



Title: **Implications of 2016-based Household Projections**
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The Office for National Statistics (ONS) published new (2016-based) Household Projections on 20th September 2018. This note has been prepared, at the Inspector's request, to consider any implication on housing need and the housing requirement in the Plan.

Overview of the Methodology

These household projections are the first to be prepared by ONS. The projections take the ONS 2016-based Sub-National Population Projections (SNPP) as the starting point. The SNPP take account of assumptions made by ONS in its 2016 national population projections and local demographic trends over the preceding 5-6 year period in projecting population growth.

To calculate household growth, ONS first apply an adjustment to remove those living in communal establishments to calculate the 'household population' by age and sex for years from 2001 to 2041. Household representative rates are then applied to this population to produce projected numbers of households. Household representative rates (HRRs) for 2001 and 2011 are calculated using Census data, using the Census definition of a household. ONS has then projected forward these HRRs for the period to 2021, with the HRRs then held constant for years beyond 2021.

In this note we have considered results for North Warwickshire over the 2011-31 period to allow a read-across to the existing evidence base for the draft North Warwickshire Local Plan, and other local plans within the Coventry & Warwickshire HMA.

Results for North Warwickshire

Growth of 3,172 households is projected by the new 2016-based Household Projections in North Warwickshire between 2011-31. This is almost identical to the figure of 3,171 households arising in the 2015 SHMA modelling which used CLG 2012-based Household Projections as its starting point (CD8/10 Table 13).

Table 1: Successive Household Projections for North Warwickshire

	Household Growth, 2011-31	Household Growth per annum
2016-based Household Projections	3171	159
2014-based Household Projections	2757	138
2012-based Household Projections	3172	159

The household formation assumptions have a minimal impact on the projections for North Warwickshire. ONS published a sensitivity analysis which applied the household formation rates in the 2014-based Household Projections to the 2016 SNPP. For North Warwickshire this sensitivity analysis shows a virtually identical scale of need – household growth of 160 pa compared to 159 pa in the 2016-based Household Projections.

Table 2: Household Projections – Sensitivity Analysis for North Warwickshire

	Household Growth, 2011-31	Household Growth per annum
2016-based Household Projections (as published)	3,171	159
2016-based SNPP with 2014-based HRR assumptions	3,208	160

We conclude that the 2016-based Household Projections show no meaningful change in the housing need in North Warwickshire from that set out in the 2015 SHMA (CD8/10). The base OAN of 190 dpa remains appropriate.

Results for the Coventry & Warwickshire HMA

For the Coventry & Warwickshire HMA, the latest 2016-based Household Projections point to household growth of 71,217 households over the 2011-31 period (3,561 pa) compared to household growth of 81,489 using the 2012-based projections used in the 2015 SHMA (CD8/10 Table 13).

Table 3: Successive Household Projections for Coventry & Warwickshire HMA

	Household Growth, 2011-31	Household Growth per annum
2016-based Household Projections	71,217	3,561
2014-based Household Projections	80,370	4,018
2012-based Household Projections	81,480	4,074

However this figure is influenced significantly by the revised methodology for calculating household formation which in my opinion should be treated with caution.

A sensitivity analysis can be undertaken applying the HRRs from the 2014-based Household Projections to the 2016-based SNPP. This results in household growth of 79,306 across the Coventry & Warwickshire HMA between 2011-31. This latter figure is 2.7% lower than that shown by the demographic projections in the 2015 SHMA. **I do not consider that this level of variance represents a meaningful change in the scale of housing need across the CW HMA.**

Table 4: Household Projections – Sensitivity Analysis for Coventry & Warwickshire HMA

	Household Growth, 2011-31	Household Growth per annum
2016-based Household Projections (as published)	71,217	3,561
2016-based SNPP with 2014-based HRR assumptions	79,306	3,965

Results for the Greater Birmingham HMA

For the Greater Birmingham HMA, the 2016-based Household Projections show household growth of 151,596 which represents a significant (25% drop) in the scale of household growth relative to that projected in the 2014-based Household Projections.

