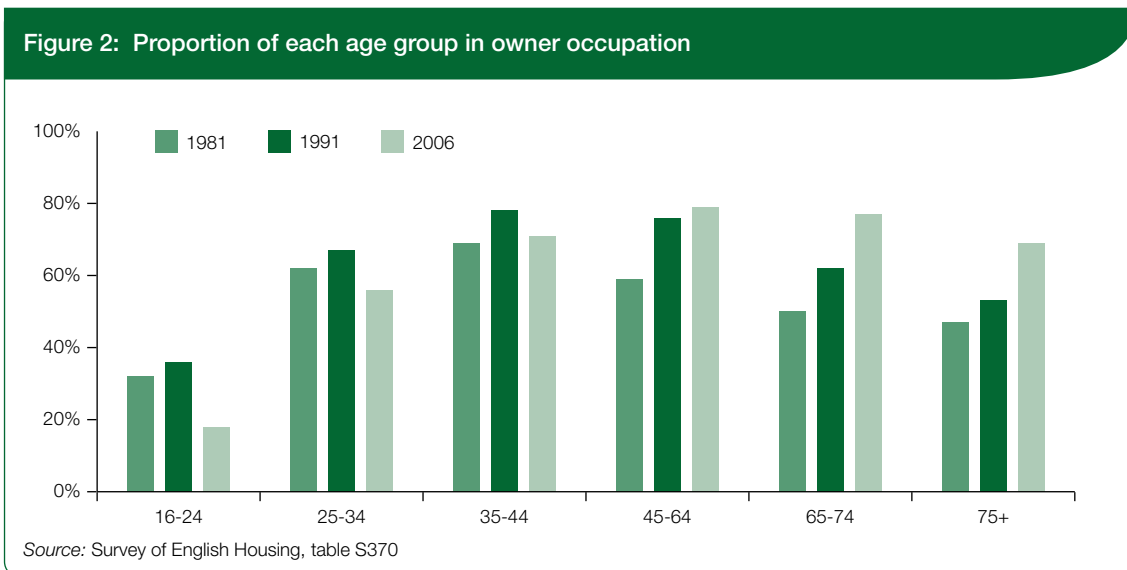
- i. **Households continue to form in the owner-occupied sector** – worsening affordability does not create binding affordability constraints, households continue to form as owner occupiers but they pay more and take more risk, and/or buy homes which are too small.
- ii. **Households form in the ‘intermediate’ market sector** – affordability constraints are binding, but households are able to buy with support from low cost home ownership schemes. Supply constraints limit the capacity of this sector to accommodate demand.
- iii. **Households form in the private rental sector (PRS)** – affordability constraints are binding in the owner-occupied sector, but households are able to afford to rent or at least find tenancies.
- iv. **Households form in the social rental sector** – affordability constraints in the owner-occupied (including low cost) sector and the PRS mean that households form in the social sector. Constrained supply in the social sector will limit the capacity of the sector to absorb all of the additional households.
- v. **Households do not form at all** – affordability constraints prevent households from forming at all. For example, this is likely to include ‘grown up’ children continuing to live with parents through their twenties and early thirties, as well as sharing rented accommodation with other younger people.

19. All these outcomes will be occurring at the same time to different households. For some, affordability constraints will not be binding and they will continue to form households in the owner occupied sector. For some households buying a home, worsening affordability may mean a higher level of borrowing and a greater risk of default if interest rates rise or other living costs increase or they become unemployed. Occasionally these circumstances can lead to repossession.

20. Because private renting is currently cheaper than entering owner-occupation with a mortgage, affordability problems will normally increase demand in the private rented sector. Demand will also increase for intermediate and social housing tenures – however in both these cases the shift in demand at the margin will simply increase the extent of excess demand and measures of stress such as overcrowding, and shared households.

What do key housing indicators suggest about recent trends in tenure?

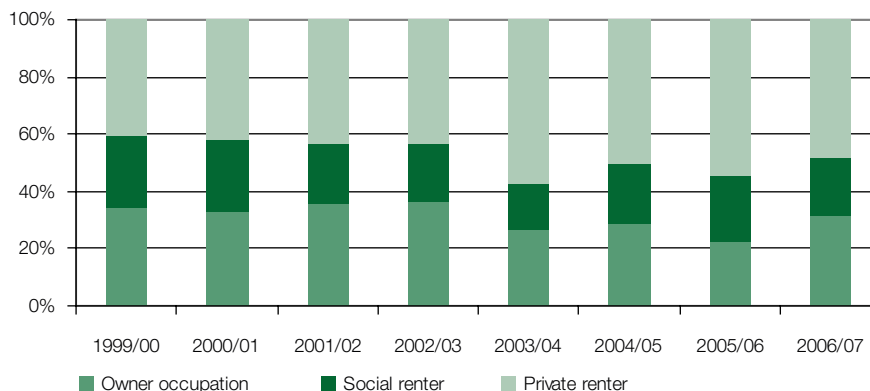
21. Owner occupation has increased from 57 per cent in 1981 to about 70 per cent by 2007, reflecting rising incomes and the impact of right to buy. The increase has not been uniform across the age groups. While owner occupation grew in all age ranges between 1981 and 1991, the proportion of owner occupiers under 45 has fallen between 1991 and 2006 as Figure 2 shows.



22. The number of loans to first time buyers has fallen significantly since 2001. NHPAU analysis of first time buyers' data from the Council of Mortgage Lenders (CML) indicates that a tightening of lenders' loan to value ratios was a major reason for this decline. Higher deposits as a proportion of income were a barrier to some first time buyers entering the market. Interest payments for first time buyers have been rising as a proportion of income reaching 19.4 per cent in 2007, while average deposits have more than doubled between 2001 and 2007 (CML).

