Craven District

Population estimates and projections

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1. Introduction

1.1. Context

Since 2006/7 and the onset of the economic recession, new dwelling completions have fallen considerably. Housing development plans are now outdated given the prevailing economic conditions and the judgement from the new Government that previous Regional Spatial Strategy (RSS) dwelling targets are largely redundant.

A Strategic Housing Market Assessment (SHMA) has been completed in North Yorkshire, including a large-scale household survey across all districts. Craven District Council (DC) has welcomed the report and is now in the process of reviewing its findings in relation to Craven's specific context so that it can proceed with preferred options and future housing growth targets for local consultation.

Craven DC has written a short note in response to the SHMA findings which examines the specific issues that are evident from ONS' official sub-national population projections (SNPP) and how they may impact upon the district. A number of key points from this note include:

- SNPP projects population growth of 6,700 in Craven 2010-2026
- The majority of this growth (6,500) is related to population over 60 years of age (large baby boomer cohorts and longer life-expectancy)
- The under 60 population remains static but is maintained through net in-migration
- Potential of population shrinking by 2026 without a migration impact
- Based on headship rates over 300 new households will be formed per year to 2026
- Significant issue of houses for younger families not being available as elderly stay in their existing homes

1.2. Requirements

Craven DC is seeking to develop a more informed view on the recent and future development of its local communities, through the provision of additional demographic intelligence that can support the local development framework. It wishes to use this intelligence to both inform its own views on the scale and distribution of future development but also to provide robust evidence with which to engage in consultation with local stakeholders across the district, taking into account local policy decisions.

Specifically Craven DC is seeking:

- To derive additional analysis that is sufficiently robust to stand up to scrutiny
- To develop a position that supports a balanced community, accepting there will be an aging population overall but with maintenance of the number of children and the size of the labour force
- To derive an appropriate target for new dwelling development across Craven District that takes account of the needs of the older and younger segments of the population

1.3. Approach

To meet Craven DC's requirements the following analysis has been undertaken:

- A review of ONS mid-year estimates (MYE) and projections and the associated 'components-ofchange', particularly international migration
- A review of the latest MYE revisions (published by ONS in November 2011) and the associated components-of-change
- The definition of a network of 'small areas' which best define the local communities within Craven DC
- The development of population projections for the District and small areas to evaluate a variety of alternative growth trajectories

Population and household projections have been completed using the POPGROUP suite of software. Section 2 provides more details on the POPGROUP methodologies and the Appendix summarises the data and assumptions used in the analysis presented.

2. Project Methodology

2.1. Area Definition

The analysis presented in this report has been developed for both the 'district' of Craven and for a number of defined 'small areas'. These small areas are detailed below. Together, areas 1-5 comprise the full extent of the district. Area 6 is an additional geography that encompasses just the wards within and around Skipton.

Area	Long label	Short label
Area1	Bentham & North Craven	N. CRAVEN
Area2	Settle & Mid Craven	SETTLE
Area3	Skipton & nearby parishes	SKIPTON
Area4	South Craven	S. CRAVEN
Area5	Yorkshire Dales NP in Craven	DALESNP
Area 6	Skipton Wards	SKIPTOWN



Figure 1: Craven DC - Area Definition

2.2. POPGROUP models

The forecasting requirements of this project have been delivered using POPGROUP. POPGROUP is a family of demographic models developed to forecast population, households and the labour force for areas and social groups. It uses MS Excel technology to enable direct integration of inputs and outputs with a user's desktop environment. POPGROUP has over 100 users which include academic and public service staff in housing, planning, policy, research, economic development, and social services (Figure 1). On behalf of the Local Government Association, Edge Analytics is responsible for the development and support of the POPGROUP software.

Aberdeen City Aberdeenshire Argyll & Bute **Birmingham City** Blackburn with Darwer Blaenau Gwent Bournemouth Bradford Brighton & Hove Buckinghamshire Caerphilly Cardiff Carmarthen Ceredigion **Cheshire West & Chester** City of Edinburgh Conwy

Cornwall Cumbria Denbighshire Derbyshire Dorset Dudley East Susses Fife Flintshire General Register Office for Scotland Glasgow & Clyde Valley Glasgow City Gloucestershire Greater London Authority Gwynedd Hampshire

Herefordshire Highland Kent Leeds City Leicestershire Luton Marja - aho Arkkitechdit Oy Merseyside Information Service Midlothian Milton Keynes Monmouthshire Nathaniel Lichfield & Partners National University of Singapore Neath Port Talbot

North Ayrshire North Yorkshire Northamptonshire Northern Ireland Statistic Research Agency Northumberland One North East Oxfordshire Pembrokeshire Pima Association of Governments Poole Powys Renfrewshire Rochdale Royal Borough of Windsor &

Salford City Leeds University Sheffield Shropshire South Lanarkshire Southern California Association of Governments South West Observatory Staffordshire Stirling Stoke on Trent Swindon Tameside Teeside Valley JSU Telford & Wrekin The National Assembly for Wales

The Vale of Glamorgan Torfaen U.S. Census Bureau University of Manchester University of Strathclyde University of Strathclyde England Warwickshire West Northamptonshire JPU West Sussex Wittshire Worcestershire Wrexham Yorkshire & Humber Public Health Observatory

Figure 2: POPGROUP users, September 2011

Maidenhead

2.3. Population forecasting

Population projections delivered using POPGROUP use a standard **cohort component** methodology (the methodology used by the UK statistical agencies). The household projections use a standard **household headship rate** as employed by Communities and Local Government (CLG) for its household projection statistics. Labour force projections use a standard **economic activity rate** methodology.

A more detailed description of the population and household projection methodologies is available from the User Guide and Reference Manual on the POPGROUP website www.ccsr.ac.uk/popgroup/about/manuals.html.

The following illustrations provide a schematic illustration of the operation of the POPGROUP and Derived Forecast methodologies (Figure 3 & Figure 4).



Figure 3: POPGROUP population projection methodology



Algebraically the model is defined as follows:

 $D_{a,s,u,y,d,g} = P_{a,s,u,y,g} * R_{a,s,u,y,d,g} / 100$

Where:

- D = Derived Category Forecast
- P = Population 'at risk' Forecast
- R = Derived Category Rates

and

a =	age-group
s =	sex
u =	Sub-population
y =	year
d =	derived category
g =	group (usually an area, but can be an ethnic group or social group)

Figure 4: Derived Forecast Model: household & labour force projection methodology

3. Official Statistics – population & households

In the absence of a population register, England and Wales rely on successive, annual updates of 2001 Census data to produce mid-year population estimates. The Office for National Statistics (ONS) estimates the mid-year population for each local authority area using data on births and deaths, internal migration and international migration. These estimates provide the statistical baseline for the creation of both national and sub-national population projections (SNPP). SNPP for England are produced on a two-yearly cycle by ONS and are constrained to the total, national projection estimates.

Household projections are produced by Communities and Local Government (CLG) and typically follow the delivery of the SNPP. Household projections are produced through the application of headship rates (by household type, age and sex) to the age-sex profile of the population projected in the SNPP statistics.



