Blackpool

Demographic Analysis & Forecasts

Evaluating the impact of the 2012-based DCLG household projections

April 2015

For the attention of:

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Acknowledgements

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Table of Contents

1. Introduction

Context

1.1 In 2013 Blackpool Council, together with Fylde Borough Council and Wyre Council, commissioned Turley Economics to prepare a Strategic Housing Market Assessment (SHMA), using demographic forecasts provided by Edge Analytics.

1.2 Following the release of the 2012-based sub-national population projections (SNPP) in May 2014, the Fylde Coast Councils sought to update the 2013 SHMA with new demographic evidence. In November 2014, Turley Economics published an addendum to the SHMA, for which Edge Analytics provided an updated range of demographic forecasts using POPGROUP v4. In the addendum, eight 'core' scenarios were presented, including the 2012-based SNPP from the Office for National Statistics (ONS); alternative trend scenarios based upon ten-year migration histories; and three 'jobs-led' scenarios, based upon economic forecasts from AECOM, Oxford Economics and Experian (2013). 'Sensitivity' scenarios were also developed to examine the implications of a reducing unemployment rate, to account for economic recovery following the recession.

1.3 The household-growth implications of each scenario was 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 DCLG[1]. Underpinned by the 2012-based SNPP, these new statistics provide new household growth projections and household formation assumptions for each local authority area for the 2012–2037 period.

[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

Requirements

1.5 Following the release of the DCLG 2012-based household projection model, Blackpool Council has requested an update to the 'core' scenarios and one 'sensitivity' scenario from the SHMA addendum (November 2014), together with commentary on the DCLG household projections.

Approach

Official Guidelines

1.6 The National Planning Policy Framework (NPPF)[2] and PPG[3] provide guidance on the appropriate approach to the objective assessment of housing need. The PPG states that the DCLG household projections should provide the "starting point estimate of overall housing need" (PPG paragraph 2a-015). Local circumstances, alternative assumptions and the most recent demographic evidence, including ONS population estimates, should also be considered (PPG paragraph 2a-017).

1.7 The use of demographic models, which enable a range of growth scenarios to be evaluated, is now a key component of the objective assessment process. The POPGROUP suite of demographic models, which is widely used by local authorities and planners across the UK, provides a robust and appropriate forecasting methodology (for further information on POPGROUP, refer to Appendix D).

1.8 The choice of assumptions used within POPGROUP has an important bearing on scenario outcomes. This is particularly the case when trend projections are considered alongside population and household forecasts. The scrutiny of demographic assumptions is now a critical component of the public inspection process, providing much of the debate around the appropriateness of a particular objective assessment of housing need.

[2] http://planningguidance.planningportal.gov.uk/blog/policy/
[3] http://planningguidance.planningportal.gov.uk/blog/guidance/

Edge Analytics' Approach

1.9 In accordance with the PPG, Edge Analytics has considered the most recent population and household projections for Blackpool.

1.10 Edge Analytics has re-run scenarios presented in the SHMA addendum (November 2014) using the newly-available household growth assumptions from the 2012-based household projection model from DCLG. These growth outcomes are presented here alongside the previous results that used the 2008-based and 2011-based household growth assumptions.

1.11 All scenarios have been run to a 2030 horizon, with historical data included for the 2001–2013 period. In the results section, scenario results are presented for the 2011–2030 plan period. Scenario results are also presented for the 2012–2027 Blackpool local plan period (Appendix B) and for the 2013–2030 forecast period (Appendix C) for comparison.

1.12 Therefore, scenario results presented from 2011 and 2012 include historical data (two years and one year of historical data respectively). This should be given particular consideration when regarding the derived jobs and dwelling growth.

Report Structure

1.13 The report is structured in the following way:

- In Section 2, the official population and household projections for Blackpool are presented, with commentary on the three most recent DCLG household projection models.
- In Section 3, the scenarios are detailed, with growth outcomes presented in Section 4.
- Section 5 concludes with a summary of the analysis.
- Appendix A provides a summary of the DCLG headship rates for England.
- Appendix B presents Blackpool scenario results for the 2012–2027 plan period.
- Appendix C presented Blackpool scenario results for the 2013–2030 forecast period.
- Appendix D presents an overview of the POPGROUP methodology.
- Appendix E provides detail on the data inputs and assumptions used in the development of the POPGROUP scenarios.

2. Official Projections

Official Population Projections

2.1 Sub-national population projections (SNPPs) are released by ONS on a two year cycle. These projections are trend-based and provide an indication of population growth over a 25-year period. In 2011, the ONS published the 2011-based interim SNPP, in which population growth was projected over a shorter 10-year period (2011–2021). In May 2014, the 2012-based SNPP was released, providing a new 'benchmark' for the analysis of population growth.

2.2 Under the 2012-based SNPP for Blackpool, population growth is projected to be considerably lower than under the earlier 2010-based SNPP (Figure 1).

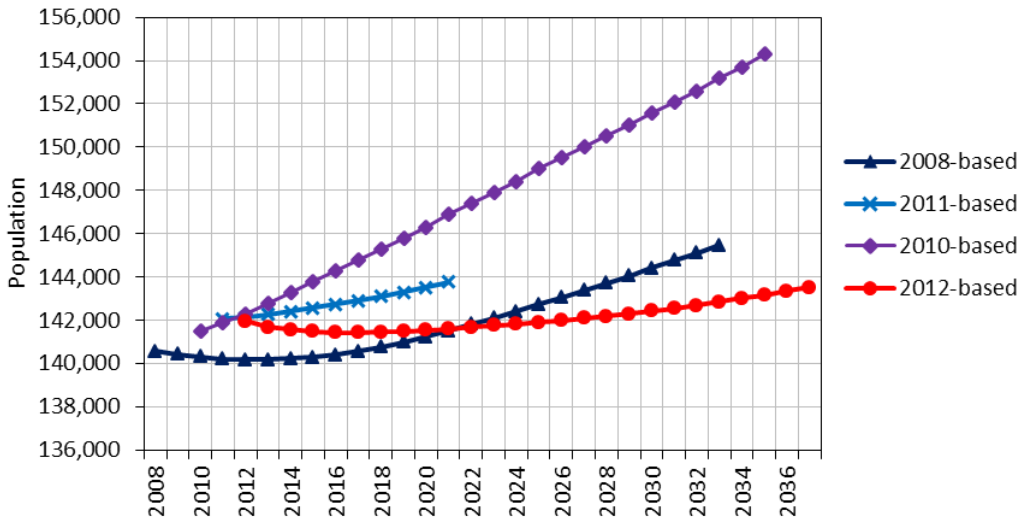


Figure 1: Official ONS population projections (Source: ONS)

2.3 The 2012-based SNPP suggests that Blackpool's population will increase by 3.5% over the 2012–2037 projection period, compared to the 9% growth projected in the 2010-based SNPP (2010–2035). For the 2011-based interim SNPP and the earlier 2008-based SNPP, annual rates of population growth are slightly higher than those projected under the 2012-based SNPP, at 0.05% and 0.14% respectively.

Official Household Projections

2.4 In the assessment of housing need, the PPG states that the DCLG household projections should provide the starting point estimate (PPG paragraph 2a-015). The DCLG household projection models are underpinned by the ONS SNPPs.

2.5 The 2012-based household projection model, which is underpinned by the 2012-based SNPP, was released by the DCLG in February/March 2015, updating the 2011-based interim and 2008-based household projection models[4].

2012-based Household Projections

2.6 The methodological basis of the 2012-based household projections is consistent with that employed in the previous 2008-based and 2011-based interim household projections[5]. In each model, 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.

2.7 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).

[4] There is no 2010-based household projection model.
[5] 2012-based Household Projections: England, DCLG 2nd March 2015.
https://www.gov.uk/government/statistics/2012-based-household-projections-methodology

- Further information on household representatives from the 2011 Census relating to aggregate household representative rates by relationship status and age.
- 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 Methodology[6], pages 4–5)

2.8 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 have been released by DCLG.

2.9 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 D). Stage Two assumptions and output, which provide the more detailed household-type statistics, have yet to be released by DCLG.

2.10 In Section 4 of this analysis, the Stage One 2012-based data is used to provide the basis for the evaluation of the impact of the 2012-based DCLG model assumptions upon the household growth outcomes of the selected scenarios for Blackpool.

Comparison of DCLG Household Projections

2.11 Of the three most recent household projection models (underpinned by the 2008-based, 2011-based and 2012-based SNPPs), growth in the number of households is lowest under the 2011-based interim household projection model (Figure 2) and highest under the 2008-based model. These differences are reflective of the time periods in which the different models were formulated. The 2011-based headship rates were calibrated after a period of unprecedented

[6] Household Projections 2012-based: Methodological Report, DCLG (February 2015). https://www.gov.uk/government/statistics/2012-based-household-projections-methodology

economic change and stagnation in the housing market and thus suggest a lower rate of household formation than the previous 2008-based rates, calibrated from data collected in a time period with very different market characteristics.

2.12 The 2012-based household projection model for Blackpool suggests a *higher* rate of household growth than in the 2011-based model but a *lower* rate of growth than under the 2008-based model.

