North Somerset Core Strategy

Review of Representations – Alternative Approaches

February 2014



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1. Introduction

Context

- 1.1 The North Somerset Core Strategy¹ was adopted in April 2012, identifying a district housing requirement of a minimum of 14,000 dwellings (700 dwellings per year) over the 20-year planning horizon 2006–2026 (Policy CS13). Following a legal challenge in March 2013, Policy CS13 and eight other policies were remitted back to the Planning Inspectorate for re-examination².
- Analytics to complete an updated demographic analysis, including the development of a suite of population, household and labour force forecasts using POPGROUP demographic modelling technology. A range of scenario alternatives was produced, which evaluated both trend and policy-led growth alternatives. Edge Analytics recommended that "North Somerset Council adopts the range of 'current trend growth' scenarios as the basis for its review of future housing provision in the unitary authority." This suggested a requirement of 812–1,018 dwellings per annum.
- On the basis of this updated evidence, NSC published its planned approach to the examination of the remitted policies in November 2013⁴. This proposed an increase in the housing requirement from a minimum of 14,000 dwellings over the 2006 to 2026 plan period to 17,130 dwellings. Public consultation on the position statement closed on the 17th January 2014.

¹ North Somerset Council Core Strategy https://www.n-somerset.gov.uk/Environment/Planning_policy_and-research/localplanning/Documents/Core%20Strategy/adopted%20core%20Strategy/20(pdf).pdf

² High Court Judgement, February 2013 https://www.n-somerset.gov.uk/Environment/Planning_policy_and-research/localplanning/Documents/Core%20Strategy/high%20court%20judgement%20(pdf).pdf

³ Edge Analytics, 2013, North Somerset Council Demographic Analysis and Forecasts <a href="https://www.n-somerset.gov.uk/Environment/Planning_policy_and-research/localplanning/Documents/Core%20Strategy/Edge%20Demographic%20analysis%20forecasts%20(pdf).pdf

⁴North Somerset Council Statement for Consultation https://www.n-somerset.gov.uk/Environment/Planning_policy_and-research/localplanning/Documents/ Core%20Strategy/North%20Somerset%20statement%20for%20consultation%20November%202013%20(pdf).pdf

Requirements & Approach

- 1.4 NSC has commissioned Edge Analytics to undertake a review of the responses to the proposed position statement. NSC received 50 representations, six of which were identified as being most relevant to the demographic evidence produced by Edge Analytics:
 - Alder King (on behalf of the University of Bristol)
 - Barton Willmore (on behalf of Barton Willmore, Alvis Brothers and the Trustees of the AE and RS Hill Settlement)
 - Development Economics Ltd. (on behalf of Gladman Developments)
 - Nathaniel Lichfield & Partners (on behalf of Barratt David Wilson Bristol)
 - Turley Associates (on behalf of Persimmon Homes Severn Valley and Bloor Homes South West)
 - Savills (on behalf of Taylor Wimpey)
- Of these six, four responses were identified with methodologies that NSC requested Edge Analytics provide comment on:
 - Barton Willmore
 - Development Economics Ltd.
 - Nathaniel Lichfield & Partners (NLP)
 - Savills

Report Structure

- 1.6 Section 2 provides a summary of the key criticisms of the Edge Analytics demographic evidence (from each of the six representations listed in paragraph 1.4) with a short response to each point raised.
- 1.7 Section 3 provides a short commentary and critique of each of the alternative approaches listed in paragraph 1.5 above.