Figure 5: Official statistics: population and households

With regard to the robustness of the data inputs that underpin the ONS MYE, birth and death statistics are derived from vital statistics registers and provide an accurate measure of natural change by local area. Internal migration data are derived from GP registers, providing the best available representation of inter-district flows. The one drawback of this data is the indeterminate level of under-registration associated with young males; although it will affect both in and out migration so the uncertainty is lessened in the 'net' picture. International migration is the most difficult component to estimate with confidence.

The accuracy of the 'components of change' (births, deaths, internal migration and international migration) in the MYE is critical to the development of SNPP (and therefore the household projections). Historical trends for a prior five-year period provide a key input to the 'trend' based

SNPP (i.e. evidence from 2004-2008 will drive the 2008-based projections). Recognition of the relative importance of the components of change within the MYE is necessary in order to interpret what is driving the 25-year trend projection of the SNPP.

For a local authority considering the development of its housing strategy, the ONS 'official' statistics on population and households provide the 'benchmark' against which a range of alternative evidence should be compared. The ONS SNPP provide only one growth trajectory - a trend-led forecast that is typically based on historical data that has already been superseded by more recent evidence (for the 2008-based projections we now have more recent, 2009 and 2010 MYE to take into consideration). In developing a robust, realistic and defendable evidence base to support housing policy and plans, it is advisable to consider a range of alternative growth scenarios.

The development of alternative scenarios is particularly important as ONS has released 'revisions' to its population estimates methodology that will have a direct impact upon trend projections. ONS has an ongoing programme of 'improvement' to its estimation methodologies to ensure the most accurate data on immigration and emigration is used in its MYE. In 2010, ONS released a set of 'revised' MYE for 2001-2009 and a revised 2008-based population projection, which took account of a number of such improvements; specifically, the improved handling of onward <u>student</u> moves and the integration of administrative data sources to better estimate the local impact of <u>international</u> migration. In November 2011, ONS released further revisions to MYE for 2006-2010, using a revised methodology for international migration estimates based upon an approach developed by Dr Peter Boden and Professor Phil Rees working at the University of Leeds (see references below).

These later revisions, although yet to be made 'official statistics', have a significant impact upon Craven's MYE and therefore upon trend projections that are based upon these MYEs. Sections 4 and 5 explore the impact of these revisions in more detail.

References:

Boden P and Rees P (2010) Using administrative data to improve the estimation of immigration to local areas in England, Statistics in Society – Series A, Volume 173 Issue 4m, p707-731, October 2010 http://onlinelibrary.wiley.com/doi/10.1111/j.1467-985X.2009.00637.x/abstract

ONS (2011) Improved Immigration Estimates to Local Authorities in England and Wales: Overview of Methodology http://www.ons.gov.uk/ons/guide-method/method-quality/imps/improvements-to-local-authority-immigrationestimates/index.html

4. District Analysis

4.1. Mid-year estimates, 2001-2010

In 2010 the population of Craven was estimated to be 55,400. Over the last ten years the population has increased by just 1,700, a 3.2% growth from 2001 (Figure 6).



Craven

Figure 6: Mid-year population estimate (Source: ONS)

4.2.Sub-national population projections

Mid-year estimates provide the baseline from which population and household projections are developed. The three, most-recent, sub-national population projections produced by ONS for Craven have suggested a range of growth scenarios. Using 2008-2026 as the forecast horizon, the 2004-based projections suggest the lowest growth (11.7%), 2006-based projections the highest (18.9%) (Figure 7).

Each projection will, of course, have been based upon 'trends' from a different historical timeperiod and on different assumptions regarding the long-term trends in fertility, mortality and migration that are set by ONS' 'national' population projections. For example, the 2004-based projections will have taken no account of the increase in international migration that resulted from the expansion of the European Union in 2004 (Accession 8 countries) and 2006 (Romania and Bulgaria). Both 2006-based and 2008-based projections will have higher international migration elements due to the increased importance of this component in the historical trend.



Figure 7: Mid-year population estimate and sub-national projections (Source: ONS)

Figure 7 also includes the trajectory of growth evident from the mid-year population estimates for Craven. The comparison with the 2004-based and 2006-based projections suggests that the mid-year estimate for Craven was 'revised downwards' as part of ONS' 2010 methodological revisions. It also indicates that 2009 and 2010 MYE are lower than those originally forecast in the 2008-based projections.

4.3.Components of change – official MYE

Successive population projections will use different 'historical' time-periods as evidence for future trends. The ONS 2008-based projections will have used 2004-2008 as the base period from which key assumptions on migration have been derived. 2010-based projections will use an updated 2006-2010 evidence base. In scrutinising population estimates and projections, it is important to recognise the relative importance of the 'components-of-change' that are driving population growth (or decline) in the historical evidence.

For Craven, growth since 2001 has been driven mainly by the positive net impact of both internal and international migration. However, the latest two years, 2008/09 and 2009/10, has seen significant fluctuations in these components, shifting from positive to negative. Natural change (the difference between births and deaths) has continued to have a negative impact on Craven's population, contributing an average of -163 per year to population growth (Figure 8). The variable

impact of migration in the last two years has resulted in an estimated net increase of just +28 due to the combined internal and international migration components.



Figure 8: Components of change, mid-year population estimate (Source: ONS)

Migration is the most difficult component to estimate accurately and there remain uncertainties with regard to both internal migration and, particularly, international migration estimation.

4.4.MYE revisions – November 2011

With regard to international migration, there remain issues with the robustness of local estimates of immigration and emigration. The UK systems for population data capture do not enable detailed and comprehensive statistics on immigration and emigration to be collected directly; estimation methods are necessary to produce the data which underpin the MYE for local authority areas. These estimation methods have been subject to further improvement, the results of which were published by ONS in November 2011. The revised methodology has used data from a number of local administrative sources (national insurance number registrations, GP registrations and university student numbers) to derive a revised immigration estimate for each local authority as the basis for the development of the forthcoming 2010-based projections. The results of these methodological changes have been made available by ONS for local authority review (and as yet are not classified as 'official statistics). They include revised MYE for 2006-2010.

For Craven, the MYE revisions have had quite a significant impact upon its population total (Figure 9). The revised MYE suggests that there has been relatively flat growth in Craven since 2006 and that the revised mid-year estimate in 2010 is 429 lower than the existing estimate. The existing MYE suggested that the population of Craven has grown by 3.2% between 2001 and 2010; the revised MYE suggest a growth rate of just 2.4% for the same period.



Figure 9: Craven - MYE vs. MYE Revised

In the context of previous trend projections, it is clear that the revisions to the MYE suggest Craven's growth trajectory is on a slightly different course to that previously suggested (Figure 10).





Importantly, the MYE revisions have resulted in a change to the 'components-of-change' that have been responsible for population growth since 2001 (Figure 11). Natural change and internal migration components remain unchanged but the impact of international migration has been reduced. This reduction has resulted from the new immigration estimation methodology which ensures a more equitable distribution of international migration flows based upon a combination of local administrative data sources.



Figure 11: Components of change MYE revised.

The assumption of reduced net international migration is very significant as it will reduce the overall 'growth' factor that is used as a component of the trend-based population projections. This is explored further in the next section.

5. District Analysis and Scenarios

5.1.Scenario definition

To evaluate the sensitivity of growth forecasts to variations in the historical 'components-ofchange', five alternative 'scenarios' have been defined and run using the POPGROUP projection model. These have been defined as follows:

<u>SNPP</u>

The SNPP scenario is the benchmark against which other scenarios are compared. The scenario replicates the 2008-based sub-national projection from ONS; the latest set of 'official' projections for local authority districts in England. This 'trend' scenario is based on historical evidence from 2004-2008 and does not take account of later information from the 2009- 2010 MYE.

