

Final
Report

GVA
81 Fountain Street
Manchester
M2 2EE

Bradford District Housing Requirements Study Report

February 2013

City of Bradford MDC

www.bradford.gov.uk

Contents

- 1. Introduction..... 1
- 2. Context: Policy 4
- 3. Context: Housing Market Drivers..... 9
- 4. Context: Housing Market Indicators 27
- 5. Population and Household Projections 44
- 6. Identifying the Local Housing Requirement 61
- 7. Conclusion 79

Appendices

Appendix 1: September Workshop Event – Notes and Attendance List

Appendix 2: The POPGROUP Model

Note: The analysis in this report was prepared on the basis of the best information available as at November 2012. It should be noted that it is the Council’s intention to update this report early in 2013 following the release of new national datasets including the 2010 base DCLG Sub-National Household Projections.

Prepared By .Antony Pollard Status.. AssociateDate 07/02/2013

Reviewed By Richard Laming Status.. Director.....Date 07/02/2013

For and on behalf of GVA Grimley Ltd

1. Introduction

- 1.1 GVA, in partnership with Edge Analytics, were commissioned in August 2012 to prepare a Housing Requirements Study (HRS) for the City of Bradford Metropolitan District Council (CBMDC).
- 1.2 The overall purpose of this HRS is to provide a sound evidence base which enables CBMDC to:
- Obtain independent advice and scrutiny of the future level of new housing needed including an audit and assessment of available data, most notably from the Government's latest population and household projections;
 - Develop a robust, transparent and effective means of determining an appropriate and justifiable local housing requirement for the Bradford District; and
 - Explore the potential scale of future housing required in the Bradford District to support future population growth and economy of the District.
- 1.3 The findings of this report will represent an important part of the evidence base for the preparation and implementation of the Council's statutory Development Plan and in particular it's Core Strategy.

Research Approach

- 1.4 This report sets out a process of analysis considering a range of factors which will impact on the future requirement for housing, including economic, demographic and housing market data, trends and forecasts.
- 1.5 In order to understand the objectively assessed need for housing across the district the analysis has considered historic and forecast data relating to the factors noted above. A range of assumptions have been applied to the nationally produced ONS sub-national population projections (SNPP), 2010 base, to produce a number of scenarios of potential projected changes in the number people and households over the plan period. This analysis has utilised the POPGROUP suite of software which is recognised as the industry standard demographic model¹.

¹ POPGROUP is used by over 90 local and regional organisations in the UK and has been subject to extensive enhancement and development over the last ten years. It uses MS Excel workbooks to manage its data inputs and outputs and provides great flexibility to enable users to experiment and analyse alternative forecasts. A more detailed description of the population and household projection methodologies is available from the User Guide and Reference Manual on the POPGROUP website. The mathematical calculations for each method are documented at the end of each of the manuals. www.ccsr.ac.uk/popgroup/about/manuals.html.

- 1.6 As part of the research process a Stakeholder Workshop event was convened on the 5th September 2012. The purpose of this event was to present stakeholders with an opportunity to comment on the proposed methodology to the research and respond to a presentation of the initial outputs of the research examining the strategic drivers of the housing market.
- 1.7 The event included a short presentation by the consultancy team followed by workshop discussions. Five workshop groups were held on the day, with each facilitated by either a member of the consultancy team or a Bradford Council representative from the project steering group.
- 1.8 Following the event stakeholders were provided with the presentation material used at the workshop and invited to send additional written comments to the Council / Consultancy team by the 21st September 2012.
- 1.9 The outputs of this research need to be considered in the context of other informing parts of the Council's Development Plan evidence base including the Strategic Housing Land Availability Assessment 2012 (SHLAA), Employment Land Review Update 2011(ELR) and the emerging Strategic Housing Market Assessment 2012 (SHMA).

Report Structure

- 1.10 The report is structured as follows:
 - Section 2: Context Policy – A concise summary of the relevant policy context which needs to be considered in the establishment of a local housing requirement for the district.
 - Section 3: Context Housing Market Drivers – Analysis is undertaken of historic population and economic data. This provides a solid basis for understanding the relationship between the two and the implications for future demand for housing within the district over the plan period.
 - Section 4: Context Housing Market Indicators – In order to understand how the market has responded to historic demand drivers analysis is undertaken of historic completions across the district as well as levels of vacancy. Recognising the interaction between supply and demand and the impact this has on the operation of the market this section also provides a short review of house price trends and affordability indicators.
 - Section 5: Population and Household Projections – Analysis of the latest long-term national population projection dataset released by the ONS (2010 base) is

included within this section. A series of alternative population and household projection scenarios are presented through the application of constraints, primarily associated with the forecast economic future potential growth of the district.

- Section 6: Defining a Local Housing Requirement – The analysis presented in this section takes forward the household projections developed in section 5 and translates them into a 'dwelling requirement' figure to assist in informing the development of housing policies within the Local Plan. A series of 'checks' and 'implications' are undertaken and considered to assess the derived level of household growth and its translation into a realistic requirement for housing in the district.
- Section 7: Conclusion – This section brings together the analysis within the preceding sections of the report into a series of concise conclusions to assist in the development of policy and strategy by CBMDC in the future.

2. Context: Policy

- 2.1 Prior to undertaking a modelling exercise to understand the objectively assessed need for housing it is important to set this in a context of national, sub-regional and local policy.
- 2.2 This serves to highlight both the rationale and need to derive a housing requirement figure for the district but also to highlight the policy environment in which the research will be used and interpreted.

National Context

- 2.3 The Government is currently implementing reforms to the planning system. As part of this reform the Government has abolished Regional Strategies through the Localism Act and is in the process of revoking the Yorkshire and Humber Regional Spatial Strategy.
- 2.4 The implication of the anticipated revocation of the Yorkshire and Humber RSS and the housing requirements that it set for Local Authorities, is that the responsibility for establishing housing requirement figures for Local Plans now falls with individual Council's in the region.
- 2.5 The National Planning Policy Framework (NPPF), published in March 2012, sets out the Government's statutory planning policies for England.
- 2.6 Importantly the NPPF is built around a policy commitment to the achievement of sustainable development. At the heart of the NPPF is a '*presumption in favour of sustainable development*' which requires local authorities in the development of their Local Plans to adopt a positive approach in order to '*seek opportunities to meet the development needs of an area*' (Paragraph 14 first bullet).
- 2.7 With regards housing the NPPF states that in order to boost significantly the supply of housing, local planning authorities should:

"use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area, as far as is consistent with the policies set out in this Framework" (NPPF, para 47 bullet point 1)

2.8 Further guidance as to the informing data and drivers which should be considered in establishing this estimate of the objectively assessed need facing the authority for housing is set out within paragraph 159 of the NPPF:

“Local planning authorities should have a clear understanding of housing needs in their area. They should:

- *prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries. The Strategic Housing Market Assessment should identify the scale and mix of housing and the range of tenures that the local population is likely to need over the plan period which:*
- *meets household and population projections, taking account of migration and demographic change²;*
- *addresses the need for all types of housing, including affordable housing and the needs of different groups...; and*
- *caters for housing demand and the scale of housing supply necessary to meet this demand.*

2.9 This study forms an important part of the Council’s response to developing this evidence base and should be read alongside the update to the SHMA which has recently been commissioned by the Council. The focus of this report is to address the full objectively assessed need and demand for housing across the district, in particular taking account of population and household projections as well as their alignment with forecast changes to the local economy. The research includes analysis of the operation of strategic market geographies in relation in particular to the flow of people in terms of migration as well as travel to work connections therefore recognising that Bradford operates in a wider market geography.

The link between housing and the economy

2.10 The wider health of the UK economy is linked to global shifts as illustrated through both the sub-prime crisis in the US and the ongoing Eurozone challenges. The UK government has however, through a range of emerging and published policies set

² Note: In response to a question asked by Lord Hodgson of Astley Abbots on the 25th October 2011 in the House of Lords around the source of total population to be used in assessing housing requirements as set out in the draft National Planning Policy Framework Baroness Hanham replied: “When assessing their housing requirements in future years as part of a strategic housing market assessment, authorities should use the most recently released sub-national population projections (published by the Office for National Statistics) and household projections (published by the Department for Communities and Local Government). (<http://www.publications.parliament.uk/pa/ld201011/ldhansrd/text/111025w0001.htm#11102553000508>)

out its ambition to reduce the deficit and maintain a course of austerity. The intention is over the longer-term to ensure a sound footing from which to achieve economic growth, although the latest national forecasts suggest that this will take the form of a slow recovery.

- 2.11 The Government issued 'The Plan for Growth' in March 2011 which set out the economic plan for the UK to recover its position as a globally recognised resilient and growing economy. The importance of retaining and encouraging the investment of businesses within the UK is also highlighted. The Plan includes the promotion of *"labour mobility by boosting the supply of housing through support for the house building industry"* and stresses the concern that *"Low levels of housing completions and limits on land supply also create barriers to mobility and high costs of entry for firms coming to the country"*. These general principles signify the intention of the Government to enable a supply of new housing which meets current and future needs to support the economic growth of the country.
- 2.12 In November 2011 'Laying the Foundations: A Housing Strategy for England' was published. This reinforced the above messages around ensuring that the housing market supported rather than constrained the economic recovery. This included a range of measures including funding support through 'Get Britain Building' programme and incentives to encourage development such as the 'New Homes Bonus'.
- 2.13 These messages continue to be reinforced, for example through the 'Housing and Growth' ministerial statement by the Rt Hon Eric Pickles MP (September 2012) which reaffirms the Coalition Government's number one priority as being the need to grow the economy, and the need for a responsive and pro-growth approach to planning.

Regional Planning Policy

- 2.14 The Yorkshire and Humber Regional Spatial Strategy (RSS) was approved by the Secretary of State in May 2008. As noted in the introduction to this research the RSS is in the process of being revoked as part of the Government's Planning Reform³. The establishment of a housing figure within this tier of policy was however built from a significant evidence base and is therefore included by way of comparison within this section and subsequent parts of the report.

³ The Localism Act was given Royal Assent on the 15th November 2011. The Localism Act provides a legal foundation to the revocation of Regional Spatial Strategies.

- 2.15 The RSS indicated that Bradford was expected to make provision for development which will result in net annual additions to the dwelling stock of 1,560 per year between 2004 and 2008 and 2,700 per year between 2008 and 2026.
- 2.16 Within the RSS the net and gross housing requirement figures for Bradford district were roughly comparable, with the evidence assembled as to future levels of demolitions and future reductions in the level of vacant properties in near equilibrium. The latest datasets available regarding vacancy and demolitions are considered in greater detail in section 4.

Local Enterprise Partnership

- 2.17 Bradford is part of the Leeds City Region. The Leeds City Region was developed as part of the Northern Way initiative in 2004 under the previous planning policy structures. It represents a functional economic area, with strong evidence of commuting and migration flows across the 10 authorities which are included within the spatial area⁴.
- 2.18 The City Region formed a Local Enterprise Partnership (LEP) as part of the Government initiative to build a policy tier built around functional economic geographies across England. In 2012 the LEP produced a five-year strategic plan 'Realising the Potential'. This set a number of economic targets against which progress could be measured, including:
- An absolute increase in GVA growth rate per annum, with the aim of achieving a minimum of 2.6% per year in the period to 2030.
 - An absolute increase in employment rate in each area per annum, with the aim of returning to pre-recession employment rates for the city region by 2016, creating in the order of 60,000 jobs.
- 2.19 The commitment to supporting the economic growth of the wider sub-regional functional area forms an important context for this research, highlighting again the importance of aligning economic potential with the required level of housing to facilitate growth.

⁴ The Leeds City Region is made up of the following authorities: Barnsley, Bradford, Calderdale, Craven, Harrogate, Kirklees, Leeds, Selby, Wakefield and York.

Bradford Core Strategy DPD

2.20 CBMDC are currently in the process of developing the Bradford Core Strategy Development Plan Document (DPD). The Core Strategy will:

- Set out a long-term spatial vision for the District until 2028;
- Identify broad locations for and broad distribution of development over the next 15 years;
- Set out policies that will influence the use of land and the type and scale of development which will be permitted within the District; and
- Identify infrastructure required to support and facilitate development.

2.21 The Council consulted on the 'Further Engagement Draft' of the Core Strategy between Friday 28th October 2011 and Wednesday 29th February 2012. This followed on from consultation on the 'Further Issues and Options' version in 2008, to which the Council received over 400 comments.

2.22 The Further Engagement Draft included Policy HO1 'The Scale of Housing Required' which set out the following policy requirement for housing development over the plan period.

"C) This equates to the following minimum net completion rates over the plan period:

Phase 1 (2004-8) = 1,560 dwellings per annum

Phase 2 (2008-16) = 2,430 dwellings per annum

Phase 3 (2016-28) = 2,700 dwellings per annum" (Core Strategy Further Engagement Draft, 2011)

2.23 These levels of provision are based on the figures in Policy H1 and Table 12.1 of the Yorkshire and Humber RSS. The Core Strategy however, looks to take account of the economic recession and adverse housing market conditions and reduces the provision in the period 2008 – 2016.

3. Context: Housing Market Drivers

- 3.1 An appreciation of the way in which the drivers of the housing market have varied historically forms an important context for establishing a projection of future change. This section therefore considers two key drivers of housing need, population change and the economy presenting the latest available data in the context of historical trends.
- 3.2 In considering this analysis it is important to recognise that historical trends will themselves have been influenced by policy decisions. For example, the levels of migration into an authority are, at least in part, constrained by the levels of housing that have been built which are in themselves linked to planning policy directions as well as the market. This has an important implication for future projections which will also be impacted by the shape of policy and market forces highlighting the fact that separating supply and demand factors represents a challenge in developing an evidence base of future housing requirements.
- 3.3 Section 4 complements this review of the key drivers of the housing market through a summary of the key housing market indicators, including for example the relative pace of completions and house price trends. Collectively the contextual analysis presented in these two chapters therefore provide an important base from which to construct a range of population and household projections.

Population

- 3.4 According to the Office of National Statistics (ONS) the population of Bradford has grown from approximately 470,800 in 2001⁵ to 522,452 in 2011⁶, an increase of just over 51,650 people over the ten years. This translates into approximately 5,165 persons per year on average over this period.
- 3.5 This pace of change is markedly different from that estimated over the preceding decade. Contrasting the ONS published 1991 Mid-Year Estimates (MYE) with the 2001 dataset suggests a population increase of only 2,000 or just 200 persons per annum.

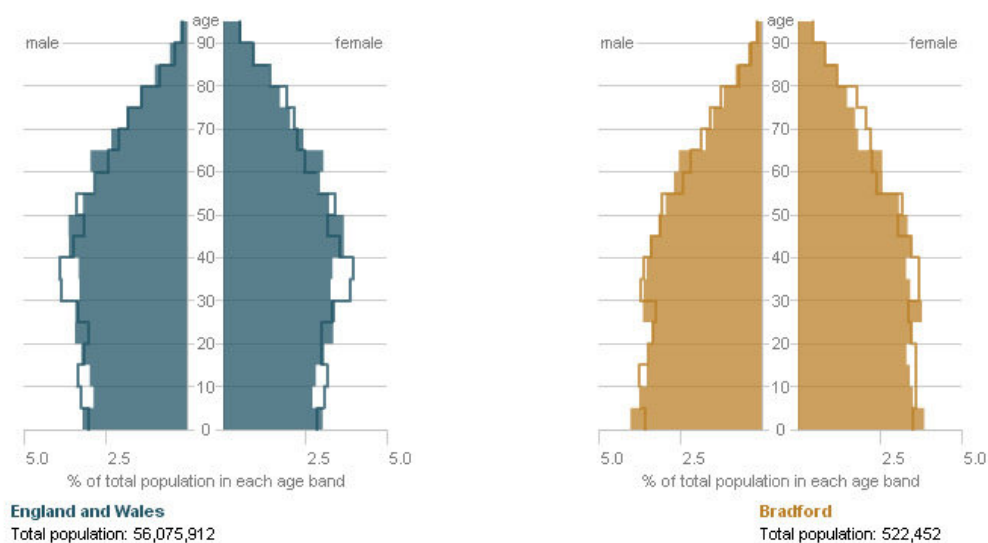
⁵ Source: ONS 2001 Mid Year Estimates figure. Note this is slightly higher than the Census 2001 results published by the ONS.

⁶ Source: 2011 Census, ONS first data release 2012

3.6 The significant growth in population seen between 2001 and 2011 has resulted in changes to the age profile of the population across the authority. This is illustrated in the following charts produced by the ONS.

Figure 3.1: 2011 Census population estimates for England & Wales and Bradford (Outlines show 2001)

2011 Census: population estimates for England and Wales (outlines show 2001)



Source: 2011 Census, 2001 Mid-Year Population Estimates
Graphic by ONS Data Visualisation Centre

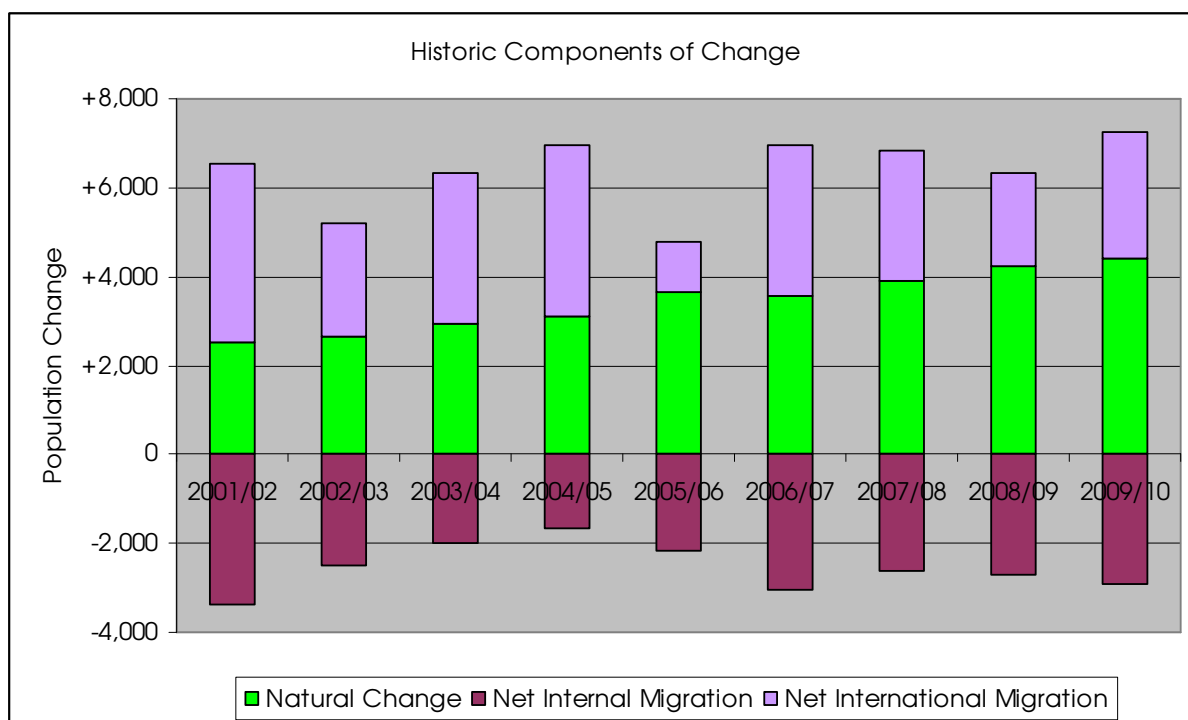
Source: 2011 Census, 2001 Mid-Year Population Estimates. Graphic by ONS Data Visualisation Centre

3.7 Comparing the 2011 age profile of Bradford against England and Wales it is evident that Bradford has a notably more youthful population, with higher proportions of both sexes in the age category's from 0 – 20 years old. Bradford also has a slightly higher proportion of males aged 25 – 40 and females aged 20 – 35 compared to the national figure which is an important factor in terms of the size of the relevant potential workforce in the authority.

3.8 Contrasting the 2001 profile with the 2011 profile in Bradford shows that in 2011 there has been a slight reduction in the proportion of the population aged 30 – 40, although this is much less marked than that seen across England and Wales. In contrast there has been an increase in the proportion of people aged 55 – 65 which reflects the general evolution of this generation through the pyramid.