2. Methodological Issues Raised

- 2.1 Edge Analytics has used the POPGROUP suite of demographic models to present a suite of scenario growth alternatives for North Somerset.
- These scenarios measure growth in terms of population, households, dwellings and jobs. They have been presented as a 'range' of outcomes from which future housing requirements can be evaluated and have been accompanied by a clear definition of all key data inputs and assumptions.
- Both NLP and Barton Willmore have made similar use of POPGROUP technology. The differences between these scenario outcomes and those presented in the Edge Analytics report are due to the choice of data inputs and assumptions.
- 2.4 Development Economic Ltd. and Savills have also conducted their own housing requirements analysis but neither has used a specific demographic modelling approach, making direct comparison difficult. Their approach is based on an objective assessment of the available evidence, rather than a comparison of a range of growth scenarios.
- Turley Associates has focused on an assessment of the appropriateness of the overall objective assessment of need, does not advocate an alternative modelling approach (to that presented by Edge Analytics) but suggests more emphasis on employment-led growth outcomes.
- 2.6 Alder King (Hardisty Jones Associates (HJA)) uses a theoretical model to test the implications of varying unemployment assumptions and focuses on a detailed analysis of the requirements and implications for jobs growth in North Somerset.

Issues & Responses

2.7 Within the six representations listed in paragraph 1.4, there were a number of specific criticisms of the Edge Analytics report. These are listed below, together with a short response to each of the issues raised.

Issue	Respondents	Edge Analytics' Response	
Approach	Approach		
Only considers North Somerset – no consideration of wider housing market area	Barton Willmore Turley Alder King (HJA) NLP Savills	The Edge Analytics work was focused on North Somerset. An assessment of demographic/economic change within the wider HMA was not part of our original remit.	
Edge work is not NPPF compliant	Barton Willmore Alder King (HJA) NLP	The Edge Analytics approach is certainly compliant with the NPPF's guidance to evaluate a range of (scenario) evidence that considers both demographic and economic drivers of change when setting a housing growth target.	
SNPP-2011 is the most recent official forecast – Edge work therefore not NPPF compliant	NLP	The normally robust rules on the calculation of long-term migration, fertility and mortality assumptions were not followed by ONS in the development of the 2011-based SNPP. Instead, ONS applied the assumptions from the previous official forecast, the 2010-based SNPP, to a 2011 Census base population. This is unsuitable because the revisions to the historical mid-year populations and the subsequent change in the historical impact of migration have not been taken into account. Furthermore, the 2011 Census population has a different age structure to the previous 2010-based population. This approach has, at times, produced very counter-intuitive results (the recent Greater London Authority SHMA provides a useful summary).	

Issue	Respondents	Edge Analytics' Response
Headship Rates		
Headship Rates numbers should be based on 2008- based HRs	Barton Willmore	2008-based headship rates result in higher household growth forecasts. A number of factors (reduced rates of household formation in younger age-groups, higher impact of international migration) have resulted in 2011-based headship rates that produce lower household growth forecasts. Neither the 2008-based or 2011-based assumptions provide a definitive perspective on future household growth, so an evaluation of population/household growth using both is a robust and appropriate approach; providing a range of outcomes to consider in the objective assessment of housing requirements.
Using an average of the 2008-based and 2011-based rates is not sufficiently robust	NLP	Edge Analytics has not used an average of 2008-based and 2011-based headship rates. It has evaluated each population forecast using both the 2008-based and 2011-based assumptions. The dwelling growth outcomes that result from this 'range' of evidence have then been presented as an 'average'. This is a suitably robust approach. The NLP approach, which appends 2008-based rates to the 2011-based assumptions, is just one of many alternatives. It invariably results in dwelling growth that lies between the 2008-based and 2011-based scenario outcomes.
Migration		
Other unattributable should not be added to international migration	Barton Willmore	All population change over the last ten years should be considered when setting assumptions on future migration. It is assumed that the 2001 and 2011 Censuses provide robust and definitive counts of North Somerset's population. Births, deaths and internal migration are robustly recorded at local authority level. International migration estimation is subject to considerable uncertainty and has been the most likely source of 'error' in ONS mid-year estimates. It is therefore appropriate to consider the ONS 'adjustment' to historical mid-year population estimates when setting future migration assumptions. Otherwise, the trend projection is not being formulated on historical population change that has taken place.