Migration-led

To take account of more recent evidence from the 2009 and 2010 MYE, an alternative, 'Migrationled', 'trend' scenario has been run. This uses the later 2006-2010 period as the basis for the derivation of its migration assumptions from the components-of-change evident in the MYE. The scenario assumes that long-term variations in mortality and fertility are consistent with those evident in the latest (2008-based) national assumptions.

Migration-led- 9-year

This scenario is defined in a similar way to the Migration-led, but it uses the NINE-year period 2001-2010 as the basis for the derivation of its migration assumptions. The scenario assumes that long-term variations in mortality and fertility are consistent with those evident in the latest (2008-based) national assumptions.

Migration-led-revised

This scenario also uses the later FIVE-year period 2006-2010 for the derivation of its migration assumptions but uses the REVISED MYE as the basis of the historical calibration. The scenario assumes that long-term variations in mortality and fertility are consistent with those evident in the latest (2008-based) national assumptions.

CR 11 Year

The dwelling-led scenario is based on an 11-year average of completions (2001-11). For each district, dwelling growth acts as a 'constraint' on population and household growth, with 'migration' used to balance the population and households required to achieve the dwelling target.

In each scenario the projection horizon is set at 2032/33.

Projections have been produced for population, households, dwellings, labour force and jobs. The derivation of these additional components to the core population forecast is driven by a number of key data inputs and assumptions. These are briefly summarised here with more detail provided in the Appendix 1 to this document.

Household numbers are derived through the application of headship rates (by household type and sex) to the changing age profile of the population. Headship rates determine the changing rate of household formation as the population changes over the projection period (see section A1.5). The population 'not in household' (communal establishments population) is excluded from this calculation. The headship rates and the communal establishments population are sourced directly from CLG's household projection model (see section A1.5). A household may be defined as an 'occupied dwelling'. To convert households to dwellings it is necessary to take account of vacancies and second homes. This parameter is derived from the 2001 Census and is kept constant in each scenario projection (see section A1.6).

The derivation of labour force and jobs estimates requires a little more information (see Appendix 1 for definition of labour force and jobs). Economic activity rates by age and sex have been sourced from NOMIS using North Yorkshire statistics as a proxy for Craven due to inadequate sample at district level. Economic activity rates in the 50-64 and 65+ age-ranges are modified to account for likely increase in participation rate in these sections of the labour force. All other economic activity rates remain constant. An unemployment rate of 3.9% has been allocated, taken as a 7-year average (2004 – 2010) for North Yorkshire from NOMIS (the unemployment rate used is the standard International Labour Organisation (ILO) definition, rather than the alternative unemployment claimant rate – see section A1.7). Finally a 'commuting ratio' has been defined which measures the balance of worker inflow and outflow to Craven from the 2001 Census. Both the unemployment rate and commuting ratio are kept constant throughout the scenario projection. Economic activity rates, the unemployment rate and commuting ratio combine to create labour

force and job requirement forecast, produced in parallel to the population, household and dwelling trajectories.

5.2.Scenario results

Whilst migration impacts are difficult to estimate, they are also typically the most important drivers of population growth. Scrutiny of the 'components-of-change' that have been used in each of the five scenarios, suggest a very different impact of migration upon growth throughout the projection period (Figure 12 a-e).



Note: 2008/9 and 2009/10 are projections and are not 'mid-year estimates' (a) Components of change, SNPP (Source: POPGROUP)



(b) Components of change, Migration-led (Source: POPGROUP)



(c) Components of change, Migration-led – 9-year (Source: POPGROUP)







(e) Components of change, CR 11 Year (Source: POPGROUP)

Figure 12: Components of change – all scenarios

In each of the five scenarios natural change (the difference between births and deaths) has an increasingly negative impact upon Craven's population growth. Net internal migration is positive in each case, highest in the SNPP scenario. A small positive growth through net international migration is suggested by each scenario, with the exception of Migration-led – revised. In this case the ONS MYE revisions have reduced the historical impact of international migration; the calibration of scenario assumptions from the new 2006-2010 data results in a small negative impact of international over the projection period.

The full growth trajectories associated with each scenario are summarised to illustrate the likely impact on population, households, dwellings and jobs (Figure 13). The SNPP population growth forecast of 17.3% (coupled with 29% increase in households) looks highly improbable. When more evidence (MYE 2009 and 2010) is used in the migration assumptions the forecast growth reduces to between 4 – 5% (depending upon whether a 5-year or 9-year history is used for calibration). The latest MYE revisions which reduce the importance of international migration in Craven's historical growth result in a trend projection which achieves flat growth, declining towards the end of the projection period. In contrast to these 'trend' projections, the imposition of a housing 'constraint' based upon average completion rates for the last 11 years results in higher growth of 6.6% over the period 2010-33.

The relative importance of migration in each of these growth trajectories is illustrated, all of which offset the negative impact of natural change. The dwelling growth suggested by the household numbers varies considerably with the SNPP suggesting an average of +336 per year. The 130 - 210 range suggested by the four remaining scenarios is a much more robust base from which to consider future development strategies.

The estimated jobs growth associated with these population, household and dwelling increases is a little more surprising. Expected annual jobs growth is negative in all but the SNPP scenario, reflecting the importance of ageing upon Craven's population. High levels of household formation are being driven by the ageing process but even with increased economic participation rates, the size of the Craven labour force is expected to contract (under our assumptions).

The growth and decline of the 0-19 age-group also varies between scenarios, with the higher migration scenarios resulting in a higher 0-19 population overall. More detail on the projected age composition and household profile of the Craven population under each district scenario is provided in Appendix 2.





		Change 2010	/11 - 2032/33	Average per year				
Scenario	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs Requirement	
SNPP	9,701	17.3%	7,242	29.2%	618	336	144	
CR 11 Year	3,665	6.6%	4,546	18.6%	395	208	-46	
Migration-led 9-year	2,737	4.9%	4,156	17.0%	356	191	-64	
Migration-led	2,253	4.1%	3,962	16.2%	337	182	-74	
Migration-led - revised	-475	-0.9%	2,924	12.0%	246	137	-133	

Figure 13: Craven – projections summary including National Park area

6. Small Area Analysis and Scenarios

6.1.Scenario Definition

To provide additional and more localised intelligence on historical and future growth scenarios, the analysis has been extended to a number of 'small area' geographies within Craven (see section 2.1 for a definition). The level of data detail is more limited at small area level which does compromise the variety of growth scenarios that can be evaluated. However, the analysis presented here provides important evidence to support local consultation and planning.

The data limitation relates to the lack of migration information at small area level. Historical data on births, deaths and population is aggregated from output area statistics. Migration is derived as the 'residual' in annual population growth after taking account of births and deaths. In addition, the small area data relate to the latest 'official' MYE and does not include the more-recent MYE revisions, for which the disaggregate data is yet to be made available.

Two alternative scenarios have been defined for Craven's small areas as follows:

Migration-led

This scenario uses the 9-year average (2001-2010) as the basis for the derivation of its migration assumptions from the components-of-change evident in the MYE.

