



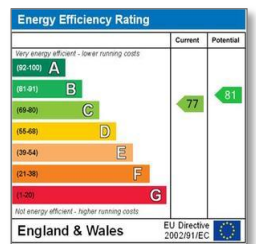
Bath and North East Somerset

Strategic Housing Market Assessment Update 2013

Addendum 1c to the Draft SHMA: Further Scenario Testing

September 2013

**Bath & North East
Somerset Council**



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Addendum 1c: Further Scenario Testing

Additional analysis to test alternative assumptions

Introduction

1. Opinion Research Services (ORS) was commissioned by Bath and North East Somerset (BANES) Council to undertake a Strategic Housing Market Assessment Review, including a study of current and future housing requirements and housing need. A consultation draft of the SHMA update was published by the Council in March 2013.
2. Following the publication of the draft SHMA, an addendum to the SHMA was published in two parts in July 2013 in advance of a technical seminar about the study which was convened with a range of interested parties in August 2013. During that seminar, participants requested that a range of further information was produced:
 - » Population and associated household and dwelling projections based on an employment-led scenario with an increase of 11,500 workers in the labourforce. This would include two variants: the first based on participation rates being held constant at 2011 rates, and the second based on trend-based changing participation rates;
 - » Household projections based on alternative headship rates which adopt the changing patterns evident in the 2008-based rates for the period post 2021, and apply these to the 2021 rates from the 2011-based projections for the period 2021-31.
3. Once again, this additional analysis has been published as a separate section of the Addendum to the draft SHMA in order to minimise any possible confusion about where the analysis has been updated.

Employment-led Projections: 11,500 additional workers

4. Figure 1 shows the overall population projections for the two employment-led scenarios over the period 2011-31 and the projected 5-year age cohorts by gender. The projections range from 191,000 based on the scenario for trend-based participation rates up to 201,500 based on the scenario for participation rates held constant at 2011 levels, which represent 20-year increases of 15,500 persons and 26,000 persons respectively.
5. The projection based on trend-based participation rates is broadly consistent (though marginally lower) than the Mid-trend migration based scenario. The projection based on constant participation rates is markedly higher than the three migration-led scenarios; although as noted in Addendum 1a:

“Economic activity rates are unlikely to remain constant as illustrated by past trends” (para 20);

“On the basis of data from the Labour Force Survey and 2011 Census, it is clear that economic activity rates across all age groups aged 25+ have tended to increase (in particular over the period since 2001). This is especially the case for the female workforce and workers aged 50+” (para 21); and

“It is clearly necessary to take account of changing future participation rates when considering the likely future workforce” (para 23).

6. Given this context, whilst we have produced the employment-led projection on the basis of participation rates held constant at 2011 levels, we do not consider this assumption realistic and would not place any emphasis on the resulting projections.

Figure 1: Population projections 2011-31 by gender and 5-year age cohort based on Jobs-led scenarios for constant and trend-based participation rates (Note: Figures rounded to nearest 100. All calculations based on unrounded data)