- 3.9 Interestingly, and reflecting these points above, the core working age population – Census defined age group of 15 – 64 – in Bradford has grown from 63.9% in 2001 to 64.7% in 2011. Whilst the share has grown it still falls below the England and Wales average of 65.9%. This has an impact on the potential size of the labour-force in the authority in turn having a bearing on the link between housing and the economy, an issue picked up in greater detail in subsequent sections.
- 3.10 When considering population change the ONS considers two principal factors, natural change, which is the net residual left when the number of deaths is subtracted from the number of births and migration, which considers the difference between the movement of people in and out of the Borough. In terms of migration the ONS makes a distinction between internal migration, that is the movement of people into and out of Bradford from other parts of the UK, and international migration – immigration and emigration flows.
- 3.11 Figure 3.2 illustrates the annual net impact of each of these factors on the changing population of Bradford.

Figure 3.2: Components of population change – Bradford 2001/02 – 2010/11⁷



Source: ONS mid-year estimates (2011), Edge Analytics

⁷ Note: the data displayed is modelled through POPGROUP and may include some slight variation from officially released datasets published by the ONS

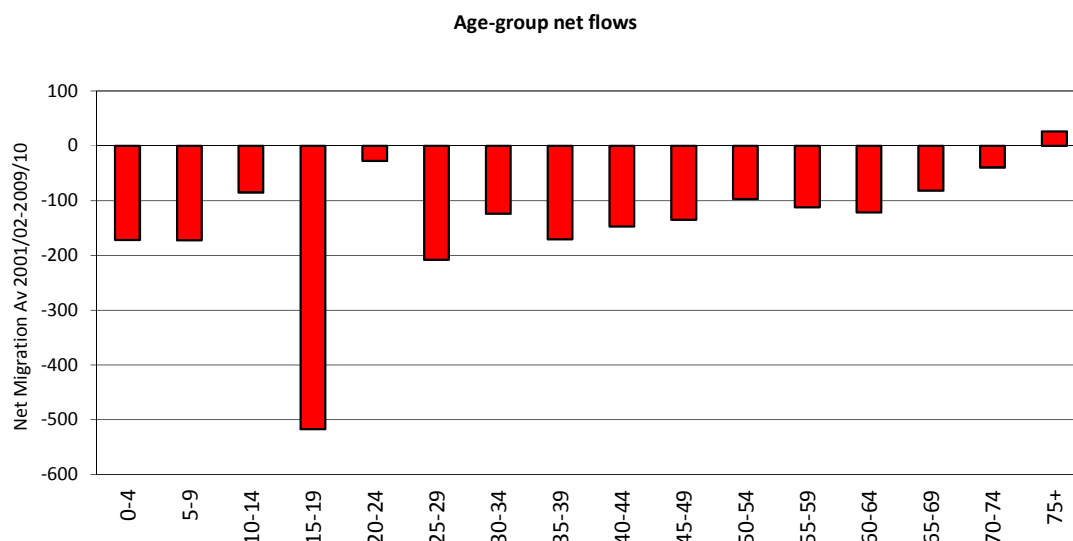
- 3.12 The chart illustrates that natural change has continued to play an increasingly important role in driving the growth in population. Indeed the dataset suggests that in 2009/10 natural change was almost twice as high as that recorded in 2001/02⁸. This reflects the age structure presented in the preceding chart with younger components of the population increasing in size.
- 3.13 Year on year Bradford has seen a net out-migration of persons to other parts of the UK (internal migration component). The scale of this flow has varied slightly but has been comparatively high for the last four years presented within the chart.
- 3.14 This net internal out-migration has been offset in terms of its impact on the annual change in population levels by a strong net migration of international migrants into the authority. Again this has been relatively consistent in the scale of the net in-flow seen with no evidence of a significant reduction in recent years.
- 3.15 It is important to recognise that the data presented in figure 3.2 draws on the ONS mid year estimates datasets. The 2010 MYE dataset actually showed a considerably lower population estimate for Bradford than that evidenced through the 2011 Census, 512,618 compared with 522,452. Given that the component which is subject to the greatest amount of modelling and estimation is the international migration component it is likely that the analysis presented above has under-counted the net scale of international in-migration into Bradford over this period.

Migration – Age Profile

- 3.16 With regard to the internal migration component it is possible to analyse the underpinning data in greater detail to understand the age profile of these flows of people in and out of Bradford.
- 3.17 Figure 3.3 shows the average net flows of UK migrants in Bradford taken over the period 2001 to 2010.

⁸ Note: This data does not take account of the findings of the 2011 Census. It is understood that the ONS will update historic mid-year estimate datasets integrating the results of the latest Census in Spring 2013.

Figure 3.3: Average age of migrants 2001 – 2010



Source: ONS Mid-Year Estimates (2011), Edge Analytics

- 3.18 This shows a notable average net out-migration to other parts of the UK across nearly every age group. The net flows are particularly pronounced for those aged 15 – 19, with this likely to be driven in significant part by the movement of people to institutes of further and higher education across the cities of the UK.
- 3.19 Importantly the chart shows a high annual average net out-migration of persons of working age to other parts of the UK. This flow of people also explains the out-migration of those aged under 16 with their movements directly linked.
- 3.20 It is important to recognise that this profiling of the age of migrants does not include international emigration or immigration. The previous chart, figure 3.2, shows high net increases in the population of Bradford annually associated with a net inflow of international migrants. In general a significant proportion of populations migrating into city’s like Bradford are of working age, with the motivation for movement being the opportunity of obtaining employment opportunities and an uplift in earnings. Bradford has a long established history of attracting economic migrants from across the world, many of which have settled within the district forming strong communities. This in itself serves to maintain the flow of new people into the district from overseas, a factor which contributes significantly to the youthful age profile displayed in figure 3.1.

Migration – Spatial linkages

- 3.21 The movement of people represents an important indicator in assessing the spatial linkages between Bradford and other surrounding authorities and areas. The analysis above has clearly shown that the flow of people in and out of Bradford represents an important factor in terms its changing population. This is also an important consideration in understanding the relative levels of containment of the housing market, with migration an important informing factor in assessing the geographies of functional markets, which in turn impacts on the setting of appropriately evidenced housing requirement policies.
- 3.22 Again the data showing the flow of migrants provides a more detailed breakdown of analysis for those flows within the UK, in terms of their origin and destination, with this monitored through a number of nationally constructed datasets.
- 3.23 Figure 3.4 shows the origin of the top ten average inflows into Bradford over the period 2001/02 – 2009/10.

Figure 3.4: Top ten authority inflows of UK migrants into Bradford (Average 2001/02 – 2009/10)

Top Ten Inflows	Average 2001/02-2009/10
Leeds	2,903
Kirklees	896
Calderdale	824
Craven	526
Manchester	293
Birmingham	284
Wakefield	252
Sheffield	211
East Riding of Yorkshire	207
Harrogate	201

Source: ONS (2011), Edge Analytics (2012)

- 3.24 This shows the very strong flow of people from Leeds into Bradford, just over 2,900 people per year on average over this time period. The flows from Kirklees and Calderdale whilst significantly less are still significant in size at on average over 800 persons a year. Craven also shows a strong flow with over 500 persons on average with the remainder of the top ten including a number of large cities including Birmingham, Manchester and Sheffield as well as other authorities in closer proximity.
- 3.25 Figure 3.5 shows the contrasting top ten outflows of people moving out of Bradford to other authorities within the UK.

Figure 3.5: Top ten authority outflows of migrants from Bradford to other authorities in the UK (Average 2001/02 – 2009/10)

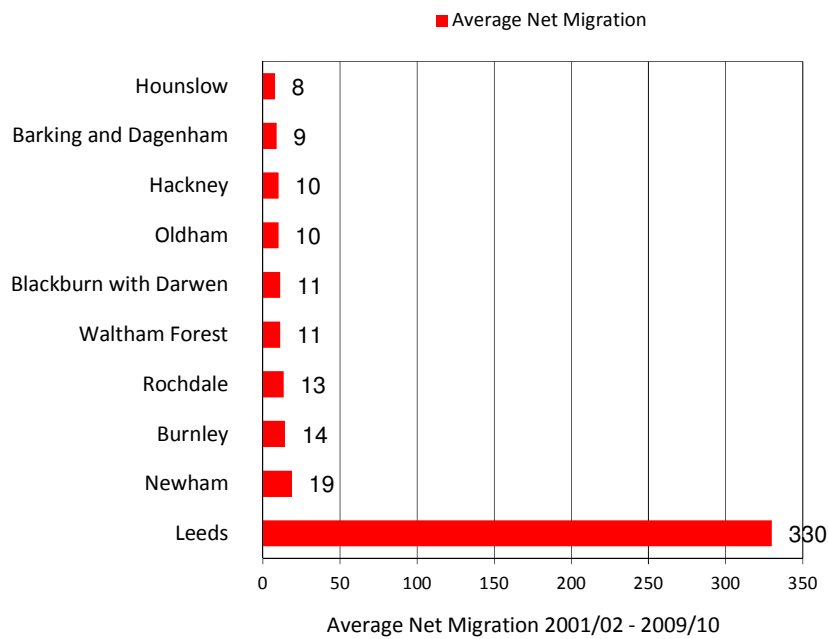
Top Ten Outflows	Average 2001/02-2009/10
Leeds	2,573
Calderdale	1,229
Kirklees	1,082
Craven	809
East Riding of Yorkshire	497
Manchester	384
Harrogate	318
Birmingham	311
Wakefield	306
Sheffield	246

Source: ONS (2011), Edge Analytics (2012)

- 3.26 Leeds also appears at the top of this list with almost 2,600 persons on average per annum moving from Bradford into Leeds. Calderdale and Kirklees also show very strong flows, both exceeding 1,000 per annum on average with Craven again 4th in the list. East Riding is higher up the rankings with almost 500 persons per year on average moving from Bradford to East Riding.

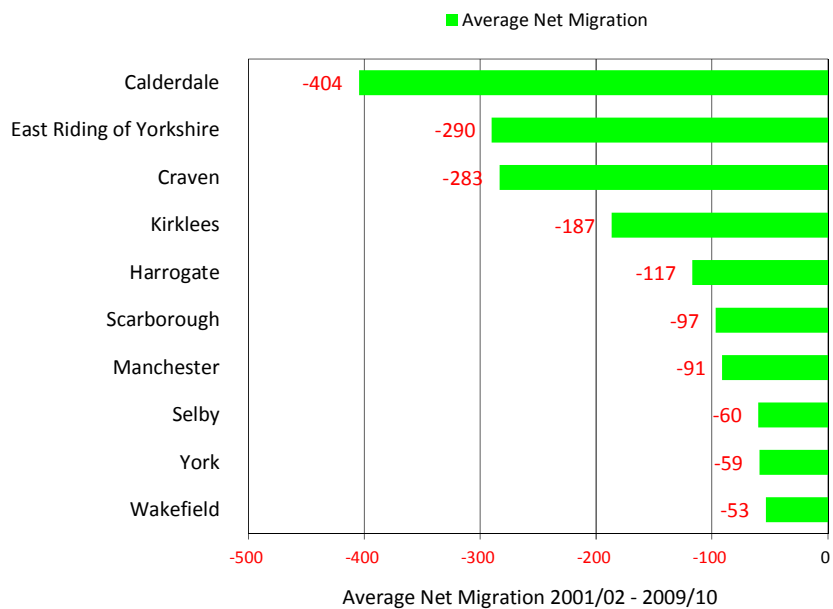
- 3.27 Contrasting the two flows, in and out, provides a net picture. This has been undertaken considering all authorities within the UK, not just the top ten flows shown in the preceding tables, with the top ten net inflows and outflows shown in Figures 3.6 and 3.7.

Figure 3.6: Top 10 net migration inflows



Source: ONS (2011), Edge Analytics (2012)

Figure 3.7: Top 10 net migration outflows



Source: ONS (2011), Edge Analytics (2012)

- 3.28 Examining the net inflows chart indicates that the only significant flow into Bradford in net terms is that from Leeds. This flow is, however, significant in scale with on average the net flow being approximately 330 persons. This contributes notably to the historical net increase in the population year on year within Bradford equating, if stretched out over a ten year period, to 3,300 persons.
- 3.29 An examination of the net outflow chart highlights, significantly, the cumulative negative contribution that internal migration flows make to the overall population change in Bradford. Three authorities experience a net increase in their population of over 250 persons per annum, resulting from the movement of people in and out of Bradford, these being Calderdale (over 400 persons per annum), East Riding of Yorkshire and Craven. Kirklees, Harrogate, Scarborough and Manchester all also show net flows in of between around 190 and 90 persons per year from Bradford.
- 3.30 On the whole, as considered in greater detail in Section 4, these flows are likely to be the collective result of a range of factors including;
- The relative attractiveness of the quality of place / housing market on offer in a number of these authorities such as the East Riding of Yorkshire, York and Harrogate;
 - Economic opportunities or family ties in surrounding urban areas e.g. Halifax, Skipton or Wakefield; and
 - The appeal of different Universities in some of the larger cities such as Manchester.
- 3.31 In summary, from the above it is clear that Bradford's housing market operates with strong functional linkages with a number of the surrounding authorities. The relationship with Leeds in particular is particularly important and not surprising given the close proximity of the two cities and the existing strong infrastructure connections.

Households

- 3.32 An increase in population in Bradford has also been reflected in an increase in the number of households in the authority. The 2011 Census shows that the number of households has increased from 181,000 in 2001 to 199,296 households in 2011, an increase of almost 18,300 households or approximately 1,830 per year⁹.

⁹ The release of updated mid-year estimate datasets between 2001 and 2011 by the ONS, anticipated in Spring 2013, will provide further clarification as to the comparative pace of household formation through the ten year period.

- 3.33 Comparing the private household population¹⁰ with the number of households the 2011 Census shows an average household size¹¹ of approximately 2.6 persons.

Economy and Employment

The Economically Active Labour-force

- 3.34 The relative health of the economy has an important relationship with population and housing market dynamics. Firstly, as noted above the availability of employment opportunities can serve as an important motivating factor for people choosing to migrate between different areas. Secondly, since employment status is linked to a household's available income to spend on housing costs, this has an important bearing again on choices exercised by households around moving house and the location, type and tenure of housing they select.
- 3.35 Figure 3.8 shows the proportion of people classified as economically active on average in Bradford between 2004 and 2011¹² as recorded by the Annual Population Survey by broad age group. Comparable proportions for England and Yorkshire and the Humber are provided in order to contextualise the statistics.

¹⁰ 2011 Census definition – A household resident is a person whose place of usual residence is in an individual household, and not within managed residential accommodation in a communal establishment. A communal establishment is an establishment providing managed residential accommodation. 'Managed' in this context means full-time or part-time supervision of the accommodation. Communal establishments include sheltered accommodation units, hotels, guest houses, B&Bs and inns and pubs, and all accommodation provided solely for students (during term-time).

¹¹ 2011 Census definition – The size of a household is equal to the number of usual residents in the household.

¹² Averages are used over this period in order to iron out any volatility in the dataset recognising that the APS is based on a sample of responses. Updated economic activity rate data is anticipated in the December 2012 second release of 2011 Census data.

Figure 3.8: Average economic activity rates by broad age group over the period 2004 – 2010 - Bradford and England

Gender	Age Group	Average 2004 – 2010		
		Bradford	Yorkshire and the Humber	England
Male	16 - 19	54.3	57.2	54.0
	20 - 24	82.9	81.2	80.5
	25 - 34	90.9	91.3	92.5
	35 - 49	89.4	91.5	92.1
	50 - 64	72.1	73.2	75.8
	65+	6.6	7.8	10.3
Female	16 - 19	43.0	54.1	53.4
	20 - 24	64.9	67.8	70.0
	25 - 34	62.3	73.6	75.3
	35 - 49	73.7	79.9	78.6
	50 - 64	56.4	57.7	59.9
	65+	3.8	4.0	5.0

Source: APS, 2012

- 3.36 It is evident from the above that across most age groups Bradford has lower economic activity rates than the England average. This is particularly true for older age groups with the only age bracket where the proportion is higher in Bradford being males aged 20 – 24.
- 3.37 Considering the rates recorded for females shows a more marked difference from the national average, for example an average of only 62.3% of females aged 25 – 34 are classified as economically active in Bradford compared to 75.3% across England.
- 3.38 The early data releases within the Census 2011 include headline economic activity data at a local authority level. This shows that in the week preceding the 2011 Census date that Bradford had an economic activity rate of 66.6% compared to an England average of 69.9%. Comparably detailed data to that presented above in figure 3.8 is not currently available through the Census 2011 dataset. In addition the averaging out of rates provides an important basis for understanding the health of the local economy over a longer-time period rather than considering a single snapshot as provided by the Census analysis.
- 3.39 The economic health of the labour-force in Bradford is further emphasised through a consideration of the unemployment rate for those aged 16+. The following table shows this rate over the period 2004 – 2011.

Figure 3.9 Unemployment Rate of those aged 16+ in Bradford

Year	Unemployment rate - aged 16+
2004	5.3
2005	5.2
2006	6.3
2007	8.2
2008	7.3
2009	7.6
2010	10.7
2011	12.7

Source: nomisweb.co.uk 2012, Edge Analytics, 2012

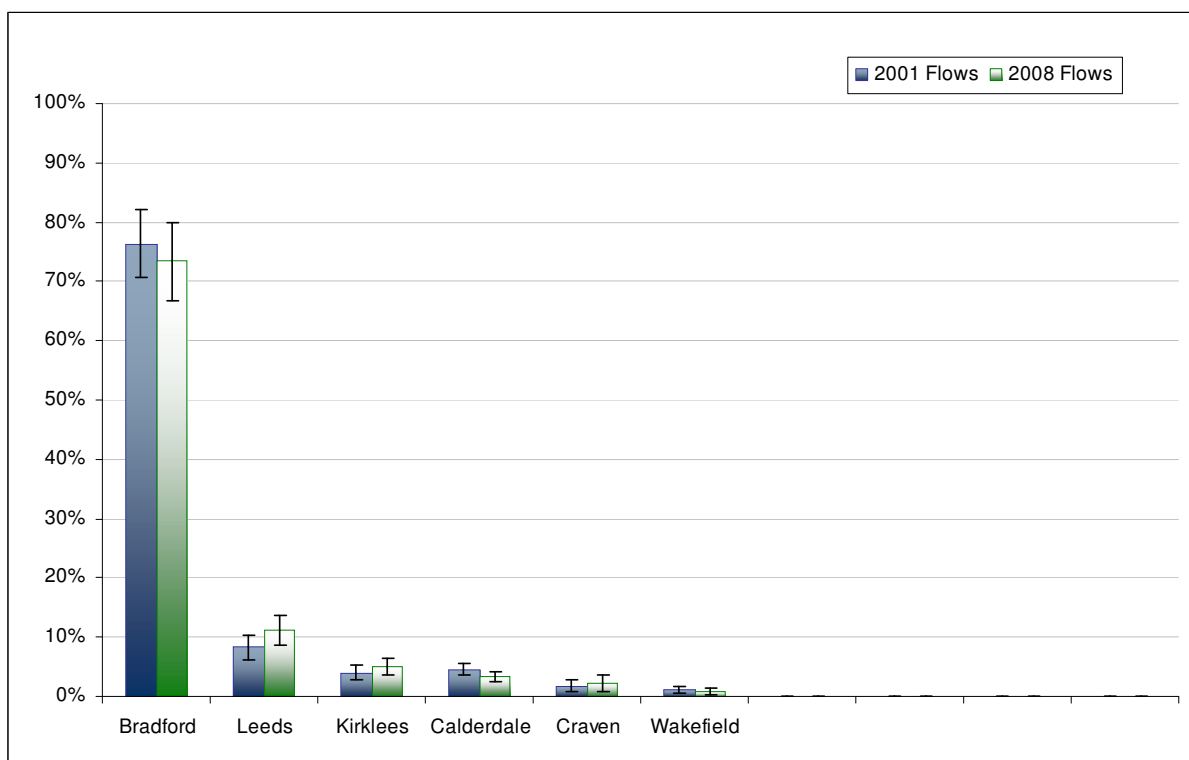
3.40 This trend data suggests that unemployment has increased in Bradford from a low of 5.2% in 2005 to over 12% in 2011.

Travel to work / Commuting

3.41 Whilst there is often a strong spatial relationship between work and home many people commute to and from work. A comparison of the number of employed residents with the number of jobs within the authority using data from the APS and the BRES for 2010 suggests that the two figures are roughly comparable albeit with the number of jobs being slightly lower than the workforce. The ratio between the two suggests a commuting ratio of around 1.01. This represents a slight change from that evidenced in the 2001 Census which suggested a commuting ratio of 0.98 with this switch round of the ratio to above 1 likely to be the result of a reduction in jobs within Bradford as a result of the recessionary economic climate following 2007.

3.42 As with migration the spatial relationship of these flows is important to understand. The following chart shows the top ten largest flows comparing where people who work in Bradford live.