<u>CR 11 Year</u>

The dwelling-led scenario is based on an 11-year average of completions (2001-11). For each small area, dwelling growth acts as a 'constraint' on population and household growth, with 'migration' used to balance the population and households required to achieve the dwelling target.

In each scenario the projection horizon is set at 2032/33.

Once again population projections are converted to households using headship rates; in this case 'scaled' to take account of the small area differences evident in 2001. Vacancy rates vary by small area but are kept constant in each scenario (see A1.6).

Labour force and jobs forecasts are not available at this small area level.

6.2. Historical context

For each small area the 'historical' profile of population change provides the basis for the calibration of scenario assumptions (Figure 14 and 15). The general trend is one of population growth 2004 – 2008, flattening thereafter. Natural change has a negative impact upon growth, with the importance of net migration declining in the later years.

At small area level, no distinction is made between internal and international migration, so migration is treated as a 'total' net flow.

Settle & Mid Craven









South Craven

Bentham & North Craven



Yorkshire Dales NP in Craven



Skipton Wards



Figure 14: Craven small areas, mid-year population estimates 2001-2010 (Source: ONS, POPGROUP)







South Craven



Yorkshire Dales NP in Craven



Skipton Wards Natural Change Net Migration

2001/02 2002/03 2003/04 2004/05 2005/06 2006/07 2007/08 2008/09 2009/10

Figure 15: Craven small areas, components of change 2001-2010 (Source: ONS, POPGROUP)

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6.3.Scenario results

For each of the defined small areas the trajectory of population growth suggested by each scenario is illustrated (Figure 16). Population, household and dwelling growth are summarised in the accompanying table (Figure 17).

Bentham & North Craven



South Craven



Settle & Mid Craven



Skipton & nearby parishes



Yorkshire Dales NP in Craven

PopGroup DALESNP



Skipton Wards



Figure 16: Craven small area, population forecasts (Source: POPGROUP)

Migration-led

		Change 2010		Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings
Bentham & North Craven	-164	-2.6%	436	15.5%	29	19
Settle & Mid Craven	785	13.5%	707	27.8%	70	33
Skipton & nearby parishes	831	4.0%	1,353	14.6%	85	61
South Craven	1,197	9.7%	1,130	21.3%	80	51
Yorkshire Dales NP in Craven	56	0.6%	639	14.2%	70	31
Skipton Wards	296	2.0%	914	13.8%	26	42

CR 11 Year

		Change 2010	Average per year			
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings
Bentham & North Craven	745	11.7%	827	29.3%	66	37
Settle & Mid Craven	1,399	24.1%	973	38.3%	95	45
Skipton & nearby parishes	1,147	5.5%	1,470	15.9%	99	67
South Craven	690	5.6%	920	17.3%	62	42
Yorkshire Dales NP in Craven	-548	-5.4%	364	8.1%	46	18
Skipton Wards	171	1.2%	858	13.0%	22	40

Note: The small area totals presented here will not sum exactly to the district totals detailed in Figure 13. This is because of the different impact that migration has on each individual small area versus the district aggregate.

Figure 17: Craven small area, population forecasts (Source: POPGROUP)

The scenario tables in Figure 17 provide information on population, household and dwelling change over the forecast period. These data are similar to those provided at district level in Figure 13, although the sum of the small areas will not be exactly consistent with the district total. This is due to the way the projection model operates, assigning fertility, mortality and migration assumptions to each small area, which when summed do not equate exactly to the (single-area) district total.

For the Migration-led scenario, 'Bentham & North Craven' experiences population decline over the projection period. Despite this decline, household growth is forecast, with the changing age profile resulting in continued household formation and a reducing average household size.

Strongest growth is evident in 'Settle & Mid Craven' and 'South Craven'. This is a trend projection, so the growth is largely based upon the extrapolation of recent demographic change, averaged over the 2001-2010 period. Growth in 'Skipton and nearby parishes' is relatively high in absolute

number but small in percentage terms due to its larger size. A very small population growth in the National Park area is estimated for the projection period.

For the dwelling-led scenario (CR 11 Year) all but the 'Yorkshire Dales NP in Craven' area experience positive growth. A full history of dwelling completions was not available for the 'Yorkshire Dales NP in Craven' area, so its dwelling constraint (18 units per year) may not reflect recent growth; a likely explanation for the difference between its migration-led and CR 11 Year scenario.

Continuation of recent completion rates in 'Settle & Mid Craven' and in 'Bentham & North Craven' suggests significant future growth in population and households. The high percentage growth is accentuated by the size of these areas relative to 'Skipton & nearby parishes'. The contrast in growth between 'Settle & Mid Craven' and 'Skipton & nearby parishes' can be related to the changing age-profile of the populations (see Appendix 3). In 'Skipton & nearby parishes' small area, the CR11 Year scenario results in significant population ageing and a reduction in the younger age-groups. For 'Settle & Mid Craven' the population also ages but the youngest age-groups remain more stable over the scenario period. Household formation rates are different as a result.

7. Concluding comments

This report provides an updated evidence base to support Craven District Council's future development strategy. Since publication of North Yorkshire's SHMA, additional demographic statistics have been published, which provide more recent information and which include important changes to ONS' population estimation methodologies.

Using this new data a series of growth scenarios for the district have been presented, combining the ONS SNPP benchmark with alternative trend scenarios and an illustrative 'dwelling-led' scenario (Figure 18).



Figure 18: Craven District – population projection scenarios (Source: POPGROUP)

This new analysis has clearly illustrated that the ONS SNPP growth scenario is unrealistic and should be considered only as a benchmark against which to compare the alternatives. The methodological revisions to Craven's MYE results in a contrasting growth trajectory (migration-led-revision), with population decline due to natural change and relatively low net migration suggesting flat growth over the projection period. This results in a consistent reduction in the size of the labour force and a significant ageing of the population profile (Appendix 2). The alternative trend scenarios (based upon information from the current unrevised MYE) and the dwelling-led scenario, suggest limited but positive growth in population over the projection period. For these scenarios the impact of a reducing labour force and an increasing proportion of population aged 65+ is also very evident but less severe (Appendix 2).

To provide additional evidence to support local planning and consultation, population and household analysis has also been presented for 'small areas' within the Craven District. Using historical evidence for 2001-2010, two scenarios have been run, one which extrapolates recent demographic trends, a second which models the impact of the continuation of recent rates of new dwelling development. These provide the most detailed picture from which to consider strategies for local areas that acknowledge recent trends, recognise the inevitable challenges with regard to the age composition of the population but which are realistically aligned with local aspirations.

The current economic uncertainty coupled with the continued revisions to official statistics makes forecasting a challenging process and the forthcoming release of data from the 2011 Census will inevitably provide an essential update to our understanding of the profile and inherent complexities of Craven's population. Using the most recent evidence in combination with industry-standard demographic models, the analysis presented here provides a sound and robust basis from which Craven can develop a local strategy that supports a balanced community; accepting there will be an ageing population overall but with maintenance of the number of children and the size of the labour force. The analysis provides important new evidence to enable Craven to derive an appropriate target for new dwelling development across its local communities that takes account of the needs of both the older and younger segments of the population.