Age	2011			2031 Jobs-led (constant rates)			2031 Jobs-led (trend-based rates)		
	M	F	Total	M	F	Total	M	F	Total
Aged 0-4	4,800	4,500	9,200	5,500	5,100	10,600	5,100	4,800	9,800
Aged 5-9	4,500	4,200	8,700	5,500	5,100	10,600	5,200	4,800	10,000
Aged 10-14	4,900	4,700	9,600	5,300	4,900	10,200	5,100	4,700	9,800
Aged 15-19	6,300	6,300	12,600	6,400	6,000	12,400	6,200	5,800	12,000
Aged 20-24	8,200	8,000	16,200	10,100	8,900	19,000	9,700	8,500	18,200
Aged 25-29	5,300	4,800	10,100	7,700	5,700	13,400	7,100	5,300	12,500
Aged 30-34	4,800	4,800	9,600	7,400	6,100	13,500	6,600	5,500	12,200
Aged 35-39	5,100	5,300	10,400	7,700	6,600	14,200	6,700	5,900	12,600
Aged 40-44	6,000	6,200	12,200	6,300	5,600	11,800	5,600	5,200	10,800
Aged 45-49	6,300	6,500	12,800	5,100	5,100	10,100	4,600	4,700	9,300
Aged 50-54	5,500	5,700	11,200	5,000	5,100	10,100	4,700	4,800	9,500
Aged 55-59	4,900	5,200	10,100	5,000	5,200	10,200	4,800	5,000	9,800
Aged 60-64	5,200	5,500	10,700	5,500	5,600	11,000	5,300	5,400	10,800
Aged 65-69	4,300	4,700	9,000	5,300	5,600	10,900	5,300	5,500	10,700
Aged 70-74	3,300	3,800	7,100	4,300	4,800	9,100	4,300	4,700	9,000
Aged 75-79	2,700	3,300	6,000	3,600	4,200	7,900	3,600	4,200	7,800
Aged 80-84	2,100	2,900	5,000	3,400	4,200	7,600	3,400	4,200	7,500
Aged 85-89	1,200	2,100	3,200	2,200	2,900	5,100	2,200	2,900	5,100
Aged 90+	500	1,200	1,700	1,300	2,200	3,500	1,300	2,200	3,500
Total	85,900	89,600	175,500	102,600	98,900	201,500	96,700	94,300	191,000

7. Figure 2 confirms that the increase in workforce in both scenarios is 11,500 workers over the 20-year period to 2031.

Figure 2: Labour force projections to 2031 based on Jobs-led scenarios for constant and trend-based participation rates
 (Note: Figures calculated by applying 2011 Economic Activity Rates to age distributions from ONS Mid-Year Population Estimate for 2011 and applying both 2011 Economic Activity Rates and projected trend-based Economic Activity Rates to the Projected Population for 2031, taking account of the additional growth in student population. Student population includes school children aged 16-17. All figures presented unrounded for transparency, but should only be treated as accurate to the nearest 100)

Age	2011			2031 Jobs-led (constant rates)			2031 Jobs-led (trend-based rates)		
	Total	Rate	EA	Total	Rate	EA	Total	Rate	EA
GENERAL POPULATION									
Males 16-24	4,717	93.8	4,425	6,743	93.8	6,325	6,144	93.8	5,763
Males 25-34	9,412	95.0	8,938	14,483	95.0	13,759	13,077	95.4	12,474
Males 35-49	17,096	93.3	15,952	18,676	93.3	17,426	16,610	94.3	15,661
Males 50-64	15,580	81.4	12,686	15,367	81.4	12,509	14,774	87.6	12,941
Males 65-74	7,629	23.0	1,755	9,661	23.0	2,222	9,524	40.2	3,829
Males 75+	6,447	5.4	350	10,478	5.4	566	10,426	5.4	563
Females 16-24	4,370	86.4	3,778	4,952	86.4	4,279	4,402	86.4	3,803
Females 25-34	8,943	84.0	7,516	11,251	84.0	9,451	10,294	89.5	9,213
Females 35-49	17,582	85.2	14,972	16,794	85.2	14,309	15,395	90.2	13,885
Females 50-64	16,338	68.5	11,183	15,830	68.5	10,844	15,201	82.2	12,494
Females 65-74	8,450	14.9	1,256	10,321	14.9	1,538	10,149	29.9	3,035
Females 75+	9,468	2.8	268	13,508	2.8	378	13,524	2.8	379
STUDENT POPULATION									
Males 16-24	8,754	28.3	2,474	10,014	28.3	2,834	9,447	28.3	2,899
Males 25-34	686	36.6	251	785	36.6	287	740	36.6	294
Males 35-49	315	47.3	149	360	47.3	170	340	47.3	175
Males 50-64	66	58.0	38	76	58.0	44	71	58.0	45
Males 65-74	21	21.5	5	24	21.5	5	23	21.5	5
Males 75+	12	10.0	1	14	10.0	1	13	10.0	1
Females 16-24	8,976	37.3	3,347	10,268	37.3	3,830	9,687	37.3	3,921
Females 25-34	564	39.3	222	645	39.3	254	609	39.3	260
Females 35-49	440	43.5	191	503	43.5	219	475	43.5	224
Females 50-64	87	40.0	35	100	40.0	40	94	40.0	41
Females 65-74	18	11.1	2	21	11.1	2	19	11.1	2
Females 75+	14	7.3	1	16	7.3	1	15	7.3	1
TOTAL	145,985	-	89,793	170,890	-	101,293	161,053	-	101,293
Net Change 2001-31	-	-	-	+24,905	-	+11,500	+15,068	-	+11,500