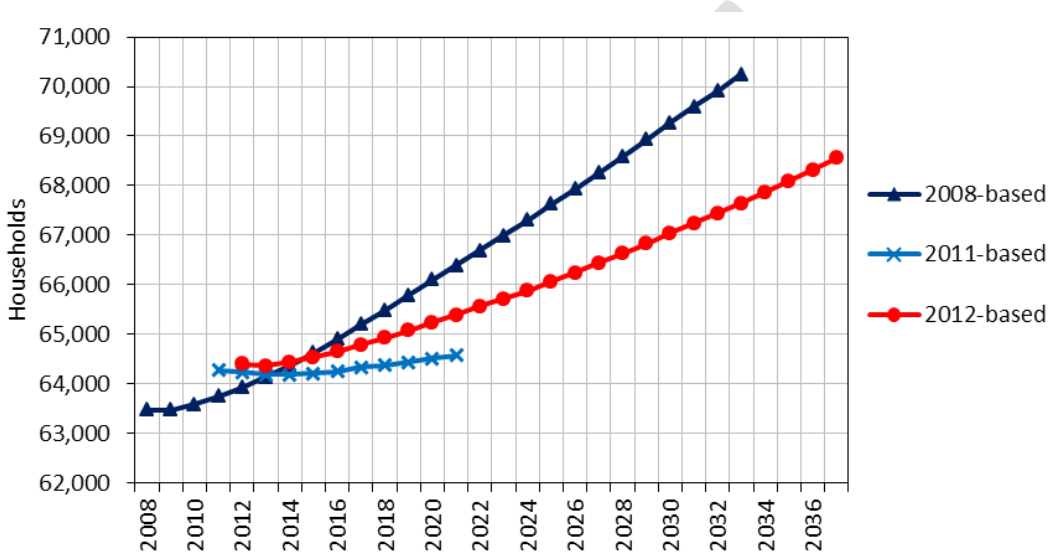


Figure 2: Number of households under the 2008-based, 2011-based and 2012-based household projection models (Source: DCLG)

2.13 The official 2012-based household projection model for Blackpool suggests that the number of households will increase by 6.5% over the 25-year projection period (2012–2037)[7], equivalent to an additional 4,160 households (approximately 166 households per year). Under the 2011-based household projection model, which is underpinned by the 2011-based interim SNPP, household growth was predicted to average 30 households per year 2011–2021. Under the earlier 2008-based household projection model, which is underpinned by the 2008-based SNPP, household growth was predicted to average 271 households per year 2008–2033. Figure 3 illustrates the annual change in the number of households over the respective projection periods.

[7] The number of households in England is projected to increase by 23.5% 2012–2037.

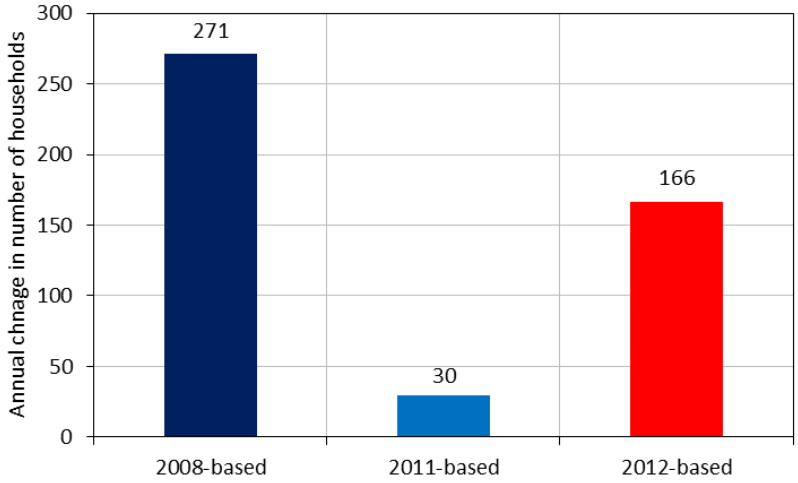


Figure 3: Annual change in the projected number of households under the 2008-based, 2011-based and 2012-based household projection models (Source: DCLG)

2.14 In both the 2008-based and 2012-based household projection models, the average household size was expected to fall (Figure 4) over the respective projection periods. Under the 2008-based household projection model, household size was projected to *decrease* from 2.14 to 2.00 over the 2008–2033 period. The change in household size under the 2012-based household model is closely aligned with the 2008-based household projection model, with a similar *decrease* expected over the 2012–2037 period, from 2.14 to 2.02 (Figure 4). Conversely, the 2011-based projection model projected an *increase* in average household size from 2.14 to 2.16 over the 2011–2021 period (Figure 4).

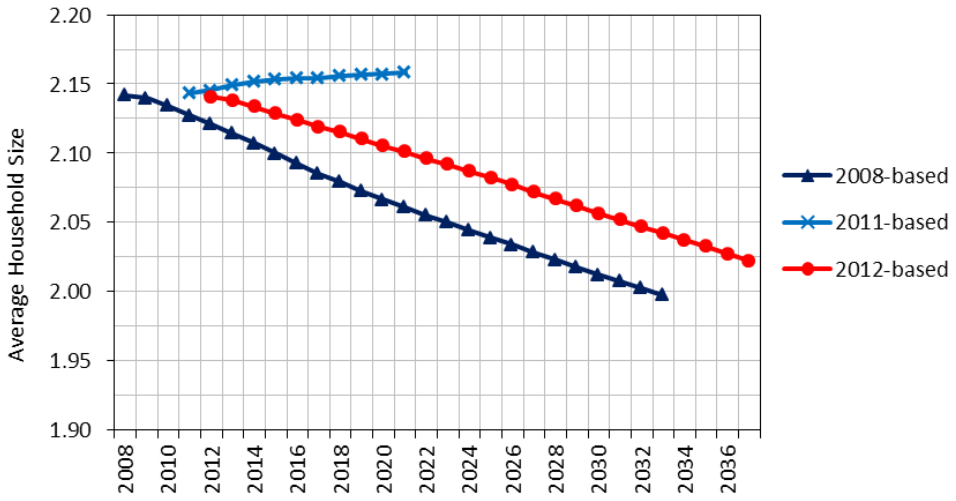


Figure 4: Average household size under the 2008-based, 2011-based and 2012-based household projection models (Source: DCLG)

Headship Rates by Age

2.15 Underpinning the household projections are the age-specific 'headship rates', which define the probability that someone of a given age will be head of a household unit. The variation in the age-specific headship rates between successive household projections (2008-based, 2011-based and 2012-based) is the factor that drives the different household and dwelling outcomes of the different growth scenarios.

2.16 The age-specific headship rates for Blackpool from each of the three most recent DCLG household projection models are presented in Figure 5 (for comparison, headship rates for England, in total, are presented in Appendix A). The latest 2012-based DCLG model has provided an update to the 2011-based statistics, so the key comparison is between the 2012-based and 2008-based evidence.

2.17 In comparing the 2012-based headship rates with the 2008-based variety, it is important to recognise that they will have been calibrated from different population bases. The 2011 Census resulted in a definitive count of the population and 'corrected' mis-estimation of population totals and age-profiles that had accumulated since the 2001 Census. This makes a direct comparison of the 2012-based evidence with headship rates based upon pre-Census data more problematic.

2.18 However, the headship rate comparison presented here does provide an indication of the differences in the expected *change* in headship rates over the forecast period, contrasting the latest 2012-based evidence with the earlier 2008-based statistics and also comparing the variations that exist between individual age-groups.

2.19 For Blackpool, the 2012-based headship rates generally suggest a flatter rate of growth (or decline) when compared to both the 2008-based and 2011-based interim headship rates.

2.20 The 2012-based evidence is generally displaying higher headship rates for the 55+ age-groups, compared to the earlier 2008-based statistics. The difference is most noticeable in the 55–59 age-group, where the 2012-based rates are higher and rise faster than the 2008-based equivalents.

2.21 In the younger-age-groups the pattern is reversed, with higher headship rates evident in the 2008-based data. For these younger age-groups, the headship rates in Blackpool are typically higher than comparable rates for England (see Appendix A).

2.22 The rate of change in the headship rates for the younger age-groups is an important consideration in the housing need calculation, with continuing debate over the likelihood of a 'return' to the higher headship rates in the 2008-based household evidence. Importantly, in the 25–34 age-groups, the 2012-based headship rates return to their 2001 level during the forecast period.

2.23 This is in contrast to the 2011-based household model where a consistent decline in headship rates for this age-group was forecast. It also contrasts to the 2012-based evidence for England, which suggests stability but not a recovery in headship rates to the extent evident in the Blackpool statistics.