23. Results from the Survey of English Housing (SEH) show that the proportion of newly formed households moving into the private rented sector has risen since 1999/00. As Figure 3 shows, in 1999/00 40 per cent of new households went into the private rental sector, 34 per cent of households moved directly into owner occupation, and 25 per cent went into social renting. In 2006/07, 48 per cent moved into the private rented sector, 32 per cent moved directly into owner occupation and 20 per cent went directly to social housing.

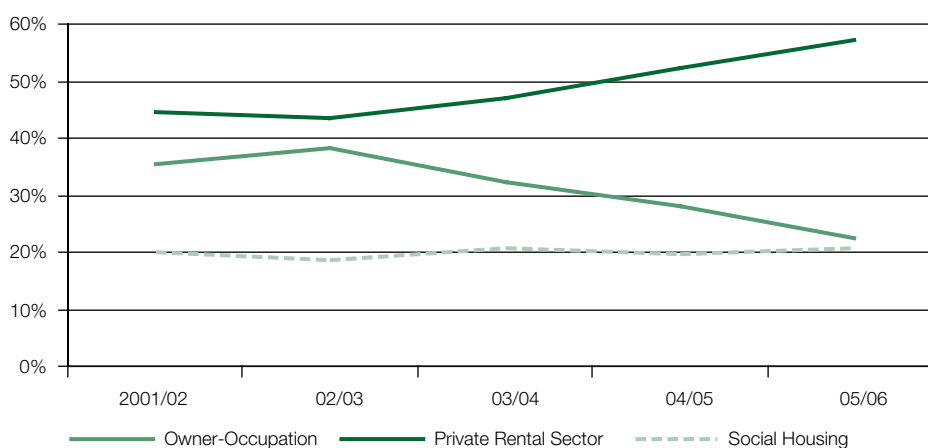
Figure 3: New households by tenure



Source: Survey of English Housing, table 216

24. For those newly forming households aged under 35, the change has been more marked with 57 per cent moving into private rented accommodation and only 22 per cent becoming owner occupiers as shown in Figure 4.

Figure 4: Proportion of New Households Forming aged under 35 by Tenure



Source: Survey of English Housing, table S102

25. The proportion of young people who are moving away from the parental home is the same in 2006/07 as it was in 2001/02 although they are more likely to be moving into private rented accommodation. Thirty-five per cent of those 25 – 29 year olds still living in the parental home said they could not afford to buy or rent.

26. The proportion of new households who had previously lived with parents has fallen from 81 per cent in 1999 to 68 per cent in 2005, while the proportion who had lived with someone else (not parents or spouse/partner) rose from 9 per cent to 17 per cent between 1999 and 2005. This suggests that young people are less likely to form independent households straight from living at home.

27. NHPAU analysis of the Survey of Mortgage Lenders looked at the previous tenure of first time buyers since 2002Q4. The survey asked first time buyers a question about their previous tenure between 1997 and 2001. The combined results from these sweeps of the survey indicated that the majority of these potential purchasers are in private rented accommodation (31 per cent); 13 per cent in social housing; 25 per cent in 'other' accommodation; and 30 per cent living with family and friends.

28. While the shift in tenure towards the private rented sector is most marked among younger households, other factors, apart from worsening affordability of market housing, may be contributing to this shift. These include rising numbers of students, with more school leavers going into further and higher education rather than into employment, and the impact of student debt. Private renting is generally more accessible and flexible than the alternatives.

Worsening affordability and private renting

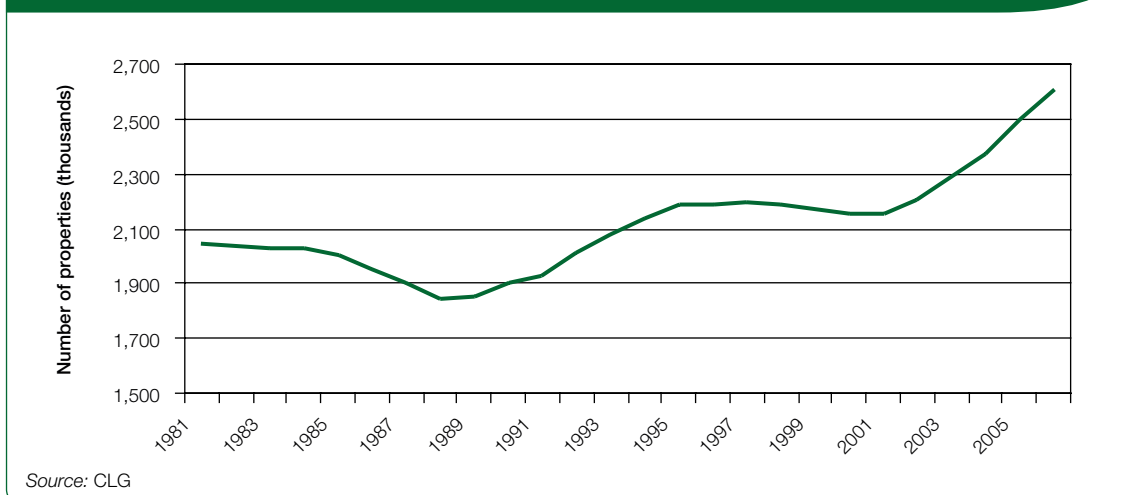
The supply of, and demand for, private rented accommodation

29. The private rental sector appears to have played a part in accommodating those households unable to buy. Private renting has grown since the late 1980s, and now accounts for 12 per cent of housing. The number of households in the private rented sector has risen from 1.7 million in 1992 to 2.6 million in 2007. The number of households renting privately has increased by 27 per cent since 2001, 17 per cent since 2004 and 4 per cent during 2006 (SEH).

30. There is a considerable amount of churn in private renting. In 2005/06 almost 60 per cent of recent movers in the private rented sector had previously been renting privately, 21 per cent were new households, 15 per cent had been owner occupiers and 5 per cent had been in the social rented sector. Since 1999 the proportion of movers into private renting from owner occupation and from social renting has fallen while the proportion of moves within the private rented sector has risen.

