Cambridge Centre for Housing & Planning Research

ESTIMATES OF FUTURE DEMAND AND NEED IN ENGLAND TO 2026 BASED ON 2008 DEMOGRAPHY

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Table of Contents

List of Tables

A) Introduction, Purpose and Method

1. The purpose of the work reported in this paper is to revise the estimates of newly arising future demand and need for housing in England as a whole and in the regions that were prepared by the Cambridge Centre for Housing and Planning Research (CCHPR) and published by Shelter in 2008 in *Homes for the Future – Anew analysis of housing need in England.* The reason for revising these estimates of future housing need is that the household projections that were their central core have been superseded by new projections of households published late in 2010 by the Department for Communities and Local Government (DCLG). These projections differ in important ways from the projections used in *Homes for the Future* (see Alan Holmans and Christine Whitehead, *New and novel household projections for England with a 2008 base;* published in May 2011 by the Town and Country Planning Association as *Town and Country Planning Tomorrow Series Paper!!)* but the method for deriving estimates of future housing need from household projections used in *Homes for the Future* and earlier estimates of future demand and need for housing by CCHPR for Shelter, the Town and Country Planning Association and the Joseph Rowntree Foundation can still be used.

2. The revised estimates of future demand and need for housing are made at national level by taking the 2008-based projections of household in 2016 and 2026, with estimates for 2006 as base year, and applying to them the methods used to produce the housing need estimates in *Homes for the Future.* The demographic household detail is new. Everything else is taken without change from the working detail of *Homes for the Future.* These elements of the estimates of future housing demand and need are:

    a) The division of households between the market and social sectors, specific for type of household and age of the household representative

    b) Any change in future in the number of dwellings used as secondary residences, second homes

    c) Any change in the number of vacant dwellings

    d) The number of new dwellings in the social sector needed to replace re-lets lost as a result of past sales to sitting tenants. If they had remained in the social sector their dwellings would have become available for re-letting when the household dissolved, but because they became owner-occupiers their dwellings go into the market sector.

    e) The figures for these are taken from Table 3 in *Homes for the Future*. This procedure can only produce interim 2008-based estimates of future demand and need for housing. A full re-working would require more timely data about housing tenure in relation to type of household and age, as well as up-to-date data about secondary residences and vacant dwellings.

3. The regional estimates of future demand and need for housing with 2008-based household projections depend on assuming that estimated future changes in tenure proportions according to type of household and age at national level will apply in each region as well. For instance, the proportion of couple households that are in the market sector is estimated to rise from 82.0 percent in 2006 to 83.5 percent, so the corresponding proportion in each region is assumed to increase by 1.5 percentage points, irrespective of the level in 2006. No allowance is made for possible “catching up” from the comparatively low proportions of couple households in the market sector in the North East region; or for a smaller rise in the South West region where the proportion in 2006 was highest. The regional figures for market sector and social sector households, separately for each type of household – couple households, lone parent households, other multi-person households, male one-person households, female one person households were controlled to the corresponding national totals by pro-rata scaling.

4. Dividing national and regional projected household totals between market and social sectors can produce only a two-sector estimate of newly arising demand and need for housing. *Homes for the Future* went on to introduce a third sector, intermediate housing. That is not attempted in this paper. The method for estimating need for intermediate housing in *Homes for the Future* – assumed explicitly that the problem to which provision of intermediate housing was addressed was one of house prices in relation to income. The rise in house prices from the late 1990s onwards resulted in there being numerous new and recently formed households that could afford to pay considerably more for their housing than the rents charged for social sector housing but could not afford to purchase an adequate dwelling at market prices. In this situation the number of new households needing intermediate housing – subsidised but more lightly than social sector housing – depended on the purchase cost of “entry level” housing in relation to incomes. Implicitly assumed was that owner-occupation was the tenure of choice; and that most new households that rented from a private landlord did so because they could not afford to buy a house. Since the housing market slump and the financial crisis these assumptions are no longer valid in the way they once were. High ratios of deposit to price are a widely reported problem; and with the growth of the private rented sector even before the housing market slump, the assumption that most recently formed households that were renting were thwarted would-be home purchasers was becoming increasingly questionable. High deposits as a barrier to house purchase as a ground for providing housing on (lightly) subsidised terms are very intractable for an estimate of need, for there is far less information about ownership of financial assets than of incomes. Need for intermediate housing in present circumstances is too complex a problem to be addressed in an interim study.

