

# Housing Provision Options Study: 2012 Update

**Stratford-on-Avon District Council**

Final Report

January 2013

## **Prepared by**

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## Quality Standards Control

The signatories below verify that this document has been prepared in accordance with our quality control requirements. These procedures do not affect the content and views expressed by the originator.

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DATE

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## Limitations

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## 2 INTRODUCTION

### Context and Purpose

- 2.1 GL Hearn and Justin Gardner Consulting (JGC) prepared a Housing Provision Options Study for Stratford-on-Avon District Council in Spring 2011. The Study was published in June 2011. It analysed population trends and set out a number of projections for population and housing requirements in the District over the period between 2008-28. The Study was intended to inform the further development of Council's Core Strategy.
- 2.2 Since the 2011 Housing Provision Options Study was completed the following have occurred:
- The Council published a further draft of its Core Strategy and consulted on this between February to March 2012. It has received a number of representations on the draft Plan;
  - The Government published new national planning policies in the National Planning Policy Framework (NPPF)<sup>1</sup> in March 2012. This provides further guidance on determining housing requirements;
  - New demographic information has become available, including data from the 2011 Census and new 2010-based Sub-National Population Projections;
  - In a recent planning appeal decision<sup>2</sup>, a Planning Inspector has provided further comments relating to the appropriate levels of housing provision to plan for in the District in light of the NPPF although these are disputed by the Council.
- 2.3 In light of the above the Council has commissioned GL Hearn to update the demographic scenarios within the Housing Provision Options Study. This report sets out this updated demographic modelling.
- 2.4 The report does not include a review of the development options presented in the 2011 Housing Provision Options Study, but instead focuses on presenting the demographic information. It is intended to provide an objective assessment of housing requirements in the District which is 'policy neutral.' In making decisions about future levels of housing provision it is for the Council to consider this report alongside other relevant considerations.

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<sup>1</sup> CLG (March 2012) *National Planning Policy Framework*

<sup>2</sup> CLG (Oct 2012) Decision Notice: Land West of Shottery, South of Alcester Road and North of Evesham Road, Stratford-upon-Avon. Application Reference 09/02196/OUT

- 2.5 This update report is presented and indeed to be read alongside the 2011 Housing Provision Options Study and the 2012 Strategic Housing Market Assessment Update. It represents an addendum to these reports.
- 2.6 The report provides revised projections of housing requirements based on past demographic trends, an understanding of demographic components of change, and consideration of how economic growth could influence housing requirements. The economic-led scenario included within the report is based on new 2012 econometric forecasts.

### National Planning Policy Framework

- 2.7 In March 2012 the Government published the National Planning Policy Framework (NPPF), which replaces most of the previous planning policy statements including PPS3: Housing.
- 2.8 The NPPF introduces a **presumption in favour of sustainable development**, whereby local planning authorities should prepare new Local Plans on the basis that objectively assessed development needs (both for housing and other types of development) should be met, unless the adverse impacts of doing so would significantly and demonstrably outweigh the benefits when assessed against the document as a whole.
- 2.9 The starting point is that Local Plans should meet the full requirements for market and affordable housing in their housing market area. Any under-provision is expected to be addressed through collaborative working with neighbouring authorities, and this is included within the tests of soundness for the plan. The proposed shift of policy means that each local authority should seek to meet its own development needs, unless there are sound reasons why it cannot do so.
- 2.10 The NPPF emphasises for Strategic Housing Market Assessments in assessing full housing requirements, including both the scale and mix of housing. It outlines that an SHMA should be prepared collaboratively where housing market areas across administrative boundaries. It 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 change;
  - Addresses the need for all types of housing, including affordable housing and the needs of different groups in the community; and
  - Caters for housing demand and the scale of housing supply necessary to meet this demand.
- 2.11 The SHMA is intended to be brought together with evidence of land availability, from a Strategic Housing Land Availability Assessment (SHLAA). The Council has separately reviewed its SHLAA in 2012.

2.12 The 2011 Housing Provision Options Study included a number of projections which are not considered necessary to either understand demographic dynamics or to inform an objective assessment of housing needs. These include projections based on lower net in-migration, zero population growth, 5% and 10% growth in labour supply and dwelling-led scenarios for provision of 280 and 375 homes per annum. As these projections do not correspond with the policy approach advocated within the NPPF they have not been updated within the update to the Study. This aims to aid clarity in determining policies for future housing provision.