Issue	Respondents	Edge Analytics' Response
5-year migration assumption flawed/not representative of flows – should use 10-year instead	Barton Willmore Turley Savills	Edge Analytics recommended that the range of (migration) trend scenarios were considered in the derivation of an objective assessment of housing need.
Commuting		
Commuting data out of date	Alder King (HJA)	We recognise that the commuting information used in the scenario analysis was dependent upon 2001 Census statistics. Using more recent evidence from the 2011 Census, Edge Analytics estimate that the commuting ratio for North Somerset has reduced from 1.22 to 1.18.
No evidence that commuting balance will reduce	Turley Alder King (HJA)	The 2011 Census evidence suggests that the North Somerset commuting balance has reduced over the 2001-2011 decade.
Commuting ratio kept fixed throughout forecast period.	NLP	NLP uses a reducing commuting ratio in its analysis. This is a robust approach which evaluates the sensitivity of changing assumptions. Edge Analytics commuting ratio sensitivities have been produced to highlight impact of changes to the CR over the forecast period.
Commuting ratio methodology is not clear	NLP	The 2001 Census Travel-to-Work statistics were used to calculate the commuting ratio (the most up-to-date at the time of the project). The commuting ratio of 1.18 is calculated by dividing the number of people who are resident in North Somerset and who are in employment anywhere by the number of jobs in North Somerset. The TTW statistics are a flow matrix of workers, with an origin, destination and count. The numerator (number of workers who live in North Somerset) is calculated by summing the count where the origin is North Somerset, and the denominator (number of jobs) by summing where the destination is North Somerset. More recent estimates (from the 'Workday Population' statistics) suggest that the commuting ratio has reduced from 1.22 to 1.18.

Issue	Respondents	Edge Analytics' Response		
Economic Activity Rates and Unemployment				
Lack of sensitivity testing regarding unemployment rates and economic activity rates	Alder King (HJA)	The Edge Analytics scenarios maintained a fixed unemployment rate. Sensitivity analysis which evaluated changes to the unemployment rate over time would be appropriate. With regard to economic activity rates, specific assumptions were made to reflect planned changes to SPA, although no amendments were made beyond 2021. Additional sensitivity analysis would be appropriate given that new data is now available from the 2011 Census.		
Economic Activity Rates – the adjustments are not explained or justified	NLP	Forecasting changes to the rates of (older age) economic participation is challenging but it is inevitable that higher rates of participation will be necessary to accommodate SPA shifts. All economic forecasting models (Oxford, Cambridge & Experian) are routinely incorporating significant shifts in the participation of the 65+ age-groups in the labour force. The Edge Analytics analysis used the latest evidence on economic activity rates in North Somerset, making assumptions about future rates of older-age economic participation using evidence from previous ONS forecasts and planned changes to the State Pension Age (SPA). Since publication of the Edge Analytics report, the 2011 Census has released more detailed economic activity rates for North Somerset. These show an increase in older-age participation for both males and females 2001-2011 and a general increase in		
		female economic activity across all age-groups (aged 20+). The unemployment rate can go up and down over		
Unemployment Rate – should not be a fixed rate throughout the forecast period.	NLP	the forecast period. Edge Analytics has not made assumptions around a changing unemployment rate. NLP's adjustments to unemployment rate (reducing over time) are perfectly valid and will have the effect of reducing the net in-migration		

Issue	Respondents	Edge Analytics' Response
"No allowance is apparently being made to accommodate replacement workers that will be required as a consequence of the increasing proportion of the existing workforce that will reach retirement age during the Plan Period" (p.18 Appendix)	Gladman	The POPGROUP model takes this into account as it is a cohort component model. It considers the changing age structure of the population and its effect upon the size and profile of the resident labour force.