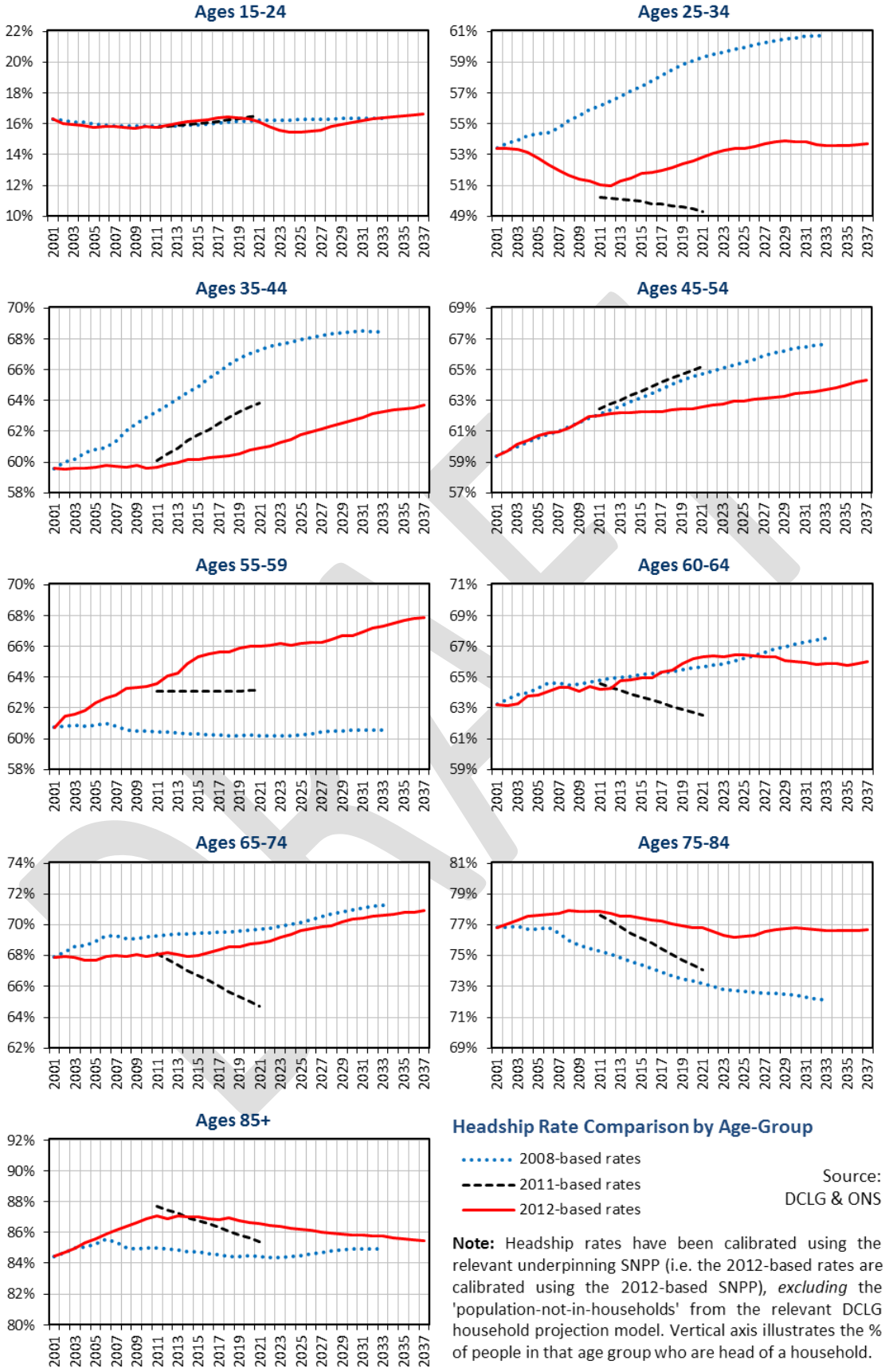


Figure 5: Blackpool DCLG headship rates by age-group

3. Scenario Definition

3.1 For the November 2014 SHMA addendum, the Fylde Coast authorities were provided with a range of scenarios, including official projections, alternative trend, jobs-led and sensitivity scenarios. For this update, Blackpool Council has requested that the following scenarios are updated (Table 1).

Table 1: Scenario definition

Scenario Type	Scenario Name	Scenario Description
Official Projection	**SNPP-2012**	This scenario mirrors the 2012-based SNPP from ONS for Blackpool. This scenario is the official 'benchmark' scenario.
Alternative Trend Scenarios	**PG-10Yr**	Internal and international migration assumptions are based on the last 10 years of historical evidence (2003/04 to 2012/13). 'Unattributable Population Change' (UPC) is included in international assumptions.
	PG-10Yr-X	Internal and international migration assumptions are based on the last 10 years of historical evidence (2003/04to 2012/13). UPC is excluded from international assumptions.
Jobs-led Scenarios	**Jobs-led Experian**	Population growth is determined by the annual change in the number of jobs, as defined by the Experian 2013 employment forecasts. Unemployment rate and commuting ratio are fixed.
	Jobs-led Oxford	Population growth is determined by the annual change in the number of jobs, as defined by the Oxford Economics employment forecasts. Unemployment rate and commuting ratio are fixed.
	Jobs-led Oxford UR	Consistent with the **Jobs-led (Oxford Economics**) scenario however the unemployment rate incrementally decreases over the 2013–2018 period and is fixed thereafter.

3.2 In the official projection and alternative trend scenarios, the labour force and jobs-growth implications of the population growth trajectories have been derived using three key data inputs: economic activity rates, an unemployment rate and a commuting ratio. In the jobs-led scenarios,

these data inputs are used to determine the level of population growth associated with a defined jobs-growth trajectory (Figure 6).

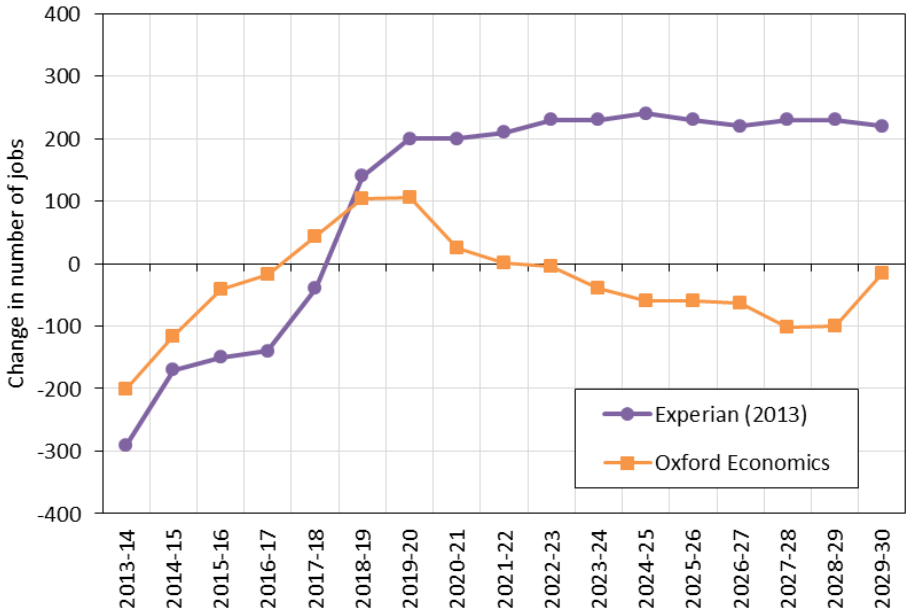


Figure 6: Blackpool jobs growth trajectory 2013/14–2029/30 (Source: Experian 2013 and Oxford Economics)

3.3 The jobs-led scenarios presented in this update are driven by the employment forecasts from Experian (2013) and Oxford Economics (Figure 6). The jobs-growth targets have been applied from the start of the *forecast* period (i.e. 2013/14). Under the Experian (2013) employment forecast, jobs growth over the 2013/14–2029/30 *forecast* period totals *+1,790*. Under the Oxford Economics employment forecast, jobs-growth over the 2013/14–2029/30 *forecast* period is *-542*.

3.4 In all scenarios, the economic activity rates (from the 2011 Census) by 5-year age group and sex are applied. Uplifts have been applied to the 60–69 age groups for both men and women to account for changes in the State Pension Age (SPA). Excluding the **Jobs-led Oxford UR** scenario, the unemployment rate and commuting ratio are fixed throughout the forecast period.

3.5 In the **Jobs-led Oxford UR** scenario, the 'UR' suffix illustrates an unemployment rate which reduces in order to account for economic recovery (see Appendix E for more detail on data inputs and assumptions).

Household Growth

3.6 In the demographic analysis for the SHMA, 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.

3.7 In this document, the household and dwelling growth outcomes of the scenarios defined in Table 1 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).

3.8 In all scenarios, for each of the HH-12, HH-11 and HH-08 alternatives, a dwelling vacancy rate of 6.7% is assumed, providing the basis for the calculation of dwelling numbers from household growth totals (see Appendix D for further detail).

3.9 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.

4. Scenario Results

4.1 Six scenarios from the November 2014 SHMA addendum have been re-run for Blackpool using the 2012-based headship rates. The scenario results are presented in the form of a chart and three tables for the 2011–2030 plan period. The chart (Figure 7) illustrates the trajectory of population change resulting from each scenario, from 2001–2030.

4.2 The tables (Table 2–Table 4) summarise the population and household growth outcomes for each scenario, ranked in order of population growth. The tables also show the estimated average annual net migration associated with the population change, together with the expected annual jobs and dwelling growth.

4.3 The HH-11 and HH-08 outcomes in Table 3 and Table 4 respectively are identical to those presented under Option A and Option B in the November 2014 scenarios.

4.4 In the HH-12 summary table (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.

4.5 It is important to note that all scenarios (excluding the SNPP-2012 scenario) presented include two years of historical data (i.e. 2011/12 and 2012/13). As illustrated in Figure 7, the historical data over these two years suggests a decrease in population. Due consideration should be given to this when regarding the population change together with the derived jobs and dwellings growth over the 2011–2030 plan period. In line with the official projection, the SNPP-2012 scenario start point is 2012 and therefore the 2013 population is a projected value. Under the SNPP-2012 scenario, the projected 2013 population is higher than the 2013 mid-year population estimate (Figure 7).

4.6 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 but *higher* when compared to the HH-11 scenarios.