31. Policy changes, such as the deregulation of private renting and the introduction of assured tenancies in 1989 have boosted the private rented sector. New types of finance such as buy-to-let mortgages encouraged the growth in the availability of private rented accommodation. Other factors have also played a part. The increase in the numbers of students without corresponding investment in student accommodation, the rise in younger people staying longer in the private rented sector before buying, and supply constraints in the social rented sector have added to demand for private rented accommodation. A more flexible labour market, with people working away from home, and on contracts, coupled with rising costs of house purchase (stamp duty, fees etc) have contributed to the increase in private renting.

Figure 5: Number of dwellings in the private rented sector in England



Affordability

32. Increased supply of private rented accommodation has meant that rent rises have been modest, despite the rise in the number of households in the private rented sector. Mean private rents have risen by 43 per cent between 1999 and 2007 compared to a 163 per cent rise in the lower quartile house price (SEH).

33. The change in the relative costs of owner occupation and private renting, with rents falling compared to the costs of owner occupation, may be producing a change in preferences between tenures. However, the number of private tenants who expect to buy their own home in 2005/6 was 60 per cent, the same as in 2002/03. This suggests that there has been no fundamental change in preferences towards owner occupation as a longer term tenure goal, but perhaps a greater acceptance of private renting for young adults. The two main reasons for not having bought were that they couldn't afford the deposit and couldn't afford the properties they like.

34. Developments in the financial markets in late 2007 and early 2008 have led to a tightening of mortgage lending criteria by the major banks and building societies. These have included increases in the size of deposit required, higher interest rates linked to loan to value ratio and the withdrawal of 100 per cent and most 95 per cent loans as lenders sought to discourage riskier business. These changes will make it more difficult for first time buyers to purchase a house in the short term.

35. Between 2001 and 2005 the price of a lower quartile house rose from £59,950 to £122,000. Based on an income constraint of mortgage costs at 25 per cent of gross income, the proportion of households in the private rented sector who could not afford to buy a lower quartile property has been rising since 2001 from 65 per cent to around 77 per cent in 2005. This implies an additional 300,000 households unable to afford to buy a lower quartile priced house. This same pattern is seen in the number of new households in the private rented sector where the proportion has risen from 75 per cent in 2001 to around 80 per cent in 2005.

Impact on private renting

36. Between 1999/00 and 2005/06, the average number of people in a private renting household has increased from 2.2 to 2.4 persons. This reflects a lower proportion of single person households, down from 38 per cent to 30 per cent, and a higher proportion of three or more person households (from 29 per cent to 36 per cent). Over this period, the proportion of private rented households with two or more family units had increased from 16 per cent to 20 per cent.

37. The result of these increases is seen in the level of overcrowding as measured by the bedroom standard¹. While on average overcrowding has changed little over time, in the private rented sector the overcrowding rate has risen from about 3 per cent in 1997 to 5 per cent in 2006/07. Overcrowding is most pronounced in London, one of the least affordable regions for owner-occupation, where the rate in the private rented sector has risen from 5.4 per cent in 1995/6 to 10.5 per cent in 2006/07. The overcrowding rate may be worse than indicated as those groups in overcrowded accommodation (for example, new immigrants) may be less likely to respond to surveys.

Worsening affordability and social renting

38. As house prices and private rents have been rising faster than rents in the social sector demand and need for social housing will have increased. For social housing the distinction between demand and need is relevant. If households cannot afford the market price of housing, they will still need to be housed; others may be able to afford market housing but may prefer (demand) to be housed in the social sector.

39. With housing user costs in the social sector generally being below those in the private sector, demand for social housing is likely to outstrip supply other things being equal. Within social housing three groups can be identified: those temporarily in social housing; those in social housing as a secure tenure for life; and those who go into social housing when old.

40. The best known estimate of housing need – this is the base methodology drawn on by Government in setting its social housing targets – is that produced by Alan Holmans of Cambridge University who identified ‘newly arising’ and ‘backlog’ need:

- newly arising need, based on demographic trends, such as the increase in the number of separate households and changes in the age and marital status of households; and
- existing or unmet need, based on overcrowding, temporary accommodation, concealed households and other indicators to give an indication of backlog need for social housing.

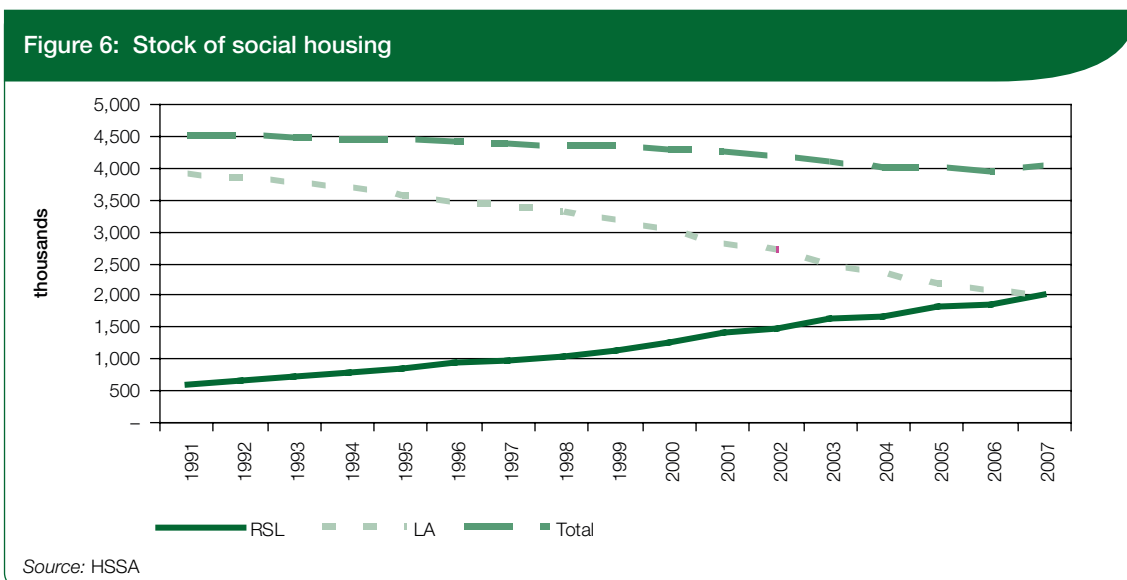
41. The existing backlog of those defined as being in housing need will determine which households are able to access social renting. Others who do not meet those definitions are unlikely to put themselves on waiting lists unless they want to access low-cost homeownership schemes. These estimates do not take into account pressures from housing need arising from worsening affordability in the market sector.

