

Bath and North East Somerset

Core Strategy Topic Paper 9

Justification for Housing and Employment Provision

October 2011

**Bath & North East
Somerset Council**



Bath and North East Somerset
Local Development Framework

Please note that this paper is based on a revised set of calculations with regard to the Stage 2 Report: Future Housing Growth Requirements to 2026. The original set of calculation contained an error affecting the homes / jobs ratio. Originally published as 1.33, this has now been corrected to 1.39.

Preface

In response to the general thrust of **paragraphs 13-22 of ID/1** on the Core Strategy's justification for housing and employment provision this paper answers the Inspector's overarching concerns alongside the more specific questions (**A1-A13**) set out in **Annex 1 of ID/1**.

This includes testing and corroborating the Stage 2 ratio between housing and jobs (demand for labour) by an alternative methodology that establishes the ratio between the housing needed to respond to population growth and the impact of this growth on supply of labour. Assumptions about the labour force participation rate and the rise in the state pension age (within both existing and newly forming population/households) are important considerations in this regard.

As with the housing / jobs ratio, once the relationship between housing and labour supply is established it can be applied to various forecasts of economic and employment growth¹ to indicate the necessary level of housing provision to support that growth. This is one means of determining the appropriate level of housing for an area. Section 7 sets out the mechanics of this approach for the Revised 2004-based population projections and Section 8 does the same for the latest 2008-based projections.

Structure

ID/1 poses a number of questions and the Council has considered how best to respond to these within the structure of a coherent argument. The paper is structured as follows. A prior reading of the Stage 2 Report: Future Housing Growth Requirements to 2026 and ID/1 is recommended.

Section 1

This section introduces the justification for the Council determining its housing requirement for itself, rather than relying on the RSS. It also sets out some of the wider considerations that it has taken into account to translate its self-assessed 'technical' requirement for housing into a Core Strategy 'policy' based requirement.

Sections 2-5

Paragraphs 13 and 14 of ID/1 suggest that more information needs to be provided to justify the approach that the Council has used in the Stage 2 Report to determine its technical housing requirement. Further it also appears that the Stage 2 Report is hard to follow and that it is not clear if the Council endorses it and its assumptions in their entirety. In broad terms Sections 2-3 follow, justify and explain the core methodology of the Stage 2 Report and

¹ Assumptions about productivity are important in making the translation from GVA growth to employment growth

attempt to make the mechanics of arriving at the housing and jobs component of homes/jobs ratio of 1.39 easier to follow. Section 4 evidences the jobs forecast of 8,700 to which the ratio is applied and Section 5 reaffirms the recommendation of the Stage 2 report.

Section 2

In response to paragraph 18 of ID1/1, Section 2 sets out the justification for the Stage 2 ratio of 1.39 that translates forecast jobs growth to housing provision, and the assumptions it embeds.

Firstly it sets out why the Council has based its assessment on the 2004-based population and household projections and why such projections need to be interrogated and not uncritically accepted as an absolute basis for planning policy.

It then introduces the more useful relationship that can be established between the 2004-based pre-recession trend demand for housing and the pre-recession trend demand for labour as a ratio that can be applied to alternative forecasts of economic growth to determine a complimentary housing requirement. Paragraph 18 of ID/1 also questions why the 'ratio' itself from the RSS has been used. It is actually the methodology that has been used with the ratio revised to reflect the 2004-based population projections. The RSS ratio was derived from the 2003-based projections. This part of the paper explains why this Draft RSS methodology is still considered as a suitable methodology for the Council even though the Council is making different assumptions to those which underpinned the RSS work, notably in relation to forecast jobs growth.

Errors within paragraphs A2.1-A2.4 of appendix 2 of the Stage 2 Report make the mechanics of this part of the report hard to follow. Section 2 corrects these errors and explains the process of moving between Tables A1-A6 more clearly. It sets out what the Council considers to be the household projection and derived homes requirement based on housing the Revised 2004-based ONS Population Projection. This forms the housing component of the housing /jobs ratio.

Section 2 (from paragraph 2.10 onwards) responds to issues in **ID1/A7** on general demographic factors and specific questions in **ID1/A8** in relation to how and to what extent the technical housing requirement derived from the 1.39 ratio caters for (1) increases to the housing stock to internally generated household growth i.e. a zero net migration scenario (2) net migration from economic and non-economic migrants (3) any backlog in housing needs. The Council interprets **ID1/A9**, in relation to the calculation of locally generated demand as essentially the same question as **ID1/A8**.

Subsequently answered in Section 2 are **ID1/A10** and **ID1/A11** in relation to the impact of higher than anticipated levels of net migration on the need for housing and the impact of significant non-economically active migration as a labour supply constraint to jobs growth.

Section 3

Having established the homes /jobs methodology and West of England based ratio this is then applied to B&NES potential share of West of England pre-recession trend jobs growth to illustrate a potential pre-recession trend housing requirement. Note is then made of the need to assess the impact of lower jobs growth performance in Section 4

Section 4

Having justified the ratio based approach and the ratio itself, Section 4 moves on to justify, in relation to paragraphs 15, 16 and 17 of ID/1, the Council's growth forecast at a time of extreme uncertainty. The Council is confident that the figure of 8,700 net additional jobs (1) reflects an optimistic view of the growth potential of the district (2) reflects the Ministerial Statement on Planning for Growth and (3) forms a suitable basis from which to determine a complimentary 'technical' and subsequently 'policy' housing requirement - based on the application of the Stage 2 homes/jobs ratio. This section provides an update on economic forecasts and suggests that 8,700 jobs remain at the optimistic end of the spectrum. Hence, as the Council has placed its Core Strategy at this end of the spectrum it is unlikely that additional flexibility/contingency is needed to enable stronger performance. Although a higher growth scenario exists for the district (dating from 2010) this is now considered to be too aspirational a figure against which to plan and determine the medium term future of the Green Belt.

Section 4 also provides answers to **ID1/A2** in relation to the more bullish growth aspirations of the West of England LEP and **ID1/A3** in relation to the 'remarkable potential' for growth highlighted in the Investment Prospectus (Appendix 1 of CD4/E9). It also sets out, in relation to ID1/A4 how the jobs target is consistent with the Vision and Objectives of the Core Strategy in respect of realising to the 'potential of the area'. Clearly potential of an area over a specific period of time is constrained by global economic conditions and the demand for goods and services.

Section 5

This reaffirms the conclusions of the Stage 2 Report.

Section 6

Having justified the ratio based approach, jobs target and 'technical' dwellings requirement Section 6 responds to **ID1/A5** to set out why the Council's 'policy' requirement is less than its 'technical' requirement. This is presented within the context of paragraph 33 of PPS3 (as requested in paragraph 20 of ID1). It considers how the Council has weighed other factors to determine an appropriate policy requirement, including the findings of the SHMA (ID1 paragraph 19) the obvious strategy of planning for more housing overall to enable more affordable housing and the under provision of housing in relation to the Local Plan period

(ID1/A6). Again observations are made about the current rate of recovery, the fact that 8,700 jobs is an optimistic forecast and that a lesser yet still stretching figure of 8,000 is also credible.

A number of observations are made here with regard to the need or otherwise for flexibility /contingency in relation to the four bullets under ID/1 paragraph 21 and 22.

Section 7

Section 7 tests the Stage 2 housing jobs multiplier established from the 2004 projections via the aforementioned labour force growth method.

Section 8

In response to the final sentence of paragraph 18 of ID/1, Section 8 updates the Stage 2 Report by repeating the original methodology that established a homes/jobs ratio to establish the relationship between latest 2008 ONS and CLG household projections and the pre-recession West of England jobs growth trend of 91,500. It explains why the methodology is not readily applicable to the 2008 projections as they project forward trends during a volatile rather than stable period of economic growth and net migration This original methodology is then tested via the labour supply method (g).

Section 1

Introduction

- 1.1 From July 2010, following a letter from The Chief Planning Officer, GLG on the revocation of Regional Strategies. B&NES Council undertook to determine its future housing requirement for the period 2006-2026. This began with the establishment of a ‘technical’ requirement, the achievability and sustainability of which was tested against a range of other factors set out in paragraphs 32 and 33 of PPS3 to arrive at a ‘policy’ requirement. On the determination of housing numbers in the absence of Regional Strategy targets the letter from The Chief Planning Officer stated that:

“Local planning authorities will be responsible for establishing the right level of local housing provision in their area, and identifying a long term supply of housing land without the burden of regional housing targets. Some authorities may decide to retain their existing housing targets that were set out in the revoked Regional Strategies. Others may decide to review their housing targets. We would expect that those authorities should quickly signal their intention to undertake an early review so that communities and land owners know where they stand”.

- 1.2 On the need to justify the housing numbers in plans the letter stated that:

“It is important for the planning process to be transparent, and for people to be able to understand why decisions have been taken. Local authorities should continue to collect and use reliable information to justify their housing supply policies and defend them during the LDF examination process. They should do this in line with current policy in PPS3”.

- 1.3 Paragraphs 32 and 33 of PPS3 set out how the appropriate level of housing should be assessed. PPS3 emphasises the need for a collaborative and strategic evidenced-based approach that takes account of other relevant strategies across a range of spatial scales. Key matters to be taken in to account include the Government’s latest household projections, the needs of the economy having regard to economic growth forecasts, and evidence from the SHMA and SHLAA on the need for affordable housing and the availability of suitable land for housing. The Government’s overall ambitions for affordability and housing supply are also important in this regard. Further, PPS3 requires that the Sustainability Appraisal of the social, economic and environmental costs and benefits of development are be considered alongside an assessment of the impact of development on infrastructure, whether existing, planned or newly required.
- 1.4 Whilst reference is also made in PPS3 to advice from the NHPAU, it has since been abolished. Its most recent potentially relevant advice is from mid-2009. This pointed

to a general and regional need for substantial additional housing provision, particularly to tackle issues of overall demand and affordability. However, this has limited weight because: it does not have a particular focus on Bath and North East Somerset; it was prepared in the context of further regional planning which has now been abandoned; it is somewhat dated; and the abolition of the unit must reflect the Government's priorities about the relevance of its work.