3. Review of Alternative Approaches

Barton Willmore

Approach

- In its *Housing Need Technical Note* (January 2014) Barton Willmore concludes that the proposed housing target for North Somerset (as outlined in NSC's statement for consultation) is too low and should be revised upwards to 1,508 dwellings per year to "meet demographic demand" (p.14). Barton Willmore draws attention to its own assessment of housing requirements in the West of England Housing Market Area, which identified a need for between 1,452 and 1,468 dwellings per year across North Somerset.
- This requirement is based on evidence from the 'West of England Sub-Regional Housing Study', produced by Barton Willmore in April 2013 on behalf of developers with land interests in Bath and North East Somerset (BANES). This report was prepared prior to the publication of NSC's proposed statement for consultation and is attached as an appendix to the Barton Willmore representation and Housing Need Technical Note.
- Barton Willmore has made robust use of POPGROUP technology, producing three scenarios for the four districts in the West of England LEP: Bath & North East Somerset (BANES), Bristol, North Somerset and South Gloucestershire. Scenarios were produced for a 2011-2031 projection period.
- Barton Willmore's forecasts are generally at the highest end of the growth range due to the choice of key assumptions on household formation and economic change.

Scenario Summary

- 3.5 A 'Demographic-led' and two 'Economic-led' scenarios have been produced by Barton Willmore.
- 3.6 The first of these scenarios is a 'Demographic-led' scenario, in which the ONS interim 2011-based SNPP assumptions were applied from 2011 to 2021 and the 2010-based SNPP fertility, mortality and migration rates were applied thereafter. Whilst this overcomes the issue that the 2011-based SNPP only projects to 2021, the use of the 2011-based SNPP is problematic for a number of

reasons.

3.7 Firstly, the normally robust rules on the calculation of long-term migration, fertility and mortality assumptions were not followed by ONS in the development of the 2011-based SNPP. Instead, ONS applied the assumptions from the previous official forecast, the 2010-based SNPP, to a 2011 Census base population. This is unsuitable because the revisions to the historical mid-year populations and the subsequent change in the historical impact of migration have not been taken into account. Furthermore, the 2011 Census population has a different age structure to the previous 2010-based population.

3.8 The other two scenarios are 'jobs-led' scenarios (referred to as 'Economic-led' scenarios by Barton Willmore), in which population growth is constrained by a jobs growth target. In the first of these scenarios ('Economic-led scenario 1'), a jobs target consistent with that outlined in the West of England LEP is applied. In the second jobs-led scenario ('Economic-led scenario 2'), the jobs growth target is taken from the Experian February 2013 forecast.

Household and Dwelling Numbers

3.9 In each of the three Barton Willmore scenarios, household numbers are derived using the 2008-based CLG headship rates. The 2008-based rates result in a higher dwelling requirement than the 2011-based headship rates.

Exclusive use of the 2011-based assumptions has been criticised for being overly dependent upon a period where household formation rates have been suppressed (although higher rates of international migration have been important in maintaining higher average household sizes). However, exclusive use of the 2008-based rates may be criticised as being influenced by rates of household formation associated with very different housing market conditions.

Edge Analytics presents an average dwelling requirement derived using both the 2008-based and 2011-based CLG headship rates. This is in recognition of the uncertainty associated with future rates of household growth, given economic and demographic conditions. This approach presents a 'range' of dwelling growth outcomes.

3.12 To convert the household figure to a dwelling number, POPGROUP uses a vacancy rate; Barton Willmore state that this is sourced from the 2001 Census, although the exact value is not specified.

Economic Activity Rates, Unemployment and Commuting

- 3.13 Barton Willmore states that economic activity rates used in the three scenarios were sourced from the ONS and that changes were applied "in future years to reflect the change in statutory pension age" (p.36, Appendix 4 of the Barton Willmore representation). It is not clear from which year the economic activity rates were derived.
- 3.14 In addition, the changes that Barton Willmore applied to the economic activity rates to account for state pension age changes are also not specified. Increasing the rates to accommodate for increased labour force participation in the older age groups is reasonable and consistent with the Edge Analytics approach.
- 3.15 It is not clear what commuting ratio statistic has been used in the Barton Willmore analysis, only that its data source is the ONS.