5. The 2008-based household projections are taken as they stand as published by DCLG. In *Homes for the Future* it is suggested (page 22) that DCLG’’s projection procedure may overstate the increase in households owing to not taking account of lower household formation rates among recently arrived immigrants. When the numbers of immigrants assumed in the population projections on which the household projections are based were fairly low this had only a small potential effect on future numbers of households. But when the numbers are as large as in the 2004, 2006 and 2008 population projections this as a much more serious issue. No account of this is taken in the present paper; so it is possible that the projected increase in households, and hence the estimate of future housing needs derived directly from them, are on the high side.

B) Newly Arising Demand and Need for Housing in England in Total

6. The estimate of future demand and need for housing in England in 2006-2026 is in two parts: (a) dividing the projected number of households between the market and social sector, and (b) working from the projected increase in households in each to the demand and need for new housing supply by bringing in the other components of the estimate (see paragraph 2 above).

i. Division of Households in 2006, 2016, and 2026 between the Market and Social Sectors

7. The projected division of households in future years between the market and social sectors depends on the way this division varies with type of household and the age of the household representative. Age for age couples are the most likely to be in the market sector, and lone parents the least. Higher proportions of married couples in their 50s and 60s are in the market sector than in their 70s and above. The source of this information has thus far been the Survey of English Housing (SEH).

8. The 2008-based household projections distinguish 17 types of household, which for present purposes are condensed into 5: couple households, lone parent households, other multi-person households, male one-person households, and female one-person households. The distinction between married couple and cohabiting couple households that was in 1992-based to 2006-based projections was not retained. The 2008-based projections use 10-year age ranges, in contrast to the 5-year ranges previously used. The division between market and social sectors in each age range is used to estimate the division in future years by "rolling forward" the sector proportions in the base year. The proportion of couples aged 45-54 in the market sector in 2006 (the base year) will be approximately the proportion in the 55-64 age group in 2016 and the 65-74 group in 2026, as comparatively few people became owner-occupiers at ages above the mid-40s other than by purchase as sitting tenants on advantageous terms. In practice "rolling forward" can be used only for couple households and one-person households. There are few lone parent households in the higher age ranges where the rolling forward affect is greatest, because lone parent households must by definition include one or more dependent children (under 16, or 16 – 18 if in full-time education). By the time most lone parent reach their 50s, their children will have ceased to be dependent in the technical sense. For "other multi person households" the sector proportions vary too erratically for "rolling forward" to be meaningful.

9. The demographic core of the present estimates of future housing demand and need is the 2008-based projections of couple, lone parent, and other multi-person and one-person households. These are shown in Table 1.

Table 1. 2008-Based Projections of Households in England to 2026

	2006	*2016*	*2026*
Couple households	11,394	11,727	12,060
Lone parent households	1,607	2,035	2,495
Other multi-person households	1,318	1,287	1,268
Male one-person households	3,100	3,944	4,787
Female one-person households	3,924	4,614	5,407
All households	21,344	23,608	26,016

Source: 2008-based projection tables made available by DCLG

10. The household totals in Table 1 are next divided between the market and social sectors, in the way described in paragraph 8 above. The categories of household for which the market and social sector proportions are projected by "rolling forward" the base year proportions, couple households and male and female one-person households were 86 percent of the total for all households in the base year, as were 83 percent of the net increase in households. For the other categories of household, lone parent and "other multi-person households", the sector shares in each age range in the base year are taken to apply in 2016 and 2026. Table 2 shows the division of the household totals in Table 1 between the market and social sectors.

Table 2. Projected Division of Households in 2006, 2016, and 2026, between Market and Social Sectors - (thousands).