- 1.5 The regulations under which DPDs must be prepared enables concerted and meaningful consultation to be undertaken to gather the views of local communities, neighbourhoods and interest groups. The weight and strength of the arguments put forward at Options and Draft Core Strategy stage have also been taken into account to arrive at the proposals that have been submitted for examination.

Section 2

The Stage 2 Report and the analysis of the 2004 projections of population and household growth

- 2.1 Although the 2006-based ONS population projections (June 2008) and CLG household projections (March, 2009) were available to the Council when it undertook to determine its 'technical' housing requirement, it based its assessment on the Revised 2004-based population projections.

- 2.2 The EiP Panel's recommendations were informed by the 2003 based ONS household projections (which projected household growth over the plan period of 13,000). The Secretary of State's Proposed Changes were informed by the 2004-based figures, which projected household growth in the district of 17,000. The 2006-based figures projected household growth of 19,000. The most recent set of projections were published in November 2010 (2008-based) and project household growth of 16,000. The local projections of household change should be seen in the context of sub-regional projections for the West of England that have risen from 93,000 (2003) to 120,000 (revised 2004), 151,000 (2006) and 156,000 (2008). The 2006 and 2008-based projections suggest household growth substantially above any evidence or proposals for delivering housing in the West of England sub-region.

- 2.3 The housing targets within the Proposed Modifications RSS were not revised when in March 2009 (with the RSS yet to be finalised) the much higher 2006-based projections were published. Therefore, the use of the 2004 projections as the basis for the Stage 2 Report enabled comparison with the conclusions drawn by the Secretary of State. In November 2010 CLG published the latest 2008-based household projections. Due to the consultation timetable for the Draft Core Strategy (December-January 2010/11) the implications of these projections were not considered at the time of publication. Section 8 of this paper presents the Council's assessment of the impact of the 2008 projections and its conclusion in relation to the level of housing that should be planned for.

Box 1: Taking account of Population and Household Projections when Determining Future Housing Requirements

ONS population projections are based on a set of demographic trend-based assumptions about future fertility, mortality and migration mainly over the previous 5 years. The ONS stresses that projections are not forecasts and do not attempt to predict the impact that future government policies, changing economic circumstances or other factors might have on demographic behaviour. They provide the population level and age structure that would result if the assumptions made were to be realised.

District population and household projections depend on regional projections and these are strongly influenced by assumptions about inter-regional and international migration, themselves influenced by relative economic performance, employment opportunities and wages.

The 2004-based, 2006-based and 2008-based household and population projections reflect the continuation of past (pre-recession) and for 2004 (pre EU accession net migration trends). Pre-recession trends in economic growth (and economically related migration) have been curtailed by the economic down turn and recession of 2008-09 and the depression thereafter (discussed further in Section 4)

This calls into question the reliability of the population and household projections as an absolute basis for future planning policy. Considered more important/useful by the Stage 2 Report is the relationship that can be established between the 2004-based pre-recession trend based population and household projections and the pre-recession trend based employment projection. This, it is argued, presents a homes needed per worker ratio that can be applied to alternative rates of economic and employment growth for the period 2006-2026 that take into account the impact of the recession.

Further, Sections 7 and 8 of this paper uses the relationship between population and household projections to derive homes to supply ratio that has been used to test the homes to jobs (labour demand) ratio of the Stage 2 Report. This is provided for both the Revised 2004-based and 2008-based projections. The labour force to household ratio can be used to determine the extent to which housing supply needs to increase to enable the increase in labour supply likely to be required by alternative jobs growth forecasts. The projected age structure of the population alongside changes to participation rates and the state retirement age is important in this regard.

Explanation of Tables A1-A6 of Appendix 2 of the Stage 2 Report – see revised appendix 2 data attachment to the paper as Appendix A

- 2.4 Beginning with the Revised 2004-based ONS population projection appendix 2 of the Stage 2 Report strips out non-private household population growth (as per the CLG process but using alternative dRSS Chelmer assumptions) to arrive at a projected private household population.
- 2.5 To this figure a household representative rate (again derived from dRSS Chelmer assumptions) has been applied. The resultant private household projection was not shown within the original Appendix 2. It would logically have followed Table A4. The household projection has been inserted into the revised Appendix 2 as Table A5 with knock-on effects on the other table numbers. The West of England private household projection is for growth of 123,600. For B&NES growth of 15,000 is projected. These projections are broadly comparable to CLG's own projections. The difference for the West of England is only +3,600 (3.0%) and for B&NES the difference is -2,000 (-11.7%).
- 2.6 To these household projections a multiplier of 1.025-1.027 (dRSS Chelmer derived) has been applied to calculate the increase in the housing stock needed to cater for the 2004 population as projected to change by size, age structure and household structure by 2026. This multiplier is based on the existing relationship between the total housing stock and total resident households. It allows for rates of sharing homes by multiple households - although this is offset by vacancy rates, second homes and losses from the housing stock.
- 2.7 This results in an estimated housing projection of 126,763 for the West of England 15,408 for B&NES.
- 2.8 The 2004-based projections of household growth and housing are termed as 'pre-recession trend' in the Stage 2 Report. This means that the population projections reflect the continuation of the natural change and migration trends that drove population growth in the sub-region in the economically and demographically stable 5 years prior to 2004. These pre-recession population trends are projected forward to 2026 alongside assumptions for age/gender household representative rates to generate a pre-recession trend household projection.
- 2.9 As set out in Box 1, it is not necessarily the absolute Revised 2004-based (pre-recession trend) projections of population, household and housing growth that is of most interest, but the way in which these relate to a pre-recession trend based employment projection. This is unless the projections of population, households and housing happen to generate a supply of labour that can be supported by a separate forecast of economic and employment growth (demand for labour) potential of the area. In such circumstances the projections would form a robust 'technical' housing requirement from which a policy 'requirement' could be developed; taking account of the matters

referred to in paragraphs 32 & 33 of PPS3. However, the Council considers that pre-recession trend economic and employment growth is not achievable for the entire Core Strategy period and that a lower level of jobs growth should be planned for. Its reasoning for this is set out in Section 4.

- 2.10 At this point it is timely to address the questions posed in **ID1/A7, A8 and A9**.
- 2.11 In relation to ID1/A7 it should be clear that the West of England housing figure of 126,763 that has been used as the housing component of the Stage 2 homes/jobs ratio (and the equivalent B&NES figure of 15,408) are entirely derived from (1) the Revised 2004-based population projections (and its assumptions in respect of fertility rates, mortality rates, births, deaths, life expectancy, natural change, age structure, inward, outward and net migration (both internal and international) and (2) dRSS Chelmer household representative rates from 2006, which although a little different from those applied by CLG, do not fundamentally change the household projection, particularly for the West of England.
- 2.12 In relation to ID1/A8 (bullet 1) and ID1/9, the Stage 2 report states at paragraph 8.2 that, within B&NES, the locally generated need for additional housing is 6,000. This figure is an output from the Chelmer zero net migration assumptions that were run for the RSS in 2006 and are compatible with the 2003-based ONS population projections.

Chelmer zero net migration assumptions run for the RSS in 2006

	2006	2011	2016	2021	2026	Change
Private Household Pop	164,001	163,347	162,895	162,912	163,081	-920
Total Households	71,352	72,229	73,784	75,638	77,222	5,870
<i>HRR [implied]</i>	2.298	2.26	2.207	2.15	2.11	0.188
Total Dwellings	73,291	74,192	75,789	77,693	79,321	6,030

- 2.13 This calculation needs to be updated based on the revised 2004-based ONS population projections². Firstly, a zero population change scenario is presented to illustrate the impact on the need for additional housing of falling household sizes (if the 2006 population level is to be maintained). The second stage presents the cumulative impact of natural change. For B&NES only about 4,500 of the 2004-based population projection (21.5%) is due to natural change. It is important to understand that the natural change figure includes both direct natural change (from within the local population) and indirect natural change (mostly arising from the children of migrants, whether internal or international). The Council is unable to separate these components but has reduced the figure by 25% to account for migration³. Further it should be noted

² Section 8 present the same calculations under the 2008-based ONS population projections and CLG household projections

³ Justify re proportion of UK 2004-based population increase that is projected from indirect natural change.

that the 2006 private household population figure is derived from the 2004-based projections. It is not the Mid-2006 population estimate.

1. Locally generated housing need assuming zero net population change but declining household size

	2006	2011	2016	2021	2026	06-26
Private H'hold Pop	170,916	170,916	170,916	170,916	170,916	0
Av H'Hold Size	2.31	2.28	2.23	2.18	2.15	0.16
Private H'holds	74,000	74,950	76,650	78,400	79,500	5,500

2. Locally generated housing need assuming natural change from 2004-based projection and declining household sizes

	2006	2011	2016	2021	2026	06-26
Private H'hold Pop	170,916	172,041	173,166	174,291	175,416	4,500
Less allowance for indirect natural change of 25%	170,916	171,766	172,616	173,466	174,316	3,400
Av H'hold Size	2.31	2.28	2.23	2.18	2.15	0.16
Private H'holds	74,000	75,335	77,400	79,570	81,080	7,080
Homes	76,010				83,280	7,270

- 2.14 Therefore, in relation to B&NES, of its share (15,408) of the West of England housing component of 122,763 homes that feeds into the homes/jobs ratio of 1.39 about 5,500 homes (36%) will be needed just to avoid population shrinkage and cumulatively, 7,300 homes (47%) will be needed under a zero net migration scenario.
- 2.15 The first bullet of ID1/A8 notes that household change within the existing population will include change in non-economically active households. It is perhaps more useful to refer to non-economically active people rather than households and also not to consider change generated at the margin but within the overall total population as projected at the end of the plan period compared to at the beginning.
- 2.16 The extent to which local population, household and housing growth will generate an increase in the population of working age and in the labour force depends on overall labour force participation rates and the impact of the rise in the state pension age. These assumptions must be applied to the whole population, not merely growth at the margin.
- 2.17 Sections 7 and 8 explore these matters for both the Revised 2004-based and 2008 based projections but do not distinguish between the artificial zero net migration scenario and the overall projection including net migration. Ultimately, that part of the household and derived dwellings growth projection related to population growth is derived from the projection forward of all the private household population, not just that part which is economically active. Broadly speaking across the whole population

there is an economic participation / non participation ratio of 1/1. This means that the ratio caters for the whole range of persons within the District, whatever their economic status.