¹ Bedroom standard: A separate bedroom is required for each married or cohabiting couple, for any other person aged 21 or over, for each pair of adolescents aged 10 – 20 of the same sex, and for each pair of children under 10. Any unpaired person aged 10 – 20 is 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.

42. Other models to estimate housing need include, also from Cambridge University Department of Applied Economics, the DAE model, commissioned in 1995. This was intended to provide a national demand and need assessment but has not been used since 2002. Another is the Bramley affordability model, a regional affordability based needs model. The model focuses mainly on the need for additional subsidised housing provision, and directly estimates the impact of economic/market conditions via affordability and via a function of re-lets of social homes.

43. Results from the Bramley² affordability-based needs model show the net annual need for additional social/affordable housing rose from 93,000 in 2002 to 155,000 in 2006 (including an allowance for reducing the backlog by 10 per cent per annum). Forward projections based on a scenario between emerging RSS plans of 200,000 net additions per annum and the current government target of 240,000 per annum, suggest that the need for affordable housing will continue at about 140,000 – 160,000 per year until 2021. This assumes that backlog need is reduced by 10 per cent per annum. Newly arising need is estimated to be around 50,000 per annum.

44. The role of social housing has changed over time, particularly with the introduction of the Right to Buy. Until recently, the stock of social housing has been falling as new supply from local authorities and housing associations has not matched losses through Right to Buy and demolitions. While excess demand for social housing would be expected because of the subsidy attached to this tenure, the reduction in stock will have exacerbated the difficulty in accessing social housing.



² These results are derived from a local authority level model for England. The latest forecasts are from the West of England Strategic Housing Market Assessment (forthcoming). This model is based on that reported in an article by Bramley and Karley (2005) entitled 'How much affordable housing is needed in England' in *Housing Studies*. This article contains technical details on the model.

45. The supply of social housing for new entrants is composed of re-lets and new build (net of demolitions and Right to Buy sales). The quantity of new build social housing completions has fallen considerably from its 1970s peak, and still has not risen to the levels of 2001/02 (Monk et al, 2005). This of itself would be expected to increase the pressure on re-lets.

46. Any pressures as a result of worsening affordability on the social renting sector will be seen in several ways: the number of re-lets, overcrowding, numbers in temporary accommodation, concealed households, the number able to access market housing and numbers on the housing register.

47. Re-lets occur either through household dissolution (death or move to an institution such as a care home) or by people moving out of social housing into the market sector – both owner occupation and private renting. When market affordability worsens, many such households will be unable to afford to move out of the social sector, and thus we would expect the number of re-lets to decline. Results from Bramley's model show that re-let rates respond to economic variables such as house prices and incomes (Bramley and Leishman 2005).

48. Total lettings have been falling as the movement out of the social sector has slowed and the stock of social housing has declined. Between 1998/9 and 2005/06 moves out of the social renting sector have slowed from 89,000 to 58,000, a 35 per cent fall. In 1998/9, 47,000 households moved from social renting into owner occupation matching the number of households who moved from owner occupation to the social rented sector. In 2005/06, 11,000 households moved from the social rented sector to owner occupation a reduction of 74 per cent, while 29,000 moved from owner occupation to social renting.

49. As shown in Table 1, lettings to new social tenants have fallen since 1998/99 in absolute terms and as a proportion of social housing stock. These data include both Local Authority and Housing Association lettings. As a proportion of all lettings, lettings to new social tenants have risen from 64 per cent in 1998/99 to 69 per cent in 2006/07. Over this period, lettings to statutory homeless have risen as a proportion of all new lettings by housing associations from around 11 per cent to 27 per cent, and from 25 per cent to 28 per cent of all new local authority lettings.

