

New Household Formation

1. Background

The guidance for Housing Need and Demand Assessments (HNDAs) asks 'How many newly arising households are likely to be in housing need each year?' The household projections produced by National Records of Scotland do not provide this information so additional analysis is required to enable planning authorities to estimate numbers of newly arising households.

Glen Bramley and Department of Communities and Local Government (DCLG) have done detailed work to describe an approach to estimate these numbers. Bramley's figures, from the 'Local housing need and affordability model for Scotland update (2005-based) can be found in www.scotland.gov.uk/Resource/Doc/1035/0085202.pdf.

There is also additional work done by Bramley for the Department for Communities and Local Government:

<http://www.communities.gov.uk/publications/housing/estimatinghousingneed>.

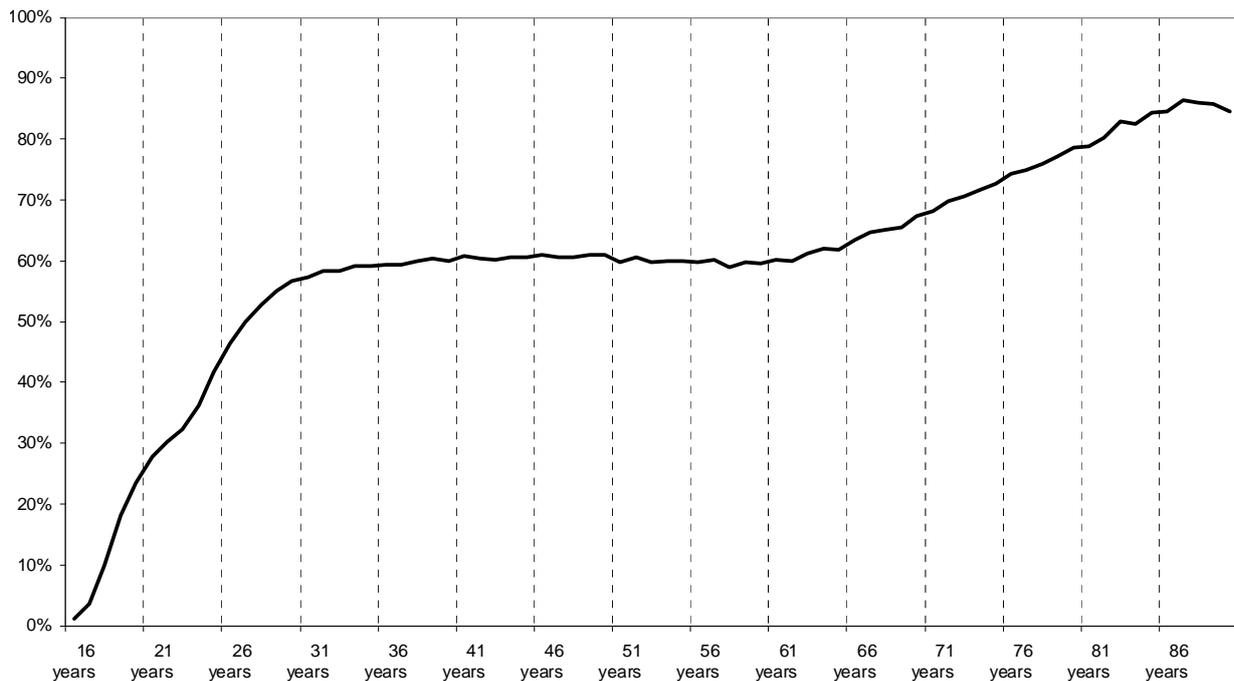
We have carried out initial exploratory work in-house with a view to providing guidance on household formation calculations for the HNDA process.

2. Overview of method

The approach compares headship rates (the proportion of people of a particular age who 'head' a particular household type) at differing age groups.

No-one aged under 16 can 'head' a household, they always live with at least one adult who will be classed as household 'head'. From the age of 16 to around 30, the number of people who 'head' a household increases rapidly, as young people move out of the parental home, and as household size decreases, from more people living in larger shared households in their late teens and early twenties, to being more likely to live alone or with a partner by their late twenties.

From around the ages of 30 to 60, headship rates plateau. There is some change in household structure as households break up and reform, but overall headship rates remain reasonably constant. Headship rates then increase again from the age of 60 onwards, mainly due to changes in household structure as one partner dies and the other becomes classed as the 'head' of the household. These changes in the older age groups don't usually represent 'new' households, and so are less relevant to this analysis, which is focuses on newly-formed households.