Blackpool: Scenario Outcomes

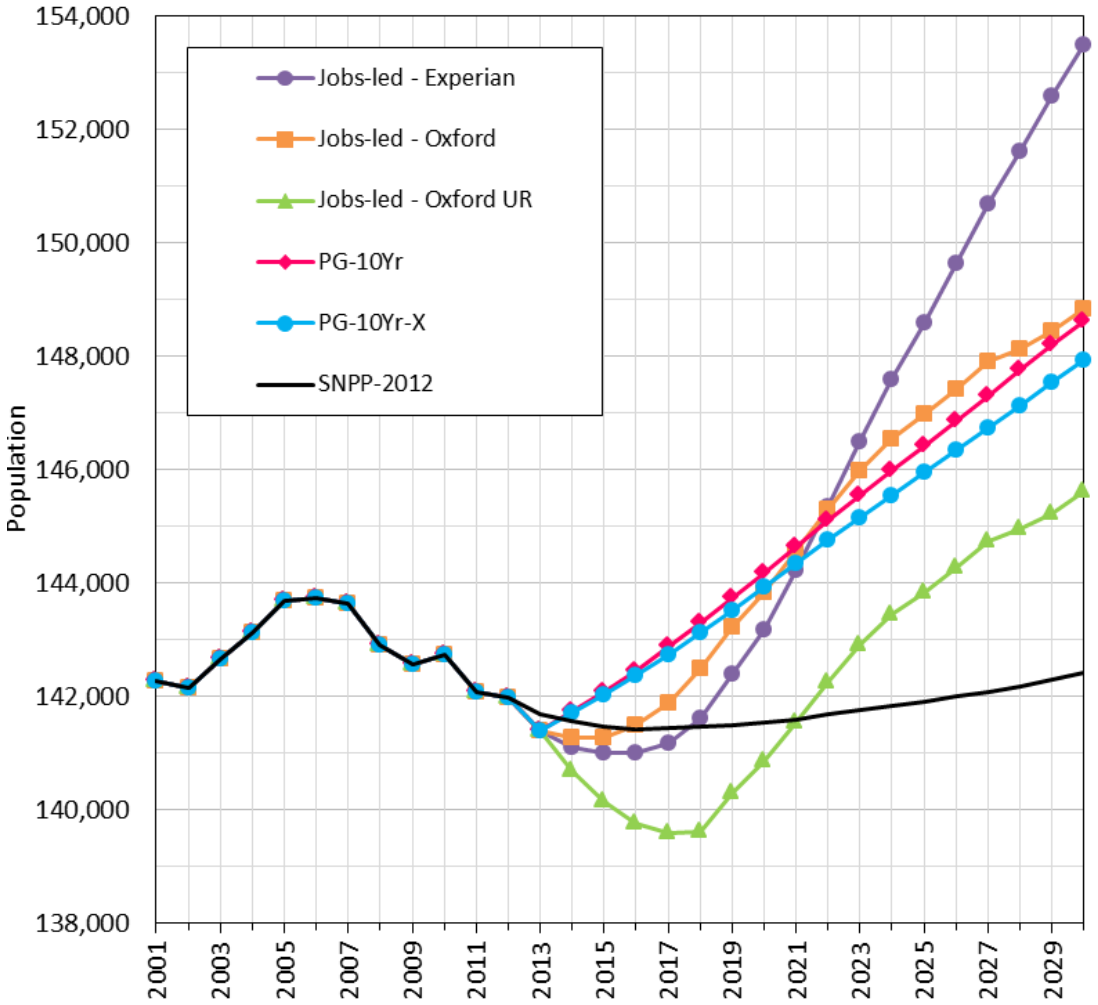


Figure 7: Blackpool scenario outcomes: population growth 2001–2030

Table 2: Blackpool **HH-12** scenario outcomes (2011–2030)

Scenario	Change 2011–2030				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led - Experian	11,409	8.0%	7,500	11.7%	555	423	66
Jobs-led - Oxford	6,750	4.8%	5,476	8.5%	319	309	-57
PG-10Yr	6,552	4.6%	5,952	9.2%	277	336	-12
PG-10Yr-X	5,854	4.1%	5,072	7.9%	246	286	-36
Jobs-led - Oxford UR	3,537	2.5%	4,019	6.2%	171	227	-57
SNPP-2012	352	0.2%	2,678	4.2%	20	151	-217

Scenario results include two years of historical data. SNPP-2012 scenario includes one year of historical data.

Table 3: Blackpool **HH-11** scenario outcomes (2011–2030)

Scenario	Change 2011–2030				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led - Experian	11,409	8.0%	4,998	7.8%	555	282	66
Jobs-led - Oxford	6,750	4.8%	3,091	4.8%	319	174	-57
PG-10Yr	6,552	4.6%	3,710	5.8%	277	209	-12
PG-10Yr-X	5,854	4.1%	2,854	4.4%	246	161	-36
Jobs-led - Oxford UR	3,537	2.5%	1,676	2.6%	171	95	-57
SNPP-2012	352	0.2%	370	0.6%	20	21	-217

Note: These scenario outcomes are consistent with the previously referred to 'Option A'. Scenario results include two years of historical data. SNPP-2012 scenario includes one year of historical data.

Table 4: Blackpool **HH-08** scenario outcomes (2011–2030)

Scenario	Change 2011–2030				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led - Experian	11,409	8.0%	7,970	12.4%	555	450	66
Jobs-led - Oxford	6,750	4.8%	5,953	9.3%	319	336	-57
PG-10Yr	6,552	4.6%	6,535	10.2%	277	369	-12
PG-10Yr-X	5,854	4.1%	5,667	8.8%	246	320	-36
Jobs-led - Oxford UR	3,537	2.5%	4,481	7.0%	171	253	-57
SNPP-2012	352	0.2%	3,096	4.8%	20	175	-217

Note: These scenario outcomes are consistent with the previously referred to 'Option B'. Scenario results include two years of historical data. SNPP-2012 scenario includes one year of historical data.

Scenario Outcomes

4.7 Population growth ranges from 0.2% under the **SNPP-2012** scenario to 8.0% under the **Jobs-led Experian** scenario. These population growth figures result in a range of dwelling requirements from 151–423 (HH-12), 21–282 (HH-11) and 175–450 (HH-08).

4.8 The **SNPP-2012** scenario results in the lowest population growth trajectory (0.2%) over the 2011–2030 plan period. This population growth results in an average annual dwelling requirement of 151 under the HH-12 scenario outcomes. This is closer to the HH-08 scenario outcome (175 dwellings per year) and higher than the HH-11 scenario outcome (21 dwelling per year).

4.9 The **PG-10Yr** and **PG-10Yr-X** alternative trend scenarios result in population growth of 4.6% and 4.1% respectively (2011–2030). The **PG-10Yr** scenario results in average annual dwelling growth requirements of 336 (HH-12), 209 (HH-11) and 369 (HH-08). Under the **PG-10Yr-X** scenario, the average annual dwelling requirement is lower; 286, 161 and 320 (HH-12, HH-11 and HH-08 respectively).

4.10 The **Jobs-led Experian** and **Jobs-led Oxford** scenarios result in the highest population growth trajectories over the 2011–2030 period (8.0% and 4.8% respectively). Under the **Jobs-led Experian** scenario, the average annual dwelling requirements are 423 (HH-12), 282 (HH-11) and 450 (HH-08). Population growth under the **Jobs-led Oxford** scenario results in dwelling requirements of 309 (HH-12), 174 (HH-11) and 336 (HH-08).

4.11 In the **Jobs-led Oxford UR** scenario, the reducing unemployment rate over the 2013–2018 period results in an increase in the proportion of the labour force in work. In combination with increased rates of economic activity (resulting in a greater proportion of the resident population being retained in the labour force), population growth is lower than in the **Jobs-led Oxford** scenario, at 2.5% 2011–2030. This population growth trajectory results in average annual dwelling requirements of 227, 95 and 253 (HH-12, HH-11 and HH-08 respectively).

Dwelling Growth Summary

4.13 In the demographic analysis for the SHMA, the household and dwelling growth outcomes of each scenario were presented as an 'Option A' and 'Option B' alternative, using headship rates from the 2008-based and the 2011-based interim household projection models from DCLG respectively. In light of uncertainty over future rates of household formation, and the differences between the 2008-based and 2011-based household projection models, Edge Analytics presented an average of the two different dwelling requirements derived using the 2008-based and 2011-based headship rates. This provided a 'mid-point' between the alternative dwelling growth outcomes (highlighted in blue in Table 5). This approach has been routinely used by Edge Analytics and is one that is considered to be appropriate given the uncertainties involved in selecting a definitive set of household formation rate assumptions[8].

4.14 Under the HH-12, the dwelling requirements are *higher* than HH-11 but *lower* than HH-08. In all cases the HH-12 dwelling-growth outcomes are within the range suggested by the HH-11 and HH-08 outcomes, sitting toward the top end of this range.

Table 5: Average annual dwelling requirement under the 2008-based, 2011-based and 2012-based headship rates

Scenario	Average annual dwelling requirement (2011–2030)			
	HH-11	HH-08	Average of HH-11 & HH-08	HH-12
Jobs-led - Experian	282	450	366	423
PG-10Yr	209	369	289	336
Jobs-led - Oxford	174	336	255	309
PG-10Yr-X	161	320	240	286
Jobs-led - Oxford UR	95	253	174	227
SNPP-2012	21	175	98	151

[8] In his interim views on the Durham Plan, the Inspector Harold Stevens stated that, the 'mid-point' approach adopted by Edge Analytics was "a logical approach as it seeks to avoid taking forward extremes in the economic cycle, whether that be an economic boom encapsulated in DCLG 2008 or the effects of recession in DCLG 2011".
http://www.durham.gov.uk/media/6444/Examination-of-the-County-Durham-Plan---Inspectors-interim-views/pdf/ExaminationOfCountyDurhamPlanInspectorsInterimViews.pdf

5. Summary

5.1 The DCLG 2012-based household projection model replaces the 2011-based household projections, providing new assumptions on future rates of household formation, incorporating detail from the 2011 Census. 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)

5.2 This short report updates the scenarios provided for the November 2014 SHMA addendum, evaluating the impact of the 2012-based household projection model assumptions upon the growth outcomes of each of the selected scenarios for Blackpool (including the benchmark SNPP-2012).