Appendix 1: Data Inputs and assumptions

The POPGROUP model draws data from a number of sources, building a historical picture of population, households, fertility, mortality and migration on which to base its scenario forecasts. Using the historical data evidence for 2001-2009, in conjunction with information from ONS national projections, a series of assumptions have been derived which drive the scenario forecasts. These assumptions are used when historical data or constraints on fertility, mortality, migration and population are not available.

A1.1 Population

The forecasting process uses the following population data as historical constraints:

• Mid 2001 to mid 2009 population by age and sex. The data includes the revised 2002-2008 MYE released by ONS in 2010, and the 2009- MYE released a little later.

A1.2 Births and fertility

The forecasting process uses the following birth and fertility information:

- Mid-year counts of births by sex, 2001 2009.
- Standard age-specific fertility schedule from national projections are combined with local evidence on births, to produce age-specific fertility rates for each area within Craven (see below).



The <u>trend</u> in fertility for each year of the forecast follows that set by ONS in its national 2008-based population projection assumptions. Following the rise in fertility since 2001, these national assumptions assume a decline from 2009.



A1.3 Deaths and mortality

The forecasting process uses the following death and mortality information:

- Mid-year counts of deaths 2001 2009.
- Deaths by age and sex from 2001 2009.
- Standard age-specific mortality schedule from national projections are combined with local evidence on deaths, to produce age-specific mortality rates for each area within Craven (see below).



<u>Future trends</u>

The <u>trend</u> in mortality for each year of the forecast (at district level) follows that set by ONS in its national 2008-based population projection assumptions. Mortality rates continue to decline throughout the projection period (see below).



Different assumptions are applied to the male and female schedules of mortality decline.

A1.4 Migration

Migration is typically the most difficult component to measure.

The forecasting process uses the following migration statistics:

- For 'districts', internal migration data by age and sex is drawn from patient registration statistics. The 2008-based projections include the revisions resulting from ONS' new estimation methodology, with new registration statistics produced for 2002-2008.
- Mid-year population estimates provide assumptions for international migration on immigration and emigration flows by district.
- For sub-districts, historical migration estimates have been derived as a 'residual' after having taken account of births and deaths in the change in population between successive years. For sub-district areas there is no distinction made between internal and international migration, with total 'net' migration used as the key migration assumption.

Assumptions about the future impact of migration within the district have been derived using historical evidence from the last five years (2004/5 – 2009/10) and the last nine years (2001/2 - 2009/10). Within small areas the nine-year average has been applied.

A1.5 Households

The household projection methodology used by POPGROUP is that employed by CLG, applying headship rates (which identify the percentage of each age-sex population category that are 'head' of a household) by household type to population forecasts by age and sex. This produces a household forecast by household type, age and sex.

Household forecasts for Craven have been made using the latest CLG 2008-based projections from November 2010 which provide information on:

- Households by household type
- Population not in households
- Headship rates by household type, age and sex

These are 2008-based and are used in all scenarios.

The household types as defined by the CLG 2008 household projections and used by the Derived Forecast Model are as follows:

- 1. One person households: Male
- 2. One person households: Female
- 3. One family and no others: Couple: No dependent children
- 4. One family and no others: Couple: 1 dependent child
- 5. One family and no others: Couple: 2 dependent children
- 6. One family and no others: Couple: 3+ dependent children
- 7. One family and no others: Lone parent: 1 dependent child
- 8. One family and no others: Lone parent: 2 dependent children
- 9. One family and no others: Lone parent: 3+ dependent children
- 10. A couple and one or more other adults: No dependent children
- 11. A couple and one or more other adults: 1 dependent child
- 12. A couple and one or more other adults: 2 dependent children
- 13. A couple and one or more other adults: 3+ dependent children
- 14. A lone parent and one or more other adults: 1 dependent child
- 15. A lone parent and one or more other adults: 2 dependent children
- 16. A lone parent and one or more other adults: 3+ dependent children
- 17. Other households

For sub-district areas, headship rates have been calibrated to ensure 'district' rates are modified to account for local variation in household type and household formation rates.

A1.6 Dwellings

The Derived Forecast model uses a 'vacancy rate' to convert households into dwellings. These vacancy rates have been derived from 2001 Census data and are maintained at a constant level in the scenario forecasts. Users may vary them to evaluate alternative scenarios. The vacancy rate data by small areas and a district as follows:

Area	Vacancy rate (%)
N. CRAVEN	7.8
SETTLE	8.0
SKIPTON	4.6
S. CRAVEN	4.7
DALESNP	12.0
SKIPTOWN	4.3
CRAVEN	6.8

Source: Census 2001

For the dwelling-constrained scenario presented in the report, historical 'completion rates' have been averaged over an 11-year period and projected forward over the projection period. The annual net housing impact of these completion rates is as follows:

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Av 2000/01- 2010/11
Craven	189	207	321	258	223	183	217	170	313	105	151	212
Bentham & North Craven	34	34	33	33	32	62	51	51	40	4	56	39
Settle & Mid Craven	17	60	128	86	80	14	36	21	27	25	10	46
Skipton & nearby parishes	79	44	100	80	38	46	89	71	144	27	21	67
South Craven	41	51	42	41	55	43	23	9	84	31	46	42
Yorkshire Dales NP in Craven	18	18	18	18	18	18	18	18	18	18	18	18
Skipton Wards	71	38	72	11	12	15	20	50	114	18	13	39

Note:

a) Completion rates for Yorkshire Dales NP are estimates. No actual data available.

 b) Data for Craven (2000/01 - 2010/11) calculated as a sum of small area rates (excluding Skipton Wards).

A1.7 Labour Force

Labour Force and Jobs Definitions

'Labour Force' is the number of people that are economically active, living in a specified area but not necessarily working in that area.

'Jobs' is the number of jobs available in an area, a share of which are taken by people living both within and outside that area.

Unemployment Rate

North Yorkshire's unemployment rates were taken from the Annual Population Survey for the years 2004-2010 with the average of 3.9% applied in the model.

The unemployment rate is that defined by the International Labour Organisation (ILO) standard and relates to the percentage of economically active people who are unemployed. Under the ILO definition those who are considered as unemployed are either: out of work but are actively looking for a job; or out of work and are waiting to start a new job in the next two weeks

Economic Activity

North Yorkshire's economic activity rates were taken from the Annual Population Survey for the years 2004-2010 with the average applied in the model. However, for years 2011 onwards, an increase of 0.1% and 0.5% year-on-year was applied to populations 50-64 and 65+ respectively.



Economic Activity Rate (Males)

Economic Activity Rate (Females)



Source: NOMIS, Edge Analytics

Commuting Ratio

A commuting ratio for Craven has been derived using data from the 2001 Census.

Where do	people who	live in	Craven	work?

Live	Work	Flow	%	Cum%
Craven	Craven	16897	65.81	65.81
Craven	Bradford	3984	15.52	81.33
Craven	Leeds	941	3.67	84.99
Craven	Pendle	668	2.60	87.59
Craven	Lancaster	548	2.13	89.73
Craven	Harrogate	390	1.52	91.25
Craven	South Lakeland	345	1.34	92.59
Craven	Ribble Valley	162	0.63	93.22
Craven	Calderdale	129	0.50	93.73
Craven	Kirklees	102	0.40	94.12
Craven	Hambleton	99	0.39	94.51
Craven	Burnley	96	0.37	94.88
Craven	Manchester	84	0.33	95.21
Craven	Others	1230	4.79	100.00
	Total	25675		

Where do people who work in Craven live?

