

Craven

Demographic Analysis & Forecasts

Evaluating the impact of the 2012-based DCLG household projections

An Addendum to the January 2015 report

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Table of Contents

Contact Details	i
Acknowledgements	i
Table of Contents	ii
1. Introduction	1
2. Scenario Definition	4
3. Scenario Results	6
4. Summary	9

1. Introduction

Context

- 1.1 In January 2015, Edge Analytics produced a range of demographic forecasts at district level and sub-district level for Craven District Council (CDC) using POPGROUP technology.
- 1.2 Eight scenarios were presented at both district and sub-district level, including: the 2012-based sub-national population projection (SNPP) from the Office for National Statistics (ONS); alternative trend scenarios based upon five-year and ten-year migration histories; and jobs-led scenarios, based upon economic forecasts from the Yorkshire and Humber Regional Economic Model (REM). Additional scenarios were included to examine the sensitivity of the 'Jobs-led' growth outcomes to variations in the key assumptions on economic activity and labour force migration.
- 1.3 The household-growth implications of each scenario were assessed using assumptions from both the 2008-based and 2011-based interim household projection models from the Department for Communities and Local Government (DCLG). Scenario outcomes were presented under an 'Option A' alternative, in which the 2011-based interim household headship rates were applied, and an 'Option B' alternative, in which the 2008-based household headship rates were applied.
- 1.4 In February/March 2015, the 2012-based household projections were released by DCLG¹. Underpinned by the 2012-based SNPP, these new statistics provide a household growth projection and household formation assumptions for each local authority area for the 2012–2037 period.
- 1.5 Planning Practice Guidance (PPG)² states that the most recent official household projections should “provide the starting point estimate of overall housing need” (PPG 2a-015-20140306) and

¹ 2012-based household projections in England, 2012 to 2037. DCLG 27th February 2015.

<https://www.gov.uk/government/statistics/2012-based-household-projections-in-england-2012-to-2037>

² <http://planningguidance.planningportal.gov.uk/blog/guidance/>

that “the most recent demographic evidence including the latest Office of National Statistics population estimates” should be considered (PPG 2a-017-20140306).

- 1.6 This addendum report updates the Edge Analytics January 2015 analysis, evaluating the impact of the 2012-based household projection model assumptions for Craven upon the household growth outcomes of each of the previous district level scenarios.

2012-based Household Projections

- 1.7 The methodological basis of the 2012-based household projections is consistent with that employed in the previous 2008-based and 2011-based interim household projections³. In each, household projections have been derived through the application of projected household representative rates (also referred to as headship rates) to a projection of the private household population, disaggregated by age, sex and relationship status.
- 1.8 Whilst methodologically similar to previous releases, the 2012-based household projections provide an important update on the 2011-based interim household projections with the inclusion of the following new information:
- 2012-based SNPP by sex and age that extend to 2037 (rather than to 2021 as was the case in the 2011-based interim projections).
 - Household population by sex, age and relationship-status consistent with the 2011 Census (rather than estimates for 2011, which were derived from 2001 Census data, projections and national trends, as used in the 2011-interim projections).
 - Communal population statistics by age and sex consistent with the 2011 Census (rather than the previous estimate, which were calibrated to the total communal population from the 2011 Census).
 - Further information on household representatives from the 2011 Census relating to aggregate household representative rates by relationship status and age.

³ 2012-based household projections: methodology, DCLG 2nd March 2015.

<https://www.gov.uk/government/statistics/2012-based-household-projections-methodology>

- Aggregate household representative rates at local authority level, controlled to the national rate, based on the total number of households divided by the total adult household population (rather than the total number of households divided to the total household population).
- Adjustments to the projections of the household representative rates in 2012 based on the Labour Force Survey (LFS).

(Source: DCLG Methodology⁴, page 6)

- 1.9 The household projection methodology consists of two distinct stages. Stage One produces the national and local authority projections for the total number of households by age-group and relationship-status group over the projection period. All Stage One output and assumptions has been released by DCLG.
- 1.10 Stage Two provides the detailed 'household-type' projection by age-group, controlled to the previous Stage One totals. Seventeen different household types are typically included in household model outputs (see Appendix B of the main January 2015 report). Stage Two assumptions and output, which provide the more detailed household-type statistics, have yet to be released by DCLG.
- 1.11 The Stage One data are used here to provide the basis for the evaluation of the impact of the 2012-based DCLG model assumptions upon the household growth outcomes of each of the previous district level scenarios.