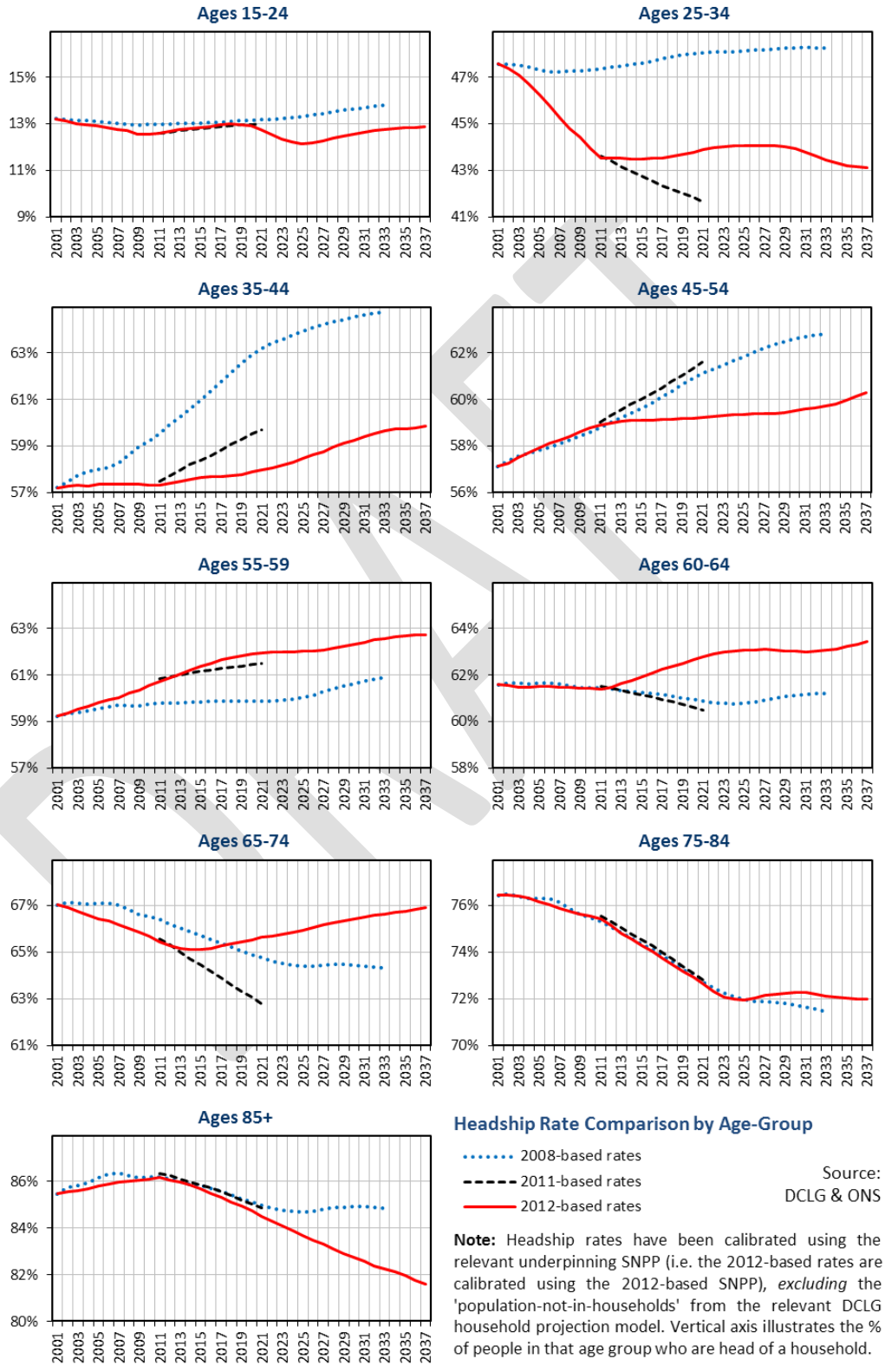
5.3 The general pattern resulting from the HH-12 household-growth assumptions is for a *higher* rate of projected household and dwelling growth when compared to the HH-11 outcomes, but a *lower* rate of household and dwelling growth compared to the HH-08 outcomes. The HH-12 dwelling requirements are slightly higher than the mid-point average of the HH-08 and HH-11 outcomes.

5.4 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 the 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 output, which will continue to provide the controlling totals for each local authority district.

Appendix A

DCLG Headship Rates by Age: England



Note: Headship rates have been calibrated using the relevant underpinning SNPP (i.e. the 2012-based rates are calibrated using the 2012-based SNPP), *excluding* the 'population-not-in-households' from the relevant DCLG household projection model. Vertical axis illustrates the % of people in that age group who are head of a household.

Appendix B

Scenario Results: 2012–2027 plan period

Table 6: Blackpool **HH-12** scenario outcomes (2012–2027)

Scenario	Change 2012–2027				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led - Experian	8,726	6.1%	5,732	8.9%	535	410	56
Jobs-led - Oxford	5,933	4.2%	4,538	7.0%	351	324	-40
PG-10Yr	5,338	3.8%	4,803	7.5%	279	343	0
PG-10Yr-X	4,771	3.4%	4,025	6.3%	249	288	-29
Jobs-led - Oxford UR	2,755	1.9%	3,120	4.8%	162	223	-40
SNPP-2012	115	0.1%	2,040	3.2%	-1	146	-229

Table 7: Blackpool **Option A** scenario outcomes (2012–2027)

Scenario	Change 2012–2027				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led - Experian	8,726	6.1%	3,779	5.9%	535	270	56
Jobs-led - Oxford	5,933	4.2%	2,660	4.1%	351	190	-40
PG-10Yr	5,338	3.8%	3,047	4.7%	279	218	0
PG-10Yr-X	4,771	3.4%	2,293	3.6%	249	164	-29
Jobs-led - Oxford UR	2,755	1.9%	1,288	2.0%	162	92	-40
SNPP-2012	115	0.1%	248	0.4%	-1	18	-229

Table 8: Blackpool **Option B** scenario outcomes (2012–2027)

Scenario	Change 2012–2027				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led - Experian	8,726	6.1%	6,203	9.6%	535	443	56
Jobs-led - Oxford	5,933	4.2%	5,018	7.8%	351	359	-40
PG-10Yr	5,338	3.8%	5,383	8.4%	279	385	0
PG-10Yr-X	4,771	3.4%	4,616	7.2%	249	330	-29
Jobs-led - Oxford UR	2,755	1.9%	3,588	5.6%	162	256	-40
SNPP-2012	115	0.1%	2,476	3.9%	-1	177	-229

Table 9: Average annual dwelling requirement under the 2008-based, 2011-based and 2012-based headship rates (2012–2027)

Scenario	Average annual dwelling requirement (2012–2027)			
	HH-11	HH-08	Average of HH-11 & HH-08	HH-12
Jobs-led - Experian	270	443	357	410
PG-10Yr	218	385	301	343
Jobs-led - Oxford	190	359	274	324
PG-10Yr-X	164	330	247	288
Jobs-led - Oxford UR	92	256	174	223
SNPP-2012	18	177	97	146

Appendix C
Scenario Results: 2013–2030 forecast period

Table 10: Blackpool HH-12 scenario outcomes (2013–2030)

Scenario	Change 2013–2030				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led - Experian	12,089	8.5%	7,769	12.1%	655	490	105
Jobs-led - Oxford	7,430	5.3%	5,745	9.0%	391	362	-32
PG-10Yr	7,232	5.1%	6,221	9.7%	343	392	18
PG-10Yr-X	6,534	4.6%	5,341	8.3%	309	337	-9
Jobs-led - Oxford UR	4,217	3.0%	4,288	6.7%	225	270	-32
SNPP-2012	733	0.5%	2,688	4.2%	35	169	-218

Table 11: Blackpool **HH-11** scenario outcomes (2013–2030)

Scenario	Change 2013–2030				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led - Experian	12,089	8.5%	5,425	8.5%	655	342	105
Jobs-led - Oxford	7,430	5.3%	3,518	5.5%	391	222	-32
PG-10Yr	7,232	5.1%	4,138	6.5%	343	261	18
PG-10Yr-X	6,534	4.6%	3,281	5.1%	309	207	-9
Jobs-led - Oxford UR	4,217	3.0%	2,104	3.3%	225	133	-32
SNPP-2012	733	0.5%	586	0.9%	35	37	-218

Table 12: Blackpool **HH-08** scenario outcomes (2013–2030)

Scenario	Change 2013–2030				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Jobs-led - Experian	12,089	8.5%	8,172	12.8%	655	515	105
Jobs-led - Oxford	7,430	5.3%	6,154	9.6%	391	388	-32
PG-10Yr	7,232	5.1%	6,736	10.5%	343	425	18
PG-10Yr-X	6,534	4.6%	5,868	9.2%	309	370	-9
Jobs-led - Oxford UR	4,217	3.0%	4,683	7.3%	225	295	-32
SNPP-2012	733	0.5%	3,079	4.8%	35	194	-218

Table 13: Average annual dwelling requirement under the 2008-based, 2011-based and 2012-based headship rates (2013–2030)

Scenario	Average annual dwelling requirement (2013–2030)			
	HH-11	HH-08	Average of HH-11 & HH-08	HH-12
Jobs-led - Experian	342	515	429	490
PG-10Yr	261	425	343	392
Jobs-led - Oxford	222	388	305	362
PG-10Yr-X	207	370	288	337
Jobs-led - Oxford UR	133	295	214	270
SNPP-2012	37	194	116	169

Appendix D
POPGROUP Methodology

Forecasting Methodology

D.1 Evidence is often challenged on the basis of the appropriateness of the methodology that has been employed to develop growth forecasts. The use of a recognised forecasting product which incorporates an industry-standard methodology (a cohort component model) removes this obstacle and enables a focus on assumptions and output, rather than methods.

D.2 Demographic forecasts have been developed using the POPGROUP suite of products. POPGROUP is a family of demographic models that enables forecasts to be derived for population, households and the labour force, for areas and social groups. The main POPGROUP model (Figure 8) is a cohort component model, which enables the development of population forecasts based on births, deaths and migration inputs and assumptions.

D.3 The Derived Forecast (DF) model (Figure 9) sits alongside the population model, providing a headship rate model for household projections and an economic activity rate model for labour-force projections.

D.4 The latest development in the POPGROUP suite of demographic models is POPGROUP v.4, which was released in January 2014. A number of changes have been made to the POPGROUP model to improve its operation and to ensure greater consistency with ONS forecasting methods.

D.5 The most significant methodological change relates to the handling of internal migration in the POPGROUP forecasting model. The level of internal in-migration to an area is now calculated as a rate of migration relative to a defined 'reference population' (by default the UK population), rather than as a rate of migration relative to the population of the area itself (as in POPGROUP v3.1). This approach ensures a closer alignment with the 'multi-regional' approach to modelling migration that is used by ONS.