Figure 3.10: Local authority of residence for Bradford workers – ten largest flows



Source: ONS Commute-APS tool, Local Labour Force Survey (2001), Annual Population Survey (2008)

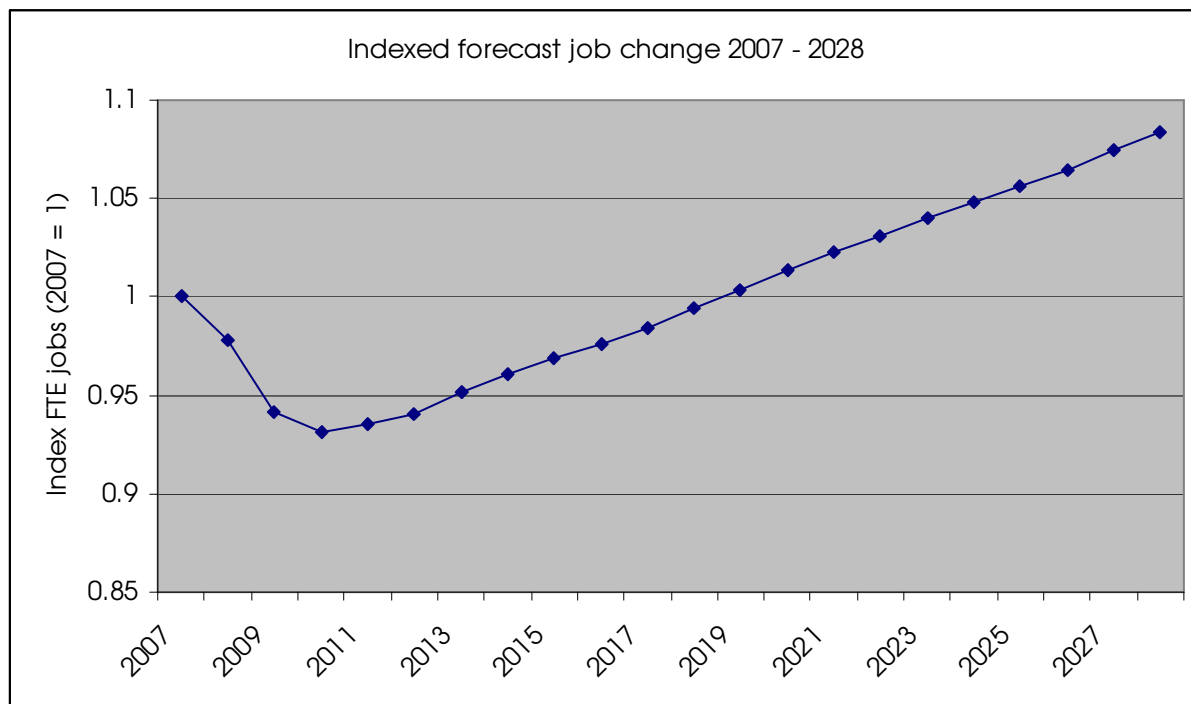
- 3.43 This shows that there is a high level of containment of the workforce within Bradford, with over 70% of workers in Bradford living in Bradford. The second strongest flow is with Leeds followed by Kirklees and then Calderdale. This reinforces the strategic linkages identified in the migration of people with these authorities, highlighting the important interplays within this functional geography.

Economic Futures

- 3.44 The above summary of the economy has considered historical trends but it is also important to understand how the health of the economy of Bradford may change in the future.
- 3.45 The review of policy in section 2 has already highlighted the ambitions of the Local Enterprise Partnership to increase labour participation and increase productivity. The analysis below considers the outputs of the Regional Econometric Model forecasts (April 2012). These forecasts are underpinned by Experian forecasts and managed by Leeds City Council.

3.46 The chart below shows the indexed change in jobs forecast between 2007 and 2028 under the model.

Figure 3.11: Indexed forecast job change 2007 – 2028



Source: April 2012 REM model outputs, Leeds City Council

- 3.47 The chart clearly shows that following the credit crunch and throughout the subsequent recessionary economic climate that Bradford has seen a reduction in the number of jobs. This reflects a national picture and provides an important context to considering the future changing health of the economy and the relationship between housing demand and job creation.
- 3.48 Forecasts at this time suggest that from 2011 this trend will begin to be reversed and the economy will continue to produce new employment opportunities, albeit slowly to begin with. Importantly the total number of jobs is not forecast to reach the pre-recession level seen in 2007 until around 2018 / 19.
- 3.49 In total the forecasts show a predicted growth of just over 27,000 jobs¹³ between 2011 and 2028. On average this translates into approximately 1,600 additional jobs per year.

¹³ The REM model forecasts full time equivalent (FTE) jobs.

Comparing Recent Economic Forecasts

The onset of the economic recession within the UK following a period of sustained economic growth over ten years has highlighted the need to apply a health-check to the accuracy of economic forecasts. Economic forecasts are intended to give an indication of the anticipated trajectory of change and do not aim to predict market cycles nor the sensitivities of single major events.

The analysis in this section and in section 5 uses a single set of forecasts in order to provide an up-to-date analysis with a credible analytical basis. In the decision to use this single set of forecasts, the April 2012 run of the REM model, analysis has been undertaken to compare the forecast change in employment over a consistent period, 2011 – 2028, from a number of different runs of the model.

The table below sets out the forecast change in FTE (full time equivalent) employment within Bradford under three different runs of the REM over the last 18 months. This shows a relative strong consistency in the level of job change over this 17 year period. The April 2012 forecasts represent the strongest level of employment change for the city. The latest forecasts (released mid-way through the research) show a slightly reduced level of forecast employment growth, although the difference is relatively minor when considering such a long period of forecasting.

Contrasting forecast employment change within recent runs of the REM forecasting model

REM forecast	Forecast change in FTE employment 2011 - 2028
REM April 2012	27,041
REM October 2012	25,740
REM (March 2011) Employment Land Review update June 2011	26,726

The table includes the run of the model (March 2011) which is used to underpin the forecast requirement for employment land within the Employment Land Review Update (October 2011). This represents another important part of the Council’s evidence base for the development of the Local Plan. Importantly the REM April 2012 job forecasts are broadly in line with the level of job growth used within the ELR. The ELR also included modelling of a January 2010 version of the REM which showed a far lower projected job growth level linked to forecasts built during the middle of the economic recession.

Highlighting the comparative volatility of economic forecasts the ELR update references the 2006 study conducted by ARUP. This included economic forecasting suggesting the creation of 4,720 jobs per annum between 2006 and 2016. A level which far exceeds any of the forecasts produced over the last two years or so. The reality of job change over the period 2007 – 2012 shown in figure 3.11 highlights the departure from this forecast position with the period actually showing a substantial reduction in employment levels across the authority.

On the basis of the above the April 2012 run appears to represent an ambitious level of job growth, which also aligns with other important parts of the Council’s evidence base and appears consistent, if slightly higher than other recent forecasts for the authority.

3.50 The forecasts provide a breakdown by industrial sector. The table below shows the top ten sectors forecast to see the largest growth in employment over the period 2011 – 2028.

Figure 3.12: REM top ten industrial sectors – scale of growth 2011 – 2028

REM April 2012	Change 2011 - 2028 (FTE Jobs)
Business Services	7,592
Retailing	5,102
Health	4,393
Transport	4,104
Hotels & Catering	2,599
Paper, Printing & Publishing	2,247
Wholesaling	1,986
Other Financial & Business Services	1,949
Other Services	1,886
Education	1,206

Source: April 2012 REM model outputs, Leeds City Council

- 3.51 The forecasts indicate that job growth will be driven by a diverse range of sectors in Bradford. Business Services stands out as the largest single sector of growth, forecast to create almost 7,600 new jobs. With the addition of ‘Other Financial & Business Services’ and ‘Other Services’ these key service sectors account for just over 11,400 additional jobs.
- 3.52 A number of the other forecast large growth sectors represent comparatively ‘low-income value’ sectors. These include for example retailing, hotels & catering and wholesaling.
- 3.53 Significantly sectors such as education and health which are forecast to grow are intrinsically linked to changing demographic factors. For example a growth in the education sector will be closely related to the increase in children of school age. The health sectors forecast growth is as well linked to overall levels of population change with the impact of an increase in older persons in particular having a bearing on demand.
- 3.54 The construction sector falls just outside the top ten growth sectors, ranked number 11. This shows a forecast growth of just over a 1,000 jobs. This sector again is linked indirectly to population and household change with a proportion of these jobs created through the construction of new houses and associated infrastructure. This is an issue which is returned to in the analysis in section 6.

Bringing the Evidence Together

3.55 This section has set out analysis of the key strategic drivers influencing changes to population and households, namely demographic and economic factors. This provides a solid basis for understanding the relationship between the two and the implications for future demand for housing within the district over the plan period. The analysis has indicated:

- According to the Office of National Statistics (ONS) the population of Bradford has grown from approximately 470,800 in 2001¹⁴ to 522,452 in 2011¹⁵, an increase of just over 51,650 people over the ten years. This translates into approximately 5,165 persons per year on average over this period;
- Comparing the 2011 age profile of Bradford against England and Wales it is evident that Bradford has a notably more youthful population. Analysis of the demographic components of change which driven population change show that natural change has continued to play an increasingly important role in driving the growth in population, this reflects this age profile;
- In terms of the other significant demographic component of change, migration, year on year Bradford has seen a net out-migration of persons to other parts of the UK. This net internal out-migration has been offset in terms of its impact on the annual change in population levels by a strong net immigration of international migrants into the authority. Again this has been relatively consistent in the scale of the net in-flow seen with no evidence of a significant reduction in recent years;
- Spatially, analysis of migration flows shows a significant link with Leeds with a net outflow of people from Leeds into Bradford annually on average over recent years. Strong flows of people are also evidenced with Calderdale, Kirklees and Craven. There is evidence of a consistent outflow of people to surrounding districts with the availability of a different housing offer / quality of place likely to be a factor in their decision making;
- An increase in population in Bradford has also been reflected in an increase in the number of households in the authority. The 2011 Census shows that the number of households has increased from 181,000 in 2001 to 199,296 households in 2011, an increase of almost 18,300 households or approximately 1,830 per year;

¹⁴ Source: ONS 2001 Mid Year Estimates figure. Note this is slightly higher than the Census 2001 results published by the ONS.

¹⁵ Source: 2011 Census, ONS first data release 2012

- Analysis of Bradford's current economy shows that across most age groups the labour-force has lower economic activity rates than the national (England) average. The relative health of the labour-market in Bradford is also evidenced in the scale of those aged 16+ who are unemployed, which has continued to increase from 2005; and
- Looking forward the Regional Econometric Model (April 2012) forecasts a significant increase in the number of jobs in Bradford. Between 2011 and 2028 approximately an additional 27,000 jobs are forecast to be created with key growth sectors including business services, retail, health and transport. This positive picture of job generation needs to be considered in the context of the preceding recessionary period which has seen year-on-year reductions in employment levels. Indeed the forecasts do not suggest a return to 2007 levels of employment until 2018/2019.

4. Context: Housing Market Indicators

- 4.1 Whilst the preceding section has considered the macro drivers of population and household change it is important to also understand the supply response to demand in the form of new development, demolitions and levels of market transactions. The balance between the supply and demand for housing manifests itself in a number of other housing market indicators, including for example the price of property, rental levels, vacancy rates and the ratio between housing costs and income (affordability).
- 4.2 This chapter of the report therefore provides a further important context to the production of housing requirement figures through a consideration firstly of the historical supply response and then the evidence displayed through market indicators.
- 4.3 The analysis within this section draws on, where appropriate, the emerging Strategic Housing Market Assessment (2012) which considers the operation of the market across Bradford in greater detail.

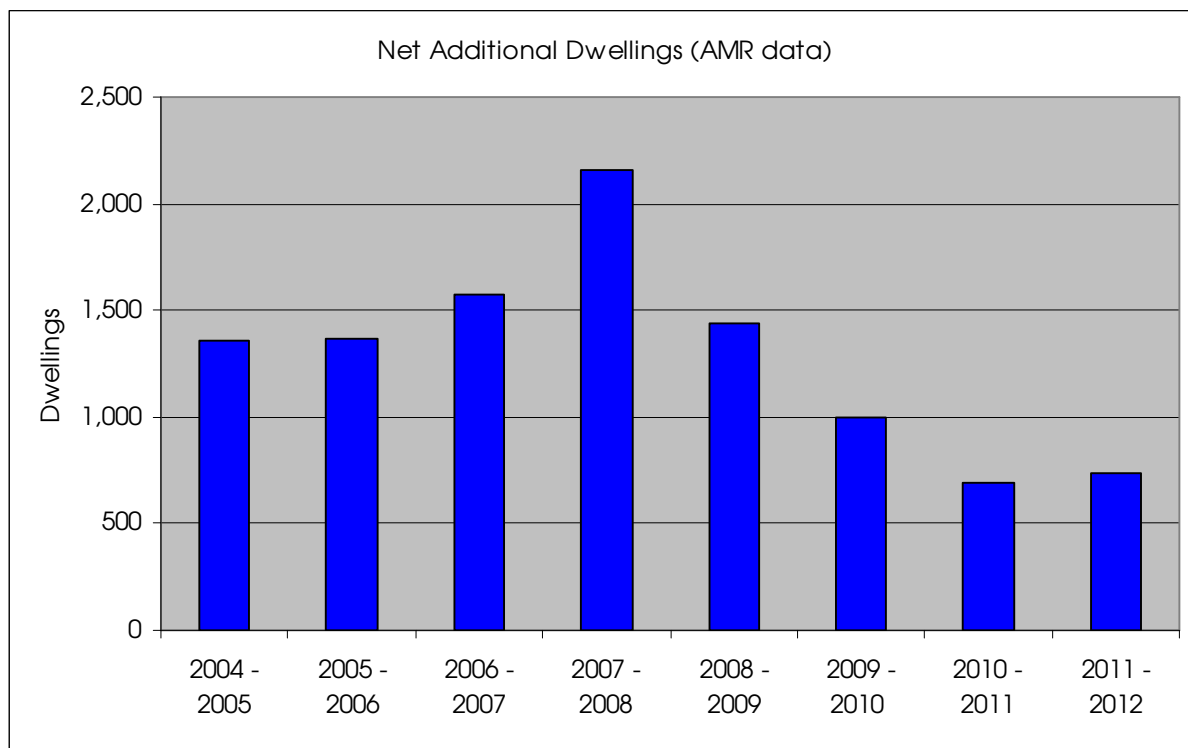
The supply of new housing

Completions

- 4.4 Nationally the development of new houses has fallen markedly from the comparably high levels seen prior to the credit crunch / recession. The latest house building statistics published by the DCLG¹⁶ indicate:
- Seasonally adjusted starts are now 52% above the trough in the March quarter 2009 but 45% below the December quarter 2005 peak. Completions are 44% below their March quarter 2007 peak; and
 - Annual housing starts totalled 98,020 in the 12 months to September 2012, down by 9% compared with this period in 2011. Annual housing completions in England reached 117,190 in the 12 months to September 2012, an increase of 6% compared with the same period in 2011.
- 4.5 The following chart, built from data contained within the Council's Annual Monitoring Report, shows that Bradford's completion levels over recent years have reflected this national trend.

¹⁶ <https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building> - September quarter 2012 publication

Figure 4.1: Annual net additional dwellings



Source: 2010 – 2011 Annual Monitoring Report, Bradford City Council

- 4.6 Over the 8 years between 2004 and 2012 there have been approximately 10,332 net additional dwellings completed across Bradford. This equates, on average, to the addition of 1,292 houses annually.
- 4.7 Figure 4.1 indicates that this pace of delivery has not, however, been consistent. Net completions rose between 2004 and 2008, peaking with the delivery of 2,156 net new houses in 2007/08. In line with the national picture completions have subsequently fallen over the following three years, reaching a low of 696 in 2010/11. The recorded net completions for 2011/12 show a small recovery but the 733 built in this year still only represents approximately a third of those completed in 2007/08.
- 4.8 The factors influencing this fall in completions both at a Bradford and national level are well documented. Fundamentally the removal of opportunities for first time buyers to gain mortgage finance has served to undermine the operation of the market. A lack of realisable demand has led to a fall or arguably a correction in house prices which in turn has impacted on the viability of house-building and further stifled demand from other parts of the housing market i.e. those looking to upsize or downsize from their current property. One of the impacts of these market changes has been an undermining of the previous seen levels of demand for city centre flats and apartments. This has had a notable impact on completion rates with these

playing a significant contributing role to the high levels of completions seen at the peak of the market in 2007/08. These issues are considered in more detail later in this section.

- 4.9 The following table shows the recorded change in housing units, derived from Council Tax data, in each ward across Bradford between April 2008 and April 2012. This reflects the time period affected by the slow down in completions and indicates where development has continued to increase the stock base. Wards have been ranked by the change in housing stock.

Figure 4.2: Change in housing units by ward

Ward	Change in stock April 2008 - April 2012
City	917
Bingley	289
Baildon	283
Bingley Rural	257
Shipley	241
Bowling and Barkerend	215
Tong	190
Idle and Thackley	186
Bolton and Undercliffe	184
Worth Valley	165
Eccleshill	151
Craven	130
Toller	130
Thornton and Allerton	126
Queensbury	124
Keighley West	117
Wyke	112
Clayton and Fairweather Green	110
Wharfedale	100
Ilkley	88
Wibsey	87
Royds	84
Great Horton	67
Windhill and Wrose	67
Manningham	53
Keighley East	52
Keighley Central	38
Little Horton	33
Heaton	29
Bradford Moor	-7

Source: Bradford City Council housing monitoring data, 2012

- 4.10 This serves to illustrate that delivery rates vary across the different wards of the District. The city ward has continued to see the largest growth in units reflecting the historical pipeline of apartment schemes in this urban area. The important role played by the city centre in driving completions is illustrated by the fact that the levels of completions over this four year period is more than three times greater than the next highest recorded level in Bingley ward. Indeed levels of completions across the other wards of Bradford are relatively low, with only the following wards recording over 200 completions over this time period - Bingley (& Bingley Rural), Baildon, Shipley and Bowling & Barkerend.

Demolition and Clearance

- 4.11 Regeneration programmes in operation across the urban parts of the district as well as ongoing activity to improve the social housing stock across the area have resulted in a steady process of demolition and clearance. The removal of stock is offset against gross new completions and conversions to arrive at a net additional stock position presented in the previous sub-section.
- 4.12 The latest information¹⁷ suggests that in 2012/13 there are a total of 393 planned demolitions with a further 85 units planned to be lost through conversion of property. This represents a total reduction in stock over this year of 478 units.
- 4.13 Looking forward it is more uncertain as to the rate at which demolitions and clearance will be maintained. Changes to funding allocations and processes mean that the level of finance to fund such stock improvement and regeneration schemes is likely to be reduced. As part of the research process social housing providers active across Bradford were approached as to their plans for removing stock over the next few years but the responses were not consistent enough to present a complete and robust picture.
- 4.14 Careful monitoring will be required to assess the rate of demolition over the next few years in order to monitor the net housing requirement for the district.

National Housing Market Overview

- 4.15 The operation of the national market forms an important context for considering Bradford's own housing market indicators. The overall operation of the housing market has undergone a period of significant volatility over the last ten years. Recognising the scale of change and the impact this potentially has on the demand for housing and

¹⁷ Data supplied by InCommunities – August 2012

the capacity for households to exercise choice in the market is important in considering the overall requirement for housing modelled in subsequent sections.

Historic Trends

- 4.16 Following the boom and bust of the late 1980s/early 1990s, the UK housing market saw almost a decade of sustained very strong house price growth from late 1996 (when house prices were below trend and house price to earnings ratios were low) to early 2005. Indeed, from the end of 1996 to the end of 2004, prices rose by 178% (or 13.6% per annum)(pa) according to the Nationwide.
- 4.17 The market then cooled in 2005, as a reaction to the modest interest rate rises in 2004, and a lack of affordability, notably for first-time buyers, with growth bottoming out in September 2005 at 2.2% pa (Nationwide seasonally adjusted figures). Following the slowdown in activity during 2005, the housing market saw price growth accelerate again during 2006, as interest rates decreased and economic growth accelerated.
- 4.18 However, growth started to decelerate in the second half of 2007, and price levels reached a peak in October 2007. The sale of, and subsequent losses upon, mortgages to households with poor financial credentials ('sub-prime') in the USA and subsequent global credit squeeze changed the financial landscape both internationally and in the UK.
- 4.19 As the subsequent 'credit crunch' spread across the globe, banks and building societies withdrew mortgage products from the market, and raised the interest costs to potential borrowers and those requiring refinancing on those products that remained (as well as raising the bar in terms of required deposits). Demand for mortgages was therefore restricted by lending criteria and the number of loans. In turn, this fed through to buyer sentiment, reducing underlying demand as well as effective demand, caused by falling house prices coupled with rising consumer prices and lack of consumer confidence. As the national UK economy went into recession, sentiment weakened further, and 'real' effects began to feed through, as unemployment started to increase.
- 4.20 The result was a rapid fall in house prices. Nationwide figures suggest that prices peaked in October 2007, and had fallen nearly 20% by February 2009. However, the national market stabilised during 2009 and 2010, remaining this way, give or take minor fluctuations, to the present day (October 2012).