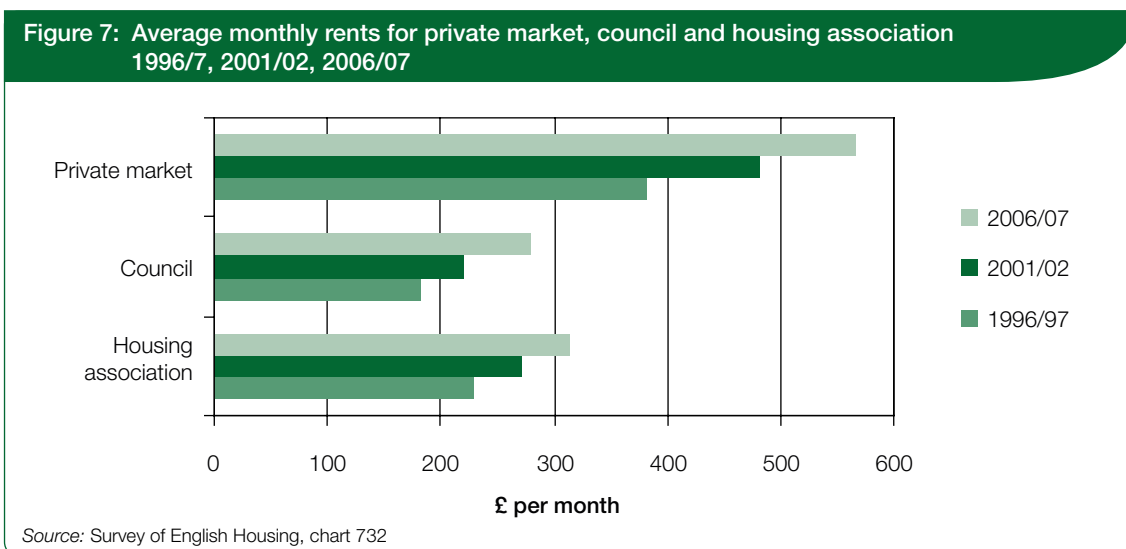
Table 1: Lettings to social tenants

	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Housing stock (000s)	4,324	4,285	4,236	4,173	4,078	4,000	3,983	3,936	4,012
All lettings (incl. previous SRS tenants, 000s)	525	502	476	448	432	373	354	317	305
New lettings (excl. previous SRS tenants, 000s)	334	321	310	301	285	247	241	216	210

Source: Housing statistics, DCLG and CORE websites

50. The rising price of market housing has made it more difficult for social tenants to move on. Data from the SEH show a marked reduction in the numbers moving from the social rented sector into owner occupation and into the private rented sector. Rents in the social rented sector have risen 30 per cent between 1999 and 2007 as compared to 43 per cent in the private rented sector and a rise of 163 per cent in lower quartile house prices.

51. Figure 7 shows that rents in the social sector have risen more slowly than those in the private rental sector and are significantly lower than private sector rents. The gap between the level of rents is likely to increase the difficulties of social renters to move into private renting. Assuming a rent cost constraint of 25 per cent of income, private renters would require an average income of £27,000 per annum, while housing association tenants would need an income of £15,000 on average.

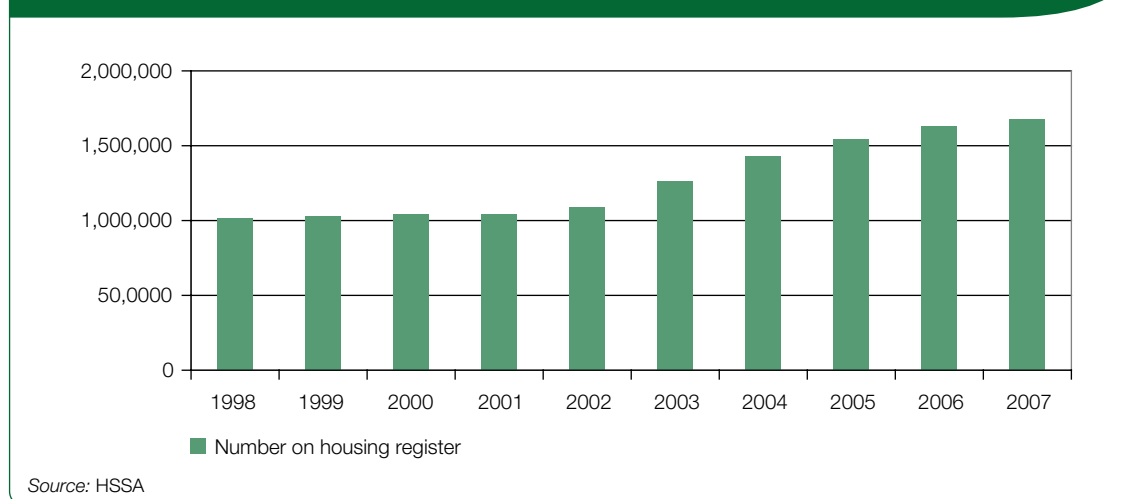


52. The reasons for households moving out of social renting include wanting to move to a bigger house, a better area or for personal reasons such as divorce. Former owner occupiers moving into social housing did so for personal reasons, but also for a small proportion they wanted to move to cheaper or smaller accommodation or could not afford mortgage payments.

53. As Figure 8 shows the number of households on the housing register has risen significantly since 2002. The data overstate the numbers in need, as the register includes some deadweight – people who have since moved away or who would not be housed. Also the housing register may have been boosted by households wanting to access low-cost home ownership schemes. Eligibility criteria for these schemes include social renting tenants, key workers, those on the housing register, and first time buyers who cannot afford to buy a property as identified by the Regional Housing Board. About 33 per cent of those accessing intermediate shared ownership in 2006/07 were on the register up from 25 per cent in 2002/03.

54. A recent LGA Heads of Housing survey found that that 80 per cent of councils reported an increase in demand for social housing in the last two years, with 66 per cent blaming the high level of house prices. Certainly, the rise of over half a million households on the housing register between 2002 and 2007 compared with an increase of 73,000 between 1998 and 2002 reflects pressures of worsening affordability from those wanting to access subsidised housing, whether social renting or low-cost home ownership.

Figure 8: Number of households on housing register



55. Another measure of the pressure on social housing is in the level of overcrowding. In the social rented sector overcrowding has increased, on a three year moving average, between 1995/6 and 2006/07 from around 5 per cent of households to 5.8 per cent of households. In London where overcrowding is most pronounced, this has risen from 10.6 per cent in 1995/6 to 12.2 per cent in 2006/07 among social renters.

56. With a decline in re-lets, a relative lack of new build, and worsening affordability in the owner occupied sector, we would expect an impact on the rate of new household formation, with young people in particular delaying independent living and with (possibly) potential separations of couples delaying finding separate homes. Results from SEH show that the number of new households forming in the social rented sector fell from 115,000 in 1999/00 to 79,000 in 2006/07 and the proportion fell from 25 per cent in 1999/00 to 20 per cent in 2006/07.

Worsening affordability and household formation

57. Official household projections are produced by CLG³, drawing on official population projections published by the Office for National Statistics. The projections are trend based. They estimate the number of households that will form in the future through assumptions based on current trends, for example in migration, mortality, fertility, separation and the age at which non-dependent children leave home. No account is taken of affordability prospects in the housing market.