- 2.18 In relation to the second and third bullets of ID1/A8, the remainder of the housing figure (i.e. 15,408 less 7,270) that forms the housing component of the homes/jobs ratio relates to the demand for housing from 'net' migration (internal and international) for both economic and non-economic net migration. ID1/A8 refers to 'in' migration but the Council considers that it is the net figure that needs to be considered. Net migrants may be economically active when they arrive, but not so in 2026. The reverse is also true. Again; it is not useful to split these components of change at the margin. What matters is stated at paragraph 2.16.
- 2.19 That the net migration component of household/housing growth is entirely derived from ONS projections of population change (that projects forward past trends and existing age structures) means that the homes figure and homes /jobs ratio into which it feeds is based on the District's local circumstances. This means that just as the ONS projection is a projection that takes account of in-migration of all kinds, so does the derived household and dwellings projection in the Stage 2 report and the ratio that this feeds into.
- 2.20 If the housing requirement for B&NES is controlled to less than 15,408 because of less than pre-recession trend employment growth the Council would wish to ensure that it is still planning for sufficient housing (7,080 units) to deal with falling household sizes and natural change, plus further housing to boost the local supply of labour to the point where it is comparable to forecast jobs growth. The ratio allows for sufficient net migration to achieve this (whether internal or international). Ultimately, aside from the control that can be exercised with regard to affordable housing, the Council cannot control who will occupy the new housing that is built. It is quite possible that in a competitive housing market migrants may outbid local people. So long as the supply of labour is sufficient to match job generation this will have more social rather than economic implications.
- 2.21 That all projected net migration in the 2004-based projection is not catered for does not matter economically so long as the supply of labour is sufficient to match the demand for labour. International migration is a dominant feature in the 2004-based population projection for B&NES. This can be affected by changes both sudden and prolonged to economic, social and political factors. Behaviour may change in response to new post-recession economic landscape rather than reflect based trends.

Section 3

The Stage 2 Report and the relationship between projected population & household growth, derived housing demand and employment change

- 3.1 For the West of England sub-region, the Stage 2 Report highlights the importance of the relationship between a pre-recession trend dwellings projection of 127,038 and the pre-recession trend projection of economic and employment growth made by Cambridge Econometrics of 91,500 jobs (equivalent to 2.8 % GVA per annum for the SW and 3.2% for the West of England). The relationship is a homes per job ratio of 1.39 that it argues can be applied to other forecasts of employment growth to determine the appropriate level of new housing⁴.

At the economic geography of the West of England sub-region it is reasonable to expect that (at the margin at least i.e. new growth) the future additional labour requirements of the economy should be almost entirely be sourced from people living in homes within the sub-region itself. This will enable more sustainable patterns of movement and ensure that future economic growth does not result in an increasing share of labour commuting into the sub-region for work.

To achieve this, sufficient housing needs to be provided to house both the projected need for additional workers, projected additional non-workers arising from natural change and allow to for a reasonable level of non-economically related migration. Therefore, although the sub-region is clearly an open system in relation to net migration in terms of the supply /demand for labour it should be seen as a closed system.

Intra-regional commuting between Districts in a sub-region such as the West of England is inevitable. The same level of self-containment is not such a realistic policy objective at local authority level. Long standing structural relationships between places are not readily shifted over 20 years. However, growth can be planned for at the margin by matching homes and jobs to at least enable the 'perfect travel to work behaviour' of additional resident workers' i.e. that they will decide to live and work in B&NES and not live in B&NES and commute elsewhere. In all likelihood 70-80% will behave 'perfectly' and 20-30% will out-commute elsewhere - to be replaced by in-commuters from neighbouring areas.

- 3.2 The relationship to be achieved between dwellings and jobs is based on the historical relationship in the West of England witnessed during the stable years of 1999-2004. During this period population change was sufficient to satisfy the labour demands of a

⁴ Basing this calculation purely on the published CLG 2004 based household projection for the West of England converts to a lower dwellings requirement of 123,107 and a lower ratio of 1.35.

growing economy to the extent that it could grow at 3.4% GVA per annum (within the context of South West GVA growing at 2.8% pa and UK GVA growing at 2.7%pa).

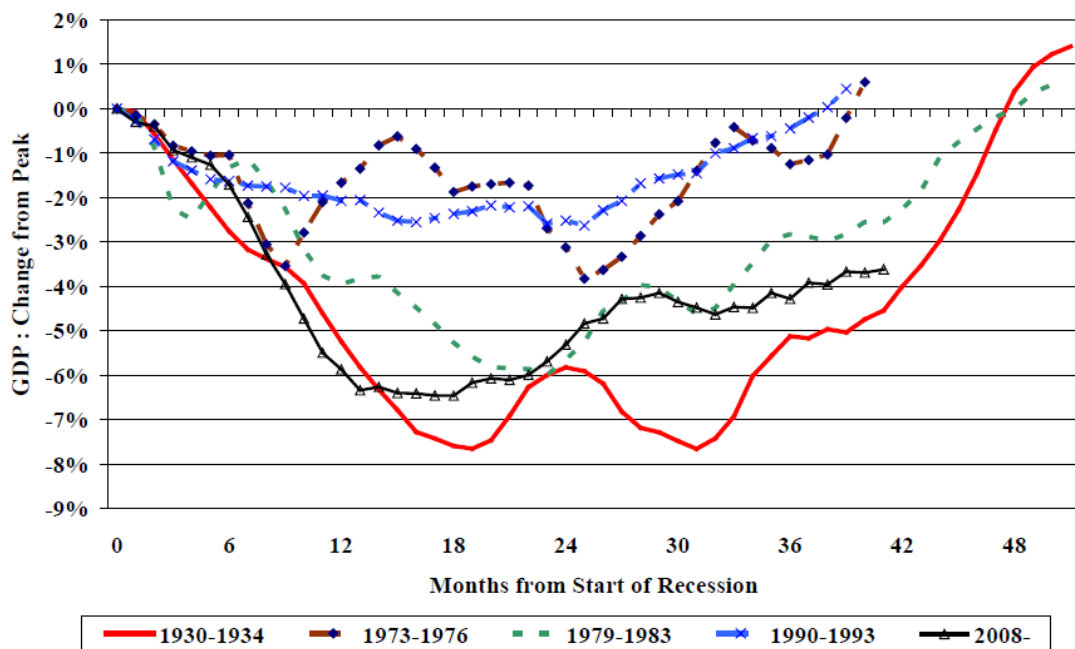
- 3.3 Cambridge Econometrics applied this rate of growth to 2006 jobs totals and made assumptions about productivity to generate a projection of 91,500 additional jobs to 2026. If the West of England was to grow at the pre-recession trend rate and B&NES were to generate 16% of new employment (its 2006 WoE share) this would equate to 14,640 net additional jobs. If the multiplier of 1.39 homes per job is applied to B&NES market share of pre-recession trend jobs growth, it generates a housing requirement of 20,350.
- 3.4 B&NES share of the West of England 2004-based population projection is 12.6%. Its share of the CLG household projection for the West of England is 14.2%. Its share of the Stage 2 household projection is 12.5%. If it was to claim a 12.5%-14.2% share of pre-recession trend employment growth this would result in a housing requirement of between 15,900 and 18,000 if the ratio of 1.39 is applied.
- 3.5 However, for the reasons set out in Section 4 pre-recession trend jobs growth for the West of England and B&NES is not considered to be achievable and it is necessary to apply the homes/jobs ratio to a lower more realistic employment growth target. In the current climate what this constitutes for the period 2006-26 is not easy to pin down. Current events and the darkening global economic landscape makes the Core Strategy figure appear to be at the optimistic end of the spectrum.

Section 4

The Stage 2 Report and the identification of the labour needs of the local and sub-regional economy

4.1 The Draft RSS was prepared, examined and proposed for modification prior to the economic slowdown and subsequent recession of 2008-9. This has been followed by a prolonged period of depression (whereby output remains depressed below its previous peak). The size of the UK economy is still approximately 3.5% below its previous peak of early 2008. Based on current Office of Budget Responsibility (OBR) estimates (see paragraph 3.8) it is not likely to be until 2013 that GDP recovers to its previous peak. In effect this results in the loss of 5 years of growth from the RSS period i.e. 25% of the pre-recession expectation of 91,500 jobs and is equivalent to a reduction in the jobs forecast to 68,625 jobs in the West of England. The depth and length of the current downturn is well documented and is well illustrated in the figure below.

The Profile of the Recession and Recovery



4.2 The prospects for employment growth in B&NES and the West of England vis-a-vis RSS policy targets have been re-evaluated by the Council to take account of the impact of these factors. Three stages of work have been prepared and triangulated with the resultant forecast closely comparable with the March 2011 forecast of the Office of Budget Responsibility (Para 3.8). This OBR forecast will be reviewed on 29th November and is widely expected to revise down expectations for 2011 (see paragraph 3.10).

4.3 In February 2010 the economy was beginning to slowly rebound from recession, the RSS had yet to be adopted and a general election and potential change of government

was on the horizon. Against this background the Council commissioned **Roger Tym and Partners** to provide a view on the District's prospects for economic and employment growth vis-à-vis the position of the RSS. The Business Growth and Employment Land Study Update (CD4/E2) considered a range of growth forecasts prepared by financial institutions in the City. The report came to the conclusion that average annual growth for the South West could average between 1.6-1.9% GVA per annum for the RSS period and that for B&NES (with the West of England tracking marginally above SW growth) this translated to additional jobs growth in the order of 8,700-11,200. This average annual rate of GVA growth takes account of losses during the recession and period of low growth to Autumn 2010.