The Current Housing Market Context

- 4.21 Overall, the national housing market has remained reasonably resilient considering the extent of the economic downturn. Although prices nationally are 13% below their

2007 peak, they have not fallen as much as might be expected given the economic climate. This is due to a number of factors including low interest rates which have maintained affordability levels for existing homeowners.

- 4.22 GVA's analysis of Land Registry data reveals that between February and May 2012, sales volumes averaged 49,343 per month, an increase on the same period in 2011 when 46,531 sales were transacted. This view is echoed by Halifax, which views the housing market remaining subdued but stable during 2012, with limited alterations in either house prices or transaction levels evidenced.
- 4.23 Overall, there has been little change in housing affordability over the past 12 months as earnings growth has softened alongside house price growth. In general, affordability has improved in comparison to before the financial crisis. The Monthly repayments for a typical first-time buyer (FTB) with a deposit of 20% have decreased to 29% of take home pay, compared with the average 2005-2007 figure of 40%. Moreover, the Council of Mortgage Lenders (CML) has reported that in July 2012 the average FTB deposit fell to 19%, the lowest level since November 2008.
- 4.24 The government's Funding for Lending scheme may provide a further stimulus but its success will largely depend on the demand for credit. Yet at present, a significant increase in domestic demand seems unlikely given the ongoing debt crisis in the eurozone, together with the weak economic picture here in the UK.
- 4.25 The lack of homes coming onto the market noted above is providing some support for prices at a national level. The effect of the government's Get Britain Building Scheme on housebuilding is yet to be seen and any improvements in the level of supply will take time to filter through into the housing market. However in the medium term, the ongoing shortage of development finance is likely to impinge upon the success of development as housebuilders struggle to obtain the necessary start up capital.
- 4.26 There has been a dramatic increase in tenant demand in the UK. The total value of housing in the private rental sector was up 42% from 2006 to the end of 2011, while the number of households renting privately leapt almost 50% from 3.4 to 4.8 million according to the *Survey of English Housing*. This demand for rental properties shows no sign of abating as FTBs struggle to secure mortgage approvals from banks asking for large deposits. According to the CML gross mortgage lending at Loan to Values (LTV) of 90% plus has fallen by 95% since the summer of 2007 and has coincided with a doubling in the average deposit paid by FTBs. However, the new Funding for Lending scheme may help in addressing this problem.
- 4.27 As a consequence of the above, the profile of renters has shifted somewhat with increasing numbers of people in their 30s and 40s forced to remain in rented

accommodation. Approximately half of all private rented sector tenants are believed to be “trapped”, as they cannot afford to buy or find it cheaper to rent.

Looking to the Future

4.28 Importantly, a review of the recent past reveals that the housing market is unlikely to remain in its current state for an extended period of time, with multiple influencing factors driving the market – not least the economy.

4.29 The Nationwide Q3 2012 Report suggests that;

“Looking forward, policy measures such as the Bank of England’s Funding for Lending Scheme should provide support for activity in the housing market by ensuring the availability of credit and lowering its cost. However, labour market developments will remain of paramount importance in deciding the trajectory of house prices. There are grounds for caution on this front, as the unusual combination of rising employment and declining economic activity that was evident in the first half of 2012 is unlikely to be sustained. But there are encouraging signs that the UK will soon return to modest growth.”

4.30 Both The Nationwide Report and Halifax Housing Market Report (September 2012) point to a gradual recovery in the UK economy over the next twelve months, with house prices remaining relatively stable over the same period. Moreover, Experian Q3 2012 forecast project an increase in house prices nationally from 2013, with greater potential for sustained growth in the medium-term.

4.31 Concurrently, Halifax (2012) anticipate this will result in a strengthening of house building activity in the period ahead:

“The major house builders appear to have the capacity to expand supply, with most reporting land banks that could support more than five years of construction at current rates of building activity. Similarly, schemes such as NewBuy, are helping to provide those with smaller deposits access to mortgage finance. This in turn should help to provide house builders with confidence that there will be demand from buyers if the homes are built.”

4.32 Moreover, it is anticipated that the rental sector will continue to be strong as rents increase and a broader range of mortgage products become available, particularly for buy-to-let investors. Demand remains high, both from tenants unable to buy and equity-rich investors so we expect the rental market to continue performing well in the short-medium term.

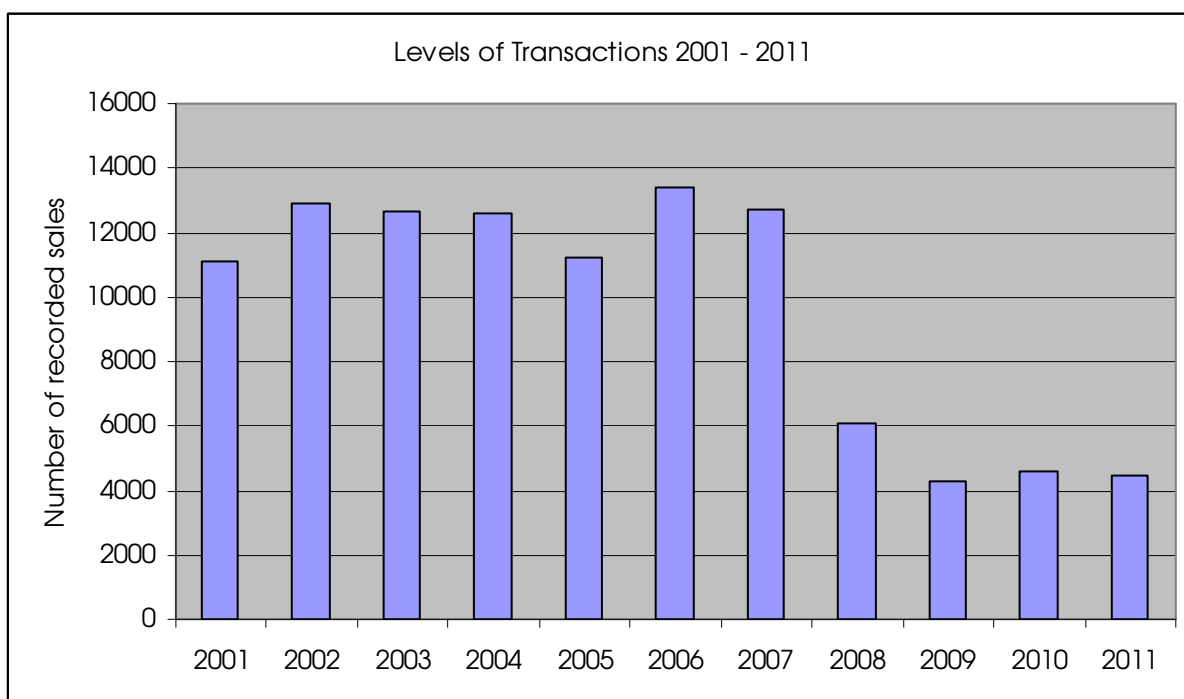
4.33 Savills produce regular 5 year house price forecasts as part of their ‘Residential Property’ research outputs. The latest publication¹⁸ suggests that across the UK house prices will rise by 11.5% over five years to the end of 2017. These forecasts include a regional dimension with Savills predicting a more modest house price growth across Yorkshire & the Humber of only 5.5% over this time period. The forecasts also suggest that whilst transaction levels will increase they will remain comparatively suppressed against levels seen at the height of the market in 2007.

Bradford’s Housing Market

Transaction levels and sale prices

4.34 Figure 4.3 shows the recorded levels of transactions of house sales in Bradford between 2001 and 2010. It is evident that the housing market in the district has seen a marked reduction in the level of sales since 2007, a position which reflects the national picture detailed above.

Figure 4.3: Number of transactions, Bradford 2001 – 2011

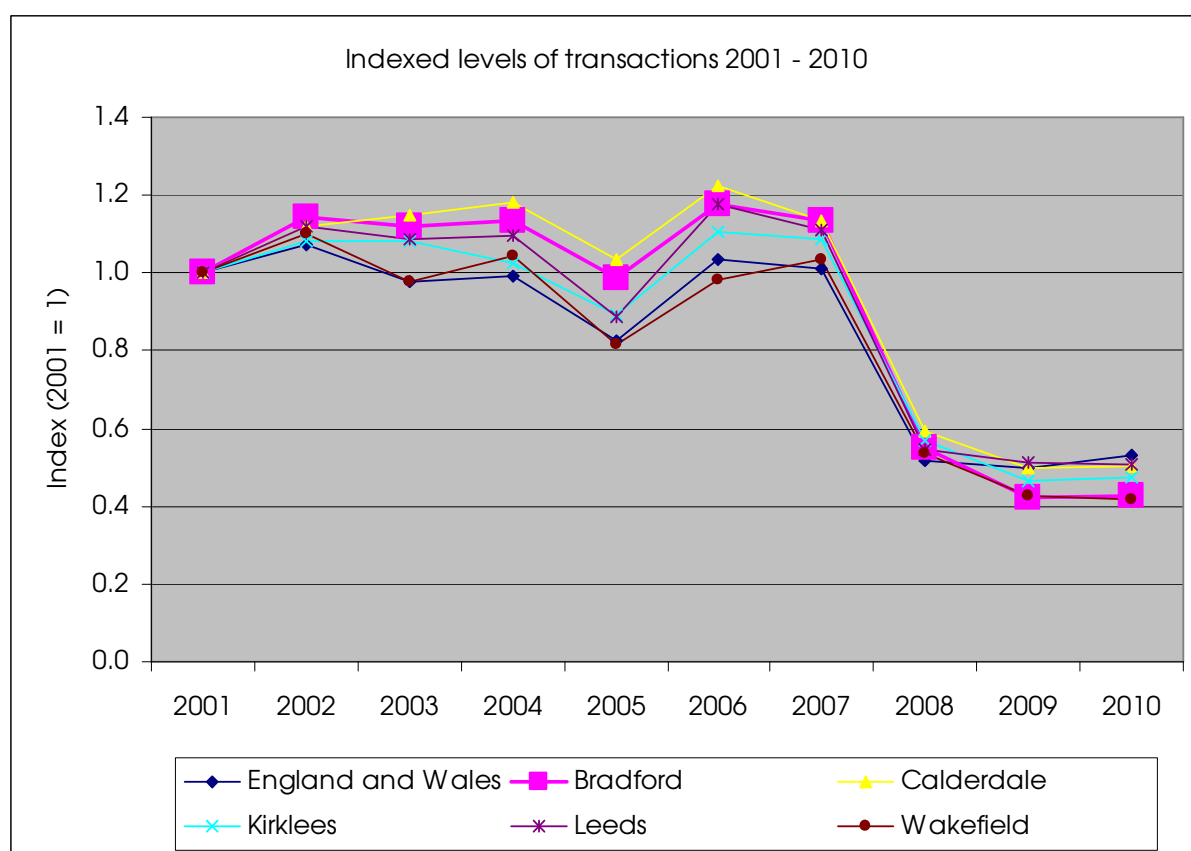


Source: Bradford City Council Housing Live Ward data, Land Registry data, 2012

¹⁸ ‘Residential Property Focus Q4 2012 – The Forecasts Issue’, Savills, November 2012

- 4.35 Consistently between 2001 and 2007 the number of transactions in the district exceeded 11,000 with a peak of 13,404 sales recorded in 2006. The last three years for which full data is available show a marked reduction in transaction to a figure of closer to just over 4,000, less than a third of the peak level seen in 2006.
- 4.36 The consistency of trends in transactions between Bradford and other surrounding authorities as well as the national picture is demonstrated in the following chart. Figure 4.4 uses an indexed analysis in order to provide comparison between the different spatial areas.

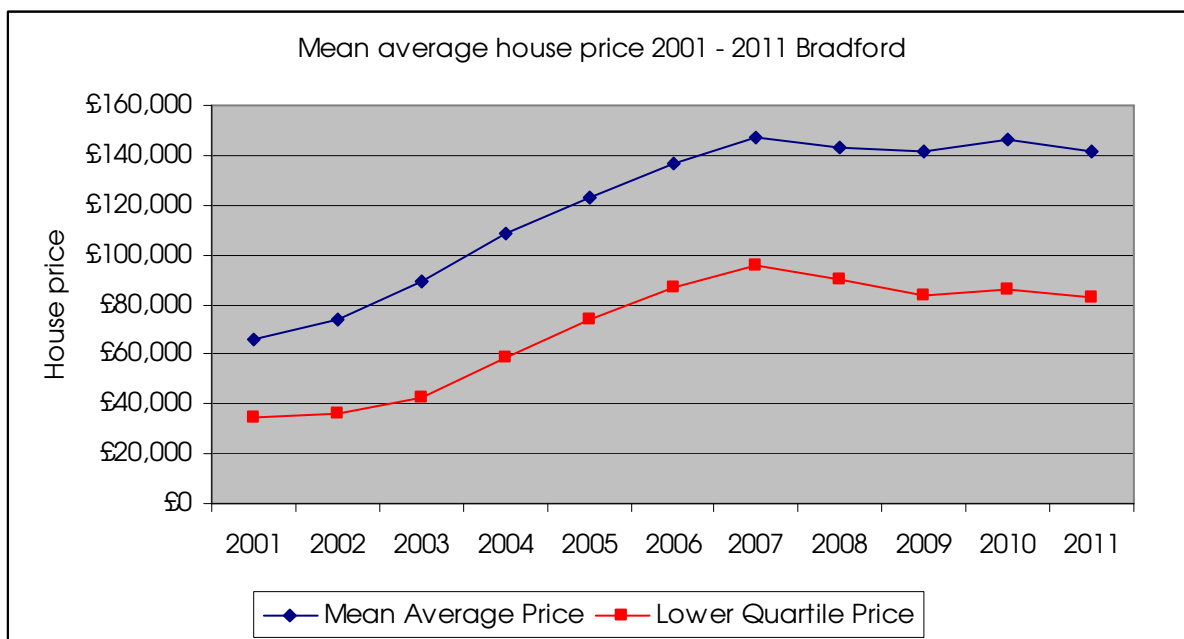
Figure 4.4: Indexed levels of transactions 2001 – 2010



Source: DCLG Housing Live Tables, 2012

- 4.37 A similar analysis is presented below considering recorded house prices. Figure 4.5 shows the average (mean) house price and the lower quartile house price annually within Bradford between 2001 and 2011.

Figure 4.5: Average (mean) and lower quartile house prices 2001 – 2011 Bradford



Source: Bradford City Council Housing Live Ward data, Land Registry data, 2012

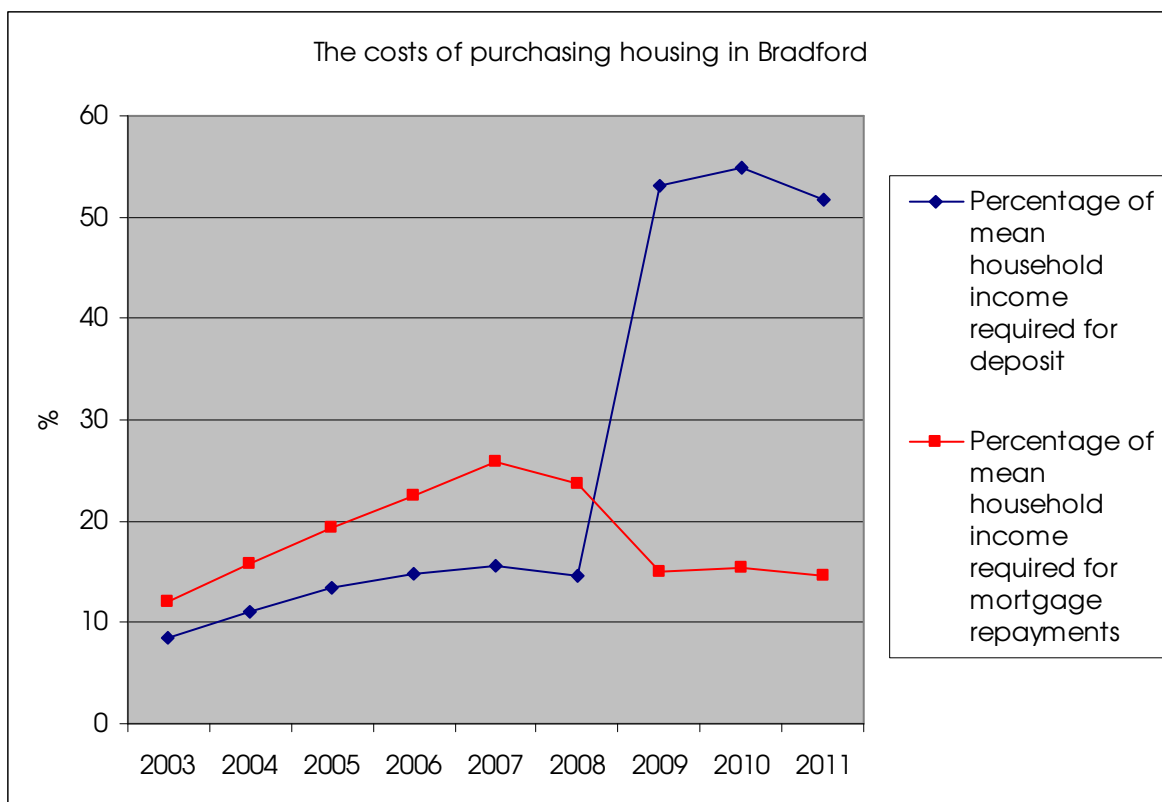
- 4.38 Examining first the average mean house price it is evident that following a rapid rise in price between 2001 and 2007 values fell moderately before stabilising at around the £140,000 level. It is important when considering this trend analysis to consider the context of significantly reduced levels of transactions post 2008.
- 4.39 The lower quartile house price trend shows a similar trajectory although prices have dropped more considerably from the 2007 peak, with the average lower quartile property price in 2011 in Bradford standing at £82,500. This slight reduction in the lower quartile price and the relative stabilisation over the last three years has an impact, alongside the availability of mortgage finance, on the affordability of property. This is considered in more detail below.

Affordability

- 4.40 The relative affordability of housing has an important bearing on the ability of households to exercise choice in the market and for new properties constructed in the district to be purchased. The issue of relative levels of housing need for non-market (affordable) housing is considered in greater detail within the emerging 2012 SHMA with the analysis below highlighting the changing affordability factors described above.

4.41 Figure 4.6 compares the proportion of income required for both mortgage repayments¹⁹ and the deposit²⁰, two key factors in purchasing and servicing the cost of owning a property. Proportions are shown over the period 2003 – 2011.

Figure 4.6: Cost of purchasing housing 2003 – 2011 Bradford – Mortgage Repayments / Deposit in relation to income



Source: Bradford Housing Live Ward Data analysis, Bradford City Council 2012, CACI Paycheck & Land Registry

4.42 The chart clearly shows firstly that in terms of mortgage repayments the fall in lower quartile house prices from 2008 has reduced the proportion of income from a high of over 25% in 2007 to around 14.5% in 2011. This suggests that purchasing property represents a more affordable prospect for the average household in the district.

¹⁹ Percentage of mean household income required for mortgage repayments. This is the percentage of the average (mean) household income for the area required for mortgage repayments based on purchasing a lower quartile property in the area. Based on 5% deposit pre 2009 and 20% deposit 2009-2010 and median variable interest rate at mid year.

²⁰ Percentage of mean household income required for a deposit. This is the percentage of the average (mean) household income for the area required as a deposit to purchase a lower quartile property in the area. Based on 5% deposit pre 2009 and 20% deposit 2009-2010.

- 4.43 Significantly, however from 2008 the chart also shows the rapid escalation in the proportionate level of income required to secure a deposit on a property. This significant change from a low of 8.4% in 2003 to almost 52% in 2011 reinforces the fundamental challenge facing household looking to purchase housing as documented in the national market overview. First time buyers evidently require a significant scale of savings to put down the required deposit and those households looking to move up the housing ladder need to have a large quantum of equity in the property they are selling, an issue in a market where prices have fallen.
- 4.44 The analysis presented within this chart therefore highlights the issue driving a fall in transactions, linked intrinsically to the demand for new build housing, and the actually real worsening of affordability problems for many households looking to enter the owner-occupier market.
- 4.45 The 2012 emerging SHMA reinforces this issue continuing to identify a high level of affordable housing need across Bradford. The analysis also suggests that this level of need is unlikely to significantly reduce over the longer-term without some fundamental changes to the operation of the housing market.