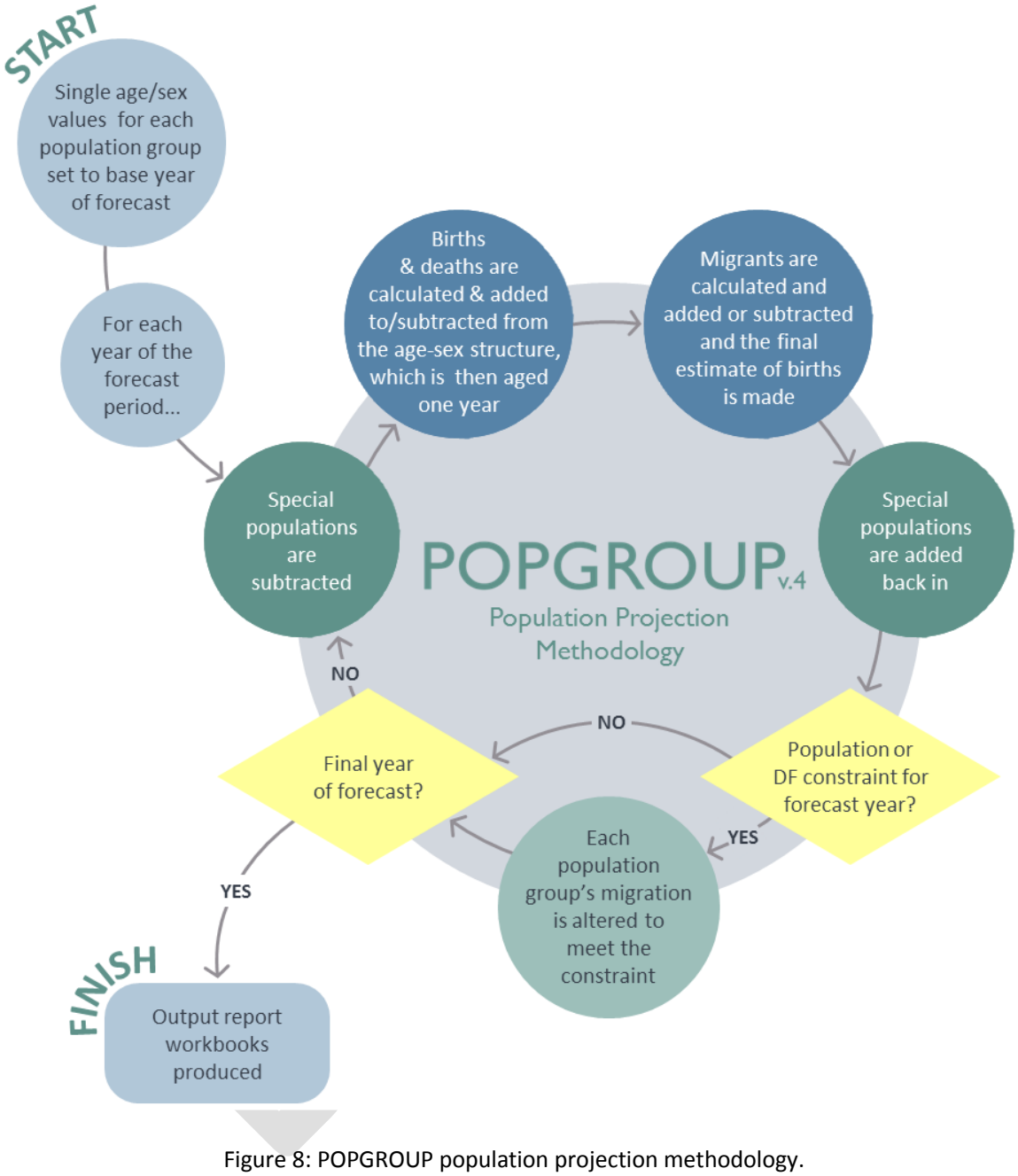


Figure 8: POPGROUP population projection methodology.

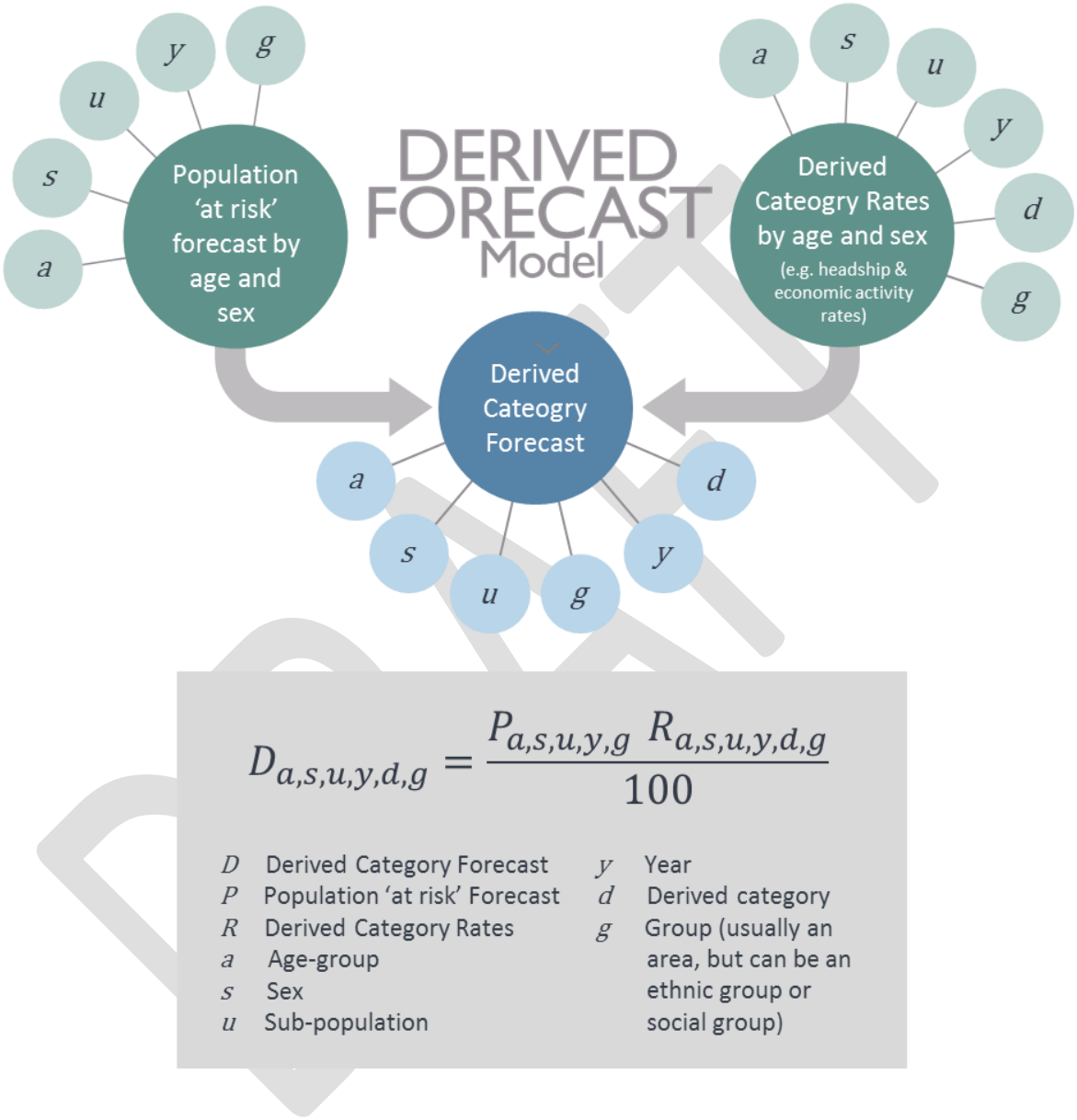


Figure 9: Derived Forecast (DF) methodology

Appendix E
Data Inputs & Assumptions

Introduction

E.1 Edge Analytics has developed a suite of demographic scenarios for Blackpool using POPGROUP.

E.2 The POPGROUP model draws data from a number of sources, building an historical picture of population, households, fertility, mortality and migration on which to base its scenario forecasts. Using the historical data evidence for 2001–2013, in conjunction with information from ONS sub-national projections, a series of assumptions have been derived which drive the scenario forecasts.

E.3 In the following sections, a narrative on the data inputs and assumptions underpinning the scenarios is presented.

Population, Births & Deaths

Population

E.4 In each scenario, historical population statistics are provided by the mid-year population estimates for 2001–2013, with all data recorded by single-year of age and sex. These data include the revised mid-year population estimates for 2002–2010, which were released by the ONS in May 2013. The revised mid-year population estimates provide consistency in the measurement of the components of change (i.e. births, deaths, internal migration and international migration) between the 2001 and 2011 Censuses.

E.5 In the **SNPP-2012** scenario, future population counts are provided by single-year of age and sex to ensure consistency with the trajectory of the ONS 2012-based SNPP.

Births & Fertility

E.6 In each scenario, historical mid-year to mid-year counts of births by sex from 2001/02 to 2012/13 have been sourced from ONS Vital Statistics.

E.7 In the **SNPP-2012** scenario, future counts of births are specified to ensure consistency with the official projections.

E.8 In the other scenarios, a 'local' (i.e. area-specific) age-specific fertility rate (ASFR) schedule, which measures the expected fertility rates by age and sex in 2013/14, is included in the POPGROUP model assumptions. This is derived from the ONS 2012-based SNPP.

E.9 Long-term assumptions on changes in age-specific fertility rates are taken from the ONS 2012-based SNPP.

E.10 In combination with the 'population-at-risk' (i.e. all women between the ages of 15–49), the area-specific ASFR and future fertility rate assumptions provide the basis for the calculation of births in each year of the forecast period.

Deaths & Mortality

E.11 In each scenario, historical mid-year to mid-year counts of deaths by age and sex from 2001/02 to 2012/13 have been sourced from ONS Vital Statistics.

E.12 In the **SNPP-2012** scenario, future counts of deaths are specified to ensure consistency with the official projections.

E.13 In the other scenarios, a 'local' (i.e. area-specific) age-specific mortality rate (ASMR) schedule, which measures the expected mortality rates by age and sex in 2013/14 is included the POPGROUP model assumptions. This is derived from the ONS 2012-based SNPP.

E.14 Long-term assumptions on changes in age-specific mortality rates are taken from the ONS 2012-based SNPP.

E.15 In combination with the 'population-at-risk' (i.e. the total population), the area-specific ASMR and future mortality rate assumptions provide the basis for the calculation of deaths in each year of the forecast period.

Migration

Internal Migration

E.16 In all scenarios, historical mid-year to mid-year counts of in- and out-migration by five year age group and sex from 2001/02 to 2012/13 have been sourced from the 'components of change' files that underpin the ONS MYEs. The original source of these internal migration statistics is the Patient Register Data Service (PRDS), which captures the movement of patients as they register with a GP. This data provides an accurate representation of inter-area flows, albeit with some issues with regard to potential under-registration in certain age groups (young males in particular).