- 4.4 During the subsequent preparation of the **Stage 2 Report, Oxford Economics** on behalf of SWRDA and SW Council's published economic projections for sub-regions within the South West. The Oxford projection introduced three scenarios of 3,000, 5,900 and 11,300 net additional jobs within B&NES. Within the Stage 2 Report, the Oxford central projection came to be regarded as a 'low' jobs growth scenario with the Roger Tym & Partners range of 8,700-11,200 regarded as central and high scenarios.
- 4.5 At this time the Council's Economic Development section commissioned **GWR Business West** to validate the central projection for economic and employment growth to ensure that it represented a locally evidenced prospectus for growth. To this end a **Smart Economic Growth Report** (CD4/E10) was prepared. The Council seeks to enable 'smart' and 'balanced' economic growth. This means maximising workplace output growth with minimum use of workers and floorspace and making sure that the growth in local workplace jobs matches the growth in the local labour force such that the need to commute is minimised.
- 4.6 The Smart Growth Report is the Council's most refined piece of economic and employment forecasting and benefits from more locally specific sectoral modelling and intelligence about key sectors and key employers. A key assumption was that nationally the economy would grow at an average rate of 1.97% per annum for the Core Strategy period and that the SW would grow at 2.01% per annum.
- 4.7 Three scenarios were developed in order to test the impact of this growth rate on the B&NES Stage 2 Report. The effect of B&NES tracking at either 1.61%, 1.9% or 2.13% per annum was then investigated. The study considered that the central projection of 8,700 net additional jobs was akin to an average annual economic growth rate within B&NES of 1.9% per annum. The study showed that in order to deliver a net change of 8,700 jobs, 14,100 gross jobs would need to be created given expected losses in manufacturing and defence. Close inspection of the way in which various sectors will need to perform and the implications of this on employment floorspace and the built environment shows that the Council is planning to enable unprecedented levels of job generation. The scale of the task faced by B&NES in growing its economy over the next 15 years is substantial. Realising the central projection is considered to be an

ambitious and challenging proposition for the District. The central economic assumption i.e. the lower end of the Tym estimate is therefore regarded as being sound, with the low projection lacking ambition and the higher figure unachievable.

- 4.8 The Office of Budget Responsibility Forecast (March 2011 – CD1/15) provides a useful update on growth prospects of the UK economy. The OBR expects economic recovery to be weaker than the recoveries of the 1980s and 1990s. This reflects the effects of the fiscal consolidation, the relatively slow easing of tight credit conditions and ongoing private sector de-leveraging (debt /risk reduction). The OBR is slightly more pessimistic about the level of GDP over the next year than the average of external forecasters, but is slightly more optimistic than them at the end of the forecast horizon.
- 4.9 In September 2011 the Treasury’s summary of independent forecast showed the average projection for the UK reduced to 1.1% for 2011 and 1.7% for 2012. This compares with averages of 1.7% and 2.1% in the Treasury’s April summary. This, combined with the gloomy latest edition of the OECD World Economic Outlook, suggests that the Oxford Economics Central Projection of 2.3% pa 2011-20 set out in Table 3a of the Stage 2 report looks increasingly optimistic (especially over the next 5 years). If anything this will have resulted in a relatively optimistic projected growth of employment, and therefore related requirement, in B&NES, in the study, at least in the period 2011-2016.

Actual Performance 2006-2010					OBR Central Forecast (March 2011)				
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
2.9%	2.6%	0.5%	-4.9%	1.3%	1.7%	2.5%	2.9%	2.9%	2.8%

- 4.10 Nationally, this equates to an annual average growth rate of 1.52% between 2006 and 2015. If the OBR forecast growth rate for 2015 (2.8%) is extrapolated to the end of the 2025 calendar year, the average annual growth rate for the UK for the 20 year period would be 2.16%. Therefore, even a return to pre-recession trend growth from about 2013 limits annual average performance over the entire Core Strategy period to a little over 2%. The decline in economic output during 2008-09 will have a lasting impact on the overall growth curve. Historically, the South West/West of England/B&NES tends to perform a little above the UK rate, yet the Smart Growth Report plans for a little below this rate. However, given the inherent uncertainty about long term forecasting, and the known local employment reductions e.g. the departure of the MoD from Bath, the Council considers that its growth assumptions to be reasonable, realistic, stretching and within touching distance of the March 2011 OBR forecast (which is likely to be revised down for the period 2011-2015).
- 4.11 On November 29th 2011 the OBR’s latest economic forecasts will be released. These will be followed by the Chancellor’s Autumn Statement which will give an update on the state of the economy and respond to the latest analysis from the OBR.

- 4.12 The West of England Local Enterprise Partnership was approved by Government in 2010. The LEP submission outlined its ambition to achieve 95,000 new jobs by 2030 and 3.4% cumulative annual economic growth by 2020. This is from 2010 onwards (i.e. starting from a pre-recession low point). This appears as is very much higher than the B&NES central / Core Strategy growth scenario but when the period 2006-2010 is factored in the overall average for the Core Strategy period for the West of England falls to much near 2.0% per annum.
- 4.13 Further the LEP is a business led organisation and targets have been driven by business 'aspiration' for growth. The B&NES Core Strategy growth target is derived from national forecasts, local forecasts, local sectoral intelligence and information on site deliverability. It is a more 'robust' approach. The LEP have little supporting evidence on their website in order for their headline figures to be interrogated.
- 4.14 The West of England Authorities are planning for a combined level of growth in their Core Strategies of about 60,000 jobs. This equates to growth of 3,000 per annum. Given the more recent statutory processes in relation to Council endorsement of documents to be examined and the outcome of the Bristol EiP, it is Core Strategies that reflect the current position of each authority to 2026.

Section 5

The Stage 2 Report: Conclusions and Recommendations

- 5.1 The Stage 2 Report concludes that in order for housing supply to absorb demographic change and support economic and employment growth potential (the demand for jobs) it will need to increase by 12,100 dwellings (605 per annum). This is based on the number of jobs in the economy rising by 8,700 – which during the Autumn of 2010 had come to be regarded as the central and (taking account of recent losses e.g. Somerdale, Keynsham and known future losses e.g. MoD Bath) most likely projection. The Stage 2 Report considers that high employment growth of 11,200 net additional jobs would require 15,568 dwellings.
- 5.2 The ratio of 1.39 homes per worker enables a much more sustainable relationship to be achieved between employment, labour and housing vis-à-vis the Draft RSS and Proposed Modifications. Although the emerging RSS proposed more housing and more jobs, the resultant homes/jobs ratio was just 1.0. Based on the evidence in the Stage 2 Report – it is unlikely that would have provided a good match between additional employment growth and labour supply within the sub-region.
- 5.3 Within both scenarios the estimated locally generated demand for housing from falling household sizes and locally generated natural change is estimated (based on the Revised 2004 projections) as being about 7,000 dwellings. This has been explained in paragraphs 2.10-2.13.

Section 6

Justification for the housing supply 'gap' between the technical requirement and policy target.

- 6.1 Having justified the homes/jobs ratio based approach, the ratio of 1.39 , the jobs target and 'technical' housing requirement, Section 6 responds to **ID1/A5** to set out why the Council's 'policy' requirement is different to its 'technical' requirement. This is presented within the context of paragraph 33 of PPS3 (as requested in paragraph 20 of ID1). It considers how the Council has weighed other factors to determine an appropriate policy requirement, including as requested, the findings of the SHMA (ID1 paragraph 19) and under provision of housing in relation to the Local Plan period (**ID1/A6**).
- 6.2 The Stage 2 Report suggests a housing requirement of 12,100 (revised from 11,600). This is derived from a jobs growth forecast of 8,700.
- 6.3 The shortfall against the Local Plan housing delivery target was 850 at 2006. This has not been added to the recommended requirement. The SHMA identifies a newly arising need for affordable housing of 857 per annum and a backlog need of 2,800 households at 2006. The recommended requirement has not been supplemented with additional housing in order to enable a greater proportion of this need to be met.
- 6.4 The Core Strategy makes provision for 11,000 homes. The reasons for not planning for 12,100 homes, for not factoring in an extra allowance to deal with the Local Plan shortfall, and for not seeking more housing to enable more affordable housing are set out below.

Shortfall in Local Plan delivery 1996-2006

- 6.5 Five years have passed since 2006. The Council considers that those households who may have been affected by a shortfall in delivery to this point will have found housing elsewhere within the sub-region or beyond and that the Local Plan shortfall need not be added to the Core Strategy housing target.

Strategic Housing Market Assessment - newly arising and backlog affordable housing need

- 6.6 Chapter 4 of the SHMA works through the methodology for calculating newly arising housing need and provides estimated average annual figures for Bath and North East Somerset and the wider Housing Market Area. In addition the figures in Table 6.1 a backlog of affordable housing need for B&NES is estimated at 2,800.

Table 6.1, Annual total housing requirements of households in need

	B&NES	Bristol	N. Som	S. Glouc	WoE Core*
Net social rented need	786	1176	735	727	3,424
Net intermediate need	61	351	169	176	757
Total need	847	1526	904	903	4,180
% social rented / intermediate	93/7	77/23	81/19	80/20	TBC

Excluding Mendip DC and West Wiltshire DC (now part of Wiltshire UA)

- 6.7 On the basis of the evidence in the SHMA there is a well justified need for a substantial scale of affordable housing. The scale of newly arising need is more than likely to not be delivered in any realistic scenario. As set out in B&NES/2 the estimated delivery from the Core Strategy is 150 per annum. The additional affordable housing that could be generated from urban extension development proposed in the dRSS and Proposed Modifications would be 80-200 per annum respectively, raising the overall total to 230-350 per annum. This is still at best meeting only 40% of estimated newly arising need. Addressing the backlog itself would require additional urban extension development of 8,000 dwellings.
- 6.8 The Council is aware of the amount of additional affordable housing that could be generated from the various Green Belt sites that are being promoted and the implications of not providing additional affordable housing. It is recognised that development in the Green Belt would at least narrow the gap between the estimated need for affordable housing and its projected supply under the proposals of Core Strategy. However, on this matter the Council weighs environmental costs, infrastructure implications and overwhelming public resistance to development in the Green Belt more highly.