	Couple households	*Lone parent households*	*Other multi-person households*	*Male one-person households*	*Female one-person households*	*All households*
2006						
Market sector	9,348	608	899	2,055	2,483	15,393
Social sector	2,046	999	419	1,045	1,441	5,950
Total	11,394	1,607	1,318	3,100	3,924	21,344
2016						
Market sector	9,736	774	895	2,711	3,037	17,153
Social sector	1,991	1,261	392	1,233	1,577	6,454
Total	11,727	2,035	1,287	3,944	4,614	23,608
2026						
Market sector	10,072	971	873	3,363	3,633	18,912
Social sector	1,988	1,524	395	1,424	1,774	7,105
Total	12,060	2,494	1,268	4,787	5,407	26,016

Source: Data on households tenure used in *Homes for the Future;* working detail on file

11. In the two decades between 2006 and 2026 net increases of 3,519,000 households in the market sector and 1,15,000 in the social sector are projected. In the social sector 525,000 of the increase in households, not far short of one half of the total, are lone parent households.

12. These projected increases in the number of households in each sector can be divided into: (a) the effect of the projected total increase in households, i.e. what would happen if the proportions in each sector remained the same as in the base year; (b) the effect of changes in the mix of household types and ages; and (c) the effect of "rolling forward" the sector proportions for couple and one-person households aged 45-54 and upwards. This analysis is shown in Table 3, with comparison with the corresponding figures in *Homes for the Future* (Table 11).

Table 3. Analysis of Projected Change in Household Total in 2006-2026

	Present report (2008-based)			*Homes for the Future (2004-based)*		
Overall increase in households	+3,370	+1,303	+4,673	+3,213	+1,243	+4,456
Changes in mix of household types and ages	- 490	+490	0	-390	+390	0
Changes in sector Shares from "rolling forward"	+639	-639	0	+684	-684	0
Total change	+3,519	+1,154	+4,673	+3,507	+949	+4,456

Source: Working behind Table 2; and *Homes for the future,* Table 11

13. That changes in the mix of household types and ages have a larger effect on sector shares in the present report than in *Homes for the Future* is due to the much larger projected increase in lone parent households. Table 2 shows that much higher proportions than of the other three household types are accommodated in the social sector. Nearly 900,000 of the increase in households between 2006 and 2026, almost 20 percent of the total, in the 2008-based household projections are lone-parent households (see Table 2). The corresponding figures in the 2004-based household projections which are the demographic base of *Homes for the Future* are a projected increase of 273,000 lone parent households, 6 percent of the total increase projected for 2006-2026.

ii. Revised Estimates of Demand and Need for Housing

14. The increase in households in the market and social sectors is the central core of estimates of housing demand and need by the method used. The other elements of the estimate of future demand and need for housing in the social and market sectors are: (i) the increase in the number of secondary residences (i.e. for occupation by households who have a main residence elsewhere); (ii) future changes in the number of vacant dwellings; and (iii) additional dwellings in the social section to offset the effect on the number of re-lets caused by sales of dwellings to setting tenants in earlier years. Of these the last affects the number of dwellings needed in each sector, but not the total overall. The figures for them in Table 4 are taken without change from *Homes for the Future.*

Table 4. Newly Arising Demand and Need for Housing in England in 2006 – 2026

	Market sector	*Social sector*	*Total*
Projected net increase in households	3,519	1,154	4,673
Secondary residences	240	0	240
Vacant dwellings	115	20	135
Replacement of social sector re-lets "lost" through earlier Right to Buy sale	- 486	+ 486	0
Total	3,388	1,660	5,048
Annual average	169	83	252
(*Homes for the Future* annual average)	(169)	(73)	(242)

Source: Table 2 above; and *Homes for the Future,* Table 3

15. The estimates of newly arising demand need for housing in Table 4 are of net additions to the housing stock. This was the counting unit for the housing targets published by the Government in 2007, and was the definition used in *Homes for the Future.* This was of statistical necessity, since in 2006 the Department for Communities and Local Government (DCLG) ceased to publish estimates of the components of change of the dwelling stock – new build, conversion gains, gains from changes of use, and dwellings demolished, and indeed withdrew the previously published estimates for 2001/02 and to 2003/04. All that was published was a total net increase in the dwelling stock, and numbers of dwellings completed.

16. DCLG has since resumed publishing estimates of the components of change of the dwelling stock, from 2006-07 onwards. These figures are shown in Table 5, with an average for the four years included.