⁴ 2012-based Household Projections: England, 2012-2037. Department for Communities and Local Government (27 February 2015). <https://www.gov.uk/government/statistics/2012-based-household-projections-methodology>

2. Scenario Definition

2.1 Eight scenarios were presented in the January 2015 report (Table 1).

Table 1: Scenario Definition

Scenario Type	Scenario Name	Scenario Description
Official Projections	'SNPP-2012'	This scenario mirrors the 2012-based SNPP from ONS for Craven. This scenario is the official 'benchmark' scenario.
	'SNPP-2010'	This scenario mirrors the 2010-based SNPP from ONS for Craven. The population is re-scaled to the 2012 MYE to ensure consistency with the 2012-based SNPP and the 2010-based growth trajectory is continued thereafter.
Alternative trend-based scenarios	'Natural Change'	In- and out- migration rates are set to zero.
	'PG-5yr'	Internal and international migration assumptions are based on the last five years of historical evidence (2008/09 to 2012/13).
	'PG-10yr'	Internal and international migration assumptions are based on the last 10 years of historical evidence (2003/04 to 2012/13).
Jobs-led scenarios	'Jobs-led'	Population growth is determined by the annual change in the number of jobs, as defined by the Yorkshire & Humber REM jobs forecast (a total increase of +1,956 Full Time Equivalent (FTE) jobs 2015/16–2029/30).
	'Jobs-led SENS1'	The 'Jobs-led' scenario, but with the migration balance determined by schedules that are more heavily weighted towards the labour force age-groups.
	'Jobs-led SENS2'	The 'Jobs-led SENS1' scenario, but with the overall rate of economic activity for 16-74 labour force ages maintained at its 2011 Census level (72%).

Note: Refer to Appendix B of the January 2015 report for further information on the scenario data inputs and assumptions.

Household & Dwelling Growth

- 2.2 In the January 2015 analysis, the household and dwelling growth outcomes of each scenario were presented as an '**Option A**' and '**Option B**' alternative:
- In **Option A**, the 2011-based interim household headship rates were applied, trended after 2021;
 - In **Option B**, the 2008-based household headship rates were applied, rescaled to the 2011 DCLG household total, with the trend continued thereafter.
- 2.3 In this addendum, the household and dwelling growth outcomes of each district level scenario are presented as **THREE** alternative outcomes:
- **HH-12**: the 2012-based household headship rates are applied;
 - **HH-11**: the 2011-based interim household headship rates are applied (i.e. as in Option A);
 - **HH-08**: the 2008-based household headship rates are applied (i.e. as in Option B).
- 2.4 In all scenarios, for each of the HH-12, HH-11 and HH-08 alternatives, a dwelling vacancy rate of 9% is assumed, providing the basis for the calculation of dwelling numbers from household growth totals (see Appendix B of the main January 2015 report for further detail).
- 2.5 For the HH-12 scenarios, updated 'communal population' statistics (i.e. the population not living in households) have been used. The communal population total is similar to that used in the HH-11 and HH-08 scenarios, but its age and sex profile is consistent with 2011 Census output.

3. Scenario Results

District Level Scenario Outcomes

- 3.1 The district level scenario growth outcomes associated with the three alternative household assumptions are presented below (Table 2, Table 3, Table 4).
- 3.2 The HH-11 and HH-08 outcomes in Table 3 and Table 4 respectively are identical to those presented in the Option A and Option B outcomes in the original January 2015 analysis.
- 3.3 In the HH-12 summary (Table 2), only the household and dwelling outcomes are different (highlighted in red), reflecting the impact of the different household growth assumptions from the DCLG 2012-based household projection model.
- 3.4 The general pattern resulting from the HH-12 outcomes is for a *lower* rate of projected household and dwelling growth when compared to the HH-08 scenarios, with the rate of growth more closely aligned to the HH-11 scenarios.

Table 2: Craven District **HH-12** scenario outcomes (2015–2030)

Scenario	Change 2015–2030				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led	9,514	16.6%	5,087	19.9%	792	373	130
Jobs-led SENS1	8,070	14.2%	4,568	17.9%	682	335	130
Jobs-led SENS2	6,566	11.6%	3,885	15.3%	602	285	130
PG-10Yr	4,475	8.0%	2,836	11.3%	456	208	-1
SNPP-2010	2,901	5.2%	2,447	9.7%	467	179	-60
SNPP-2012	2,399	4.3%	2,116	8.5%	366	155	-103
PG-5Yr	2,215	4.0%	1,739	7.0%	316	127	-102
Natural Change	-1,757	-3.2%	-53	-0.2%	0	-4	-186

Table 3: Craven District **HH-11** scenario outcomes (2015–2030)

Scenario	Change 2015–2030				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led	9,514	16.6%	5,135	20.0%	792	376	130
Jobs-led SENS1	8,070	14.2%	4,486	17.6%	682	329	130
Jobs-led SENS2	6,566	11.6%	3,832	15.1%	602	281	130
PG-10Yr	4,475	8.0%	2,881	11.4%	456	211	-1
SNPP-2010	2,901	5.2%	2,368	9.4%	467	173	-60
SNPP-2012	2,399	4.3%	2,129	8.5%	366	156	-103
PG-5Yr	2,215	4.0%	1,876	7.5%	316	137	-102
Natural Change	-1,757	-3.2%	-352	-1.4%	0	-26	-186