However again this figure is again influenced significantly by the revised methodology for calculating household formation: if the HRRs from the 2014-based Household Projections are used, household growth of 190,507 across the Birmingham HMA is shown between 2011-31. This latter figure is 5.6% lower than that shown by the 2014-based Household Projections. This is a more significant reduction than in Coventry & Warwickshire.

Table 4: Household Projections – Results for Birmingham HMA

	Household Growth, 2011-31	Household Growth per annum
2016-based Household Projections	151,596	7,580
2014-based Household Projections	201,738	10,087
2016-based SNPP with 2014-based HRR assumptions	190,507	9,525

Household Representative Rates

ONS has set out the following in the methodology document which accompanies the new household projections:

“Household projections are not forecasts and generally take no account of policy or development aims that have not yet had an impact on observed trends. It should also be noted that future demographic behaviour is inherently uncertain, meaning that any set of projections will almost inevitably be proved wrong to some extent, when treated as a forecast or prediction of future numbers of households. Rather, household projections should be thought of as a trend-based starting point for analysis, providing data produced on a consistent basis for England, its regions and local authorities. Further analysis can be taken forward using these data, including the assessment of future housing need.”

It goes on to explain the particular justification for revising the methodology for projecting household representative rates:

“The HRP is a person chosen for statistical reasons by virtue of economic activity, age and/or sex as the representative of a household. Previous sets of household projections defined the

HRP for the Stage 1 household projections as the eldest male within the household, then the eldest female if there was no male, in line with the definition used prior to the 2001 Census. This approach preserved consistency with earlier censuses and enabled data from the 1971, 1981 and 1991 Censuses to be used as part of the process for projecting HRRs. However, previous sets of Stage 2 household projections (broken down by household type) used the 2011 Census definition of HRP; that is, the eldest economically active person in the household, then the eldest inactive person if there was no economically active person.

In our response to the consultation on proposed changes to household projections for England, we said we would move to using the standard 2011 Census definition for HRP, as soon as this is consistent with the rest of the projections methodology. This is with a view to improving the transparency of the projections and increasing coherence with other standard population statistics. Therefore, the 2016-based household projections for England use the 2011 Census definition of HRP for both Stage 1 and Stage 2 of the methodology. This also provides internal consistency of definitions within different household projections breakdowns. We have no current plans to change the definition of HRP in the 2021 Census from that which was used in the 2011 Census, so this approach should provide consistency with future census data.

... the change of HRP definition means it is no longer possible to use the 1971, 1981 and 1991 Census data used in the previous methodology in the production of the 2016-based household projections. Household data from these censuses used the eldest male definition of HRP, therefore to include data from them in the methodology would require making complex adjustments of a similar nature to the adjustments made to 2011 Census data in the previous methodology.

In the consultation on proposed changes to household projections for England, a total of 15 respondents considered using data from only two censuses to be insufficient. There was a view that only using the 2001 and 2011 Censuses would result in a downward trend in household formation for the younger age groups, which in turn would downplay the need for housing for younger people. With these views in mind, Section 8 shows the results of sensitivity analysis in which 2014-based HRRs (projected using 1971 to 2011 Census data) are applied to the 2016-based subnational population projections (SNPPs), should users wish to investigate the impact of the change of HRR methodology on the household projections.

We are also planning to publish a set of variant 2016-based household projections in which household formation rates for younger adults (those aged 25 to 44 years) are higher – provisionally scheduled for 3 December 2018. The purpose of this variant would be to illustrate the uncertainty in the projections around the future household formation patterns of this age group.”

I consider that for strategic planning purposes, there are particular issues with using just two data points to project household formation, particularly given some evidence that trends between 2001-11

for younger age groups were influenced by the housing market downturn and declining affordability alongside other factors. In line with what is set out in ONS' methodology document, we consider that for strategic planning purposes, greater weight should be given at this time to the modelled sensitivity analysis using the Household Representative Rates from the 2014-based Household Projections.

Overall no meaningful change is shown in the scale of housing need in North Warwickshire or the Coventry and Warwickshire HMA, but there is evidence of a potential modest reduction in the scale of housing need in the Greater Birmingham HMA.