Vacancy

- 4.46 The penultimate market indicator considered within this section is the quantum and proportion of empty properties within the district. Empty or vacant properties represent a potential capacity within the existing stock to absorb future demand. In order to allow market turnover there will always be a proportion of stock empty at any single point in time in order to allow fluidity in the market. Evidence and analysis underpinning a number of the Regional Spatial Strategy's suggested that a reasonable level of vacancy within a balanced and well operating housing market would be 3% of all stock.
- 4.47 Analysis of Council Tax data by Bradford City Council provides a consistent assessment of the level of empty properties between 2008 and 2011. Figure 4.7 presents the absolute and proportionate levels of short-term and long-term empty properties within Bradford.

Figure 4.7: Number and proportion of empty properties - Bradford

Date	Numbers of Dwellings		
	Total Empty	Short-term Empty	Long-term Empty
Oct-08	12,738	5,165	7,573
Oct-09	12,216	4,914	7,302
Oct-10	10,992	4,506	6,486
Oct-11	10,362	4,314	6,048
Jul-12	9,915	4,378	5,537
	Proportion of Total Stock		
Oct-08	6.2%	2.5%	3.7%
Oct-09	5.9%	2.4%	3.5%
Oct-10	5.3%	2.2%	3.1%
Oct-11	5.0%	2.1%	2.9%
Jul-12	4.7%	2.1%	2.6%

Source: Bradford City Council, Council Tax data, 2012

- 4.48 The analysis shows that as of July 2012 4.7% of all stock in Bradford was classified as empty. This is evidently higher than the standard benchmark of 3% suggesting a certain amount of latent capacity within the existing stock, notwithstanding the relative quality and appropriateness of these dwellings.
- 4.49 Total levels of empty properties have fallen, both in absolute and proportionate terms, with a total empty property rate of 6.2% evident in 2008. This take-up of empty properties is likely to be driven by a range of factors including investment by the Council and private owners to bring properties back into use as well as the increasing demand pressure resulting from a growing population and the evidenced slow down in the completion of new properties.
- 4.50 The analysis shows that the fall in empty properties is mirrored in terms of both short and long-term empty stock. Long-term empty stock has fallen as a proportion from 3.7% to 2.6% between October 2008 and July 2012.
- 4.51 Bradford City Council are committed to addressing current empty homes issues across the authority and have recently published a Delivery Plan to address the issue 'Tackling Empty Homes in the Bradford District' (2011)²¹. This delivery plan includes a commitment to reduce long-term empty properties by around 3,000 in the next six years. The City Council's success in realising this ambition has been documented by the DCLG²². Bradford was identified as the third best performing authority in England

²¹ <http://www.bradford.gov.uk/NR/rdonlyres/D9B3F231-0307-45DC-B02A-B57EBC4D5D4E/0/TacklingEmptyHomesintheBradfordDistrict>.

²² 'News – Councils seeing benefits of reducing numbers of empty homes', DCLG (27th September 2012) - <https://www.gov.uk/government/news/councils-seeing-benefits-of-reducing-numbers-of-empty-homes>

in terms of the scale of the reduction in empty homes since 2010. In total the DCLG identified that Bradford has successfully brought back 1,944 empty homes benefiting significantly from New Homes Bonus payments.

- 4.52 The ongoing realisation of this aspiration to continue to re-use empty properties and therefore reduce vacancy levels is an important consideration in understanding the overall amount of additional new-build properties required to match projected demand. This is considered in more detail in section 6.

Overcrowding / Under-occupation

- 4.53 Whilst the analysis above has considered the proportion and number of empty properties it is also important to understand the way in which occupied stock accommodates people within households. One indicator in relation to this factor is the relative level of over-crowding and under-occupation of properties.
- 4.54 Across Bradford analysis undertaken by the Council suggests that in total there are approximately 16,135 households in overcrowded circumstances in 2011 with approximately 3,360 households classified as in over-crowded circumstances by 2 or more bedrooms²³. This suggests that there is a relatively large pent-up unrealised level of demand within the existing stock. This is likely to have at least in part become more acute in light of the affordability issues considered earlier in this section over recent years and as an indirect consequence of a lack of new supply / completions in recent years.
- 4.55 Significantly though there are over 62,000 households classified as under-occupying their property. In terms of under-occupation this reflects the capacity of households to realise their aspirations to occupy properties larger than their specific needs. In reality in market housing there is no direct way of affecting this position with households occupying housing which matches their aspirations. It does, however, continue to highlight the importance of ensuring that the future supply of new housing matches the housing need of different household types. For example, the ongoing provision of more specialist products aimed at older person households represents an important factor in at least enabling households, who desire to do so, to downsize. The ongoing scale of under-occupation in the existing stock does provide an important context for considering the current usage of properties and the wider capacity of the existing stock, an issue which is also recognised within the emerging 2012 SHMA.

²³ Data reflects proportion of households (all tenures) that are classified as under-occupying or in overcrowded in terms of the number of bedrooms as measured against the Bedroom Standard. Data is derived from 2011 Public Perceptions Survey and analysed by Bradford City Council.

4.56 Figure 4.8 shows the estimated proportions of over crowded and under-occupying households by ward. The table has ranked the wards by the proportion of those households in over-crowded circumstances by 2 or more bedrooms.

Figure 4.8: % of households classified as over-crowded / under-occupying stock

Ward (ranked by % of households overcrowded by 2 or more bedrooms)	% of households		
	Overcrowded by 2 or more bedrooms	Overcrowded households	Under occupying by 2 or more bedrooms
City	6.1	17.9	13.6
Bradford Moor	5.9	22.6	16.8
Keighley Central	5.6	16.1	30.0
Little Horton	4.4	14.9	28.9
Bowling and Barkerend	3.7	18.2	16.5
Heaton	3.6	14.2	35.1
Manningham	2.9	17.4	33.5
Clayton and Fairweather Green	2.6	9.0	30.1
Toller	2.3	14.0	33.7
Bingley Rural	1.8	4.3	25.4
Wibsey	1.8	5.9	26.1
Bolton and Undercliffe	1.7	7.7	21.9
Tong	1.5	7.4	19.0
Great Horton	1.5	10.5	29.0
Wyke	1.4	8.4	29.3
Baildon	1.3	2.7	48.6
Eccleshill	1.3	6.8	40.7
Keighley West	1.2	4.3	28.0
Royds	0.8	5.9	30.0
Thornton and Allerton	0.7	6.1	31.7
Queensbury	0.6	2.9	51.3
Windhill and Wrose	0.3	7.1	25.4
Bingley	0.0	2.6	33.9
Craven	0.0	3.0	35.8
Idle and Thackley	0.0	5.4	34.6
Ilkley	0.0	1.9	59.7
Keighley East	0.0	2.8	28.0
Shipley	0.0	6.6	42.6
Wharfedale	0.0	3.2	50.4
Worth Valley	0.0	4.2	30.2
Bradford	1.7	8.2	31.7

Source: Data is derived from 2011 Public Perceptions Survey and analysed by Bradford City Council

- 4.57 The data suggests a concentration of more severe over-crowding in the more urban areas with the city ward showing the highest overall proportion, with over 6% of households classified as overcrowded to the extent of 2 bedrooms or more.

Bringing the Evidence Together

- 4.58 This section has examined the market response to demand factors in the form of recent levels of completions of new properties and the overall changing size of the stock available. Analysis has also been undertaken of a range of market indicators in order to understand the impact that the relative balance between supply and demand factors have had on the operation of the market. The analysis has indicated:

- Over the 8 years between 2004 and 2012 there have been approximately 10,332 net additional dwellings completed across Bradford. This equates, on average, to the addition of 1,292 houses annually. Following a national picture Bradford has seen a sharp reduction in the number of completions since 2008. The recorded net completions for 2011/12 show a net addition of 733 dwellings, which represents approximately only a third of those completed in 2007/08;
- In terms of the planned removal of stock the latest information suggests that in 2012/13 there are a total of 393 planned demolitions with a further 85 units planned to be lost through conversion of property. This represents a total reduction in stock over this year of 478 units. Looking forward it is difficult to accurately forecast levels of demolitions and conversions based on changing funding and finance circumstances;
- The analysis of the housing market has highlighted the volatility of the market nationally, with prices falling since 2008 and the capacity of households to purchase housing affected significantly by the availability of mortgage finance;
- Within Bradford these national trends are evidenced with prices falling over this period and the total levels of transactions falling significantly, with levels of sales in 2011 about a third of the peak of the market;
- Examining empty properties the analysis shows that as of July 2012 4.7% of all stock in Bradford was classified as empty. This is higher than the standard benchmark of 3% suggesting a certain amount of latent capacity within the existing stock, not withstanding the relative quality and appropriateness of these dwellings. Levels of vacancy are evidenced as falling from 2008 to 2011 indicating the demand pressures on existing stock and the success of public sector interventions to make better use of the property already in existence across Bradford; and

- Across Bradford analysis undertaken by Bradford City Council suggests that in total there are approximately 16,135 households in overcrowded circumstances in 2011 with approximately 3,360 households classified as in over-crowded circumstances by 2 or more bedrooms²⁴. This suggests that there is a relatively large pent-up unrealised level of demand within the existing stock. This is likely to have at least in part become more acute in light of the affordability issues considered earlier in this section over recent years.

²⁴ Data reflects proportion of households (all tenures) that are classified as under-occupying or in overcrowded in terms of the number of bedrooms as measured against the Bedroom Standard. Data is derived from 2011 Public Perceptions Survey and analysed by Bradford City Council.

5. Population and Household Projections

- 5.1 This section presents a number of scenarios of projected population change in Bradford over the plan period. These scenarios are built using the POPGROUP suite of software with the input assumptions derived from official datasets and updated where relevant to reflect the data presented in sections 3 and 4. Additional information on the POPGROUP suite of software is included within Appendix 2.
- 5.2 The analysis in this section starts with analysis of the latest official sub-national population projection dataset released by the ONS (2010 base), in order to comply with Paragraph 159 of the NPPF. This dataset is 'updated' to take account of the latest available data from the 2011 Census at the time the modelling was undertaken. The relative impact of migration on future population growth is explored and evidenced through a hypothetical scenario which removes this important component of change.
- 5.3 Building on the evidence presented in the preceding sections a scenario is then presented which constrains the future population change to a forecast picture of the economy in Bradford, utilising the Regional Econometric model outputs in order to ensure consistency with other components of the district's evidence base.
- 5.4 The population projections resulting from these scenarios are then translated into household projections in order to understand the resultant level of projected growth in households within the district over the plan period.
- 5.5 The outputs of this analysis are then taken forward in section 6 to arrive at a recommended dwelling requirement for the Borough. This takes account of a number of other 'checks' including an assessment of "*housing demand and the scale of housing supply necessary to meet this demand*" (NPPF, 2012, pg 39).

Outputs of the Population Modelling Analysis

Demographic Projections: Sub-national Population Projection (2010 base)

- 5.6 On the 21st March 2012 the Office of National Statistics (ONS) released the latest full set of official Sub National Population Projections (SNPP) data²⁵. These have a 2010 base and replace the 2008 base sub-national population projections.
- 5.7 The ONS notes within an accompanying 'methodology document'²⁶ the detailed data sources and methodology used to generate the population projections. These are however, summarised based on the accompanying 'frequently asked questions'²⁷ note:

"Registrations of births and deaths collected by the civil registration system at the General Register Office are used to calculate fertility and mortality rates. Internal migration estimates and cross-border migration estimates are based on administrative data. International migration estimates are based on data from the International Passenger Survey, together with asylum seeker data from the Home Office and National Asylum Support Service." (ONS, SNPP 2010 – Frequently Asked Questions)

- 5.8 A number of methodological changes have been integrated in the latest projections which have an impact both at a national and a sub-national level. These changes are primarily related to the treatment of projections of international migration flows and changes to fertility rates reflecting recent national trends. These are explored in more detail below.

Projecting International Migration

- 5.9 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 estimation of the population. In 2010, ONS released a set of 'revised' Mid Year Estimates (MYE) for 2001-2009 and a revised 2008-based population projection, which took account of a

²⁵ Note: In September 2012 the ONS published an Interim 2011 base SNPP dataset. This doesn't represent a full official SNPP with the projections only running to 2021. This dataset is considered in more detail throughout this section but does not form a separate considered scenario.

²⁶ ONS, (2012) Methodology: 2010 Sub-National Population Projections, 21st March 2012
<http://www.ons.gov.uk/ons/rel/snpp/sub-national-population-projections/2010-based-projections/rpt-snpp-2010-based-methodology-report.html>

²⁷ ONS, (2012) Frequently Asked Questions: 2010-based Sub-National Population Projections, 21st March 2012
<http://www.ons.gov.uk/ons/rel/snpp/sub-national-population-projections/2010-based-projections/rpt-snpp-2010-based-faq.html>

number of such improvements; specifically, the improved handling of onward student moves and the integration of administrative data sources to better estimate the local impact of international migration.

- 5.10 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 Leeds²⁸.
- 5.11 These latest MYE revisions, although yet to be made 'official statistics', have been used as the basis for ONS' latest 2010-based SNPP, released in March 2012. The 2010 base SNPP include within their long-term estimates of projected international migration trends a substantial increase in net flows at a national UK level.
- 5.12 The new projections also include updated assumptions around fertility rates. Nationally recent evidence suggests a rise in fertility rates, this again impacts on local level projections,²⁹, this is explained by the ONS below:

"Compared to the 2008-based projections, the long-term fertility assumption has remained the same. However higher fertility rates are assumed in the short-term, with the assumed UK fertility rates set to increase from current levels to a high of 2.02 (children per women) in 2013 before decreasing to the long-term assumption of 1.84 by 2027. These short-term assumptions are very different to those used in the 2008-based projections which assumed a decreasing fertility rate and reached the long-term within five years. The 2010-based assumptions are higher and stay higher for longer reflecting the current relatively high trends in fertility." (ONS, SNPP 2010 – Frequently Asked Questions)

²⁸ 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-immigration-estimates/index.html>

²⁹ Note: Further information on the national assumptions can be found at the following link:
<http://www.ons.gov.uk/ons/rel/npp/national-population-projections/2010-based-projections/rep-2010-based-npp-fertility-assumptions.html#tab-Principal-assumptions>

Taking account of the 2011 Census data

- 5.13 In July 2012 the ONS published the first phase release of data from the 2011 Census. This included estimates of the population and the number of households for each authority in England and Wales as well as a breakdown by age. This data has been analysed in section 3. In order to ensure the analysis takes account of this data release all of the modelled scenarios have been rebased to reflect the 2011 Census population count.
- 5.14 This exercise is very similar to that undertaken by the ONS in the publication of the 2011 based Interim sub-national population projections. These are described in the text box below.

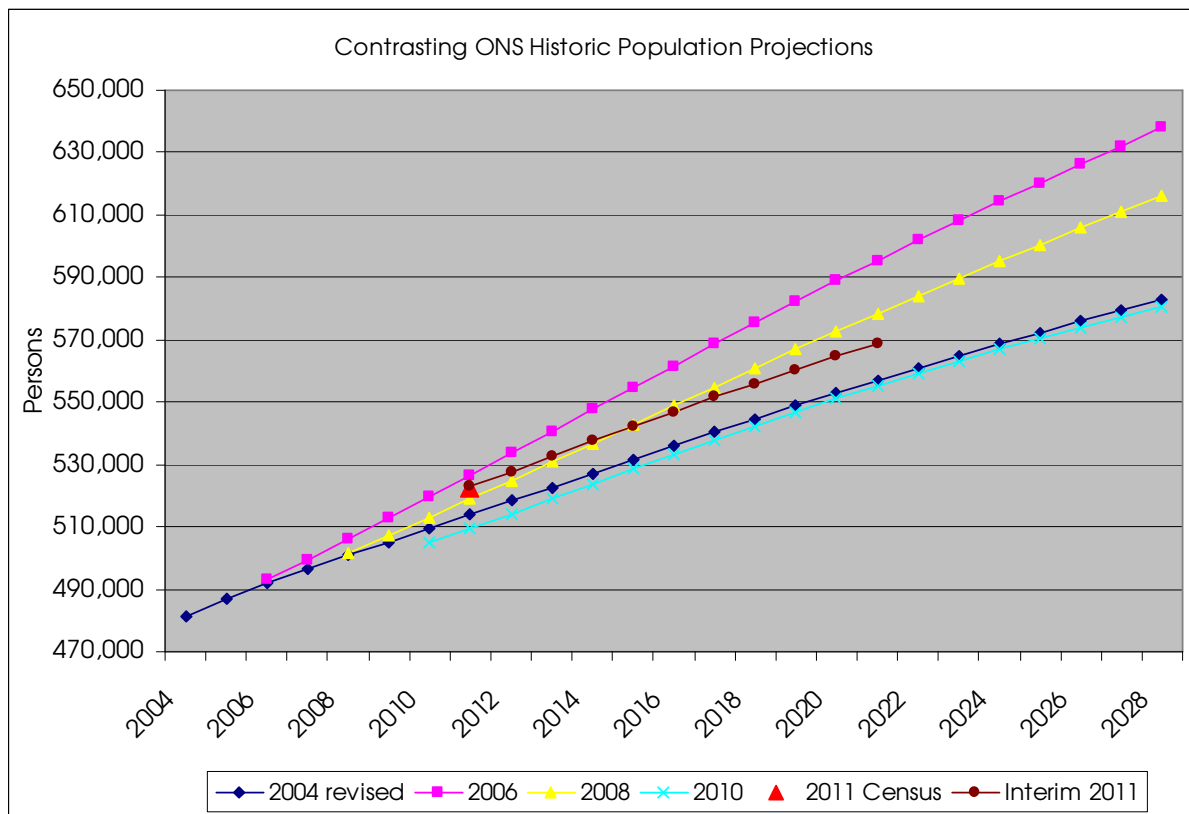
Interim 2011 based Sub-National Population Projections

The ONS published a 2011 based Interim set of sub-national population projections (SNPP) on the 28th September 2012. These projections were produced ahead of the usual schedule of releases in order to provide an indication of the impact of the integration of available data from the 2011 Census.

It is important to recognise that these projections do not take into account all of the data usually required to update trends in the ONS projection model. Assumptions around future fertility, mortality and migration levels are based on the trends calculated for the 2010-based SNPP. This is because a revised back series for the rolled forward mid-2002 to mid-2010 population estimates taking account of the 2011 Census is not yet available to update the assumptions. The projections do however, give an indication of the possible size and structure of the future population based upon and updated base position regarding the structure of the population in terms of age and sex as of the 2011 Census date.

- 5.15 The following chart shows the position of the 2011 Census count in the context of the various ONS published SNPP datasets which have been released back to the 2004 revised projection dataset.

Figure 5.1: Contrasting ONS historic and current SNPP datasets and the 2011 Census



Source: ONS various dates

5.16 This chart clearly illustrates the changes to the trajectory projected by the ONS based upon alterations to the modelling methodology. The 2006 based projections showed the greatest projected pace of growth with this moderated down in turn through both the 2008 and 2010 based datasets.

- 5.17 Significantly, the 2011 Census data suggests that these later projection datasets have under-estimated the pace of growth. It is more than likely that this under-estimation is driven in part by the estimation process regarding international migration components with this relying on the greatest level of modelling. This historical undercount could have an impact on the production of future demographic trend based projections by the ONS. If the higher level of net international migration is confirmed over recent years a trend based projection is likely to extrapolate this higher net annual flow forwards³⁰.
- 5.18 The GVA modelled SNPP 2010 scenario presented below therefore takes the 2011 Census date as a start point and as with the Interim 2011 projection dataset applies the projected rate of change assumed through the 2010 base dataset (ONS long-term assumptions on fertility and mortality change) but projects this forward through to the end of the plan period.
- 5.19 The 'corrections' applied through the various datasets highlights the impact of varying assumptions and highlights the importance of considering a range of scenarios recognising that projecting forward data over the long-term always come with a level of uncertainty. Further updates will be available through future information releases by the ONS. This includes a 2010 based release of the Sub-National Household Projections (SNHP) and in March / April 2013 a release of further migration and fertility assumptions linked to the 2011 Census. Bradford Council plan to reference these new datasets through subsequent updates to the analysis once they become available to ensure the evidence remains up-to-date.

Rebased SNPP 2010 Scenario Projected Population Change

- 5.20 The projected impact of the rebasing of the 2010 base SNPP to include the 2011 Census outputs is illustrated in figure 5.2. This includes the official 2010 base SNPP figures for Bradford to enable comparison to be made.