Note: This table replicates Table 4 from the January 2015 analysis (i.e. equivalent to the 'Option A' outcomes)

Table 4: Craven District **HH-08** scenario outcomes (2015–2030)

Scenario	Change 2015–2030				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led	9,514	16.6%	5,738	22.3%	792	420	130
Jobs-led SENS1	8,070	14.2%	5,039	19.7%	682	369	130
Jobs-led SENS2	6,566	11.6%	4,391	17.2%	602	322	130
PG-10Yr	4,475	8.0%	3,422	13.5%	456	251	-1
SNPP-2010	2,901	5.2%	2,922	11.6%	467	214	-60
SNPP-2012	2,399	4.3%	2,709	10.8%	366	198	-103
PG-5Yr	2,215	4.0%	2,424	9.7%	316	178	-102
Natural Change	-1,757	-3.2%	115	0.5%	0	8	-186

Note: This table replicates Table 5 from the January 2015 analysis (i.e. equivalent to the 'Option B' outcomes)

Dwelling Growth Summary

- 3.6 In the original January 2015 analysis, the HH-11 (i.e. Option A) and HH-08 (i.e. Option B) dwelling growth outcomes were presented, together with an average of the two (see Table 15 in the January 2015 report). The HH-12 dwelling-growth outcomes are presented here alongside these outcomes (Table 5).
- 3.7 The dwelling growth outcomes at district level for each of the eight scenarios are presented, illustrating the scale of growth suggested by the HH-12 scenarios relative to the HH-11 and HH-08 alternatives.
- 3.8 In some scenarios, the HH-12 dwelling growth outcomes are lower than the range suggested by the HH-08 and HH-11 scenarios whereas others are more closely aligned to the HH-11 scenario outcomes. With the exception of the hypothetical 'Natural Change' scenario, the HH-12 dwelling growth outcomes are lower than the HH-11/HH-08 average as presented in the January 2015 report.

Table 5: Craven district scenario dwelling growth outcomes

Scenario	Average annual dwelling requirement (2015–2030)			
	HH-11	HH-08	Average of HH-11 & HH-08	HH-12
Jobs-led	376	420	398	373
Jobs-led SENS1	329	369	349	335
Jobs-led SENS2	281	322	301	285
PG-10Yr	211	251	231	208
SNPP-2010	173	214	194	179
SNPP-2012	156	198	177	155
PG-5Yr	137	178	158	127
Natural Change	-26	8	-9	-4

4. Summary

4.1 The DCLG 2012-based household projections replace the previous 2008-based and 2011-based interim household projections, providing new assumptions on future rates of household formation, incorporating more detail from the 2011 Census.

4.2 The 2012-based household projections, in conjunction with the 2012-based SNPP, provide a new 'benchmark' for local housing requirements evidence. In line with the PPG, these projections should form the 'starting point' for the assessment of future housing requirements. However, the PPG also states that:

"Wherever possible, local needs assessments should be informed by the latest available information. The National Planning Policy Framework is clear that Local Plans should be kept up-to-date. A meaningful change in the housing situation should be considered in this context, but this does not automatically mean that housing assessments are rendered outdated every time new projections are issued."

(PPG Paragraph 2a-016-20150227)

4.3 This short addendum report updates the Edge Analytics January 2015 analysis, evaluating the impact of the 2012-based household projection model assumptions upon the growth outcomes of each of the previous district level scenarios (including the benchmark SNPP-2012).

4.4 For Craven, the general pattern resulting from the HH-12 outcomes is for a *lower* rate of projected household and dwelling growth compared to the HH-08 scenarios but a rate of growth either *lower* or more *closely aligned* to the HH-11 scenarios.

4.5 In the absence of 'Stage Two' data from the DCLG 2012-based household projections, it is not possible to derive sub-district household assumptions. However, the pattern of household and dwelling growth suggested by the district-level HH-12, HH-11 and HH-08 outcomes would be reflected in the equivalent sub-district results.

4.6 This latest DCLG 2012-based household projection data has provided national and local authority projections and assumptions for the total number of households by age-group and relationship-

status group (i.e. Stage One). DCLG intends to release additional data (Stage Two) which enables disaggregation of these projections by each of seventeen household types, although a date for future release of this information has not been set. Whilst this new data will provide further detail to the household outputs, it is not expected that they will change the household growth assumptions implied by the Stage One, which will continue to provide the controlling totals for each local authority district.

- 4.7 It is recommended that the scenario outcomes are reconsidered when the Stage Two data is released by DCLG, providing additional detail on the profile of growth by household-type implied by the 2012-based household projection assumptions.