E.17 In the **SNPP-2012** scenarios, future counts of internal migrants are specified, to ensure consistency with the official projections.

E.18 In the alternative trend-based scenarios, age-specific migration rate (ASMigR) schedules are derived from the area-specific historical migration data. In the **PG-10Yr** and **PG-10Yr-X** scenarios, a ten year internal migration history is used (2003/04–2012/13).

E.19 The **jobs-led** scenarios calculate their own internal migration assumptions to ensure an appropriate balance between the population and the targeted increase in the number of jobs that is defined in each year of the forecast period. In the **jobs-led** scenarios, a higher level of net internal migration will occur if there is insufficient population and resident labour force to meet the forecast number of jobs. In the **jobs-led** scenarios, the profile of internal migrants is defined by an ASMigR schedule, derived from the ONS 2012-based SNPP.

E.20 Rather than the schedule of rates being applied to the area-specific population – as is the case with the other components (i.e. births, deaths and international migration) – in the case of internal in-migration the ASMigR schedule of rates is applied to an external 'reference' population (i.e. the population 'at-risk' of migrating into the area). In the case of Fylde Coast, the reference population is defined as the total population of the districts where 70% of the in-migrants to the Lancashire Local Economic Partnership (LEP) come from.

International Migration

E.21 Historical mid-year to mid-year counts of total immigration and emigration from 2001/02 to 2012/13 have been sourced from the 'components of change' files that underpin the ONS MYEs. Any 'adjustments' made to the MYEs to account for asylum cases are included in the international migration balance.

E.22 In all scenarios, future international migration assumptions are defined as 'counts' of migration.

E.23 In the **SNPP-2012** scenarios, the international in- and out-migration counts are drawn directly from the official projections.

E.24 Implied within the international migration component of change in all scenarios (apart from the **PG-10Yr-X** scenario) is an 'unattributable population change' (UPC) figure, which ONS identified within its latest MYE revisions. The POPGROUP model has assigned the UPC to international migration as it is the component with the greatest uncertainty associated with its estimation. In the **PG-10Yr-X** scenario, the UPC is not considered when calculating the migration assumptions.

E.25 In the alternative trend-based scenarios, the international in- and out-migration counts are derived from the area-specific historical migration data. In the **PG-10yr** and **PG-10yr-X** scenarios, a ten year international migration history is used (2003/04–2012/13). An ASMigR schedule of rates is derived from a ten year migration history and is used to distribute future counts by single year of age.

E.26 In the **jobs-led** scenarios, international migration counts are taken from the ONS 2012-based SNPP (i.e. counts are consistent with the **SNPP-2012** scenario). An ASMigR schedule of rates from the ONS 2012-based SNPP is used to distribute future counts by single year of age.

Household & Dwellings

E.27 The 2011 Census defines a household as:

> *"one person living alone, or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room or sitting room or dining area."*[9]

E.28 For each scenario, the household and dwelling growth implications of the population growth trajectory have been evaluated through the application of headship rate statistics and communal population statistics. These data assumptions have been sourced from the 2001 and 2011 Census and the 2008-based, 2011-based and 2012-based household projection models from the DCLG.

Household Headship Rates

E.29 The DCLG household projections are derived through the application of projected household representative rates (also referred to as headship rates) to a projection of the private household population. A household headship rate (also known as household representative rate) is the "probability of anyone in a particular demographic group being classified as being a household representative"[10].

E.30 In the scenarios presented, headship rate assumptions have been sourced from the new 2012-based household projection model and from the earlier 2011-based and 2008-based models, producing three alternative outcomes for each scenario:

- In the **HH-12** outcome, the 2012-based DCLG headship rates are applied.
- In the **HH-11** outcome, the 2011-based headship rates are applied
- In the **HH-08** outcome, the 2008-based DCLG headship rates are applied, scaled to be consistent with the 2011 DCLG household total, but following the original trend thereafter.

[9] http://www.ons.gov.uk/ons/guide-method/census/2011/census-data/2011-census-user-guide/glossary/index.html

[10] Household Projections 2012-based: Methodological Report. Department for Communities and Local Government (February 2015). https://www.gov.uk/government/statistics/2012-based-household-projections-methodology

2012-based Headship Rates

E.31 The 2012-based headship rates have been sourced from the new 2012-based household projection model from DCLG. The methodology used by DCLG in its household projection models consists of two distinct stages:

- **Stage One** produces the national and local authority projections for the total number of households by sex, age-group and relationship-status group over the projection period. All Stage One output and assumptions for the 2012-based household projection model has been released by DCLG.
- **Stage Two** provides the detailed 'household-type' projection by age-group, controlled to the previous Stage One totals. Stage Two assumptions and output for the 2012-based model have yet to be released by DCLG.

E.32 In POPGROUP, the 2012-based headship rates are defined by age, sex and relationship status. These rates therefore determine the likelihood of person of a particular age-group, sex and relationship status being head of a household in a particular year, given the age-sex structure of the population.

2011-based and 2008-based Headship Rates

E.33 The 2011-based and 2008-based headship rates are provided by age-group and household type and therefore define the likelihood of a particular household type being formed in a particular year, given the age-sex profile of the population. Household-types are modelled with a 17-fold classification (Table 14).

Communal Population Statistics

E.34 Household projections in POPGROUP exclude the population 'not-in-households' (i.e. the communal/institutional population). In the **HH-08** and **HH-11** scenarios, this data has been drawn from the 2011-based household projection model. The **HH-12** scenarios use the communal establishment assumptions from the 2012-based household projection model.

E.35 Examples of communal establishments include prisons, residential care homes and student halls of residence. For ages 0–74, the number of people in each age group 'not-in-households' is kept fixed throughout the forecast period. For ages 75–85+, the proportion of the population 'not-in-

households' is recorded. Therefore, the population not-in-households for ages 75–85+ varies across the forecast period depending on the size of the population.

Table 14: Household type classification

ONS Code	DF Label	Household Type
OPM	OPMAL	One person households: Male
OPF	OPFEM	One person households: Female
OCZZP	FAMC0	One family and no others: Couple: No dependent children
OC1P	FAMC1	One family and no others: Couple: 1 dependent child
OC2P	FAMC2	One family and no others: Couple: 2 dependent children
OC3P	FAMC3	One family and no others: Couple: 3+ dependent children
OL1P	FAML1	One family and no others: Lone parent: 1 dependent child
OL2P	FAML2	One family and no others: Lone parent: 2 dependent children
OL3P	FAML3	One family and no others: Lone parent: 3+ dependent children
MCZDP	MIX C0	A couple and one or more other adults: No dependent children
MC1P	MIX C1	A couple and one or more other adults: 1 dependent child
MC2P	MIX C2	A couple and one or more other adults: 2 dependent children
MC3P	MIX C3	A couple and one or more other adults: 3+ dependent children
ML1P	MIX L1	A lone parent and one or more other adults: 1 dependent child
ML2P	MIX L2	A lone parent and one or more other adults: 2 dependent children
ML3P	MIX L3	A lone parent and one or more other adults: 3+ dependent children
OTAP	OTHHH	Other households
TOT	TOTHH	Total

Vacancy Rate

E.36 The relationship between households and dwellings is modelled using a 'vacancy rate', sourced from the 2011 Census. A vacancy rate of 6.7% for Blackpool has been applied, fixed throughout the forecast period.

E.37 Using this vacancy rate, the 'dwelling requirement' of each household growth trajectory (HH-12, HH-11 and HH-08, see paragraph E.30) has been calculated.

Labour Force & Jobs

E.38 For each scenario (apart from the **jobs-led** scenarios), the labour force and jobs implications of the population growth trajectory have been evaluated through the application of three key data items: economic activity rates, a commuting ratio and an unemployment rate.

E.39 In the **jobs-led** scenarios, these three data items are used to determine the population growth required by a particular jobs growth trajectory.

Economic Activity Rates

E.40 The level of labour force participation is recorded in the economic activity rates.

E.41 Economic activity rates by five year age group (ages 16-74) and sex have been derived from 2001 and 2011 Census statistics. The 2011 Census statistics include an open-ended 65+ age category, so economic activity rates for the 65–69 and 70–74 age groups have been estimated using a combination of Census 2011 tables, disaggregated using evidence from the 2001 Census. Between 2001 and 2011, the rates are linearly interpolated.

E.42 For Blackpool, rates of economic activity increased for all age groups between 20–74 between the 2001 and 2011 Censuses most noticeably for women (Figure 10).

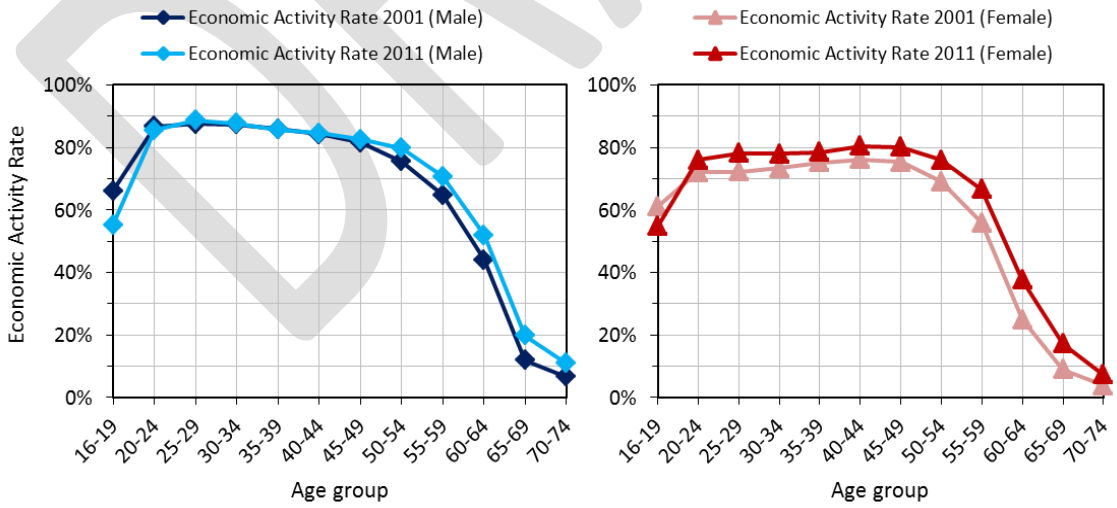


Figure 10: Blackpool Economic activity rates: 2001 and 2011 Census comparison (source: ONS)

E.43 In all scenarios, Edge Analytics has made changes to the age-sex specific economic activity rates to take account of changes to the State Pension Age (SPA) and to accommodate potential changes in economic participation which might result from an ageing but healthier population in the older labour-force age-groups.