³⁰ The ONS states in the published 'Information Paper – Quality and Methodology Information Sub-National Population Projections' (25th September 2012): "SNPPs are demographic, trend-based projections indicating likely size and age structure of the future population if the underlying trends and assumptions about future levels of components of change were realised. They are based on levels of births, deaths and migration observed over a five year reference period leading up to the base year. However, as a result of inherent uncertainty of demographic behaviour, any set of projections will inevitably be proved wrong, to a greater or lesser extent, as a forecast of future demographic events or population structure. The SNPPs use the latest available population estimates and are inevitably dependent on the accuracy of these estimates. The methods used do not enable statements of probability nor confidence intervals to be directly calculated'. In addition to the above in the past the ONS produced a 'Sub National Population Projections Accuracy Report' in August 2008. This considered a range of projections but not the latest series of projections considered in this research.

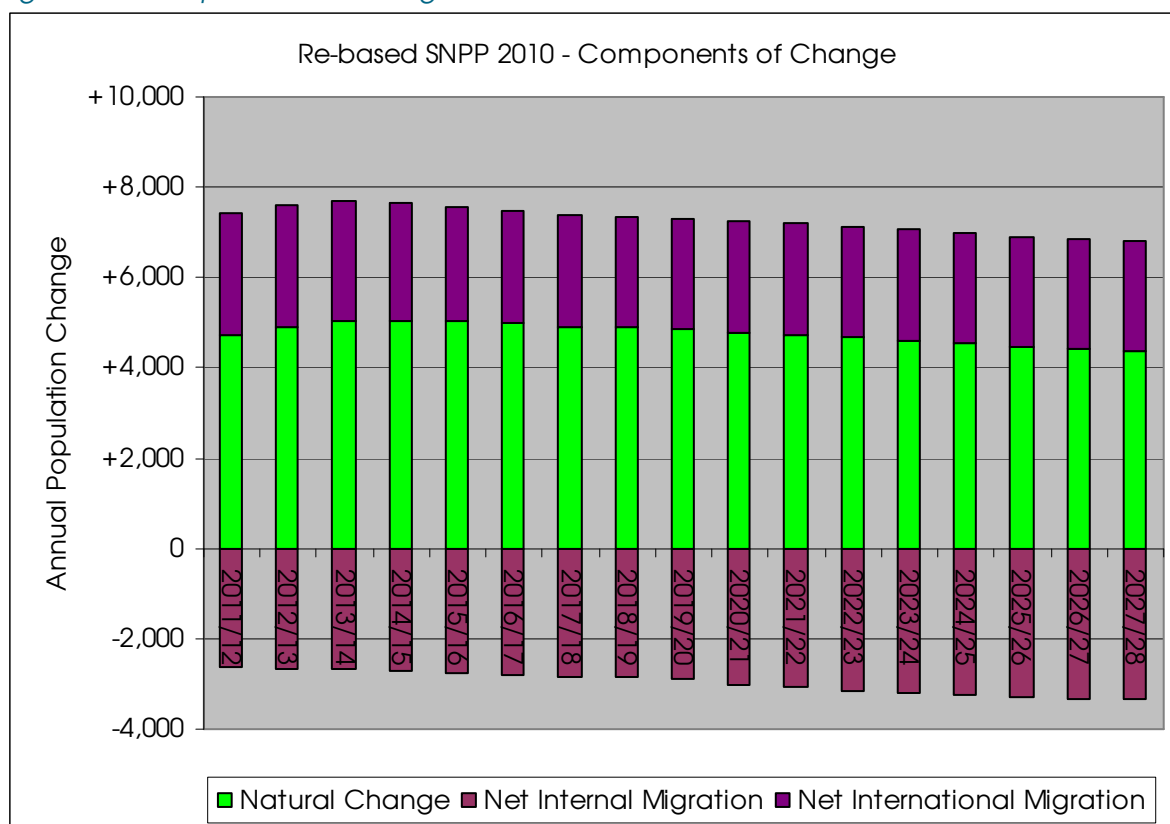
Figure 5.2: Projected Population Rebased SNPP 2010

Scenario	Number of Persons		Change in Population 2011 - 2028	Annual average change 2011 - 2028 (17 years)
	2011	2028		
Rebased 2010 SNPP	522,500	595,799	73,299	4,312
ONS 2010 SNPP	509,400	580,800	71,400	4,200

Source: Edge Analytics, GVA, 2012

- 5.21 Under this scenario the population of Bradford is projected to increase by just over 73,000 people. This represents a moderate increase in the scale of change identified within the official ONS 2010 base SNPP dataset. This small uplift reflects the increase in the base population in 2011, with the model then assuming the growth and change of this larger population.
- 5.22 The following chart and accompanying table illustrates the assumed net impact of the three components of change on annual population change in Bradford under this scenario.

Figure 5.3: Components of Change Rebased 2010 SNPP



Source: Edge Analytics, 2012

Figure 5.4: Components of Change Re-based 2010 SNPP Scenario – Numbers

Re-based SNPP 2010 Scenario	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Natural Change	+4,737	+4,921	+5,049	+5,043	+5,028	+4,978	+4,925	+4,884	+4,844	+4,793	+4,737	+4,675	+4,605	+4,534	+4,467	+4,409	+4,379
Net Internal Migration	-2,634	-2,657	-2,691	-2,722	-2,754	-2,792	-2,839	-2,869	-2,906	-3,009	-3,081	-3,137	-3,194	-3,249	-3,281	-3,325	-3,355
Net International Migration	+2,711	+2,682	+2,648	+2,610	+2,550	+2,487	+2,483	+2,477	+2,475	+2,468	+2,465	+2,461	+2,459	+2,455	+2,453	+2,452	+2,450
Population Change	+4,815	+4,946	+5,006	+4,931	+4,824	+4,673	+4,569	+4,492	+4,414	+4,252	+4,120	+3,998	+3,870	+3,741	+3,639	+3,536	+3,473

Source: Edge Analytics, 2012

- 5.23 The chart serves to illustrate the trend-based nature of this projection approach, with future change driven by a continued extrapolation of historical trends. Under this scenario internal migration continues to represent a negative factor on population change. This is offset; however, by a strong projection forward of both natural change and international migration components.
- 5.24 The important role of natural change is evident with this component contributing over 4,000 additional people per annum throughout the projection period. This is illustrated further through the next projection which represents a hypothetical position but removes the impact of migration to show the level of growth derived simply from the continued evolution of the population in the district.

Demographic Projections: Natural Change

- 5.25 A scenario has been modelled which removes the impact of migration from 2011 onwards. This therefore assumes that the existing population is not changed by migratory factors and that population change is constrained only to natural change from the population (i.e. births and deaths).
- 5.26 It is important to recognise that this scenario is a hypothetical scenario with the reality of the operation of the housing market meaning that migration could never be constrained to zero.

Natural Change Scenario Projected Population Change

- 5.27 Under this scenario the outputs shown in figure 5.5 show that the population, without the impact of migration, would increase by just over 74,750 people.

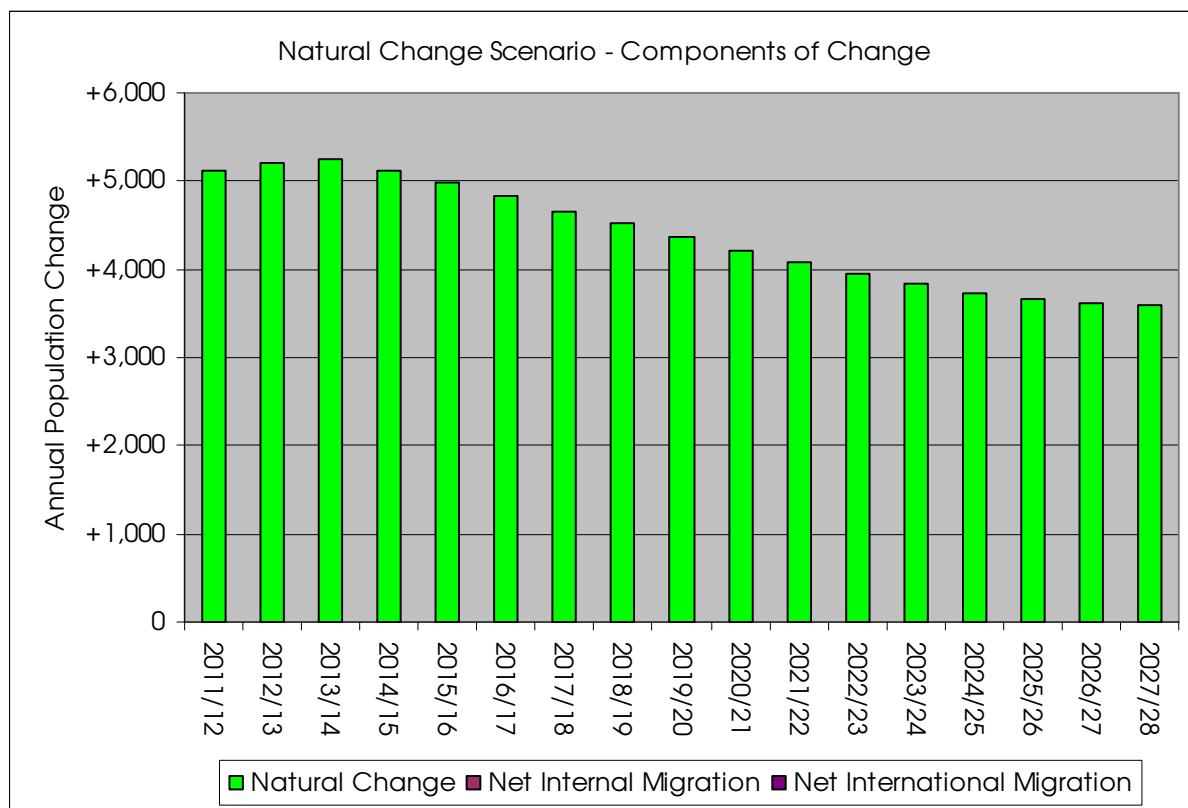
Figure 5.5: Projected Population Natural Change Scenario

Scenario	Number of Persons		Change in Population 2011 - 2028	Annual average change 2011 - 2028 (17 years)
	2011	2028		
Natural Change	522,500	597,252	74,752	4,397

Source: Edge Analytics, GVA, 2012

- 5.28 The following chart illustrates the assumed net impact of the natural change component over the projection period. It is important to note that the projected net change resulting from natural change reduces over the plan period compared to the Re-based SNPP 2010 scenario. This is because under this scenario the impacts of migration are not realised with the migration assumed in the previous scenario including a large proportion of younger persons.

Figure 5.6: Components of Change Natural Change Scenario



Source: Edge Analytics, 2012

Employment Constrained Projection

5.29 The final scenario presented in this section differs from the previous two in that rather than projecting forward changes to the future population on the basis of historical trends it constrains the population to an economic forecast.

Methodology / Assumptions

5.30 The population projected under the Rebased SNPP 2010 scenario has been aligned with the economic forecasts produced through the Regional Econometric Model, these have been presented and analysed in section 3.

5.31 The construction of this scenario is achieved by applying parameters which measure the relationship between the population and the labour-force (economic activity rate) and between the labour force and the number of jobs in an area (labour force: jobs conversion factor). This takes into account the level of unemployment but also the degree to which residents live and work within the area in question. In an employment constrained scenario, net in-migration will occur if the size of the labour-force is insufficient to match the number of jobs forecast to be created.

- 5.32 The scenario assumes that commuting and unemployment rates remain constant over the projection period, drawing on the data presented in section 3³¹. The same approach is applied to economic activity rates³², the only variation on these assumptions is a varying of older person activity rates to reflect changes to pension ages over the long-term, with the following assumption applied:
- 50 – 64 and 65 – 74 year age groups: Economic activity rates incrementally increased by 10% between 2011 and 2030. An incremental approach is applied to reflect the gradual impact of this employment factor.
- 5.33 Importantly the assumed economic activity rates and unemployment levels, as presented in section 3, are based on averages over a 5 to 6 year period. This is important both in terms of smoothing out estimation errors in the published datasets, which are based on sampling analysis, but also in terms of the relative health of the economy which is projected forward. Projecting current rates forward over a twenty year period would compound any current issues linked to the recession and present a particularly negative outlook in employment terms. The averaging out of rates incorporates the current economic climate as well as more positive economic periods therefore achieving a more balanced perspective for projecting forward.
- 5.34 Analysis in section 6 highlights the comparative size of the labour-force resulting from this scenario compared to the previous two demographic scenarios. The analysis in section 6 also considers the impact of varying a number of the economic assumptions more significantly.

³¹ Commuting rates are held constant at 1.01 as referenced in paragraph 3.40. Unemployment rates are held constant at 9.3% based on a 5 year average of the last five years from those presented in figure 3.9.

³² Economic activity rates are held constant based on average figures developed from those presented within figure 3.8 and attributed to individual age groups by sex.

Employment Constrained Projection Projected Population Change

5.35 The following table illustrates the impact of this forecast on population levels. This shows population growth over the period of just over 89,600 persons.

Figure 5.7: Projected Population – Employment-Led Projection (REM)

Scenario	Number of Persons		Change in Population 2011 – 2028	Annual average change 2011 - 2028 (17 years)
	2011	2028		
Employment-led (REM)	522,500	612,141	89,641	5,273

Source: Edge Analytics, GVA, 2012

Translating Projected Population Growth into Household Growth

- 5.36 Whilst the ONS have released a 2010 base SNPP the DCLG have not at the time of publication released a sister Household Projection dataset (Sub-National Household Projection). Edge Analytics have converted the two population projections presented in the preceding analysis utilising the headship rate assumptions included within the 2008 DCLG projections (household headship rates by household type, age and sex)³³.
- 5.37 This set of household projections assumes a fall in household size over the projection period. The average household size is projected to fall under the re-modelled POPGROUP outputs by approximately 0.09 persons per household between 2011 and 2028. For example, under the Re-based SNPP 2010 scenario the average household size falls from 2.58 to 2.49.
- 5.38 The projected fall in household size over the longer-term reflects a number of factors with the general ageing of the population, and the linked fact that older person households on average contain only 1 or 2 persons, an important contributor.
- 5.39 For the 2010 SNPP Scenario the headship rates have been calibrated to ensure that the household statistics revealed through the 2011 Census are replicated, therefore the number of households in 2011 is constrained to the Census 2011 count i.e. 199,300

³³ Once the 2010 base DCLG household projections are released consideration will be given as to the level of change from the 2008 base projections with regards the applied headship rates. Where there is a notable difference in the two datasets the Council will look at re-running and updating the projections presented in this section to assess the impact for levels of future household change.

households. This results in an update to the starting point for the household size assumption which is then applied to the other scenarios³⁴.

- 5.40 The following table illustrates the projected level of household change resulting from the population projections presented within this section. In addition the 2008 DCLG Household projections³⁵ are included for reference as these still represent the latest nationally published household projection dataset.

Figure 5.6: Projected Household Change – Alternative projections

Scenario	Households 2011	Projected Households in 2028	Change in Households	
			2011 – 2028	Annual Average (17 years)
Rebased 2010 SNPP	199,300	235,778	36,478	2,146
Natural Change	199,039	239,598	40,559	2,386
Employment-led (REM)	199,048	241,381	42,333	2,490
2008 SNHP (DCLG)	199,619	248,330	48,711	2,865

Source: Edge Analytics, GVA, 2012

- 5.41 The projections show a comparatively wide spread of projected growth in households within Bradford. The Employment-led projection shows a projected increase of just over 42,000 households, equating to almost 2,500 households forming on average per annum.
- 5.42 By contrast the Rebased SNPP 2010 projection shows a lower level of household formation reflecting the lower level of population growth under this scenario. This translates into a projected growth of almost 36,500 households or just short of 2,150 on average per annum. The natural change scenario sits between these two scenarios. This highlights the important contribution that the natural evolution of Bradford’s population plays in driving household growth over the plan period.
- 5.43 The 2008 based SNHP have been included for reference only. These show a far higher projected growth in households. This is however, because the projections assume a far

³⁴ Due to the population forecasts having a base date of 2010 for the other two scenarios the calibration of headship rates means that the 2011 level is not directly constrained to the 2011 Census count. The key factor when considering the household projections, however, is the projected change over the plan period as opposed the exact starting base.

³⁵ The un-rounded detailed dataset released by the DCLG for modelling purposes are used within the table. These are available at: <http://www.communities.gov.uk/housing/housingresearch/housingstatistics/housingstatisticsby/householdestimates/detailedatadownloads/> (June 2012)

higher growth in the population overall compared to the latest SNPP datasets, as illustrated in figure 5.1.

- 5.44 The final part of this section highlights the important role that changing household size plays in contributing to the high levels of projected household change. This is provided for reference only but highlights the importance of updating the analysis to take account of the updated 2010 base DCLG household projections when they are released and further informing evidence from the 2011 Census as part of an updating and refining approach to understanding household change.

Considering the impact of changing household size

- 5.45 In order to highlight the sensitivity of the projections to varying assumptions the private household population projected under the rebased 2010 SNPP scenario has been divided by the POPGROUP calculated current household size of 2.58 rather than using the DCLG projected headship rates, which show a continued decline in household size.
- 5.46 Interestingly contrasting the household size evidenced through the Census 2001 against that evidenced in 2011 through the Census 2011³⁶ shows that household size in Bradford has remained relatively unchanged and potentially has seen a slight increase. The 2001 Census showed an average household size of 2.55 and the 2011 Census an average household size of 2.6³⁷. This increase is potentially likely to be linked to the continued growth of the migrant community in Bradford, which has historically been associated with larger household sizes on the whole³⁸.
- 5.47 The status of the housing market currently suggests a sustained constraint on concealed households forming new households which will continue to impact on household size, arguably continuing to push it up rather than leading it to fall. In addition the modelling in this section has continued to show that net international migration is forecast to continue to form an important part of Bradford's changing population, further reinforcing the trends which have been seen between 2001 and 2011.
- 5.48 This sensitivity therefore represents a constrained scenario intended to illustrate the impact of a continuation of recent trends which suggest that household sizes have not fallen significantly in Bradford. This therefore makes assumptions around the impact of continued affordability and availability of housing challenges as well as a

³⁶ Census 2011 table KS403EW

³⁷ Note the 2011 Census figure is presented to only one decimal place. The POPGROUP modelling using 2011 Census updates suggests an average household size of approximately 2.58.

³⁸ The validity of this assertion will be able to be tested as more detailed tables emerge from the 2011 Census dataset.

sustained growth of international migrant households and there continuing propensity to form larger households. It will be important to continue to monitor the impact of various drivers, taking account of more detailed Census 2011 data as it emerges and contrasting occupied property data within Council Tax records and population estimates.

5.49 The following table illustrates the impact of ‘freezing’ the average household size to 2.58 rather than letting it fall as projected under the DCLG projection³⁹. This shows a significant reduction in the number of households projected to form if this household size is maintained. This highlights the sensitivity of the household projections to this factor in particular.

5.50 It is important to recognise that this approach is hypothetical in nature and is presented only as a sensitivity analysis for illustrative purposes. The application of a freezing of household size assumptions represents a simplistic approach. In reality it is the underpinning household formation rates or headship rates which shape the relationship between a changing population and a changing household profile. Importantly one of the drivers behind a projected fall in household size is the continuing ageing of the population and the move towards higher numbers of single and couple older person households. The result of this aging population is likely to be a sustained long-term fall in household size even under comparable market conditions. This is something which will need to be carefully monitored.

Figure 5.7: Illustrating the Impact of ‘freezing’ the average household size

Scenario	Households 2011	Projected Households in 2028 (assuming ‘frozen’ average household size of 2.58)	Change in Households	
			2011 – 2028	Annual Average (17 years)
Rebased 2010 SNPP	199,300	227,208	27,908	1,642

Source: Edge Analytics, 2012

³⁹ Note: The freezing of household size is not the same as freezing headship rates. Once the 2010 base DCLG Sub-National Household Projections are released the Council will assess the implications of any updates to headship rates with regards the analysis.