³ CLG methodology note <http://www.communities.gov.uk/documents/housing/doc/707660>

58. According to Ermisch's (1999) econometric model of young people's decision to live apart from parents, tighter housing markets, as indicated by higher regional relative house prices, significantly restrict leaving home and reduce household formation.

59. Results from the SEH show that the level of new household formation has fallen almost 14 per cent between 1999/00 and 2006/07. Estimates of household numbers based on the Labour Force Survey (Experian, 2007) show a substantially lower increase in household numbers than the official household projections using the 2003-based population projections.

60. The difference between the two alternative sets of estimates of household representative rates is particularly marked for the younger 15 -34 year old age groups. The LFS-based estimates show a steep decline compared to a small increase in the CLG trend-based estimates. According to Experian's analysis there is a close link between changes in household representative rates for the younger age groups and changes in the house price to earnings ratio. This evidence supports the expectation that worsening affordability reduces household formation.

61. Constraints on household formation caused by affordability will put upward pressure on the average size of households. While historical data show average household size falling, this is because the downward pressure on the average size of households generated by increased divorce rates and the ageing population (see Table 2) has tended to outweigh the upward pressures arising from worsening affordability.

Table 2: Single person households in England

Year	Number of single person households (000s)	% of total households who are single person households
1997	5,683	28.7%
1998	5,783	29.0%
1999	5,885	29.3%
2000	5,998	29.7%
2001	6,163	30.0%
2002	6,309	30.4%
2003	6,447	30.8%
2004	6,535	31.0%

Source: CLG Household Estimates, Table 404

What does the CLG Affordability Model tell us?

62. The Affordability Model, developed by Reading Business School, allows us to explore the impact of worsening affordability on:

- household formation, comparing official projections with the market outcome taking changes in affordability into consideration;
- tenure structure changes flowing from worsening affordability; and
- the implications of delivering more social homes in place of market homes.

63. Official household projections are based on the assumption that household membership rates in a particular cohort (defined by age) will vary smoothly with time. Changes in a particular rate in a given cohort will be the result of effects such as leaving the parental home, marriage and mortality, which are strongly dependent on the stage of the cohort's life cycle. The methodology for the 2003-based projections was modified to give greater weight to past experiences of that cohort. This had the effect of dampening projected rates of household representative rates at younger adult ages, particularly those under the age of 30.

64. These official projections are not forecasts, but estimates of how many households will form given certain assumptions about age of leaving home, marriage etc. However, worsening housing affordability could inhibit rates of household formation, with young people leaving home later, or joining others in mutual households rather than forming independent households.

65. For the purposes of this research, in running the affordability model our principal scenarios use the 2004-based population projections, assume nominal earnings grow at 4 per cent and that mortgage interest rates average 6.25 per cent until 2026. Under RSS plans between 2007 and 2026 the model forecasts a worsening in affordability, measured by the lower quartile affordability ratio⁴, from 7.2 to 8.7.

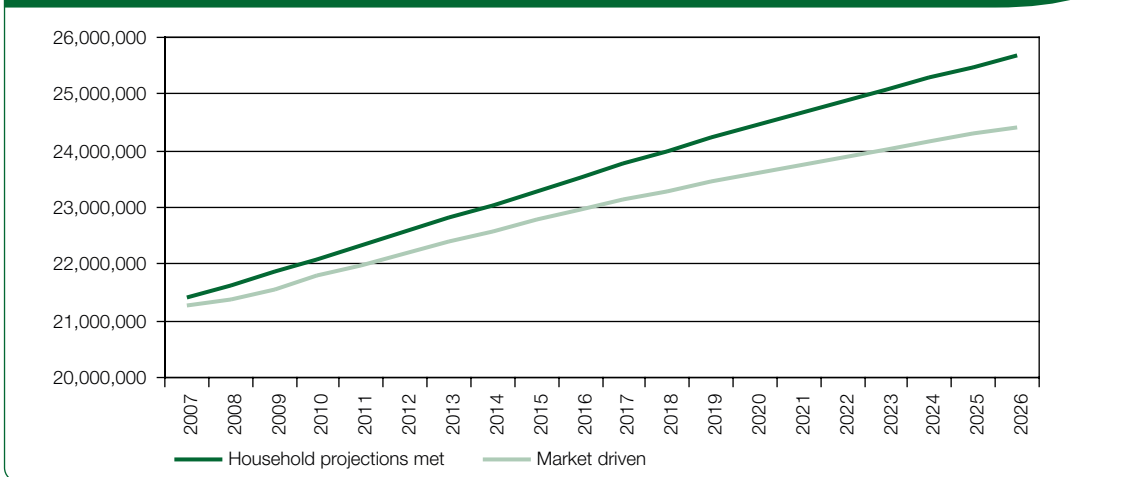
66. If the official household projections are met, the model shows the level of vacancies falling in both the private and the social sectors, with private vacancies dropping to 0.03 per cent, which is below the equilibrium level required for the housing market to function effectively.

67. Dropping the assumption that the official household projections are met allows the effects of this worsening affordability on household formation to be explored. With higher house prices and worsening affordability, young people delay leaving home and forming a new household until a later age than under the official household projections. Thus households will form at a lower rate than the official projections as a result of worsening affordability.

68. Figure 9 shows the official household projections and the number of households forecast to form in the model as a result of worsening affordability.

⁴ The ratio of lower quartile house price to earnings ratio.

Figure 9: Official household projections compared to market driven household projections



69. The model results show:

- 1.2 million fewer households by 2026 compared to the official projections.
- The average household size will be 2.3 persons per household by 2026 as compared to 2.1 persons per household under the official projections.