- 3.16 Barton Willmore has made robust use of POPGROUP technology, consistent with the Edge Analytics methodology. However, the data inputs and certain assumptions differ.
- 3.17 Edge Analytics would not recommend using the 2011-based SNPP; instead, the 2010-based SNPP is considered a more appropriate benchmark.
- 3.18 Exclusive use of the 2008-based headship rates is not recommended by Edge Analytics; an average dwelling requirement resulting from the application of both the 2008-based and 2011-based headship rates is preferred as the basis for considering future housing need.
- 3.19 Greater transparency with regard to the assumptions on commuting and economic activity would be preferable.

NLP

Introduction & Approach

3.20 On behalf of Barratt David Wilson Bristol (BDW), NLP has used its 'HEaDROOM' framework to calculate an alternative housing requirement for North Somerset. This is essentially POPGROUP technology, incorporating the latest ONS and DCLG data.

3.21 NLP recommends a dwelling requirement of between 18,000 and 21,000 dwellings over the 2006 to 2026 period (taking into account the delivery of 4,950 dwellings between 2006 and 2011). This equates to an annual dwelling requirement of 860–1,070 per year between 2011 and 2026). This range is similar to that recommended by Edge Analytics (812–1,018 dwellings per year 2011–2026), reflecting similarities in the underlying data inputs and assumptions.

3.22 NLP has conducted a robust analysis using appropriate methodology and data inputs. The variations to the Edge Analytics scenarios relate to the choice of assumptions made in the scenario development.

Scenario Summary

- 3.23 NLP has produced three North Somerset scenarios.
- 3.24 The first scenario mirrors the 2011-based interim SNPP for North Somerset. Edge Analytics do not consider it appropriate to use the 2011-based SNPP owing to inadequacies in the underlying ONS projection assumptions (see paragraph 3.7 above).
- 3.25 The second scenario is trend-based. NLP has used the revised MYEs 2001–2011 to calculate future assumptions on the components of change (i.e. migration assumptions based on a 10-year average). Two alternatives of this scenario have been produced, in which the international migration component contains: (a) 50% of the 'other unattributable' component and (b) 100% of the 'other unattributable' component. Approach (b) is consistent with that of Edge Analytics, which includes the 'other unattributable' within international migration as this is the component of change that has the most uncertainty attached.
- 3.26 The third NLP scenario is employment-led; population growth has been constrained by a jobs growth target +671 jobs per year between 2011 and 2026. This target is in line with the NSC Core Strategy and is similar to the Edge Analytics approach, in which an average target of +650 jobs

per year was specified in the jobs-led scenario. In POPGROUP, the economic activity rates, unemployment rate and commuting ratio are used to model the impact of the designated jobs growth target on population growth; these data assumptions are discussed below.

Household and Dwelling Numbers

To derive household numbers for each scenario, NLP used an 'index' approach, in which the 2011-based headship rates are applied to 2021 and, thereafter, the 2008-based trend is followed. Edge Analytics typically uses both the 2008-based and 2011-based headship rates, deriving a range of dwelling requirements from using the two alternatives. There is no preferred approach to using headship rates; Edge Analytics has typically found that using the 'index' approach results in a dwelling requirement that sits between that derived using the 2008-based rates and that derived using the 2011-based rates.

Economic Activity Rates, Unemployment and Commuting

3.28 NLP has assumed that the commuting balance is fixed at 1.22 until 2015 and is then gradually reduced to 1.15 over the remainder of the forecast period. This is consistent with approach B of the Edge Analytics Commuting Balance Sensitivity (see page 30 of the Edge Analytics report) and considered a reasonable alteration to make. In the jobs-led scenario produced by NLP, this reduction will have acted to increase self-containment of the labour force, thereby reducing the in-migration required to meet the set jobs target. It is also consistent with NSC's aspiration to increase self-containment.