E.44 The SPA for women is increasing from 60 to 65 by 2018, bringing it in line with that for men. Between December 2018 and April 2020, the SPA for both men and women will then rise to 66. Under current legislation, the SPA will be increased to 67 between 2034 and 2036 and 68 between 2044 and 2046. It has been proposed that the rise in the SPA to 67 is brought forward to 2026–2028[11].

E.45 ONS published its last set of economic activity rate forecasts from a 2006 base[12]. These incorporated an increase in SPA for women to 65 by 2020 but this has since been altered to an accelerated transition by 2018 plus a further extension to 66 by 2020. Over the 2011–2020 period, the ONS forecasts suggested that male economic activity rates would rise by 5.6% and 11.9% in the 60-64 and 65-69 age groups respectively. Corresponding female rates would rise by 33.4% and 16.3% (Figure 11).

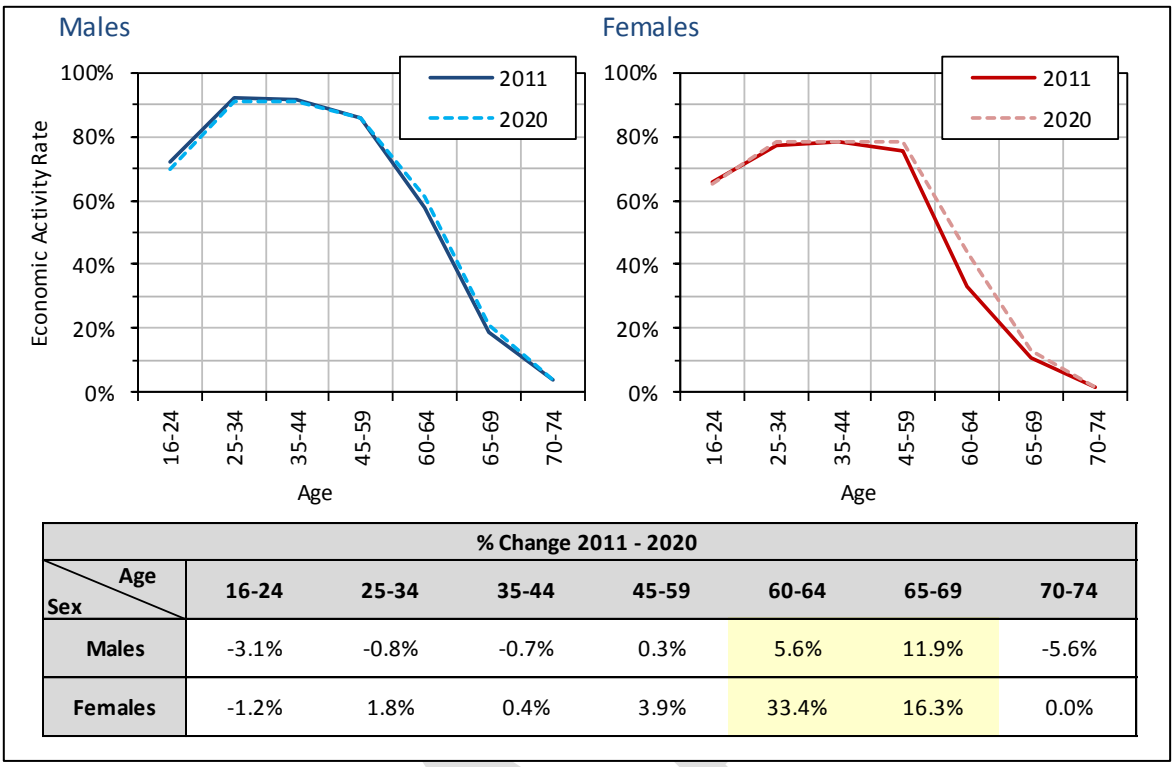
E.46 To take account of planned changes to the SPA, the following modifications have been made to the Edge Analytics economic activity rates:

- Women aged 60–64: 40% increase from 2011 to 2020.
- Women aged 65–69: 20% increase from 2011 to 2020.
- Men aged 60–64: 5% increase from 2011 to 2020.
- Men aged 65–69: 10% increase from 2011 to 2020

E.47 Note that the rates for women in the 60–64 age and 65–69 age-groups are higher than the original ONS figures (Figure 11), accounting for the accelerated pace of change in the SPA. No changes have been applied to other age-groups. In addition, no changes have been applied to economic activity rates beyond 2020. This is an appropriately prudent approach given the uncertainty associated with forecasting future rates of economic participation.

[11] https://www.gov.uk/changes-state-pension

[12] ONS January 2006, Projections of the UK labour force, 2006 to 2020 http://www.ons.gov.uk/ons/rel/lms/labour-market-trends--discontinued-/volume-114--no--1/projections-of-the-uk-labour-force--2006-to-2020.pdf



% Change 2011 - 2020							
Sex \ Age	16-24	25-34	35-44	45-59	60-64	65-69	70-74
Males	-3.1%	-0.8%	-0.7%	0.3%	5.6%	11.9%	-5.6%
Females	-1.2%	1.8%	0.4%	3.9%	33.4%	16.3%	0.0%

Figure 11: ONS Labour Force Projection 2006 – Economic Activity Rates 2011–2020. Source: ONS

E.48 Given the accelerated pace of change in the female SPA and the clear trends for increased female labour force participation across all age-groups in the last decade (Figure 12), these 2011–2020 rate increases (Figure 12) would appear to be relatively conservative assumptions.

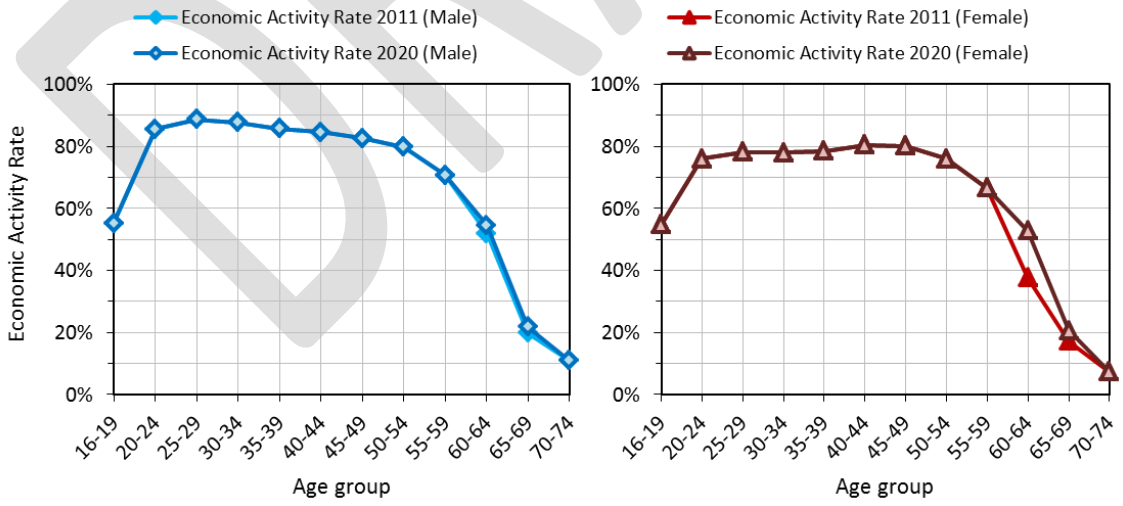


Figure 12: Edge Analytics economic activity rate profiles for Blackpool, 2011 and 2020 comparison.

Commuting Ratio

E.49 The commuting ratio, together with the unemployment rate, controls the balance between the number of workers living in a district (i.e. the resident labour force) and the number of jobs available in the district.

E.50 A commuting ratio greater than 1.00 indicates that the size of the resident workforce exceeds the number of jobs available in the district, resulting in a net out-commute. A commuting ratio less than 1.00 indicates that the number of jobs in the district exceeds the size of the labour force, resulting in a net in-commute.

E.51 From the 2011 Census 'Travel to Work' statistics, published by ONS in July 2014, commuting ratios have been derived for Blackpool. This is compared to the 2001 Census value in Table 15.

Table 15: Commuting Ratio Comparison

Blackpool		2001 Census	2011 Census
Workers	a	59,074	61,419
Jobs	b	59,349	63,241
Commuting Ratio	a/b	**1.00**	**0.97**

Note: 2001 data from Census Table *T101 – UK Travel Flows*; 2011 data from Census Table *WU02UK - Location of usual residence and place of work by age*.

Unemployment Rate

E.52 The unemployment rate, together with the commuting ratio, controls the balance between the size of the labour force and the number of jobs available within an area.

E.53 In all scenarios (apart from **Jobs-led Oxford UR**), a 'recession' unemployment rate (2008–2013 average) of 8.2% has been applied, fixed across the forecast period (Table 16).

E.54 In the **Jobs-led Oxford UR** scenario, the unemployment rate has been incrementally reduced from the 'recession' average (8.2%) to the 'pre-recession' average (6.0%) between 2013 and 2018 (Table 16). This reduction in the unemployment rate provides an appropriate basis for what is likely to be a gradual recovery from current economic conditions.

Table 16: Historical unemployment rates 2004–2013 for Blackpool

Blackpool	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average recession (2008–13)	Average pre-recession (2004–07)
Unemployment Rate (%)	5.6	6.3	6.2	6.0	5.2	8.5	9.3	9.1	8.7	8.2	8.2	6.0

Note: Unemployment rates are for January to December (source: Annual Population Survey, NOMIS).