8. Finally, Figure 3 summarises the projected number of households for each of the two employment-led population scenarios and each of the two headship rates presented in the analysis in Addendum 1a.
9. This has then been converted to a dwelling requirement, taking the proportion of dwellings with no usual residents from the 2011 Census and assuming that this rate remains constant over the period to 2031. Any empty properties reintroduced into the stock would therefore contribute to the overall additional housing requirement identified.
10. Once again, we would caution against placing any emphasis on the resulting projections from the scenario based on participation rates being held constant at 2011 levels as we do not consider this assumption realistic.

Figure 3: Household projections to 2031 based on Jobs-led scenarios for constant and trend-based participation rates and 2008-based and 2011-based Headship Rates (Note: Figures rounded to nearest 100. All calculations based on unrounded data)

	2008-based Headship Rates		2011-based Headship Rates	
	Jobs-led (constant rates)	Jobs-led (trend-based rates)	Jobs-led (constant rates)	Jobs-led (trend-based rates)
Households				
2011	73,500	73,500	73,500	73,500
2031	88,600	84,000	85,400	81,200
Net change	+15,100	+10,500	+11,900	+7,700
Dwellings				
Additional occupied dwellings	15,100	10,500	11,900	7,700
Dwellings with no usual residents	3.7%	3.7%	3.7%	3.7%
Total dwelling requirement	15,700	10,900	12,400	7,900
Annual average dwelling requirement	780	540	620	400

Household Projections: Alternative Headship Rates

- The 2011-based household projections were based on interim Sub-National Population Projections and only cover the 10-year period from 2011 to 2021. In the absence of a longer-term projection, the SHMA analysis held the 2011-based headship rates constant for the period 2021-31.
- To sensitivity test this assumption, an alternative analysis has been produced which applies the rate of change from the 2008-based headship rates over the period 2021-31 to the rates published for 2021 from the 2011-based data.
- Whilst the headship rates provide detailed information about household type, Figure 4 summarises the total proportion of people in each age category that are counted as household representatives in the two original sources alongside the alternative rates now also prepared.

Figure 4: Overall Household Representative Rates by age from 2008-based and 2011-based Headship Rates

	2008-based Headship Rates				2011-based Headship Rates (constant post 2021)				2011-based Headship Rates (2008-based trend post 2021)			
	2011	2021	2031	% change 2021-31	2011	2021	2031	% change 2021-31	2011	2021	2031	% change 2021-31
Aged 15-24	13.4%	13.4%	14.4%	+8.0%	13.1%	13.4%	13.4%	0.0%	13.1%	13.4%	14.4%	+8.0%
Aged 25-34	49.9%	45.4%	46.2%	+1.8%	46.4%	45.4%	45.4%	0.0%	46.4%	45.4%	46.2%	+1.8%
Aged 35-44	58.9%	58.6%	59.0%	+0.7%	55.9%	58.6%	58.6%	0.0%	55.9%	58.6%	59.0%	+0.7%
Aged 45-54	59.6%	63.6%	63.6%	-0.0%	59.9%	63.6%	63.6%	0.0%	59.9%	63.6%	63.6%	-0.0%
Aged 55-59	58.3%	60.0%	58.7%	-2.1%	59.5%	60.0%	60.0%	0.0%	59.5%	60.0%	58.7%	-2.1%
Aged 60-64	61.1%	60.5%	59.5%	-1.6%	61.4%	60.5%	60.5%	0.0%	61.4%	60.5%	59.5%	-1.6%
Aged 65-74	65.2%	62.0%	61.0%	-1.5%	64.8%	62.0%	62.0%	0.0%	64.8%	62.0%	61.0%	-1.5%
Aged 75-84	75.5%	72.3%	70.7%	-2.1%	75.8%	72.3%	72.3%	0.0%	75.8%	72.3%	70.7%	-2.1%
Aged 85+	87.3%	81.9%	82.5%	+0.8%	87.1%	84.9%	84.9%	0.0%	87.1%	84.9%	82.5%	+0.8%