Table 5. Components of Change of the Housing Stock in England

	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*Average (rounded thousands)*
New build completions	193,080	200,300	157,630	124,200	117,700	159
Net conversions	7,600	9,020	8,640	6,230	5,050	7
Net change of use	20,150	17,640	16,640	13,600	11,540	16
Net other gains	460	1,020	270	970	1,810	1
Demolitions	22,290	20,500	16,590	16,330	14,890	18
Net additional dwellings	198,770	207,370	166,570	128,680	121,200	165

Source: Department for Communities and Local Government, Live Table 120

17. The figures in Table 5 suggest that 20,000 a year would be a reasonable assumption for demolitions, with present policies, and 25,000 a year for new supply from sources other than new building. On these very simple assumptions the required net increase of 252,000 a year in the housing stock would imply 272,000 as the gross increase including replacement of dwellings demolished. Of this 247,000 a year would come from building new dwellings, for which sites are required. This is not far short of 50,000 more than highest of the annual completion figures.

C) Regional Estimates of Future Demand and Need for Additional Housing

18. The method used for producing regional estimates of future demand and need for housing was outlined in Part a) of this paper. National changes in the proportions of households in the market and social sectors, specific for each type of household (five types) and age of household representative (eight ranges), are applied to regional household projections in their detail, made available by DCLG. The projected regional totals of households are shown in Table 6

Table 6. 2008-Based Household Projections for the Regions of England

(thousands)

	2006	*2016*	*2026*
North East	1,098	1,183	1,271
North West	2,908	3,116	3,341
Yorkshire and Humber	2,164	2,426	2,702
East Midlands	1,832	2,047	2,271
West Midlands	2,214	2,387	2,581
East of England	2,346	2,667	3,000
London	3,180	3,529	3,907
South East	3,408	3,791	4,201
South West	2,193	2,463	2,743
England	21,344	23,608	26,016

Source: Tables supplied by DCLG. Figures for 2006 and 2026 published in Table 4 of *New and Novel Household Projections*

19. The 2008-based projections showed larger proportional increases in total households in the East of England, London, and the South East than did the 2004-based projections from which the regional figures in *Homes for the Future* were taken. The 2008-based figures showed smaller proportional increases in the North West, East and West Midlands, and the South West (See *New and Novel Household Projections,* Table A). The household totals have to be divided between the market and social sector. This division is shown in Table 7 for 2006 and 2026. 2016 is omitted for reasons of space.

Table 7. Projected Regional Household Totals Analysed by Sector

	2006	*2026*	*Total*	*Percentage increase*
North East				
Market sector	684	793	109	15.9
Social sector	414	478	64	15.5
Total	1,098	1,271	173	15.8
North West				
Market sector	2,057	2,366	309	15.0
Social sector	851	975	124	14.6
Total	2,908	3,341	433	14.9
Yorkshire and Humber				
Market sector	1,542	1,935	393	25.5
Social sector	622	767	145	23.3
Total	2,164	2,702	538	24.9
East Midlands				
Market sector	1,369	1,710	393	25.5
Social sector	463	561	145	23.3
Total	1,832	2,702	538	24.9
West Midlands				
Market sector	1,509	1,758	249	16.5
Social sector	705	823	118	16.7
Total	2,214	2,581	367	16.6
East of England				
Market sector	1,749	2,270	521	29.8
Social sector	597	730	133	22.3
Total	2,346	3,000	654	27.9
London				
Market sector	2,090	2,563	473	22.6
Social sector	1,090	1,344	254	23.3
Total	3,180	3,907	727	22.9
South East				
Market sector	2,671	3,339	668	25.1
Social sector	737	862	125	17.0
Total	3,408	4,201	793	23.3

	2006	*2026*	*Total*	*Percentage increase*
South West				
Market sector	1,722	2,178	456	26.5
Social sector	471	565	94	20.0
Total	2,193	2,743	550	25.1
England				
Market sector	15,393	18,912	3,519	22.9
Social sector	5,950	7,105	1,155	19.4
Total	21,344	26,016	4,672	21.9

Source: England from Table 2; regional figures are author's calculations from household projection detail supplied by DCLG

20. In the East of England, South East and South West regions, the proportional increase in households in the social sector are considerably smaller than in the market sector; in the Yorkshire and Humber and East Midland regions the proportionate increases in the market and social sector are very similar. These inter-regional differences in the tenure proportions in the base year and the overall projected increase in households.