Consideration of urban extension development

- 6.9 Urban extension development with the Green Belt is clearly an option for making good the difference identified in the SHLAA between the availability and deliverability of land for brownfield redevelopment, committed greenfield development and the 12,100 homes suggested by the Stage 2 Report. The difference is about 1,000 homes. As previously stated, development in the Green Belt could also narrow that gap between the estimated need and likely supply of affordable housing.
- 6.10 Paragraphs 3.21-3.25 of Topic Paper 2 set out the Council's position on urban extensions. Paragraph 2.5 of Topic Paper 2 refers to the Council's Strategy of directing development towards brownfield sites in need of redevelopment in the most sustainable locations. Making land in the Green Belt available for urban extensions is likely to detract from this strategy, especially in times of limited investment.

- 6.11 The Council has assessed the options of urban extensions carefully and Para 3.22 of Topic Paper 2 summarises briefly their environmental impact. The Council and other statutory bodies have concluded that harm caused by urban extensions outweighs the benefits they would bring, particularly in highly sensitive environment of the City of Bath World Heritage Site.
- 6.12 Furthermore, the Government's focus on economic growth must be read alongside its commitment to sustainability and protection of Green Belts. Even in its March 2011 Plan for Growth statement (CD1/16) in which the Government sets out the radical changes needed to the planning system to put the UK on a long-term path to economic growth, the Government re-iterates commitment to maintain the Green Belt.

Results of Public Consultation

- 6.13 The draft National Planning Policy Framework states that Local Plans are the key to delivering development that reflects the vision and aspiration of local communities. The thrust of the localism bill and the abolition of the regional tier of planning is being executed in order that local authorities and local communities can agree the strategy appropriate for their own areas rather than being dictated to. As set out in paragraphs 3.18-3.20 of Topic Paper 2, the Core Strategy is the result of extensive local engagement. A range of spatial options has been tested with local communities and the agreed Strategy has been shaped by this process.

Duty to co-operate

- 6.14 In addition, an urban extension within B&NES on the edge of Bristol is not in accordance with the new duty to cooperate. This duty is being strengthened by the Government in the Localism Bill. The Duty will require neighbouring LPAs to work together during the preparation of their local plans, in particular in relation to strategic matters. Bristol City Council are not planning for urban extensions (in their adopted Core Strategy) and do not support extensions to Bristol outside of the city Boundary.

The Council is planning for high level growth

- 6.15 Whilst not planning for 605 homes per annum as suggested in the Stage 2 Report the Council is planning for an average delivery rate 550 homes per annum. This is an unprecedented rate of housing delivery and represents an uplift of 20% on the average annual target rate of the Local Plan. Further it represents an increase of 44% on the delivery rate actually achieved during the Local Plan period of 380 per annum.
- 6.16 The Council maintains that the net job growth forecast and policy expectation of 8,700 upon which its housing requirement was based is well argued based on the information and outlook between Spring and Autumn of 2010. The past 12 months

appear to suggest that this forecast may be towards the optimistic rather than the pessimistic side of expectations. The next few years seem likely to be choppy in respect of economic recovery which may well temper overall expectations

- 6.17 Based on the Council's methodology and the homes/jobs ratio of 1.39, net job growth of 8,000 (92% of 8,700) would require c. 11,000 new homes.
- 6.18 The Smart Growth report further evidences the Core Strategy's ambition with respect to economic and employment growth. The degree to which various economic sectors would need to perform is stretching. The implication of enabling jobs growth in business services as far as the built environment is concerned is very challenging. The amount of new office space required and being planned for within the Bath market is substantial and again unprecedented. The sensitivity of the built environment to change compounds this challenge

Commuting Patterns

- 6.19 The Council is planning for much more sustainable alignment of homes, jobs and infrastructure than has been achieved in previous planning cycles.
- 6.20 As stated in paragraph 3.1 above it is inevitable within a sub-region such as the West of England there will be a degree of commuting between the Districts, principally due to the economic influence of the main commercial centres of Bristol and to a lesser extent Bath. It should also be accepted that the job growth and housing planned for in B&NES and across the West of England is planning at the margins in terms of existing jobs and homes across the District and more particularly the current and well established relationships across the sub-region.
- 6.21 The B&NES Local Economic Assessment (LEA) (CD4/E7) notes that there are strong commuting patterns between B&NES and the rest of the West of England. Overall, in and out-commuting from B&NES roughly balance each other out, although in relation to the West of England out-commuting exceeds in-commuting. The 2001 census shows that 14,330 (18%) of the B&NES resident workforce commute out of the District to work in other parts of the West of England and 9,360 (12%) of workers that work within B&NES are residents commuting into B&NES from elsewhere in the sub-region. The LEA also notes the dominant nature of Bristol within the sub-regional economy and the risk that B&NES might become a dormitory area.
- 6.22 Whilst the impact of the Core Strategies is likely to be limited it is also true that the Core Strategies of the 4 Unitary Authorities should seek to sustainably shape commuting relationships and seek to achieve greater alignment of homes and jobs across the West of England. The B&NES Core Strategy (and the Council's Economic Strategy) seeks to plan for, encourage and deliver significant job growth and a

diversified economy in Bath. This should help to address the risk identified in the LEA of B&NES becoming a dormitory area.

- 6.23 According to the 2001 census approximately 70% of B&NES workforce (employed in jobs in the District) is resident in B&NES, meaning that about 30% commutes into the District from outside. Similarly 70% of the resident workforce also works in B&NES, again meaning about 30% commutes out from B&NES.
- 6.24 The Core Strategy plans for 11,000 homes and 8,700 jobs. Through application of the homes to jobs ratio of 1.39 there is an evidence based need to make provision for 12,100 homes to provide sufficient housing to ensure (at least in theory) 100% of net additional jobs could be filled by B&NES resident workers. If 70% of jobs are filled by B&NES resident workers this would lead to a requirement of 8,465 homes i.e. additional 8,700 jobs x 70% = 6,090 jobs (or workers). 6,090 workers x 1.39 = 8,465 homes.
- 6.25 Given that the Core Strategy is planning for 11,000 homes this provides the opportunity for a greater proportion of new jobs to be filled by residents within B&NES. Theoretically, this reduces the need to travel. This is in accordance with strategic objective 1 in the draft Core Strategy.
- 6.26 Whether the theoretical reduced need to travel results in proportionally less commuting into and out of the District will, as noted above, be shaped by a myriad of factors outside the control of the B&NES Core Strategy e.g. comparative house prices across the sub-region and the level and type of economic growth in Bristol.
- 6.27 Whilst the influence of the Core Strategy on commuting patterns may be subject to some uncertainty it is evident that in comparison with recent job growth/housing completions at a District-level the Core Strategy plans for a greater alignment of jobs and homes than has been achieved in the recent past (see table below). Therefore, the Core Strategy is moving in the right direction in terms of planning for a more sustainable alignment of job growth and new housing.

1996-2006		Core Strategy: 2006 -2026	
Dwellings	3,719	Dwellings	11,000
Job Growth *	7,078	Job Growth	8,700
Dwellings/Jobs	0.53	Dwellings/Jobs	1.26

**Job growth = employee job growth as recorded by ONS annual business inquiry employee analysis*

Justification for no Green Belt contingency

Would the Core Strategy be able to accommodate a greater scale of economic growth if the national / regional/ sub regional economy was stronger than predicted or would it restrain higher growth?

- 6.28 The Council is already planning at the optimistic end of the economic growth spectrum. The scope for additional growth pressure is therefore considered to be unlikely and limited. The fact that economic growth may be weaker than that which is being planned is also a valid consideration. The prospects for the short to medium term (1-5 years) appear to be below OBR expectations of just 6 months ago. Downward revisions for the short term will affect the longer term growth curve to 2026.
- 6.29 Within this context, housing supply and the supply of labour is not likely to be a constraint on the achievement of a greater scale of economic growth - if this were indeed to occur. The likely scope of any additional economic growth (demand for labour) at the margin could be accommodated by a small increase in commuting from surrounding areas. Given that stronger growth is unlikely and if it occurs at all is likely to be marginal in terms of additional employment growth, the sustainability of the strategy (in terms of the alignment of jobs and workers) will only be weakened by a very small fraction if housing supply cannot be boosted locally.
- 6.30 This is a very uncertain time to be planning for a long term economic and employment growth target. Establishing a contingency at this stage could have potentially negative consequences for the deliverability of brownfield sites if developers (with both brownfield and greenfield land interests within the District) manipulate delivery in order to make sure that the Council cannot identify a 5 year housing land supply. Identifying contingency may lead to a withdrawal of resources from more complex brownfield sites in favour of accelerating housing supply pressure in order to bring forward more profitable greenfield sites. The net impact of the coming on stream of a contingency site on delivery may be zero.

If household formation, migration and other demands on housing were greater than allowed for in the multiplier, how/when would any such pressures/consequences be identified and would there be an opportunity to accommodate greater provision than currently planned for?

- 6.31 If ONS and CLG continue to publish projections of population and household change this will enable the Council to keep under the review the assumptions and strategy that it has planned for to 2026. The first projections after the 2011 census will be particularly useful in this regard. Potentially, 2010-based, 2012-based and 2014-based projections could be published before 2016. Whilst it may be difficult for the Core Strategy to react to these in the short term there is certainly scope to modify the

strategy and housing delivery trajectory over the second half of the plan period. This would most likely involve an extension of the plan to at least 2031-2036.