Live	Work	Flow	%	Cum%
Craven	Craven	16897	70.59	70.59
Bradford	Craven	3322	13.88	84.46
Pendle	Craven	1532	6.40	90.86
Harrogate	Craven	321	1.34	92.20
Leeds	Craven	303	1.27	93.47
Lancaster	Craven	303	1.27	94.74
Ribble Valley	Craven	150	0.63	95.36
Others	Craven	1110	4.64	100.00
	Total	23938		

Commuting Ratio 1.07

Appendix 2: District scenarios - detail

Scenario: SNPP

Age profile (population)

	2001	2006	2011	2016	2021	2026	2031	2033
0-19	12,550	12,560	11,890	11,520	11,610	11,870	11,870	11,880
20-44	15,450	14,700	14,160	13,830	14,170	14,680	14,880	14,820
45-64	14,800	16,190	17,400	17,800	17,980	17,570	17,360	17,440
65-79	7,780	8,060	9,120	10,670	11,550	12,420	13,120	13,540
80+	3,120	3,430	3,910	4,450	5,190	6,350	7,820	8,190
Total	53,710	54,950	56,480	58,270	60,510	62,890	65,060	65,870

Note: Populations rounded to the nearest 10

Household profile

Craven								
Category of Households	2001	2006	2011	2016	2021	2026	2031	2033
OPMAL	2,415	2,811	3,304	3,823	4,361	4,977	5,643	5,970
OPFEM	4,291	4,392	4,635	4,883	5,131	5,404	5,504	5,533
FAM C0	7,381	8,225	9,331	10,416	11,312	12,112	13,057	13,330
FAM C1	1,409	1,417	1,377	1,368	1,400	1,420	1,414	1,411
FAM C2	2,070	2,075	1,963	1,905	1,927	1,936	1,923	1,922
FAM C3	890	875	809	756	757	767	765	762
FAM L1	451	480	485	506	544	576	588	590
FAM L2	304	332	338	351	384	415	431	435
FAM L3	84	96	101	108	123	139	146	146
MIX C0	1,565	1,372	1,225	1,115	1,025	936	839	795
MIX C1	444	321	229	168	135	111	95	89
MIX C2	151	149	143	137	132	128	126	127
MIX C3	50	47	44	43	40	37	37	37
MIX L1	107	102	95	90	84	79	78	81
MIX L2	37	36	36	35	37	38	37	37
MIX L3	20	22	23	25	26	29	31	31
ОТННН	1,074	982	928	876	816	773	734	716
Total	22,743	23,734	25,066	26,604	28,234	29,878	31,448	32,012
Private household population	52,419	53,630	55,108	56,828	58,972	61,203	63,205	63,921
Population / Households	2.30	2.26	2.20	2.14	2.09	2.05	2.01	2.00

Scenario: Migration-led

Age profile (population)

	2001	2006	2011	2016	2021	2026	2031	2033
0-19	12,550	12,560	11,670	10,920	10,570	10,530	10,250	10,180
20-44	15,450	14,700	13,600	12,760	12,380	12,260	12,370	12,170
45-64	14,800	16,190	17,240	17,210	16,810	15,400	13,570	13,120
65-79	7,780	8,060	9,130	10,730	11,710	12,520	13,050	13,310
 80+	3,120	3,430	3,920	4,540	5,370	6,750	8,440	8,890
 Total	53,710	54,950	55,550	56,160	56,830	57,440	57,680	57,670

Note: Populations rounded to the nearest 10

Household profile

Craven								
Category of Households	2001	2006	2011	2016	2021	2026	2031	2033
OPMAL	2,415	2,811	3,249	3,710	4,178	4,686	5,208	5,484
OPFEM	4,291	4,392	4,599	4,827	5,056	5,263	5,269	5,255
FAM C0	7,381	8,225	9,241	10,228	10,959	11,473	11,938	11,984
FAM C1	1,409	1,417	1,315	1,247	1,199	1,154	1,107	1,089
FAM C2	2,070	2,075	1,877	1,729	1,619	1,539	1,456	1,432
FAM C3	890	875	774	683	620	595	575	567
FAM L1	451	480	463	462	470	475	470	465
FAM L2	304	332	320	315	320	331	337	337
FAM L3	84	96	95	96	102	111	116	116
MIX C0	1,565	1,372	1,219	1,097	995	880	759	704
MIX C1	444	321	224	159	123	98	80	73
MIX C2	151	149	138	126	113	102	92	91
MIX C3	50	47	43	40	35	30	26	26
MIX L1	107	102	92	83	72	63	55	55
MIX L2	37	36	34	32	32	31	29	28
MIX L3	20	22	22	22	21	23	24	24
ОТННН	1,074	982	923	865	797	738	679	651
Total	22,743	23,734	24,627	25,721	26,708	27,591	28,220	28,380
Private household population	52,419	53,630	54,166	54,691	55,242	55,688	55,708	55,574
Population / Households	2.30	2.26	2.20	2.13	2.07	2.02	1.97	1.96

Scenario: Migration-led 9-year

Age profile (population)

		2001	2006	2011	2016	2021	2026	2031	2033
	0-19	12,550	12,560	11,680	10,930	10,590	10,580	10,340	10,280
	20-44	15,450	14,700	13,600	12,810	12,470	12,400	12,550	12,370
	45-64	14,800	16,190	17,240	17,240	16,850	15,460	13,650	13,210
	65-79	7,780	8,060	9,130	10,740	11,730	12,560	13,100	13,360
	80+	3,120	3,430	3,920	4,550	5,390	6,770	8,480	8,930
-	Total	53,710	54,950	55,560	56,270	57,040	57,760	58,120	58,150

Note: Populations rounded to the nearest 10

Household profile

2026 4,709	2031	2033
4,709	5 2/1	
E 200	3,241	5,521
5,260	5,299	5,287
11,515	11,998	12,051
1,162	1,118	1,102
1,547	1,470	1,448
597	580	573
478	475	470
333	340	341
112	118	117
883	762	708
99	80	74
103	93	92
30	27	26
63	55	56
31	29	29
23	24	24
743	684	657
27,713	28,393	28,573
55,995	56,135	56,051
2.02	1.98	1.96
_	5,286 11,515 1,162 1,547 597 478 333 112 883 99 103 30 63 31 123 743 27,713 55,995 2,02	5,286 5,299 11,515 11,998 1,162 1,118 1,547 1,470 597 580 478 475 333 340 112 118 883 762 99 80 103 93 30 27 63 55 31 29 23 24 743 684 27,713 28,393 55,995 56,135 2.02 1.98

Scenario: Migration-led - revised

Age profile (population)

		2001	2006	2011	2016	2021	2026	2031	2033
	0-19	12,550	12,530	11,550	10,690	10,180	9,930	9,440	9,300
2	20-44	15,450	14,650	13,280	12,130	11,480	11,130	11,040	10,780
4	45-64	14,800	16,190	17,190	17,120	16,620	15,050	13,010	12,450
(65-79	7,780	8,060	9,110	10,680	11,630	12,420	12,920	13,170
	80+	3,120	3,430	3,910	4,520	5,350	6,710	8,370	8,810
	Total	53,710	54,850	55,030	55,140	55,260	55,230	54,800	54,510