NLP has also assumed that the unemployment rate reduces over the forecast period, from 6.1% to 4.2%. Edge Analytics consider this a reasonable alteration to make and one that will act to reduce the in-migration required to meet the specified jobs target in the jobs-led scenario (therefore reducing the dwelling target). Edge Analytics has chosen to retain a fixed unemployment rate given the uncertainty associated with likely future increases and decreases associated with this economic parameter.

Economic activity rates have been increased to take account of changes to what NLP refer to as the 'statutory retirement age'. This is interpreted by Edge Analytics to refer to alterations to the State Pension Age (SPA) as the default retirement age has been phased out⁵. NLP state that economic activity rates for females aged 60 to 64 have been increased by 8% between 2010 and

⁵ https://www.gov.uk/retirement-age

2018. In addition, for males and females aged 65 to 69, economic activity rates have been increased by 2% between 2018 and 2020 period. It is not clear whether these changes have been applied as a percentage uplift to the rates or as a percentage point increase. For example, an 8% increase to a 60-64 female economic activity rate of 30% would result in a 32.4% figure. Alternatively, a rise of 8 percentage points would results in a figure of 38%.

Edge Analytics has chosen economic activity rates which result in a higher rate of increase in older-age economic participation, reflecting previous ONS forecasts and planned SPA changes.

- 3.32 NLP has made robust use of POPGROUP technology, consistent with the Edge Analytics methodology.
- 3.33 NLP has used the 2011-based SNPP as a benchmark scenario. Edge Analytics would recommend the 2010-based SNPP as a more appropriate benchmark given the methodological deficiencies associated with the formulation of the 2011-based SNPP.
- 3.34 Scenario outcomes are similar to those presented in the Edge Analytics report, with differences due to key assumptions on economic activity rates, the commuting ratio and the unemployment rate.

Development Economics Ltd.

Approach

On behalf of Gladman Development Ltd., Development Economics Ltd. analysed the appropriateness and soundness of NSC's proposed housing requirement. This evidence is used by Gladman Development Ltd. to conclude that the proposed dwelling target of 17,130 is too low and will impede the economic growth prospects of the area.

3.36 Development Economics Ltd. based their assessment of North Somerset's future housing requirement on what they identify as the key drivers of future housing requirement:

- 1. Demographic change;
- 2. Economic growth;
- 3. The social need for affordable housing.

No demographic forecasting has been undertaken within the Development Economics analysis making a direct comparison with the Edge Analytics scenarios difficult. It has used its own objective assessment of a range of evidence to express a preference for an economic growth outcome that is linked to more substantial housing growth.

Housing Requirements

3.38 In terms of demographic change, population trends over the past decade (2001–2011) are described, using the 2001 and 2011 Census data and the MYEs. Future population growth is considered using the 2010-based SNPP population projection, in which the population is forecast to grow by +17.5% over the 2011 to 2026 period. Population growth under the 2011-based interim SNPP is reported at 15.3% 2011–2021.

Household growth is examined using the 2008-based and 2011-based CLG household projections. Development Economics Ltd. emphasises that both these official projections produce a higher rate of household growth than is implied by the NSC target of +812 dwellings per year. In the forecasts generated by Edge Analytics (on which NSC's dwelling requirement is based upon), the 2008-based and 2011-based headship rates are taken from the CLG household projections and applied to each population projection⁶. Therefore, the scale of household (and dwelling) growth

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⁶ In the Edge Analytics approach, the 2008-based and 2011-based rates are both used to provide an 'Option A' and an 'Option B' dwelling requirement, which is then averaged.

in the Edge Analytics scenarios is not directly comparable with the CLG household projections because of differences in the underlying population projections.