6.32 This paper has urged that caution should be exercised when looking at trend-based population and household projections in isolation. The relationship with separate forecasts of economic and employment jobs growth needs to be considered as these may affect short term trends, particularly in relation to net international migration (as the most volatile variable affecting the projections). Again, over the next 5 years the Council will be able to monitor the accuracy and achievability of the forecasts that have evidenced the Core Strategy. Further, additional twice yearly OBR forecasts and Treasury summaries of independent forecasts will be available for scrutiny. In tandem with population and household projections these may or may not trigger the need to review the growth trajectory that the Council is planning for.

6.33 Within the context of a wide evidence base the Council has made a judgement about the weight that it applies to the Green Belt and the costs and benefits development within it. If the context for the plan were to change this judgement /weighing process, would, via review of the Core Strategy, be needed once more.

Is there sufficient flexibility to accommodate the planned scale of growth if there is any slippage in the delivery of the major sites or lower than expected capacity of housing on such sites?

6.34 Within the current strategy, there are few strings that can be pulled in order to react to slow delivery or reduced capacity.

6.35 However, it should be borne in mind that the current capacity of the MoD sites in Bath as set out in the housing trajectory is regarded as a minimum level of achievable development. The Placemaking DPD will explore in greater detail the extent to which a higher density of development should be pursued. Up to 1,000 units could be achieved at Foxhill. The SHLAA estimate is 700.

6.36 Further, if the Council were permitted to include a windfall allowance for the 10 years between 2012 and 2022 additional flexibility could be achieved. 100 units per annum are highly probable, and 140 units per annum is still a realistic prospect. This equates to 1,000-4,000 homes. There are currently small 450 sites with planning permission. The net additional scale of such an allowance would be 600-950 homes. These will almost certainly come forward. This is in addition to an allowance from 2022 onwards, which the Council is permitted to make.

Section 7

Testing the Stage 2 Report homes / jobs ratio

- 7.1 Testing of the Stage 2 Report conclusions has been undertaken in response to the general thrust of ID/1.
- 7.2 The Stage 2 Report concluded that for the West of England 126,763 homes would be sufficient to house a population increase of 166,000 and that that, in combination, this level of change would be sufficient to support an increase in the demand for labour of 91,500. Understanding the labour market requires an assessment of labour supply as well as labour demand. In order to test the dwellings/jobs ratio established in the Stage 2 Report an analysis has been undertaken of the growth in the labour force that might result from the ONS Revised 2004 population projection. The homes/jobs (demand for labour) ratio of 1.39 established in the Stage 2 Report will be validated if the homes/supply of labour ratio is comparable.
- 7.3 The extent to which the age structure of the population is projected to change is important in this regard. The Council has assessed the way that the population aged 15-64⁵ is projected to change under the Revised 2004-based projections and has considered the extent to which this group will be economically active in 2026 compared to 2006. Also important are assumptions about the labour force participation rate and the rise in the state pension age (within both existing and newly forming population/households).
- 7.4 The decision of whether to participate or not in the labour market is a choice between whether to search for work on the one hand versus remaining out of the labour market on the other. The latter might involve studying, looking after the home or retirement. The propensity for someone of working age to be economically active varies by age. Therefore the labour force participation rate for an area is shaped by the age structure of the population, which itself is shaped by a number of factors. These include the attractiveness of somewhere as a place of retirement or the prevalence of higher education institutions. Those aged between 25 and 49 are most likely to be economically active (c.85%).
- 7.5 The Council's analysis is based on the application of an average participation rate for the entire working age population - sensitised to take account of a number of factors related to the projected age structure. A more refined assessment can be provided using disaggregated participation rates if this is necessary. Draft calculations suggest that the more refined method of calculation is not significantly different to the broad brush approach.

⁵ This being the closest data match to the current working age of 16-60F/65M and future working age of 16-66M&F

7.6 Changes to the state pension age also need to be taken into account. The Pensions Act 2007 legislated for the state pension age to rise for both men (from 65) and women (from 60) to 66 by 2026, to 67 by 2036, and to 68 by 2046. Whilst the timetable for the rise to 66 is proposed for acceleration for the purposes of the Core Strategy it is sufficient to merely take account of the timetable of the 2007 Act. This means that account needs to be taken of the extent to which women aged 60-66, and men between 65 and 66 will participate in the labour force at the end of the plan period compared to 2006.

West of England

7.7 Table 7.1 examines these matters at West of England level. The Revised 2004-based projection projects that the population of working age will increase from 699,400 to 785,600. This is an increase of 86,200.

Table 7.1: West of England Change by Quinary Age Group (ONS Revised 2004 based)

Age	2006	2006 Share	2026	2026 Share	Change	Change Share
0-4	57.0	5.5%	66.5	5.5%	9.5	5.7%
5-9	57.5	5.6%	64.6	5.4%	7.1	4.3%
10-14	59.1	5.7%	61.3	5.1%	2.2	1.3%
0-14	173.6	16.8%	192.4	16.0%	18.8	11.3%
15-19	67.6	6.5%	63.8	5.3%	-3.8	-2.3%
20-24	84.7	8.2%	85.0	7.1%	0.3	0.2%
25-29	74.5	7.2%	87.7	7.3%	13.2	7.9%
30-34	71.3	6.9%	90.9	7.6%	19.6	11.8%
35-39	77.5	7.5%	92.1	7.7%	14.6	8.8%
40-44	78.6	7.6%	84.0	7.0%	5.4	3.2%
45-49	67.3	6.5%	73.2	6.1%	5.9	3.5%
50-54	60.6	5.8%	68.3	5.7%	7.7	4.6%
55-59	63.3	6.1%	71.4	5.9%	8.1	4.9%
60-64	54.0	5.2%	69.2	5.8%	15.2	9.1%
15-64	699.4	67.5%	785.6	65.3%	86.2	51.8%
65-69	43.3	4.2%	56.7	4.7%	13.4	8.1%
70-74	38.1	3.7%	48.7	4.1%	10.6	6.4%
75-79	33.3	3.2%	47.8	4.0%	14.5	8.7%
80-84	26.2	2.5%	35.7	3.0%	9.5	5.7%
85+	22.1	2.1%	35.5	3.0%	13.4	8.1%
65-85+	163.0	15.7%	224.4	18.7%	61.4	36.9%
ALL AGES	1036.0	100.0%	1202.4	100.0%	166.4	100.0%

7.8 Table 7.2 (below) shows that the 2006 economic participation rate in the West of England for people aged 16-64 was about 80%. This resulted in a labour force in 2006 of 559,200. Applying the same ratio to the population aged 16-64 in 2026 results in a projected labour force of 628,480. This is growth of 69,280 and is significantly less labour supply than the 91,500 pre-recession trend forecast of labour demand.

7.9 However, if the economic participation rate for the West of England increased to 82% or 83% in 2026, the gap between sub-regionally supplied labour and pre-recession trend labour demand reduces to a 6,820 (82%) or a surplus of 1,000 (83%).

Table 7.2: Converting the working age population to labour supply under different assumptions of economic participation

West of England	Participation Rate 80%	Participation Rate 82%	Participation Rate 83%
2006 Working Age Pop = 699.4	559,520		
2026 Working Age Pop = 785.6	628,480	644,200	652,000
Labour Force Change	68,960	84,680	92,480
Labour supply against additional 91,500 jobs	-22,400	-6,820	+980
Housing / Labour Supply Ratio <i>'126,763 divided by change in labour force'</i>	1.84	1.50	1.37

7.10 What are the prospects of the participation rate increasing amongst those of working age? Although the overall population is aging, the working age population shows strong growth in the 25-34 age group where participation rates are highest. Further, whereas in 2006 the overall participation rate reflected a state pension age for women of 60 and men of 65 this will rise to 66 for both during the Core Strategy period. It is hard to be sure about the extent to which women aged 60-66 and men aged 65-66 will participate in the labour market vis-a-vis 2006 rates. Clearly there is likely to be some uplift in the labour force as more people defer retirement but more research is needed to quantify this.

7.11 Perhaps the most useful evidence is from the Bank of England⁶ on the participation rate among those aged 50+. Across the UK, between 1995 and 2010 the participation rate amongst this age group increased from 34%-40% (despite there being no increase in the state pension age). Projecting this trajectory forward to 2020 would see the rate increase to 45%, which suggests that it will certainly be achievable by 2026 (especially given the rise in the state pension age as a driver of a higher participation rate).

7.12 Can the impact of this on the supply of labour be quantified? Yes. In 2006 The 50+ population in the West of England was 340,900. Applying the 2010 average UK participation rate of 40% yields 136,360 workers. Applying the same participation rate to the projected 2026 population (433,300) yields 173,320 workers. However, if the projected trend rate at 2020 is applied it yields 194,984 workers. This is an additional

⁶ Benito, A and Bunn, P (2011), 'Understanding labour force participation in the United Kingdom', Bank of England Quarterly bulletin 2011 Q1 pp 36-42

21,665 workers and is broadly equivalent to the amount of extra labour required if the overall participation rate was to rise from 80%-83%.

7.13 The Council considers that the factors affecting the supply side of the labour market during the Core Strategy period need to be taken into account when making decisions about the implications of population projections, household projections and derived housing targets. It considers that there is a reasonable prospect of the participation rate increasing to the extent that 83% is achievable. Under such a scenario the 2026 population could yield an additional 92,500 workers compared to the 2006 population, thus validating homes/demand for labour ratio of 1.39 as presented in the Stage 2 Report.

7.14 The supply side approach highlights its sensitivity to small changes in the assumptions of economic participation rates and the impact of the increase in the state pension age. That the Stage 2 ratio of 1.39 falls within the range of potential outcomes validates it as one means of determining the housing supply requirement to 2026 (based on the 2004-based on population projections).

Bath and North East Somerset

7.15 Table 7.3 examines these matters for Bath and North East Somerset. The Revised 2004-based projection projects that the population of working age will increase from 117,500 to 127,400. This is an increase of 9,900.