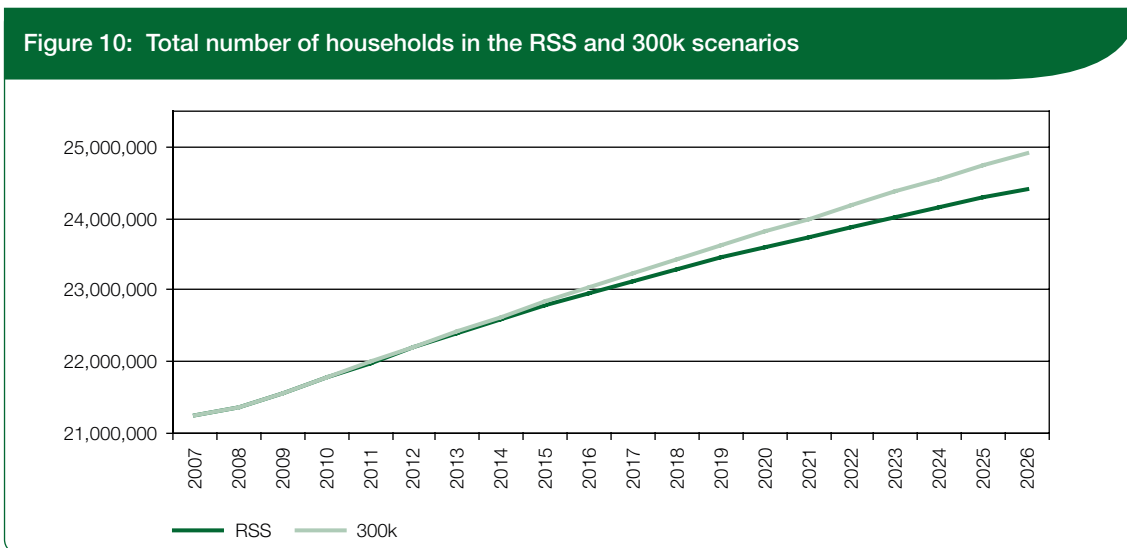
70. These results need to be interpreted with care and are likely to be a worst case. For example, more households could form if:

- There was an increase in social rented and intermediate housing in addition to meeting the RSS targets – Bramley and Leishman estimate a total requirement for around 150,000 homes in these tenures up to 2021 to meet newly arising need and to tackle the backlog of needs. Government has set targets for 70,000 new affordable homes per year 2011 of which 45,000 are to be social homes, with an aspiration to increase this to 50,000. However, it seems reasonable to assume that any further substantial increase is unlikely given the finite resources available and competing priorities.
- The private rented sector expanded further. Growth of 27 per cent in the supply of private rented properties since 2001 has allowed new households to form. Further expansion of supply, which appears feasible, would support household formation by younger people.
- The supply of housing was more responsive to demand. If long term price trends were dampened by delivering an adequate supply of market homes this would have an important bearing not only on the number of people able to access home ownership, but also therefore on pressure on demand for intermediate and social housing (see next section).

What if more market housing was built?

71. All things being equal, increasing the level of build from the current RSS plans (204k net additions per annum) to 300k net additions per annum would cause an easing of affordability pressures, the lower quartile affordability ratio declining to 6.8 in 2026 rather than 8.7.

72. The effect of this increase on household formation is shown in Figure 10. The improvement in affordability allows for 260,000 more households to form in the market by 2021 and 500,000 by 2026.



73. An alternative model, the Bramley Leishman model, produces a similar result. In this model the difference between the number of households under two supply scenarios – RSS and 265,000 – would be 244,000 households in 2021. Given that these are two different models, and the difference in the scenarios tested the similarity of results gives us confidence in the results from the Reading Affordability Model.

The implications for affordability of delivering more social homes in place of market homes

74. It is suggested by some that one way of tackling the affordability problem is to build more social homes. The stock of social housing has been falling until recently as new supply has not matched losses through right to buy and demolitions. Access to social housing is needs determined.

75. If households who want social housing cannot access this, their options are not to form or to share in the social sector or the private sector. However, these households may be able to afford some accommodation in the private sector with or without housing assistance. In the first case, building social renting houses would not affect the private sector and affordability; in the second case building more social houses would affect affordability and the private sector.

76. We have used the Affordability Model to simulate the effect of increased social home provision. We have modelled the effects of building a higher proportion of social housing, and therefore a lower proportion of private build. As the total level of build remains the same in both scenarios there has been a reduction in private build to accommodate the additional social housing. We have increased the level of social build to 90,000 by 2010 and maintaining this level to 2026. Over the 20 year time period modelled, the increase in social build equates to an additional 800,000 social houses, approximately 38,000 per year.

77. The proportion of households in the social sector increases from 17% in 2026 when the level of social build is held at current planned levels, to 20% when the level of social build is increased. This is expected due the increased supply of social housing.

78. The proportion of households in both the private rented and owner occupied sectors falls. The decrease in size of the private rented sector is caused by the substitution between the private rented sector and the social sector in the model. More households are accommodated in the social sector, and fewer in the private rented sector.

79. The decrease in the proportion of households in the owner-occupied sector occurs due to a worsening in affordability. Increasing the share of social build, thereby reducing the supply of market housing, causes the affordability outcome to worsen from 8.7 to 9.6 in 2026.

Main Conclusions

80. Worsening affordability of home ownership over the past decade has increased pressure in the social rented sector and supported growth in the private rented sector.

81. Looking ahead, based on current regional housing plans we should expect: a big increase in pressure on intermediate and social housing; household formation to be significantly inhibited by affordability pressures; and a break on household formation to lead to the end of the downward trend in average household size established since 1960s. Our modelling suggests this will reach 2.3 in 2026, as compared to 2.1 persons per household under the official projections.

82. The impact of affordability pressures preventing the formation of over 1 million households is likely to be a worst case. More households would form if: there was an increase in social rented and intermediate housing above current RSS totals; the private rented sector expanded; or the functioning of the housing market improved.