- 3.40 Development Economics Ltd. examined the employment and economic activity characteristics of North Somerset using a variety of data sources. The composition of the local employment base is examined using 2012 data from the Business Register and Employment Survey (BRES, from Nomis). Annual Population Survey (APS) data from Nomis is used to describe the characteristics of North Somerset's labour force.
- 3.41 When considering future employment growth, Development Economic Ltd. expresses concern that bespoke economic forecasts for the Local Authority have not been produced. They conclude that the economic forecast evidence on which the Council's strategy is based is out-of-date.
- 3.42 Regarding housing affordability and supply, Development Economics Ltd. draw attention to CLG data that suggest housing in North Somerset is relatively unaffordable. They also draw attention to the 2013 SHLA, in which an overall potential supply of 19,854 was identified.

- 3.43 Development Economics Ltd has used a range of evidence to support its preference for more substantial housing growth in North Somerset.
- Edge Analytics would advocate the use of a more formal demographic forecasting approach, enabling greater transparency and consistency of output, directly comparable with official statistics.

Savills

Approach

- 3.45 Savills response to the NSC position statement was prepared on behalf of Taylor Wimpey, which has land interests in North Somerset. As part of this representation, Savills produced evidence to support an alternative housing requirement for North Somerset (Appendix A of the Savills January 2014 report: 'Housing Requirement in North Somerset').
- 3.46 Savills recommend a minimum housing requirement of 1,450 dwellings per year, stating that delivery at this level would be less than that implied by the 2011-based household projections.
- 3.47 Savills assessed the level of housing need in North Somerset using national and local household projections and their relationship to existing housing stock, considering market signals and the wider housing market area in which North Somerset is located.
- 3.48 No demographic forecasting has been undertaken within the Savills analysis. It has used its objective assessment of a range of evidence to identify a preference for the 'employment-led' scenarios within the Edge Analytics suite of growth outcomes.

Housing Requirements

- 3.49 The CLG household projections are used by Savills as the starting point in assessing the housing requirement of the HMA.
- 3.50 At a national level, Savills highlights the work by Alan Holmans to help explain the differences between the 2008-based household projection for 2011 and the number of households recorded in the 2011 Census.
- Using the 2008-based, 2011-based and 'Holman's' assumptions on household numbers, the difference between this dwelling number and the household totals are used to estimate that "the increase in the number of households across all local authority districts in England should be at an average of around 1.0% of stock per annum" (p.9).
- Regional variations in the differences between household and dwelling numbers are presented for the 2011-based and 2008-based projections and regional market signals are evaluated (affordability, house price growth and long-term vacant dwellings).

- Savills states that their analysis of market signals indicates housing need in North Somerset is higher than the national average. They state that housing supply in excess of 1.04% of stock is needed and that the interim 2011-based DCLG household projections indicate annual housing need is 1.2% of the stock in the HMA.
- Savills analysed rates of delivery in areas with similar market characteristics to North Somerset, stating that the higher rates of delivery observed in these areas were an indication that "market capacity has not been a limit to housing supply in North Somerset over the three years to 2012/13" (p.19). They use this to conclude that there is market capacity to absorb new homes in the HMA at a rate of at least 1.2% of stock per annum.

- 3.55 Savills has presented a range of evidence relating to market signals, housing stock and the HMA.
- 3.56 Edge Analytics would advocate the use of a more formal demographic forecasting approach, enabling greater transparency and consistency of output, directly comparable with official statistics.

4. Summary

- 4.1 Edge Analytics has reviewed six of the key responses to the NSC Statement for Consultation.
- 4.2 Of these, four have been reviewed in detail. Two of these (NLP and Barton Willmore) use POPGROUP, ensuring consistency with the forecasting methodology employed by Edge Analytics.
- 4.3 The differences between these alternative scenario outcomes and those presented in the Edge Analytics report are due to the choice of data inputs and assumptions. Edge Analytics believes it has chosen robust and appropriate data inputs and assumptions for the development of its scenario outcomes.
- 4.4 Development Economic Ltd. and Savills have also conducted their own housing requirements analysis but neither has used a more formal demographic modelling approach, making direct comparison difficult. Their approaches are based on an objective assessment of the available evidence, rather than a comparison of a range of growth scenarios that compare directly with official statistics.