Bringing the Evidence Together

- 5.51 The analysis of future projected changes to population and households presented within this section has, in line with the requirements of the NPPF, considered the latest demographic evidence and the potential requirements generated from a 'best estimate' of the future direction of the economy of the authority.
- 5.52 In order to provide context to this analysis a number of sensitivities and hypothetical scenarios have been presented. The projection forward over the long-term of complex factors such as migration and labour force characteristics is by its nature uncertain. The presentation of the impact of changing input factors on the generated outputs of population and household change is therefore important.
- 5.53 In headline terms the analysis has evidenced the following:
- Bradford's population will continue to grow in the future. This growth will be driven to a relatively significant extent by the ongoing balance between natural change factors, births and deaths. Bradford's comparatively youthful population means that without a significant increase in the out-migration of residents the population will grow of its own accord. This is illustrated through the hypothetical 'natural change' scenario modelled through the POPGROUP software;
 - Migration will also continue to play an important role in shaping the growth of Bradford's population. The ONS project a continued net increase in population resulting from international migration with this assumption built into the Re-based 2010 SNPP projection. This is based on a continuation of recent trends. The continued net growth of the population from this component also further reinforces the impact of natural change with this migrant population assumed to include a high proportion of younger persons. Significantly recent mid-year population estimates produced by the ONS have estimated a strong net out migration of residents moving in and out of Bradford from other parts of the UK. This net flow has been consistently high over the last five years or so with the Re-based 2010 SNPP projection therefore assuming that this net flow continues to increase in the future. Collectively these factors continue to show a strong projected growth in the population with the higher levels of natural change linked to international migration as well as the direct effect of this net international migration offsetting the sustained net outflow of migrants to other parts of the UK;
 - Importantly in the context of the above the 2011 Census results show that international migration flows are likely to have been stronger than estimated through recent ONS mid-year-population estimates. If this stronger flow is sustained over the plan period this in turn would translate into a higher

demographic driven growth projection. The addition of further assumed international migrants into Bradford each year would be likely to have an impact in particular on the working age population of the district;

- The analysis of the above two scenarios takes no account of the comparative health of Bradford's economy. Flows of international migrants into the district in particular have, at least in part, been attracted by the offer of employment. Recent economic forecasts consistently predict a steady growth of Bradford's economic base, reflected in a growth in employment opportunities, a shift from the impact of recent job losses resulting from the wider UK recession. The modelling of the employment-led scenario, which takes the more optimistic level of job growth in the considered economic forecasts (see section 3 analysis), illustrates that in a simple modelling process of aligning a labour-force in Bradford with these job opportunities that rather than the authority seeing an increasing out-migration of people, the offer of jobs will serve to retain parts of the population which may otherwise choose to move out. This modelling incorporates assumptions around economic activity rates and unemployment which reflect average rates recorded over the last 5 to 6 years. This use of averages provides a more positive consideration of the balance between jobs and the labour-force than that which would be presented using economic indicators at the current point in time, which reflect the impact of the double-dip recession and are unlikely to be representative over the life-time of the projections; and
- The consideration of these two fundamental drivers, demographic change and economic factors, provides a solid evidence base from which to assess and analyse the level of housing which is likely to be required in the authority over the plan period. On this basis the following chapter considers in more detail the implications and realities of planning for the provision of a housing level linked to household change associated with the 2010 rebased SNPP scenario outputs and the employment-led scenario outputs. These projected scenarios of need are taken forward to identify an appropriate dwelling requirement to inform policy for the authority. In doing this a number of 'tests' are undertaken to take account of for example, policy aspirations, market demand and supply factors to ensure that it represents a robust and realistic estimate of housing demand over the plan period.

6. Identifying the Local Housing Requirement

- 6.1 This section uses the population and household projection information presented within the previous section to assess the implications for the requirement of dwellings within Bradford over the future plan period.
- 6.2 The analysis checks the estimated resultant housing demand against a number of factors. This includes a consideration of the sensitivities inherent in linked population change to the economic forecasts, including for example successes in addressing unemployment levels and changing commuting rates. Whilst the supply of land and the historic rates of completions have not been used to constrain potential population projection scenarios they do represent an important check against the impact of realising varying levels of household demand, with these factors therefore considered against the outputs of the household projections.
- 6.3 Whilst the previous section considered household demand this section also translates this demand into a requirement for dwellings. This process takes into account current vacancy levels and the potential to absorb demand through a continued re-use of parts of the available stock. Finally the section includes a high-level assessment of the implications of the delivery of differing levels of housing development over the plan period linked to the projections presented in the previous section. This includes, for example, analysis of the direct and indirect employment outputs of the construction of properties and potential increased local spend and financial revenue generation.
- 6.4 The section concludes by drawing together all of this analysis to present a recommended range of dwelling requirements to be used to inform policy development in Bradford.

Considering the Link between Housing and the Economy

- 6.5 The NPPF places a significant emphasis on the commitment to secure economic growth in order to create jobs and prosperity. The inherent link between housing and the economy is indicated through one of the 12 core planning principles set out in the Framework:

“proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. Every effort should be made objectively to identify and then meet the housing, business and other development needs of an area, and respond positively to wider opportunities for growth. Plans should take account of market signals, such as

land prices and housing affordability, and set out a clear strategy for allocating sufficient land which is suitable for development in their area, taking account of the needs of the residential and business communities” (NPPF, DCLG, pg.5)

- 6.6 The analysis presented in section 5 has, in the form of the employment-led scenario, included a detailed analysis of the implications of aligning future population change with a forecast change in employment over the plan period.
- 6.7 The modelling under this scenario assumes a return to job growth in Bradford over the plan period, with the authority’s business base and successes at attracting investment recovering from the substantial period of employment losses seen since 2007. The analysis of various economic forecasts in section 3 provides a rationale for the use of the April 2012 REM forecasts to underpin this modelling, with these forecasting a growth of just over 27,000 FTE jobs between 2011 and 2028 (almost 1,600 per annum).
- 6.8 This level of forecast employment growth closely resembles the job growth used in Employment Land Review Update (October 2011) and is supported by wider corporate economic ambitions set out in the Bradford District Economic Strategy 2011 – 2013 (February 2011).
- 6.9 This Economic Strategy identifies the challenges facing the authority and its economy, including the following important statistics:
- Between 2000 and 2008 the number of public sector jobs in the district increased by 7,400 to 60,300 while private sector jobs fell by 10,700;
 - Public spending cuts will result in the loss of around 5,000 public sector and 2,000 related private sector jobs over the next four years from 2011; and
 - Factoring in a growing working age population nearly 15,000 new private sector jobs will be needed to maintain employment rates at their current level over the next four years.
- 6.10 The Economic Strategy, however, represents an ambitious and positive response to these challenges setting out aspirations for transformational change. The Strategy and the ELR highlight that during the challenging climate of the recent recession Bradford has continued to deliver a steady stream of wealth creating projects. These include for example, the new Pro Logis £67m logistics warehouse for Marks & Spencer and City Park within the city centre as well as new investment in a headquarters building by Provident Finance Group and a new 200 bed hotel by Jurys Inn.
- 6.11 The modelling presented in section 5 includes the identification of a projected labour-force over the plan period. This is built using evidenced up-to-date local economic activity rates, unemployment levels and a borough-wide commuting ratio (informing

element analysed in section 3). The table below shows the projected growth of the labour-force alongside the overall projected growth in the population for the two central scenarios taken forward from section 5.

Figure 6.1: Projected change in the labour-force (economically active population)

Scenario	Projected Population 2011	Projected Population 2028	Projected Change in Population 2011 – 2028	
			Total	Economically active population
Rebased 2010 SNPP	522,500	595,799	73,299	24,124
Employment-led (REM)	522,500	612,141	89,641	30,112

Source: Edge Analytics, GVA, 2012

- 6.12 It is evident that under both scenarios the size of the labour-force will continue to grow substantially. Under the Rebased 2010 SNPP the labour-force will grow by over 24,000 persons with this increasing to just over 30,000 under the Employment-led scenario. As explained in section 5 the employment-led scenario is built around an alignment of the forecast increase in jobs of just over 27,000 over the plan period. The increase in the labour-force shown above retains the assumption that the authority will continue to export labour in net terms to surrounding authorities⁴⁰. If the same assumption is applied to the Rebased 2010 SNPP scenario this would suggest that a level of population change as modelled through this scenario would still support in the region of 21,600 jobs.
- 6.13 The above analysis also highlights the overall role that the growth of the older person parts of the population will have on the overall household growth. For example under both scenarios the growth in the economically active population constitutes only approximately a third of the total population change also shown in the table above. Therefore whilst the number of jobs in the authority may increase by, for example, 1,600 a year, the overall population growth is considerably higher – taking account of dependants and the growing older population – which in turn generates a higher level of household formation annually than there are jobs. This highlights the importance of not directly comparing the annual change in jobs to the projected annual change in households within the modelling.

⁴⁰ Note: the Labour-force growth exceeds the jobs forecast partly as a result of the assumption that Bradford continues to export labour to surrounding areas i.e. a larger labour-force than there are jobs, but also because there is an assumption that parts of this economically active labour-force are unemployed at a point in time.

Considering the impact of varying key economic assumptions in the modelling

- 6.14 The analysis in section 3 highlighted that currently Bradford’s economic profile incorporates comparatively high levels of economic inactivity and unemployment levels when compared to national averages and much higher levels of unemployment than were prevalent in the years preceding the current economic downturn. This is a challenge which is recognised within the District’s Economic Strategy as well as the Local Enterprise Partnership. In addition the role of Bradford as a net exporter of labour as a result, at least in part, of a fall in employment opportunities in the district in recent years, could change linked to the growth of jobs forecast.
- 6.15 This section examines the impact of applying hypothetical changes to a number of the core economic assumptions within the model in order to explore the impact of potentially successful policy aspirations. When considering these sensitivities it is important to recognise as noted in section 5 that the Employment-led scenario integrates assumptions around unemployment and economic activity which are based on averages of the last 5 – 6 years and not simply extrapolating forward over the long-term the current low performance of economic indicators.
- 6.16 The intention of presenting this analysis is to illustrate the impact of longer-term variations to the economic health of the labour-force. The intention is not necessarily to assume that the realisation of ambitions to improve the health of the economy can be achieved but to indicate the impact of such changes on the development of policy and strategy to support the growth of the economy.
- 6.17 Three sensitivity scenarios have been run on the Employment-led scenario. These include the following changes to the underpinning assumptions:
- Increasing the employment rate in Bradford (Adjusted economic activity rates) – Under this sensitivity those age groups where the current economic activity rates fall below national averages are incrementally adjusted to increase to the current national rate by 2030⁴¹. In addition the unemployment rate is reduced incrementally to the national average over the same time period;
 - Balancing the commuting ratio – This sensitivity suggests that the balance between jobs and the labour-force comes into alignment in 2018 and is then sustained at this level; and

⁴¹ Note: The end date of 2030 is applied for this assumption to provide a longer projection period. The data is presented consistently as a change in labour-force up to 2028 to align with the analysis in section 5.

- Combined Impact – This sensitivity applies both of the adjustments above to illustrate the cumulative impact of changing key economic assumptions.

6.18 Achieving these adjustments will depend very heavily on the success of policy and strategy interventions as well as the wider health of the economy. It is not possible to accurately forecast that these improvements to the economic profile of Bradford will occur. Importantly though, the underlying assumption in the REM model presented in section 3 is one of a recovering economy in Bradford. The analysis therefore highlights the significant impact that improvements to, and for example, economic activity rates could have on generating a comparable level of job growth through a reduced associated increase in population.

Figure 6.2: Impact of the application of economic assumptions sensitivity analysis

Scenario	Projected Change in Population 2011 - 2028		Underlying change in jobs
	Total Population	Economically active population	
Employment-led (REM)	89,641	30,112	27,041
Employment-led (Adjusted Economic Activity Rates)	50,584	24,035	27,041
Employment-led (Adjusted Commuting Rate)	83,978	27,398	27,041
Employment-led (Combined impact of adjustments to economic activity and commuting rates)	45,277	21,374	27,041

Source: Edge Analytics, GVA, 2012

- 6.19 The analysis above highlights that accommodating a job growth of just over 27,000 new jobs within Bradford can be achieved through a different level of projected growth in the population depending upon whether other factors are improved / altered within the economic structure of the district.
- 6.20 Under the Employment-led Scenario taken from section 5 with current activity rates, unemployment and commuting ratios held constant the population would increase by over 80,000 people to allow for a growth of the labour-force by just over 30,000 serving the increase in jobs forecast.
- 6.21 By contrast if the authority made significant advances in addressing current low economic activity rates (noting that the improvement of these to national levels

would represent a significant change) then the population would potentially only increase by just over 50,000 people. This would result as the labour-force would expand through the return of already resident working age people into economic activity.

- 6.22 The impact of varying the commuting ratio is less pronounced as the district already has a comparatively balanced workforce / jobs ratio. Under this scenario though the growth in the population would reduce by a small amount again with new jobs being increasingly taken by those residents in the authority
- 6.23 As would be expected the combination of the two sensitivities is significant. Under this set of hypothetical assumptions the authority of Bradford would only increase by just over 45,000 people (half that projected under the Employment-led scenario) but with the authority still seeing a job growth of just over 27,000.
- 6.24 The above analysis highlights the importance of continuing to monitor the interplay between these important factors in ensuring that policy continues to remain up-to-date and responsive. At the current point in time, coming out of a severe recession, it is difficult to accurately forecast whether the above sensitivities are achievable. Going forward, however, it is clearly an ambition of the Council and partners to address some of the fundamental challenges in Bradford's economic structure.

The Supply Picture

- 6.25 The NPPF highlights the need to understand the objectively assessed needs facing an authority in terms of the demand for housing. The implication being that need should not be under-estimated due to a supply constraint, for example the ability of households to purchase, the capacity of developers to build or indeed the availability of deliverable land to accommodate need.
- 6.26 This was a specific issue that was discussed at the stakeholder workshop conducted as part of this research, with the general view being that this research should not apply supply-constraints to any modelling of population and household needs. The role of policy going forward is to consider the two aspects together, supply and demand, and arrive at a reasonable position to ensure that the needs of households are met over the plan period. Potential imbalances in the short-term i.e. linked to affordability should not fundamentally alter the role of the Local Plan to take a long-term perspective for delivering a range of housing which meets needs and accommodates changes to the economy. Equally where there is an insufficient supply of deliverable land this is an issue which needs to be explored through further research and potentially in dialogue with surrounding authorities as part of the duty to cooperate expectation of the NPPF.

6.27 This sub-section does, however, use recent completions data and the current assessment of the supply of deliverable residential land to put into context the objectively assessed need under the scenarios taken forward from section 5.

Current Pace of Development / Market Activity

Completions

6.28 The analysis of recent completion data in section 4 identified that over the 8 years between 2004 and 2012 there have been approximately 10,332 net additional dwellings completed across Bradford. This equates, on average, to the addition of 1,292 houses annually.

6.29 The analysis of delivery rates over individual years identified that net completions rose between 2004 and 2008, peaking with the delivery of 2,156 net new houses in 2007/08. In line with the national picture completions have subsequently fallen over the following three years, reaching a low of 696 in 2010/11. The recorded net completions for 2011/12 show a small recovery but the 733 built in this year still only represents approximately a third of those completed in 2007/08.

6.30 These rates of completions, with the exception of the peak years clearly fall well short of accommodating the levels of household demand identified through the scenarios presented in section 5.

6.31 Analysis of falling vacancy (empty property) rates, as shown in section 4, suggest that some of the imbalance between supply and demand has resulted in a better re-use of the existing stock. Over the long-term this has a finite capacity, however, particularly when taking account of the suitability and quality of some vacant units and their overall market appeal. Moreover any gains in bringing empty homes back into use have to be set against any losses which occur through clearance or change of use.

6.32 On this basis if the level of objectively assessed need is to be met, housing completions will need to increase substantially from the low levels achieved over recent years. There are a number of potential impacts on the population growth of the district if this is not achieved, including:

- An increase in the net out-migration of people from the district to surrounding authorities. The analysis of births and deaths shows that the population and therefore household numbers will increase irrespective of supply with a requirement for this pressure to be accommodated somewhere; or

- An increase in average household size. The analysis presented in section 5 considered the impact of recent supply challenges and affordability issues on household size. The failure to alleviate some of these issues through the provision of new stock will be likely to lead to a further increase in household sizes, rather than the projected fall, with different generations having to live with each other for longer.

Deliverability – Considering the Market

- 6.33 The analysis in section 4 highlighted the fact that Bradford’s housing market continues to show indications of an imbalance between supply and demand. The latest analysis suggests a sustained need for affordable housing across the authority with the overall delivery of housing an important facilitating factor to addressing this need.
- 6.34 The analysis also showed that the housing market in Bradford has been comparatively subdued over recent years following the onset of the credit crunch and the economic recession. The ongoing difficulties facing households in gaining mortgage finance has had a significant impact on the number of transactions and the overall capacity within the market to purchase housing.
- 6.35 Figure 4.3 in section 4 highlights the significant drop in transaction levels across the district. This shows that consistently between 2001 and 2007 the number of transactions in the district exceeded 11,000 with a peak of 13,404 sales recorded in 2006. The last three years for which full data is available show a marked reduction in transaction to a figure of closer to just over 4,000, less than a third of the peak level seen in 2006.
- 6.36 Savills Research highlights the relationship between levels of transactions and the potential capacity to sell new housing: *‘Volume sales of new homes is inherently easier in markets in which a high proportion of housing stock changes hands each year’*⁴².
- 6.37 An examination of Land Registry house price sales data shows that between February and September 2012⁴³ there have been between only 35 and 10 sales per month of new build properties. Over a 12 month period this level of transactions of new properties would fall considerably short of the level of sales potentially associated with the forecast increase in households presented in section 5. This highlights the current imbalance between need the ability of households to realise demand. This is due to the health of the housing market and in particular the limited availability of mortgage finance.

⁴² Savills Research report ‘Spotlight: Where Best to Develop and Invest in Residential Property’ Spring 2012, pg. 5

⁴³ Note: Analysis excludes data from the month of July

- 6.38 On the basis of the above transactions the projected annual growth in new households under the Employment-led scenario would represent less than twenty percent of transactions at the peak of the market. Significantly though, they would represent more than half of the current levels of transactions seen over recent years. This further suggests a market capacity issue to absorb high levels of new completions in the short-term.

Availability of Land for Residential Development

- 6.39 The first SHLAA for Bradford was completed in 2011. The SHLAA was used to inform the policies of the Core Strategy Further Engagement Draft which adopted an overall housing requirement figure of approximately 48,000 new homes in line with the guidance in the RSS. Once a windfall allowance of 3,000 dwellings was subtracted, the Core Strategy identified a need to allocate sufficient land to accommodate 45,000 new homes.
- 6.40 The results of the SHLAA indicated a number of challenges both in meeting the overall longer term quantum of 45,000 new homes and identifying sufficient immediately deliverable sites in the short term. The total deliverable and developable capacity within the SHLAA was estimated to be around 44,000 dwellings – just short of the required quantum, and even this was only achieved with a significant contribution from currently designated green belt land. The SHLAA also revealed that the district only had a five year deliverable supply of 5,747 dwellings. This represents just 39.5% of the 5 year requirement or alternatively 1.98 years supply with this balanced against the current requirements to be met through the RSS. Significantly, this supply would also show a considerable shortfall if compared against the objectively assessed need identified through both of the scenarios taken forward from section 5.
- 6.41 It is important to recognise that this capacity assumes low annual completion rates informed through discussions as part of the SHLAA working group with concerns raised around weak demand linked to weak housing market conditions over the next few years. The total capacity of the schedule of sites within the 5 year land supply trajectory is actually 12,632 dwellings.
- 6.42 The implication of this assumption around low completion rates has an important bearing in light of the assessment of completion levels in this section.
- 6.43 It is however expected that the total land supply in the second SHLAA, which is due to be completed in January 2013, will be higher and perhaps significantly higher than the first iteration. This is due to a number of factors including an increase in the number of sites assessed by reducing the site size threshold from 0.4ha to 0.2ha and new sites provided both by landowners and by the general public.

6.44 The Council has also published within its Annual Monitoring Report data on the potential supply using information solely related to land with extant planning permissions and/or RUDP allocations from an April 2011 base data. It is important to note that this supply data has not, unlike the SHLAA, incorporated any assessment of deliverability and the total therefore includes some sites which are unlikely to be implemented within the 5 year period. Nevertheless the AMR net housing supply comprises⁴⁴:

- Remaining yield on land with outstanding planning permissions 11,188 (7,437 on previously developed land; 1,569 through conversion/change of use; 2,182 on greenfield land); and
- Estimated yield on the remaining allocations in the RUDP, that does not have planning permission, (on both Phase 1 and Phase 2 allocations) 5,034 (1,007 on previously developed land and 4,027 on greenfield land).

6.45 This suggests that the net housing supply in Bradford is 16,222 dwellings. Even if it was assumed that all of these commitments were capable of being implemented at some point within the Local Plan period, this capacity would represent less than half of the overall demand projected based on the change in households between 2011 and 2028.