Note: Populations rounded to the nearest 10

Household profile

2006	2011	2016	2024			
0.007		2010	2021	2026	2031	2033
2,807	3,227	3,664	4,099	4,568	5,038	5,290
4,388	4,578	4,785	4,989	5,167	5,137	5,108
8,218	9,199	10,142	10,818	11,264	11,635	11,638
1,414	1,299	1,211	1,138	1,070	1,002	977
2,071	1,856	1,685	1,544	1,433	1,322	1,289
873	766	666	591	553	521	509
479	456	447	444	439	426	418
331	315	304	301	303	302	299
96	94	92	95	101	104	102
1,371	1,214	1,090	985	868	741	685
321	222	156	120	94	75	68
149	137	124	109	96	84	82
47	42	39	34	28	24	23
102	91	82	70	60	50	51
36	34	31	30	28	26	25
22	22	22	20	21	22	21
980	914	851	780	718	653	623
23,705	24,466	25,389	26,168	26,811	27,164	27,209
53,531	53,647	53,678	53,672	53,484	52,832	52,431
2.26	2.19	2.11	2.05	1.99	1.94	1.93
	2,807 4,388 8,218 1,414 2,071 873 479 331 96 1,371 321 149 47 102 36 22 980 23,705 53,531 2,26	2,807 3,227 4,388 4,578 8,218 9,199 1,414 1,299 2,071 1,856 873 766 479 456 331 315 96 94 1,371 1,214 321 222 149 137 47 42 102 91 36 34 22 222 980 914 23,705 24,466 53,531 53,647 2.26 2.19	2,807 3,227 3,664 4,388 4,578 4,785 8,218 9,199 10,142 1,414 1,299 1,211 2,071 1,856 1,685 873 766 666 479 456 447 331 315 304 96 94 92 1,371 1,214 1,090 321 222 156 149 137 124 47 42 39 102 91 82 36 34 31 22 22 22 980 914 851 23,705 24,466 25,389 53,531 53,647 53,678 2.26 2.19 2.11	2,807 3,227 3,664 4,099 4,388 4,578 4,785 4,989 8,218 9,199 10,142 10,818 1,414 1,299 1,211 1,138 2,071 1,856 1,685 1,544 873 766 666 591 479 456 447 444 331 315 304 301 96 94 92 95 1,371 1,214 1,090 985 321 222 156 120 149 137 124 109 47 42 39 34 102 91 82 70 36 34 31 30 22 22 20 980 914 851 780 23,705 24,466 25,389 26,168 53,531 53,647 53,678 53,672 2.26 2.19	2,807 3,227 3,664 4,099 4,568 4,388 4,578 4,785 4,989 5,167 8,218 9,199 10,142 10,818 11,264 1,414 1,299 1,211 1,138 1,070 2,071 1,856 1,685 1,544 1,433 873 766 666 591 553 479 456 447 444 439 331 315 304 301 303 96 94 92 95 101 1,371 1,214 1,090 985 868 321 222 156 120 94 149 137 124 109 96 47 42 39 34 28 102 91 82 70 60 36 34 31 30 28 22 22 20 21 980 914<	2,807 3,227 3,664 4,099 4,568 5,038 4,388 4,578 4,785 4,989 5,167 5,137 8,218 9,199 10,142 10,818 11,264 11,635 1,414 1,299 1,211 1,138 1,070 1,002 2,071 1,856 1,685 1,544 1,433 1,322 873 766 666 591 553 521 479 456 447 444 439 426 331 315 304 301 303 302 96 94 92 95 101 104 1,371 1,214 1,090 985 868 741 321 222 156 120 94 75 149 137 124 109 96 84 47 42 39 34 28 24 102 91 82 70 6

Scenario: CR 11 Year

Age profile (population)

	2001	2006	2011	2016	2021	2026	2031	2033
 0-19	12,550	12,560	11,660	10,860	10,490	10,490	10,400	10,450
20-44	15,450	14,700	13,580	12,620	12,260	12,270	12,760	12,800
45-64	14,800	16,190	17,230	17,150	16,750	15,380	13,700	13,330
65-79	7,780	8,060	9,130	10,700	11,680	12,510	13,140	13,470
 80+	3,120	3,430	3,910	4,520	5,360	6,750	8,530	9,030
Total	53,710	54,950	55,510	55,860	56,540	57,410	58,530	59,080

Note: Populations rounded to the nearest 10

Household profile

								Craven
2033	2031	2026	2021	2016	2011	2006	2001	Category of Households
5,594	5,272	4,686	4,160	3,693	3,247	2,811	2,415	OPMAL
5,349	5,327	5,263	5,039	4,808	4,597	4,392	4,291	OPFEM
12,185	12,058	11,468	10,919	10,189	9,237	8,225	7,381	FAM C0
1,131	1,132	1,153	1,189	1,238	1,314	1,417	1,409	FAM C1
1,480	1,484	1,536	1,607	1,718	1,876	2,075	2,070	FAM C2
585	585	593	615	679	774	875	890	FAM C3
484	482	474	466	458	463	480	451	FAM L1
351	345	330	317	312	320	332	304	FAM L2
121	120	111	101	95	95	96	84	FAM L3
714	765	880	991	1,093	1,218	1,372	1,565	MIX C0
75	81	98	123	158	223	321	444	MIX C1
93	94	102	112	125	138	149	151	MIX C2
26	27	30	35	40	43	47	50	MIX C3
57	55	63	72	83	92	102	107	MIX L1
29	30	31	31	31	34	36	37	MIX L2
25	25	23	21	22	22	22	20	MIX L3
665	688	739	794	861	922	982	1,074	ОТННН
28,964	28,569	27,580	26,592	25,604	24,615	23,734	22,743	Total
56,962	56,537	55,651	54,956	54,394	54,136	53,630	52,419	Private household population
1.97	1.98	2.02	2.07	2.12	2.20	2.26	2.30	Population / Households
-	345 120 765 81 94 27 55 30 25 688 28,569 56,537 1.98	330 111 880 98 102 30 63 31 23 739 27,580 55,651 2.02	317 101 991 123 112 35 72 31 21 794 26,592 54,956 2.07	312 95 1,093 158 125 40 83 31 22 861 25,604 54,394 2.12	320 95 1,218 223 138 43 92 34 22 922 24,615 54,136 2.20	332 96 1,372 321 149 47 102 36 22 982 23,734 53,630 2.26	304 84 1,565 444 151 50 107 37 20 1,074 22,743 52,419 2.30	FAM L2 FAM L3 MIX C0 MIX C1 MIX C2 MIX C2 MIX C3 MIX L1 MIX L2 MIX L2 MIX L3 OTHHH Total Private household population Population / Households

Appendix 3: Small Areas scenarios – detail

Scenario: Migration-led

Bentham & North Craven

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	230	180	210	180	180	150	120	110
4-15	950	890	770	720	730	680	630	610
16-19	350	330	270	280	200	250	220	220
20-44	1,710	1,600	1,460	1,260	1,150	1,020	900	830
45-64	1,820	2,070	2,140	2,120	2,080	1,930	1,810	1,790
65-79	910	970	1,150	1,380	1,550	1,650	1,670	1,710
80+	360	350	400	480	550	730	940	970
Total	6,320	6,380	6,400	6,430	6,440	6,400	6,290	6,230