83. If long term price trends were dampened by delivering an adequate supply of market homes this would have an important bearing not only on the number of people able to access home ownership, but also therefore on pressure on demand for intermediate and social housing.

84. There would be serious economic and social consequences of the reduction of household formation if this were caused by affordability pressures. For example, an increase in overcrowding and households sharing when they would prefer not to.

85. Increasing the supply of market housing will be vital if this challenge is to be met. Our modelling indicates that if the level of delivery of new homes increased from 200,000 in emerging RSS plans, to about 300,000 per annum by 2016, then this would ease affordability pressures and enable 500,000 more households to form in the market by 2026.

86. Solving the affordability problem is not about building more social and low cost homes at the expense of market housing. All things being equal, doubling the number of social homes delivered would lead to a worsening in the ratio of lower quartile house prices to earnings from 8.7 to 9.6.

87. It is not surprising that delivering more social homes at the expense of market housing does not help improve affordability prospects. While social homes would provide housing for those in need, but it does not meet demand for housing, it provides for those who are priced out.

88. If we fail to deliver enough market housing more people in the future will require state support to meet their housing needs. A key mechanism of pricing people back into the market is to tackle the affordability problem by building the right number of new homes, of the right type, in the right place and at the right time.

89. Finally, it is important to keep an eye on the medium and long term. A short term cooling in the housing market is not an answer to the affordability problems we face. Indeed, developments in the financial markets in late 2007 and early 2008 have led to a tightening of mortgage lending criteria by the major banks and building societies. These changes will make it more difficult for first time buyers to purchase a house in the short term.

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Currently Warden of Nuffield College, Oxford, and a Board Member of the UK Statistics Authority. Previously he has held Economics Professorships at both LSE (London School of Economics) and Oxford and was President of the Royal Economic Society from 2000 to 2003. He was a member of the Bank of England Monetary Policy Committee from 2000 to 2006, and during this time he made a number of speeches on the housing market. He is a fellow of both the Econometric Society and the British Academy as well as being a foreign honorary member of the American Economic Association and the American Academy of Arts and Sciences.



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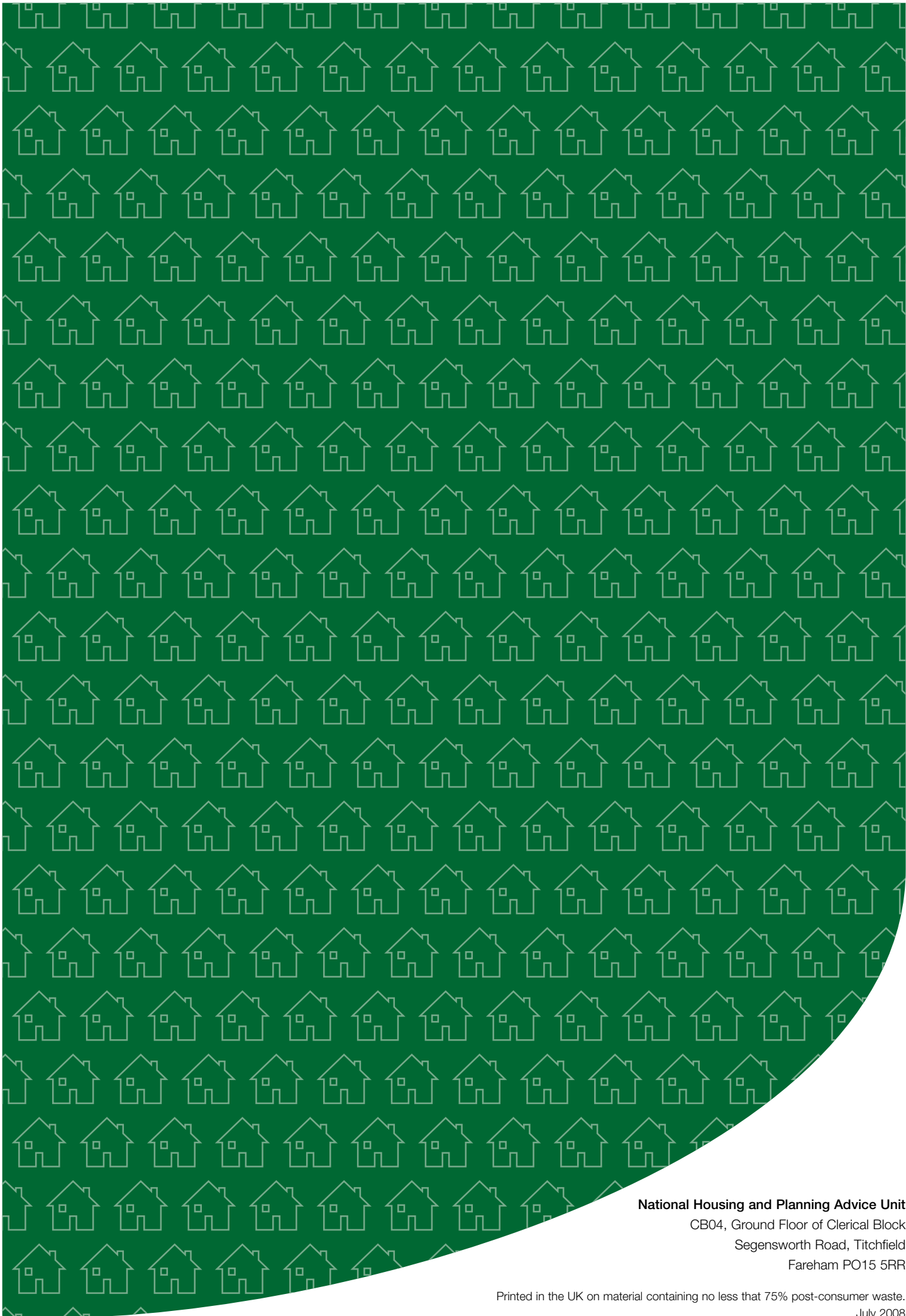
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