6.46 The above summary of potential supply suggests, based on the current information available, that there will be a deficit to match the levels of household growth projected. This deficit will need to be considered through further assessment through an update of the SHLAA and the implications for policy considered.

Translating Household Growth into a Dwelling Requirement

6.47 The analysis throughout this section has assessed the alignment of the objectively assessed need for housing as projected in the growth in households through the two scenarios taken forward from section 5. This sub-section translates the generated levels of household growth into dwelling requirements.

6.48 In order to compare the household growth projections with the figures presented previously within the Regional Spatial Strategy they are translated into dwellings through the application of an assumed 3% vacancy. A 3% vacancy level has been used in the evidence underpinning regional plans in recognition of the need for a buffer of additional stock to enable turnover and choice. This 3% is therefore applied

⁴⁴ Note: The data presented here is directly replicated from the December 2011 Annual Monitoring Report published by Bradford District Council

to the projected growth in new households, assuming therefore that additional dwellings are required beyond projected household growth over this period to enable turnover in the market and recognising that transactions and household growth will continue post 2028. It is important to note this takes no account of the ability to absorb demand within existing surplus vacant stock, this is considered in more detail later in the section.

Figure 6.3 Hypothetical dwelling requirements

Scenario	Change in Households 2011 - 2028	Dwellings Required 2011 - 2028 (3% vacancy assumed)	Theoretical net annual dwelling requirement (17 years)
Rebased 2010 SNPP	36,478	37,572	2,210
Employment-led (REM)	42,333	43,603	2,565
Regional Spatial Strategy		45,900	2,700

Source: GVA, Edge Analytics, 2012

- 6.49 RSS represents the highest of the three figures although given the length of time period being examined there is relatively little difference with the Employment-led scenario in particular. The Rebased 2010 SNPP scenario shows a slightly lower requirement from that established through RSS based on the latest available demographic projection data.
- 6.50 As noted above whilst the numbers above allow additional dwellings to come forward beyond household growth to enable turnover the analysis of empty properties / vacancy in section 4 highlighted the fact that there was a substantial amount of existing empty properties in Bradford, noting, however that this had been reducing over recent years. In order to take account of the potential capacity offered by this existing empty stock a further set of dwelling requirements have been modelled taking account of a re-absorbing of demand in existing vacant stock.
- 6.51 Bradford City Council are committed to addressing current empty homes issues across the authority and have recently published a Delivery Plan to address the issue 'Tackling Empty Homes in the Bradford District' (2011)⁴⁵. This delivery plan includes a commitment to reduce long-term empty properties by around 3,000 in the next six years. As outlined in section 3 considerable progress has already been made in achieving this aim in the last two years, with Bradford returning 1,944 previously empty homes back into use.

⁴⁵ <http://www.bradford.gov.uk/NR/rdonlyres/D9B3F231-0307-45DC-B02A-B57EBC4D5D4E/0/TacklingEmptyHomesintheBradfordDistrict>.

6.52 The table below shows the current levels of vacancy within Bradford based upon the latest information available at the time of modelling from Council Tax data (July 2012).

Figure 6.4: Empty Properties across Bradford

July 2012	Total Empty Homes		Short-term empty		Long Term Empty	
	Number	% of total stock	Number	% of total stock	Number	% of total stock
Total Dwellings	9,915	4.7%	4,378	2.1%	5,537	2.6%
209,634						

Source: Bradford City Council, Council Tax Records, July 2012

6.53 Analysis of historical empty property records shows that the overall level of vacancy has fallen from 6.2% in October 2008. The current overall proportion of empty properties, 4.7%, is notably higher than the level assumed to enable a healthy turnover of properties considered in the development of dwelling requirement figures earlier in the section i.e. 3%.

6.54 This reinforces both the need to reduce the levels of vacant properties as well as the potential capacity to do so. The table below illustrates the impact on the overall vacancy level if the Council is successful in bringing back 3,000 properties into use and occupying them with households projected to form over the plan period.

Figure 6.5: Vacancy level assuming the re-occupancy of 3,000 currently empty properties

Total Dwellings (a)	Total Empty Homes July 2012	Total empty homes - 3,000 target set by Council (b)	New % dwellings vacant (a/b)*100
209,634	9,915	6,915	3.3%

Source: GVA, 2012

6.55 This illustrates that if the Council is successful in reducing the long-term empty property stock by 3,000 and the overall proportion of short-term properties doesn't change then this would result in a level of vacancy of just over 3% suggesting a much more balanced market.

6.56 The following table highlights the impact of applying the assumption that 3,000 long-term empty properties are brought back into use and occupied by households projected to form over the projection period on the overall level of dwellings required over the plan period.

Figure 6.6: Dwelling requirements taking account of a re-use of 3,000 long-term empty properties

Scenario	Change in Households 2011 - 2028	Projected additional households after assumed re-occupancy of 3,000 vacant properties	Remaining dwellings required 2011 - 2028 (3% vacancy assumed on new stock to enable turnover)	Theoretical net annual dwelling requirement (17 years)
Rebased 2010 SNPP	36,478	33,478	34,482	2,028
Employment-led (REM)	42,333	39,333	40,513	2,383

Source: GVA, Edge Analytics, 2012

Evaluating the Impact of Population and Household Change

- 6.57 The level of housing delivered will have both a direct and indirect economic and financial impact on the authority.
- 6.58 This sub-section presents high level assessments of the potential scale of this impact in terms of a number of employment and financial factors. The following factors are considered:
- Direct construction employment using a standard national multiplier;
 - Indirect employment using supply –chain multipliers;
 - Retail expenditure;
 - Council tax payments; and
 - New Homes Bonus
- The following table sets out the multiplier assumptions and sources of data used to derive quantified outputs for both of the two dwelling requirement projections set out in figure 6.3.

Figure 6.7: Multiplier assumptions and sources

Impact Indicator	Assumed rate	Source / Explanation
Associated construction impacts		
Direct	1.5 fte jobs per home	Assumed rate sourced from - Professor Michael Ball (2005) – “The Labour Needs of Extra Housing Output”
Indirect	4 fte jobs per home	HBF Standard proposed multiplier
Finance Revenues		
Retail Expenditure	Assumed Expenditure Per Person Per Annum of: - Convenience goods £1,467 - Comparison goods £3,641	Derived from the Bradford Retail and Leisure Study (2008). Average taken across all of the survey zones for 2012 expenditure rates.
Council Tax Revenues	Council Tax Band C (£1,135.33)	Average New Build property value in 2012 (Feb - Sept) calculated at approximately £143,250. Classified as Council Tax Band C
New Homes Bonus	Assumed spread of stock based on current Council Tax distribution	Total Properties input into the New Homes Bonus Calculator - Payment for one year

Source: GVA, 2012

- These assumptions have been applied to the per annum dwelling figures identified in figure 6.3 and the underpinning population characteristics built from the projections from which they are built. The following table displays the outputs of this process and enables a direct comparison between the two scenarios.

Figure 6.8: Evaluating the Impact of Population and Household Change

Impact Indicator	Generated output / value per annum	
	Rebased 2010 SNPP Scenario - Average annual dwelling requirement of 2,210	Employment-led Scenario (REM) Average annual dwelling requirement of 2,565
Associated construction impacts		
Direct jobs (fte)	3,315	3,847
Indirect jobs (fte)	8,840	10,260
Retail Expenditure		
<i>Convenience goods</i>	<i>£3,242,242</i>	<i>£3,762,691</i>
<i>Comparison goods</i>	<i>£8,047,037</i>	<i>£9,338,759</i>
Total	£11,289,279	£13,101,450
Council revenue streams		
<i>Council Tax</i>	<i>£2,509,212</i>	<i>£2,911,995</i>
<i>New Homes Bonus</i>	<i>£2,629,990</i>	<i>£3,052,455</i>
Total	£5,139,202	£5,964,450

Source: GVA, 2012

- The analysis above highlights the significant impacts that the development of new housing could have in Bradford on a per annum basis. The higher level of dwellings proposed under the Employment-led Scenario results in a slightly higher contribution against each of the impact indicators.
- Under both scenarios the construction of new housing supports a substantial number of direct and in-direct jobs which could potentially have an important role in realising the ambitions set out within the District's Economic Strategy⁴⁶.
- The additional retail spend under each scenario will also have a significant effect in supporting and growing the local retail base.
- The revenue generated from Council Tax and potentially New Home Bonus (the retention of this throughout the plan period is uncertain) will also represent an important factor in supporting the delivery of new community, social and transport infrastructure required to accommodate the growth of settlements across the District.

⁴⁶ Note: These job figures cannot be directly compared to those integrated within the REM model. These represent gross jobs and in reality a proportion of these may well be duplicated as development occurs in a phased manner throughout the year.

Arriving at a Recommended Housing Requirement for Bradford

- 6.59 The analysis in section 5 identified two population and household projections. The first of these the Rebased SNPP 2010 scenario represents the most up-to-date trend based demographic projection following a comparable methodology to that used by the ONS in the release of their SNPP datasets. The second scenario constrained the projected population to an ambitious economic forecast, which assumed an uplift in the employment in the district by 27,000 additional jobs between 2011 and 2028.
- 6.60 Collectively these two scenarios have been used to generate a robust range of dwelling requirements for the district. Without assumptions around the re-use of vacant stock this suggests a dwelling requirement of between 2,210 and 2,565 dwellings per year.
- 6.61 It is however important to stress that depending on the interplay of a number of factors these two scenarios could be adjusted up or down producing different projections of population and household growth. Some of the sensitivities that could produce variances on these outcomes are discussed in this report and summarised below.
- 6.62 The lower of the two scenarios, the Re-based 2010 SNPP is built from official datasets and adjusted to take account of early data releases from the 2011 Census. This updating process has not taken account of a full range of adjustments around historical migration and natural change factors which the ONS are not planning to release data on until March 2013. Indications from the analysis suggest that the modelled outputs of the scenario may change when the full adjustments around the historical levels of international migration into the authority over the last ten years are taken into account.
- 6.63 The Employment-led scenario builds in assumptions around the size of the labour-force linked unemployment levels and economic activity rates which are based on averages of the last 5 – 6 years. Whilst not projecting forward the particularly bleak economic picture in its entirety (i.e. simply using the latest rates) this is still likely to take a potentially pessimistic view of the economy in the future, particularly when considering the REM forecasts which are underpinned by indicators of economic recovery. Improved levels of use of the existing labour-force and new emerging people of working age would result in a greater capacity to absorb new jobs from the existing population therefore impacting on the net inflow/outflow of migrants from elsewhere. This in turn could therefore suppress the level of population growth. Equally to counter balance this however, it is also the case that there is the capacity for the

district to accommodate and realise higher employment growth than that currently forecast.

- 6.64 With regards to these potential sensitivities the complexity of the interlinked nature of individual drivers in the housing market makes it difficult to accurately assess their exact impact. For example in terms of the economic factors it is very difficult to accurately predict the pace of economic growth and recovery and the effects of these on, for example, economic activity rates. Equally in terms of future rates of international migration, although Bradford has long established patterns of international migration, migration trends are, over the longer term, sensitive to changes in economic conditions and to national policy.
- 6.65 Account needs to be taken of 'softer' policy related goals at the national and local level. The current policy and strategy publications from the Government highlight a commitment to ensuring that planning continues to support and facilitate the economic growth of the UK. The importance of strengthening the resilience of Bradford's economy is also recognised in Bradford's Economic Strategy and other evidence base reports. This would suggest that emphasis should be placed in terms of the setting of a dwelling requirement that supports rather than inhibits these aspirations for economic growth. This suggests a level which is reasonably closely aligned with the previous requirement established through the RSS.
- 6.66 Analysis of recent levels of completions and indeed transactions suggests that the delivery of this level of housing will be challenging in Bradford, especially over the short-term. This is also reinforced through the messages emerging from developers through the development of the 2011 SHLAA which suggested that moderated build-out rates be applied to those sites included in the five year supply.
- 6.67 Importantly though the implications of delivering out at this rate include a number of strong positives. These include:
- The strong growth of the labour-force representing a significant asset in ensuring the foundation for a more resilient economy in Bradford in the future;
 - The potential to generate significant amounts of direct and indirect employment through the development and construction of new housing;
 - The capacity to increase local spend linked to the growth in population helping to support retail and other services; and
 - Increases to financial resources to spend on other services, infrastructure and environmental improvements linked to Council Tax receipts and potential New Homes Payment benefits.

6.68 Evidently the delivery of lower levels of housing development would have the reverse effect. A failure to at least deliver housing to meet the level of household growth projected under the Rebased 2010 SNPP scenario would lead to potential increased levels of out-migration to other surrounding authorities, undermining the size of the labour-force and therefore the potential to realise the growth of the existing business base and the attraction of new investment.

7. Conclusion

- 7.1 The overall purpose of this Housing Requirements Study has been to provide an independent and impartially derived sound evidence base which enables CBMDC to:
- Develop a robust, transparent and effective means of determining an appropriate and justifiable local housing requirement for the Bradford District.
 - Explore the potential scale of future housing required in the Bradford District to support future population growth and economy of the District.
- 7.2 The conclusions presented below are therefore structured around these aims.

Methodology

- 7.3 In order to understand the objectively assessed need for housing across the district in line with the NPPF definition, the analysis has considered historic and forecast data relating to economic, demographic and market factors.
- 7.4 The research process has approached the assessment of the objectively assessed needs of Bradford from an authority level. This reflects the guidance in the NPPF and in particular the availability of important projection datasets, including the Sub-National Population Projections (ONS) and the Sub National Household Projections (DCLG), at this geographical level.
- 7.5 In considering long-term demand generated by population and household growth it is important to recognise the intrinsic historical connection between the supply of new housing and changes in population and employment. The impact of the linkages between these factors becomes even more apparent at smaller spatial scales. For example a low rate of historical construction, which is apparent across many of the wards within Bradford⁴⁷, would result in a limited capacity for household numbers and the population to have changed. The extrapolation of these trends forward would therefore be distorted by a local supply position rather than the potential needs of households which have in the past been forced to migrate out of the area, the continued replication of which may not be beneficial to the sustainable development of areas. These issues further reinforce the need to consider long-term drivers at a more strategic level, as is required in the development of Local Plan policies.

⁴⁷ Supporting data provided in figure 4.2

- 7.6 The influencing role of different drivers on future change also steers the approach towards considering a range of alternative futures in order to produce a more considered view of potential change. Within this research a range of assumptions have been applied to the nationally produced ONS sub-national population projections (SNPP), 2010 base, to produce a number of scenarios of potential projected changes to the growth in the number people and households over the plan period. This analysis has utilised the POPGROUP suite of software which is recognised as the industry standard demographic model⁴⁸.
- 7.7 In developing these scenarios consideration has been given to alignment with other important informing parts of the Council's evidence base such as the Employment Land Review and SHLAA as well as wider Corporate Strategy and Policy documents. In addition consideration has been given to the aspirations set through the Local Enterprise Partnership recognising the important cross-authority dynamics which impact on economic and demographic change within the authority.
- 7.8 The research process has involved local stakeholders. Early in the research process a Stakeholder Workshop event was convened to present stakeholder representatives from the public and private sectors with an opportunity to comment on the proposed methodology to the research and respond to a presentation of the initial outputs of the research examining the strategic drivers of the housing market. This event was well attended and included a good representation in terms of the scope of partners represented.

The Scale of Future Housing Required

- 7.9 Drawing on a detailed analysis of historical and current datasets the modelling of future population and household projections evidenced the following:
- Bradford's population will continue to grow in the future. This growth will be driven to a relatively significant extent by the ongoing balance between natural change factors, births and deaths. Bradford's comparatively youthful population means that without a significant increase in the out-migration of residents the population will grow of its own accord;
 - Migration will also continue to play an important role in shaping the growth of Bradford's population. The ONS project a continued net increase in population resulting from international migration with this assumption built into the Re-based 2010 SNPP projection. This is based on a continuation of recent trends. The

⁴⁸ Additional information on the POPGROUP model is included within Appendix 2

continued net growth of the population from this component also further reinforces the impact of natural change with this migrant population assumed to include a high proportion of younger persons. Significantly recent mid-year population estimates produced by the ONS have estimated a strong net out migration of residents moving in and out of Bradford from other parts of the UK. This net flow has been consistently high over the last five years or so with the Re-based 2010 SNPP projection therefore assuming that this net flow continues to increase in the future. Collectively these factors continue to show a strong projected growth in the population with the higher levels of natural change linked to international migration as well as the direct effect of this net international migration offsetting the sustained net outflow of migrants to other parts of the UK;

- Importantly in the context of the above the 2011 Census results show that international migration flows are likely to have been stronger than estimated through recent ONS mid-year-population estimates. If this stronger flow is sustained over the plan period this in turn would translate into a higher demographic driven growth projection. The addition of further assumed international migrants into Bradford each year would be likely to have an impact in particular on the working age population of the authority;
- The projection forward of historical trends does not however, take account of the relative health of Bradford's future economy. Flows of international migrants into the district in particular have, at least in part, been attracted by the offer of employment. Recent economic forecasts consistently predict a steady growth of Bradford's economic base, reflected in a growth in employment opportunities, a shift from the impact of recent job losses resulting from the wider UK recession. The modelling of a projection of the population of Bradford constrained to a scenario of future job growth (27,000 additional jobs), illustrates that rather than the district seeing an increasing out-migration of people, the offer of jobs will serve to retain parts of the population which may otherwise choose to move out; and
- The consideration of these two fundamental drivers, demographic change and economic factors, provides a solid evidence base from which to assess and analyse the level of housing which is likely to be required in the authority over the plan period.

7.10 On this basis two population and household projections are considered to represent a robust starting point for understanding the potential range of dwelling requirements to be taken forward through policy. These being the Rebased SNPP 2010 and the Employment-led scenarios.

7.11 Without assumptions around the re-use of vacant stock the translation of household growth projected under these scenarios into dwelling requirements suggests a

dwelling requirement of between 2,210 (Re-based 2010 SNPP scenario) and 2,565 dwellings (Employment-led scenario) per year as appropriate for Bradford.

- 7.12 The current policy and strategy publications from the Government highlight a commitment to ensuring that planning continues to support and facilitate the economic growth of the UK. The importance of strengthening the resilience of Bradford's economy is also recognised in the Council's Economic Strategy and other evidence base reports. This would suggest that emphasis should be placed in terms of the setting of a dwelling requirement to support this strategy aim.
- 7.13 The initial results of the 2011 Census also reinforce the position to plan for a level of growth above that identified within the re-based 2010 SNPP scenario. As noted through various sections of the report the 2011 Census showed a higher population count than that previously estimated by the ONS and used to underpin their trend based SNPP projections. It is likely that this additional population relates to an increased net in-migration of international migrants. Future iterations of ONS based trend projections are likely to extrapolate forward a higher net level of international migration serving to elevate the overall growth of the projected population. Evidently the future flows of international migration into Bradford are, at least, in part likely to be influenced by the level of job opportunities available in the district again reinforcing the need to consider the outputs of the Employment-Led scenario.
- 7.14 The delivery of housing at this level will serve to increase the labour-force within Bradford and help to stem historic flows of out-migration to other parts of the UK, with particularly strong flows to surrounding authorities.
- 7.15 The sensitivity of aligning population growth with forecast job levels has been evidenced through the presentation of a series of economic sensitivities which show the impact of Bradford making significant headway in addressing current challenges around low economic activity rates and the potential impact of changing commuting patterns. These show that if better use is made of the existing resident latent labour-force that the forecast level of job growth can be accommodated with a reduced level of migration and therefore population growth. This analysis also potentially shows, however, the capacity for the district to accommodate and realise higher employment growth than that currently forecast.
- 7.16 Analysis of recent levels of completions and indeed transactions suggests that the delivery of this level of housing will be challenging in Bradford, especially over the short-term. This is also reinforced through the messages emerging from developers consulted through the preparation of the 2011 SHLAA which suggested that moderated build-out rates be applied to those sites included in the five year supply.

7.17 Importantly delivering homes at this rate will lead to a number of positive outcomes including:

- The strong growth of the labour-force representing a significant asset in ensuring the foundation for a more resilient economy in Bradford in the future;
- The potential to generate significant amounts of direct and indirect employment through the development and construction of new housing;
- The capacity to increase local spending power linked to the growth in population helping to support retail and other service sector businesses; and
- Increasing Council tax revenues and payment of New Homes Bonus which can help to support investment in services, infrastructure and environmental improvements.

7.18 A failure to at least deliver housing to meet the level of household growth projected under the Rebased 2010 SNPP scenario would lead to potential increased levels of out-migration to other surrounding authorities, undermining the size of the labour-force and therefore the potential to realise the growth of the existing business base and to attract new investment to the district.