Note: Populations rounded to the nearest 10

Settle & Mid Craven

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	210	200	180	160	160	160	160	160
4-15	840	890	840	820	810	790	780	780
16-19	320	350	320	350	330	320	310	310
20-44	1,420	1,380	1,220	1,070	1,050	1,050	1,040	1,030
45-64	1,410	1,670	1,820	1,870	1,890	1,800	1,680	1,620
65-79	800	890	1,020	1,250	1,390	1,530	1,600	1,660
80+	350	420	450	510	620	760	980	1,020
Total	5,350	5,790	5,840	6,050	6,240	6,410	6,540	6,580

Note: Populations rounded to the nearest 10

Skipton & nearby parishes

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	810	730	790	730	730	710	670	650
4-15	3,000	2,830	2,570	2,540	2,470	2,400	2,370	2,340
16-19	860	1,060	990	840	840	860	790	790
20-44	6,070	5,710	5,470	5,300	5,220	5,130	5,080	5,020
45-64	5,280	5,800	6,200	6,220	6,050	5,710	5,360	5,280
65-79	3,090	2,930	3,170	3,640	4,040	4,380	4,510	4,560
80+	1,220	1,350	1,560	1,720	1,890	2,250	2,750	2,890
Total	20,340	20,410	20,750	21,000	21,240	21,440	21,530	21,530

South Craven

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	490	490	510	450	480	490	490	480
4-15	1,890	1,930	1,750	1,720	1,760	1,700	1,750	1,770
16-19	500	580	620	600	500	610	540	550
20-44	3,730	3,680	3,420	3,240	3,240	3,240	3,340	3,340
45-64	3,180	3,380	3,630	3,740	3,690	3,560	3,290	3,170
65-79	1,390	1,490	1,760	2,120	2,340	2,450	2,540	2,620
80+	630	690	750	840	1,000	1,250	1,560	1,650
Total	11,810	12,240	12,440	12,720	13,020	13,300	13,520	13,580

Note: Populations rounded to the nearest 10

Yorkshire Dales NP in Craven

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	350	300	260	240	240	230	210	200
4-15	1,370	1,360	1,260	1,120	1,070	1,020	1,000	990
16-19	390	440	440	480	370	380	350	350
20-44	2,520	2,330	2,010	1,820	1,810	1,750	1,690	1,630
45-64	3,120	3,290	3,430	3,420	3,380	3,150	2,850	2,780
65-79	1,590	1,780	2,010	2,290	2,330	2,400	2,510	2,570
80+	550	620	750	880	1,090	1,370	1,640	1,680
Total	9,900	10,120	10,160	10,240	10,290	10,300	10,250	10,200

Note: Populations rounded to the nearest 10

Skipton Wards

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	590	530	580	550	540	520	490	470
4-15	2,150	2,000	1,830	1,810	1,760	1,710	1,670	1,650
16-19	660	800	740	620	620	630	590	580
20-44	4,550	4,290	4,190	4,070	4,000	3,910	3,850	3,800
45-64	3,590	3,960	4,170	4,190	4,080	3,870	3,690	3,630
65-79	2,040	1,920	2,040	2,330	2,580	2,810	2,860	2,900
80+	750	880	1,000	1,090	1,190	1,390	1,710	1,790
Total	14,340	14,380	14,550	14,660	14,770	14,840	14,850	14,820

Scenario: CR 11 Year

Bentham & North Craven

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	230	180	210	190	190	170	160	150
4-15	950	890	770	730	760	740	730	720
16-19	350	330	270	290	210	270	250	260
20-44	1,710	1,600	1,470	1,300	1,260	1,180	1,170	1,140
45-64	1,820	2,070	2,140	2,140	2,150	2,060	2,020	2,040
65-79	910	970	1,150	1,380	1,570	1,700	1,750	1,810
80+	360	350	400	490	560	750	980	1,020
Total	6,320	6,380	6,410	6,530	6,710	6,860	7,060	7,140

Note: Populations rounded to the nearest 10

Settle & Mid Craven

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	210	200	180	170	180	180	180	190
4-15	840	890	840	840	840	830	850	860
16-19	320	350	320	360	340	340	340	340
20-44	1,420	1,380	1,230	1,100	1,130	1,160	1,210	1,230
45-64	1,410	1,670	1,820	1,900	1,940	1,880	1,800	1,770
65-79	800	890	1,020	1,260	1,410	1,570	1,660	1,740
80+	350	420	460	520	630	790	1,010	1,070
Total	5,350	5,790	5,870	6,140	6,450	6,740	7,060	7,200

Note: Populations rounded to the nearest 10

Skipton & nearby parishes

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	810	730	790	730	720	710	680	670
4-15	3,000	2,830	2,570	2,530	2,460	2,390	2,380	2,380
16-19	860	1,060	990	840	830	860	800	800
20-44	6,070	5,710	5,480	5,270	5,170	5,120	5,150	5,190
45-64	5,280	5,800	6,200	6,210	6,030	5,700	5,380	5,320
65-79	3,090	2,930	3,170	3,640	4,030	4,370	4,520	4,580
80+	1,220	1,350	1,560	1,720	1,890	2,250	2,760	2,910
Total	20,340	20,410	20,770	20,940	21,130	21,400	21,670	21,850

South Craven

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	490	490	500	440	450	460	460	460
4-15	1,890	1,930	1,750	1,690	1,690	1,590	1,650	1,680
16-19	500	580	620	590	480	580	510	520
20-44	3,730	3,680	3,410	3,140	3,050	3,000	3,140	3,170
45-64	3,180	3,380	3,630	3,700	3,610	3,430	3,150	3,030
65-79	1,390	1,490	1,750	2,100	2,320	2,410	2,500	2,580
80+	630	690	750	830	990	1,230	1,550	1,630
Total	11,810	12,240	12,420	12,500	12,590	12,700	12,960	13,070

Note: Populations rounded to the nearest 10

Yorkshire Dales NP in Craven

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	350	300	260	220	220	200	190	180
4-15	1,370	1,360	1,250	1,080	1,010	940	930	920
16-19	390	440	440	470	360	360	320	320
20-44	2,520	2,330	1,980	1,700	1,640	1,560	1,510	1,470
45-64	3,120	3,290	3,420	3,320	3,230	2,970	2,680	2,610
65-79	1,590	1,780	2,010	2,260	2,260	2,310	2,400	2,460
80+	550	620	750	860	1,060	1,330	1,590	1,630
Total	9,900	10,120	10,110	9,910	9,780	9,670	9,610	9,590

Note: Populations rounded to the nearest 10

Skipton Wards

	2001	2006	2011	2016	2021	2026	2031	2033
0-3	590	530	580	550	530	510	480	470
4-15	2,150	2,000	1,830	1,810	1,740	1,680	1,630	1,610
16-19	660	800	740	610	610	620	580	580
20-44	4,550	4,290	4,210	4,040	3,920	3,810	3,770	3,760
45-64	3,590	3,960	4,170	4,190	4,060	3,830	3,650	3,590
65-79	2,040	1,920	2,040	2,330	2,570	2,800	2,840	2,890
80+	750	880	1,000	1,090	1,180	1,390	1,700	1,790
Total	14,340	14,380	14,580	14,610	14,610	14,630	14,660	14,700