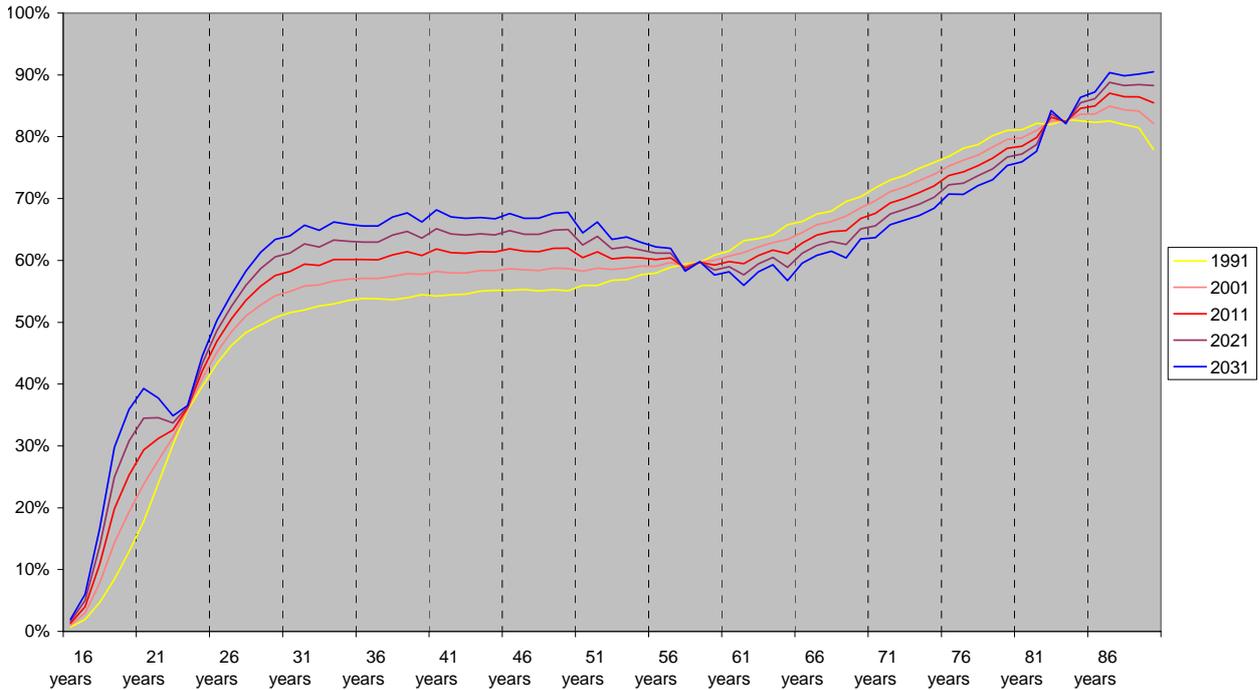
Chart 1 - Percentage of age group heading a household 2008

The majority of new households are formed by people aged 16-30, so this analysis focuses on those age groups. It is possible to assume that the slope of the curve at this part of the line represents newly-formed households, e.g., the percentage of 17 year olds who will have become a household head by the time they are 18. If, for example, 4% of 17 year olds are 'heads' of households, and 10% of 18 year olds are, then the difference is 6%, which represents newly-formed households. By multiplying this by the number of people in the age group, it is possible to produce the number of newly-formed households headed by someone in that age group, then add up the figures for each age from 16 to 30 to work out the overall number or percentage of newly-formed households.

In almost all ages up to 60, headship rates are increasing over time. This is due to more people living alone and in smaller households, so they are more likely to be 'heading' a household. An exception to this is around age 24 – at this age, the headship rates in the 1991 and 2001 Censuses were virtually identical, so all the projected figures are almost identical too.

From around 60 until the early 80s, headship rates have been decreasing. This is probably due to a reduction in the gap between the life expectancy of men and women, and perhaps a reduction over time of the trend for women to marry men who are older than themselves. Then in the very oldest age groups, headship rates are increasing again.

Chart 2 - Percentage of age group heading a household 1991 – 2031



3. Comparison with Bramley method

We examined differences in headship rates at the single year of age level, whereas Glen Bramley looked at the age groups which are publically available.

Glen Bramley made some assumptions in his work, most notably excluding 70% of students from the population and adding 0.536% to represent household formation in the over 30 age groups. Glen said that the 70% was fairly arbitrary but he felt that most students should be excluded from calculations as they did not contribute to permanent household formation within the Local Authority of study. The 0.536% churn figure (for the over 30s) comes from the Survey of English housing and obviously a Scottish based figure would be preferable. Bramley’s work for CLG shows regional variation across England so it would be useful to examine a source of data for Scotland in more detail.

Table 1 – Comparison of methods – Percentage of households which are newly-formed, Scotland

Glen Bramley's figures (for comparison)	Standard GROS approach	Excluding Communal Establishment population	Add 0.536, turnover in older age groups (after excluding CE population)	Remove 70% of students
2.4%	1.6%	1.6%	2.1%	1.3%

Please note, these figures should be considered developmental and should not be shared or quoted at this time.

4. Next Steps

In order to validate the calculated household formation rates we intend to compare them to available survey data. One option is to validate the household formation rates against the British Household Panel Survey. This should give us comparison rates for Scotland as a whole, and perhaps also a picture of how these rates have changed over several years. This work would borrow from PhD work by Ashley McCormick for calculating migration and formation rates for dynamic microsimulation. The Scottish Household and Housecondition Surveys are other possible sources of comparison data.

It may also be possible to look in detail at HESA data to get a feel for student movers, how many remain in the parental home during study, and indeed how many stay in a Local Authority after completing their studies. This could lead to a less arbitrary student reduction and one which varies to reflect the differences between Local Authority areas.

We could also look at SCORE to investigate transitions in the social sector. This may help us decide how people living in communal establishments should be included in the calculations.

Ideally we aim to present the results as a simple figure, or perhaps sets of figures to apply (rather than using a more complicated model requiring planning authorities to carry out detailed calculations based upon headship rates) and then produce guidance on how the calculated newly formed housing rates should be applied during the Housing Needs and Development Process.

Note: HARG members are asked to comment on the uses and value of this experimental analysis and consider how it may be further developed.

GROS: Household estimates and projections branch
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