Table 7.3 B&NES Population Change by Quinary Age Group (ONS Revised 2004 based)

Age	2006	2006 Share	2026	2026 Share	Change	Change Share
0-4	8.6	4.89%	9.7	4.93%	1.1	5.19%
5-9	9.3	5.29%	10.0	5.08%	0.7	3.30%
10-14	10.1	5.75%	10.1	5.13%	0.0	0.00%
0-14	28.0	15.94%	29.8	15.13%	1.8	8.49%
15-19	12.7	7.23%	11.9	6.04%	-0.8	-3.77%
20-24	16.1	9.16%	16.6	8.43%	0.5	2.36%
25-29	10.8	6.15%	13.4	6.81%	2.6	12.26%
30-34	10.3	5.86%	12.9	6.55%	2.6	12.26%
35-39	12.1	6.89%	13.4	6.81%	1.3	6.13%
40-44	12.8	7.29%	12.8	6.50%	0.0	0.00%
45-49	11.4	6.49%	11.6	5.89%	0.2	0.94%
50-54	10.7	6.09%	11.2	5.69%	0.5	2.36%
55-59	11.1	6.32%	12.0	6.09%	0.9	4.25%
60-64	9.5	5.41%	11.6	5.89%	2.1	9.91%
15-64	117.5	66.88%	127.4	64.70%	9.9	46.70%
65-69	7.6	4.33%	9.7	4.93%	2.1	9.91%
70-74	6.9	3.93%	8.5	4.32%	1.6	7.55%
75-79	6.3	3.59%	8.4	4.27%	2.1	9.91%
80-84	5.1	2.90%	6.4	3.25%	1.3	6.13%
85+	4.3	2.45%	6.7	3.40%	2.4	11.32%

65-85+	30.2	17.19%	39.7	20.16%	9.5	44.81%
ALL AGES	175.7	100.00%	196.9	100.00%	21.2	100.00%

- 7.16 Table 7.4 (below) shows that the 2006 economic participation rate in B&NES for people aged 16-64 was 75.2%. This resulted in a labour force in 2006 of 88,360. Applying the same ratio to the population aged 16-64 in 2026 results in a projected labour force of 95,800. This is growth of 7,440.
- 7.17 That the labour force participation rate for B&NES is less than the West of England average is a reflection of the greater incidence of the non-economic related immigration it has attracted historically. Building in these factors to future projections enables subtle but important local characteristics to be acknowledged.
- 7.18 Since 2004 the economic activity rate amongst 15-64 year olds in B&NES has fluctuated between 75.2% and 80.1%. The average rate has been 77.67%, the median 78.0% and the mode (once the figures are rounded to zero decimal places) 77%. One might reasonably expect that the economic participation rate to be around 78% at the end of the plan period. For the reasons set out in paragraph 6.10 onwards this is considered to be a realistic prospect. If the economic participation rate for B&NES increased to 77.5% or 78% in 2026 the result is an additional 10,375-11,040 workers.

Table 7.4: Translating the working age population to labour supply under different assumptions of economic participation

B&NES	Participation Rate 75.2%	Participation Rate 77.5%	Participation Rate 78%
2006 Working Age Pop = 117,500	88,360		
2026 Working Age Pop = 127,400	95,800	98,375	99,400
Change in Labour Force	7,440	10,375	11,040
Housing / Labour Supply Ratio <i>'15,408 divided by change in labour force'</i>	2.07	1.48	1.395

- 7.19 This table shows that planning for 15,408 homes (the 2004-based population/homes projection of the Stage 2 Report) could conceivably result in 11,000 workers if the labour force participation rate were to increase little. This results in a ratio of homes to labour supply of 1.395, the same as the homes/ labour demand ratio of the Stage 2 Report. Therefore, under this approach and using these assumptions, 12,136 homes are needed in order to supply enough labour locally to fill 8,700 jobs. This is the same conclusion as arrived at in the Stage 2 report – only from a supply side perspective.

Section 8

Updating and Testing the Stage 2 report having regard to the 2008 population and household projections

- 8.1 Whilst not completely setting aside the 2006 and 2008-based (and 2006-based) household projections (particularly with regard to the latest household representative rates which suggest a slowdown in the reduction of average household sizes compared to the 2004-based projections) the Council considers that they need to be treated with caution. This is especially the case at the West of England level. This is because they are derived from a set of population projections which extrapolate forward a post EU Accessions spike in net international migration. Further, as will be shown, the labour force growth implications of planning for the 2008-based population projection and household projections would require extremely high levels of complimentary employment growth.
- 8.2 In PPS3, paragraph 33 refers to having regard to the *latest household projections*, but given the uncertainty over the applicability of the most recent figures, regard should also be given to previous projections, particularly those that have informed the evaluation of the emerging RSS. Whilst the most recent projections may overestimate future migration, the 2003 and 2004-based projections also reflect strong net migration trends from 1998-2003 and 1999-2004. These trends could continue subject to a number of factors, including relative employment opportunities, wage levels and government migration policy. The Council accepts that the levels of net migration set out in the 2004-based projections should be planned for, subject to there being evidence that the jobs growth potential of the area requires the projected increase in the labour force. The jobs growth potential of the District is set out in Section 4 as being not more than 8,700, which is at the optimistic end of the spectrum.
- 8.3 For the West of England the 2008 population projection is for an additional 285,000 people (up 119,000 or 72% against the Revised 2004 projection). The household projection is 156,000 (up 36,000 or 30%) against the Revised 2004 projection. These increases are considerable.
- 8.4 The latest projections for B&NES exhibit less dramatic change than for the West of England, yet they are still significant. The population is projected to grow by 27,700 (up 6,200 or 30% against the 2004-based figure). However, the additional household projection is for growth of 16,000 (down 1,000 or -6% against the 2004-based figure). This means that the latest projections consider that the reduction in average household size will be slower than assumed in the Revised 2004-based projections. Therefore, a given level of population growth can be housed in fewer additional houses than was assumed under earlier projections.

- 8.5 Across the West of England the growth in population and households in relation to the Revised 2004-based projections is largely attributable to Bristol, with North Somerset, South Gloucestershire and B&NES exhibiting smaller yet still notable changes. In the supporting evidence to the City of Bristol Core Strategy Bristol City Council treated the 2006 population and household projections for the city with great caution. These arguments remain for the 2008 projections.
- 8.6 It is necessary to observe that the 2008-based projections can still be termed as pre-recession trend. Despite being published in 2010 they reflect the continuation of past trends in the years prior to mid-2008. The economy only began to contract towards the end of 2008. However, what sets the 2008-based projections apart from the Revised 2004-based projections is the spike in net international migration that they project forward.
- 8.7 For the Revised 2004-based population projections Appendix 2 of the Stage 2 Report followed the same methodology as CLG to project the household growth but used different assumptions for household representative rates. For the current assessment of the 2008-based projections the ONS and CLG figures are accepted as published. Alternative Chelmer household representative rates have not been commissioned by the Council.
- 8.8 Multiplying the CLG 2008-based household projection by 1.025 and 1.027 generates a dwellings requirement of 160,000 for the West of England and 16,400 for B&NES.
- 8.9 Under the 2008-based projections the ratio of dwellings to pre-recession jobs growth of 91,500 for the West of England is 1.75. If this relationship between homes and jobs is applied to the B&NES Core Strategy jobs growth target of 8,700, the resultant dwellings requirement is 15,225. However, because the West of England 2008 population and household projection is so heavily skewed by the dramatic increase in the figures for Bristol the West of England ratio is not considered to be a reasonable means for projecting housing requirements in B&NES.
- 8.10 The alternative labour supply methodology is now considered.

Testing the 2008 Homes / Jobs Ratio using the Homes / Labour supply method

West of England

8.11 The 2008-based projection (from the 2006 Mid-Year estimate to 2026) is for an increase in the population of working age (15-64) of 708,300 to 872,700. This is an increase of 164,400.

Table 8.1, West of England Change by Quinary Age Group (ONS 2008-based)

Age	2006	2006 Share	2026	2026 Share	Change	Change Share
0-4	57.5	5.5%	78.5	5.9%	21.0	7.4%
5-9	57.4	5.5%	74.5	5.6%	17.1	6.0%
10-14	59.1	5.6%	68.5	5.1%	9.4	3.3%
0-15	174.0	16.6%	221.5	16.7%	47.5	16.7%
15-19	69.2	6.6%	73.8	5.5%	4.6	1.6%
20-24	90.4	8.6%	100.9	7.6%	10.5	3.7%
25-29	74.6	7.1%	102.9	7.7%	28.3	10.0%
30-34	71.8	6.9%	105.9	8.0%	34.1	12.0%
35-39	77.6	7.4%	104.9	7.9%	27.3	9.6%
40-44	78.6	7.5%	92.4	6.9%	13.8	4.9%
45-49	67.6	6.5%	76.3	5.7%	8.7	3.1%
50-54	61.0	5.8%	70.9	5.3%	9.9	3.5%
55-59	63.5	6.1%	73.5	5.5%	10.0	3.5%
60-64	54.3	5.2%	71.2	5.4%	16.9	6.0%
15-64	708.3	67.7%	872.7	65.6%	164.4	57.9%
65-69	43.5	4.2%	58.5	4.4%	15.0	5.3%
70-74	38.1	3.6%	49.8	3.7%	11.7	4.1%
75-79	33.2	3.2%	48.9	3.7%	15.7	5.5%
80-84	26.5	2.5%	37.2	2.8%	10.7	3.8%
85-89	14.9	1.4%	24.1	1.8%	9.2	3.2%
90+	7.6	0.7%	17.5	1.3%	9.9	3.5%
65-90+	164.0	15.7%	236.0	17.7%	72.0	25.4%
All ages	1046.2	100.0%	1330.3	100.0%	284.1	100.0%

8.12 Table 8.2 (below) shows that the 2006 economic participation rate in the West of England for people aged 15-64 was about 80%. This resulted in a labour force of 566,640. Applying the same rate to the population aged 16-64 in 2026 results in a projected labour force of 698,160. This is growth of 131,520 and is significantly more additional labour than the 91,500 pre-recession trend forecast of labour demand. The dwellings projection to cater for this level growth in the population supply of labour growth is 160,000, resulting in a homes / supply of labour ratio of 1.22.