- Figure 5 summarises the net change in households and the associated dwelling requirement over the 20-year period 2011 to 2031, together with the annualised dwelling requirement. It is evident that whilst the

types of households projected to form are different given the alternative scenario, the overall number of households (and associated number of dwellings) does not vary significantly.

15. Nevertheless, Figure 6 shows that the alternative headship rates influence the mix of housing required. The modelled housing requirement based on the population projections from the Mid-trend Migration scenario shows an increased need for Social/Affordable Rent Housing, with marginally lower requirement for Intermediate Affordable Housing and Market Housing. The other population projections show a similar shift in emphasis towards Social/Affordable Rent Housing.

Figure 5: Household projections to 2031 based on High-, Mid- and Low-Trend Migration scenarios and Jobs-led scenarios for constant and trend-based participation rates; showing 2008-based Headship Rates and 2011-based Headship Rates with rates held constant and with trends taken from 2008-based data for the period 2021-31 (Note: Figures rounded to nearest 100. All calculations based on unrounded data)

	High-trend Migration	Mid-trend Migration	Low-trend Migration	Jobs-led (constant rates)	Jobs-led (trend-based rates)
Households: 20-yr net change 2011-31					
2008-based Headship Rates	+12,500	+11,100	+9,800	+15,100	+10,500
2011-based Headship Rates (constant post 2021)	+9,500	+8,200	+7,000	+11,900	+7,700
2011-based Headship Rates (2008-based trend post 2021)	+9,400	+8,100	+6,900	+11,900	+7,500
Dwellings: Total 20-yr dwelling requirement					
2008-based Headship Rates	12,900	11,500	10,200	15,700	10,900
2011-based Headship Rates (constant post 2021)	9,800	8,600	7,300	12,400	7,900
2011-based Headship Rates (2008-based trend post 2021)	9,800	8,400	7,100	12,300	7,800
Dwellings: Average annual dwelling requirement					
2008-based Headship Rates	650	580	510	780	540
2011-based Headship Rates (constant post 2021)	490	430	360	620	400
2011-based Headship Rates (2008-based trend post 2021)	490	420	360	620	390

Figure 6: Housing requirement to 2031 based on Mid-trend Migration scenarios and 2008-based and 2011-based Headship Rates with rates held constant and with trends taken from 2008-based data for the period 2021-31 (Note: Figures rounded to nearest 100. All calculations based on unrounded data)

	2008-based Headship Rates		2011-based Headship Rates (constant post 2021)		2011-based Headship Rates (2008-based trend post 2021)	
	Dwellings	%	Dwellings	%	Dwellings	%
Housing Requirement 2011-31: based on Mid-trend Migration						
Market Housing	7,300	63.6%	5,300	62.9%	5,200	61.6%
Intermediate Affordable Housing	600	5.2%	1,100	12.5%	800	9.3%
Social/Affordable Rent Housing	3,600	31.2%	2,100	24.5%	2,400	29.1%
Total Housing Requirement	11,500	100.0%	8,600	100.0%	8,400	100.0%

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