21. The projected net increases in households shown in Table 7 are the central core of estimates of future housing demand and need in each region. The other elements in Table 8 are taken without change from *Homes for the Future.*

Table 8. Two-Sector Regional Estimate of Newly Arising Housing Demand and Need 2006-2026

	NE	***NW***	***YH***	***EM***	***WM***	***E***	***L***	***SE***	***SW***	***England***
Social sector										
Net increase in households	64	124	145	98	118	133	254	125	94	1,155
Increase in vacant dwellings	1	3	2	2	2	2	3	3	2	20
Offset to “lost “ re-lets	+39	+65	+52	+43	+65	+52	+67	+64	+39	+486
Total	**104**	**192**	**199**	**143**	**185**	**187**	**324**	**192**	**135**	**1,661**
Market sector										
Net increase in households	109	309	393	341	249	521	473	668	456	3,519
Increase in second homes	17	16	30	10	45	21	42	33	26	240
Increase in vacant dwellings	4	13	12	12	9	17	15	17	16	115
Offset to “lost “ re-lets	-39	-65	-52	-43	-65	-52	-67	-64	-39	_486
Total	**91**	**273**	**383**	**320**	**238**	**507**	**463**	**65**	**459**	**3,388**
Market and social sector										
Net increase in households	173	433	538	439	367	654	727	793	550	4,673
Increase in second homes	17	16	30	10	45	21	42	33	26	240
Increase in vacant dwellings	5	16	14	14	11	19	18	20	18	135
Total	**195**	**465**	**582**	**463**	**423**	**694**	**787**	**846**	**594**	**5,048**

22. A comparison may next be made between the 2008-based regional estimates future demand and need for additional housing and 2004-based estimates in *Homes for the Future.* This is shown in Table 9, in annual averages.

Table 9. 2008-Based Regional Estimates of Future Demand and Need for Additional Housing: Comparison with *Homes for the Future*

	2008-Based			*Homes for the Future*		
	Market Sector	Social sector	**Total**	Market sector	Social sector	**Total**
North East	4.6	5.2	**10**	4.8	2.5	**7**
North West	13.7	9.6	**23**	17.5	9.8	**27**
Yorkshire and Humber	19.2	10.0	**29**	19.3	6.3	**26**
East Midlands	16.0	7.0	**23**	17.5	5.8	**23**
West Midlands	11.9	9.3	**21**	13.9	7.1	**21**
East of England	25.4	9.4	**35**	24.6	7.2	**32**
London	23.2	16.2	**39**	21.8	14.2	**36**
South East	32.7	9.6	**42**	25.1	13.5	**39**
South West	23.0	6.8	**30**	24.5	6.5	**31**
England	169.4	83.1	**252**	168.8	72.5	**242**

Sources: Table 8; and *Homes for the Future Technical Report*

23. In all regions other than the South East, the proportion of newly arising housing demand and need, that will be in the social sector, is higher in the 2008-based estimates than in *Homes for the Future.* The principal explanation for the higher social sector share the much higher projected increase in lone parent households is present in all the regional household projections (the high proportion in the South East in *Homes for the Future* looks … in comparison with the East of England and South West – investigate further).

24. A comparison may be made between the regional projections of housing need and actual net additional housing supply in the recent past. Two comparisons are

made: with the average for the whole decade from 2000-01 to 2009-10; and for the peak years, 2005-05, 2006-07, and 2007-08.

Table 10. 2008-Based Regional Estimates of Required and Actual New Supply.

	2008-Based Projections	*2005/06 to 2007/08 Actual*	*2000/01 to 1009/10 Actual*
North East	10	7	5
North West	23	23	17
Yorkshire and Humber	29	19	14
East Midlands	23	21	17
West Midlands	21	17	14
East of England	35	25	21
London	39	26	23
South East	42	34	29
South West	30	25	22
England	252	198	162

Source: Department for Communities and Local Government, *Housing and Planning Statistics 2010*, Table 1.3

25. With the exception of Yorkshire and Humber the gap between the 2008 based estimates of future housing need and actual new supply (three highest years) is smaller in the North and Midlands than in the South (with the South West region as a partial exception).