8.13 If the labour force participation rate for the West of England increased to 82% or 83% in 2026 (as discussed in Section 7), the gap between sub-regionally supplied labour and pre-recession trend labour demand increases to 48,000-58,000.

- 8.14 On this basis 8,700 jobs in B&NES would require not more than 10,600 homes (applying the ratio of 1.22). It could be as low as 9,300 if the ratio of 1.07 is applied.

Table 8.2, Converting the working age population to labour supply under different assumptions of economic participation

	Particip Rate 80%	Particip' Rate 81%	Particip Rate 82%
2006 Working Age Pop of 708,300	566,640		
2026 Working Age Pop of 872,700	698,160	706,900	715,600
Labour Force Change	131,520	140,260	149,000
Housing / Labour Supply Ratio <i>160,00 divided by change in labour force'</i>	1.22	1.14	1.07

Bath and North East Somerset

- 8.15 For B&NES the 2008-based projection (from the 2006 Mid-Year estimate to 2026) is for an increase in the population of working age (15-64) of 115,300 to 128,400. This is an increase of 13,100.

Table 8.3 B&NES Change by Quinary Age Group (ONS 2008-based)

Age	2006	2006 Share	2026	2026 Share	Change	Change Share
0-4	8.6	5.0%	10.3	5.1%	1.7	6.3%
5-9	9.1	5.3%	10.6	5.3%	1.5	5.6%
10-14	10.0	5.8%	10.5	5.2%	0.5	1.9%
0-15	27.7	16.0%	31.4	15.7%	3.7	13.7%
15-19	12.8	7.4%	13.5	6.7%	0.7	2.6%
20-24	16.5	9.5%	18.9	9.4%	2.4	8.9%
25-29	10.0	5.8%	13.5	6.7%	3.5	13.0%
30-34	9.6	5.5%	12.8	6.4%	3.2	11.9%
35-39	11.6	6.7%	13.1	6.5%	1.5	5.6%
40-44	12.5	7.2%	12.3	6.1%	-0.2	-0.7%
45-49	11.3	6.5%	10.7	5.3%	-0.6	-2.2%
50-54	10.6	6.1%	10.6	5.3%	0.0	0.0%
55-59	11.0	6.4%	11.6	5.8%	0.6	2.2%
60-64	9.4	5.4%	11.4	5.7%	2.0	7.4%
15-64	115.3	66.6%	128.4	64.1%	13.1	48.5%
65-69	7.6	4.4%	9.6	4.8%	2.0	7.4%
70-74	6.9	4.0%	8.4	4.2%	1.5	5.6%
75-79	6.3	3.6%	8.4	4.2%	2.1	7.8%
80-84	5.1	2.9%	6.5	3.2%	1.4	5.2%
85-89	2.8	1.6%	4.3	2.1%	1.5	5.6%
90+	1.5	0.9%	3.1	1.5%	1.6	5.9%
65-90+	30.2	17.4%	40.3	20.1%	10.1	37.4%
All ages	173.2	100.0%	200.2	100.0%	27.0	100.0%

- 8.16 Table 8.4 (below) shows that the 2006 economic participation rate in B&NES for people aged 15-64 was about 75.2%. This generates a labour force of 87,710. Applying the same rate to the population aged 16-64 in 2026 results in a projected labour force of 96,560. This is growth of 9,850 and results in a homes/ worker ratio of 1.66.
- 8.17 For the reasons set out in paragraph 7.10 an increase in the labour force participation rate has been assessed. A 2% rise to 77% generates 12,160 workers and a homes workers ratio of 1.34. An increase to 3% generates 13,440 workers and a homes/workers ratio of 1.22.
- 8.18 In 2006 The 50+ population in the B&NES was 61,200. Applying the 2010 average UK participation rate of 40% yields 24,480 workers. Applying the same participation rate to the projected 2026 population (73,300) yields 29,560 workers. However, if the trend projected trend rate at 2020 is applied it yields 32,985 workers. This is an additional 3,425 workers and is comparable to the amount of extra labour required if the overall participation rate was to rise from 75.2%-78%.
- 8.19 On this basis 8,700 jobs in B&NES would require not more than 10,600 homes (applying the ratio of 1.22).

Table 8.4, *Converting the working age population to labour supply under different assumptions of economic participation*

	Particip Rate 75.2%	Particip' Rate 77%	Particip Rate 78%
2006 Working Age Pop of 115,300	86,710		
2026 Working Age Pop of 128,400	96,560	98,870	100,150
Labour Force Change	9,850	12,160	13,440
Housing / Labour Supply Ratio <i>16,400 divided by change in labour force'</i>	1.66	1.34	1.22

Conclusion of Section 8

- 8.20 Section 8 shows that, across the West of England, planning for the 2008-based projection of population and households would distort the labour market as it would introduce more labour than could ever be demanded. Whilst the distortion for B&NES is not so great it is hard to reconcile an isolated acceptance of the B&NES projection in the context of a rejected West of England projection.
- 8.21 However, the relationship between the 2008-based projections of population and households is interesting. For B&NES, the 2008-based projections are for 1,000 fewer homes for 6,000 more people compared to the 2004-based projections. This indicates a more efficient use of the housing stock with more people able to be housed by fewer dwellings.

8.22 The relationship between projected homes and workers yields a series of supply side homes/labour ratios which vary subject to assumptions in relation to labour participation rates and the impact of the increase in the state pension age. These ratios generally appear to put downward pressure on the 1.39 established in the Stage 2 Report.

Revised Appendix 2 data from the Stage 2 Report

Table A1 ONS Revised 2004 Population Projection

	2001	2006	2011	2016	2021	2026	06-26	CLG 06-26
Bath and North East Somerset		175,900	181,700	186,600	191,500	196,800	20,900	
Bristol, City of		404,200	418,100	432,100	445,400	458,000	53,800	
North Somerset		200,500	211,900	223,500	235,200	246,100	45,600	
South Gloucestershire		255,800	267,200	278,900	290,700	301,500	45,700	
West of England		1,036,400	1,078,900	1,121,100	1,162,800	1,202,400	166,000	

Table A2 Non Private Household Population

	2001	2006	2011	2016	2021	2026	06-26	
Bath and North East Somerset	4,806	4,984	5,155	5,250	5,333	5,471	487	
Bristol, City of		10,029	9,950	9,840	9,790	9,866	-163	
North Somerset		4,119	4,466	4,701	5,069	5,611	1,492	
South Gloucestershire		3,392	3,684	4,001	4,406	4,821	1,429	
West of England		22,524	23,255	23,792	24,598	25,769	3,245	

Table A3 Private Household Population

	2006	2011	2016	2021	2026	06-26	
Bath and North East Somerset	170,916	176,545	181,350	186,167	191,329	20,413	
Bristol, City of	394,171	408,150	422,260	435,610	448,134	53,963	
North Somerset	196,381	207,434	218,799	230,131	240,489	44,108	
South Gloucestershire	252,408	263,516	274,899	286,294	296,679	44,271	
West of England	1,013,876	1,055,645	1,097,308	1,138,202	1,176,631	162,755	

Table A4 Chelmer 2006 dRSS prjections of average household size

	2001	2006	2011	2016	2021	2026	06-26	
Bath and North East Somerset	2.31	2.31	2.28	2.23	2.18	2.15	0.16	
Bristol, City of	2.3	2.27	2.22	2.16	2.11	2.06	0.21	
North Somerset	2.31	2.25	2.21	2.16	2.11	2.08	0.17	
South Gloucestershire	2.45	2.39	2.32	2.23	2.15	2.09	0.3	
West of England		2.29	2.24	2.18	2.12	2.08	0.21	

Table A5 Household Projection

	2006	2011	2016	2021	2026	06-26	CLG 06-26
Bath and North East Somerset	73,990	77,432	81,323	85,398	88,990	15,001	17,000
Bristol, City of	173,644	183,851	195,491	206,450	217,541	43,897	42,000
North Somerset	87,280	93,862	101,296	109,067	115,620	28,339	29,000
South Gloucestershire	105,610	113,584	123,273	133,160	141,952	36,342	32,000
West of England	442,530	470,740	503,399	536,096	566,128	123,599	120,000

Table A6 Chelmer 2006 projections dwellings / household ratio

	2001	2006	2011	2016	2021	2026	06-26	
Bath and North East Somerset	1.02717	1.02719	1.02718	1.02718	1.02718	1.02718	0.00001	
Bristol, City of	1.02648	1.02649	1.02649	1.02649	1.02649	1.02649	0.00000	
North Somerset	1.03325	1.03326	1.03327	1.03326	1.03326	1.03327	0.00001	
South Gloucestershire	1.01845	1.01846	1.01847	1.01846	1.01846	1.01846	0.00001	
West of England								

Table A7 Estimated pre recession trend additional housing requirment

	2006	2011	2016	2021	2026	06-26	CLG 06-26
Bath and North East Somerset	76,001	79,537	83,534	87,719	91,409	15,408	17,462
Bristol, City of	178,243	188,721	200,669	211,918	223,303	45,059	43,112
North Somerset	90,183	96,984	104,665	112,694	119,466	29,283	29,965
South Gloucestershire	107,560	115,682	125,549	135,618	144,572	37,013	32,591
West of England	451,987	480,923	514,417	547,950	578,750	126,763	123,130

Table A8 Projected jobs pre-recession trend

	2006	2011	2016	2021	2026	06-26	
West of England Central	627,200				681,000	53,800	
West of England High	627,200				694,700	67,500	
West of England Low	627,200				660,600	33,400	
West of England pre-recession trend	627,200				718,700	91,500	

Pre-recession additional jobs homes ratio

1.39

1.35