## Report Structure

2.13 The remainder of this report is structured as follows:

- **Section 2: Projections Methodology and Assumptions** – this section provides an overview of the projections included within the previous 2011 Study and reviews the baseline population and assumptions about future population changes in light of the new information;
- **Section 3: Revised Projection Results** – outlines the result of the revised projections, providing updated projections for growth in the City's population and associated household growth and housing requirements. The new projections are compared against those prepared in 2011;
- **Section 4: Conclusions** – draws the analysis together to review the conclusions drawn in the 2011 Study in light of the revised modelling.



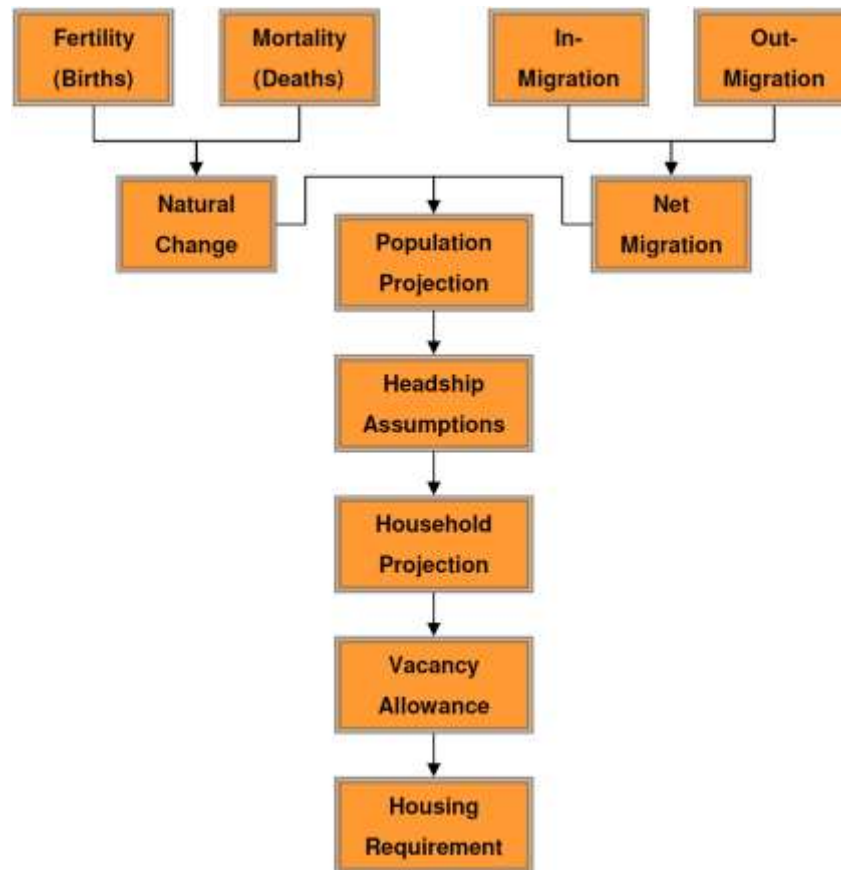


### **3 PROJECTION METHODOLOGY & ASSUMPTIONS**

#### Introduction

- 2.1 The methodology used to determine population growth and hence housing requirements is based on a standard population projection methodology and is consistent with the approach taken in the previous set of projections run for the District Council. Essentially the method establishes the current population and how this will change in the period from 2008 to 2028.
- 2.2 The population is projected using a standard cohort survival projection method. This considers how likely it is that women will give birth (the fertility rate); how likely it is that people will die (the death rate) and how likely it is that people will move into or out of the District (migration). These are calculated for different age groups within the population and are the principal components of population change which are used to construct population projections.
- 2.3 Headship rates (the proportion of people in an age group who are a head of a household) are used to project growth in households from this. To estimate the requirement for additional homes (dwellings) an allowance for vacant homes to support turnover in the housing stock has been included.
- 2.4 Figure 2.1 below shows the key stages of the projection analysis through to the assessment of housing requirements.

**Figure 2.1 Overview of Methodology**



2.5 The projections cover the period from 2008 to 2028, however it must be recognised that there is already some data available for 2008 to 2012. We have therefore done some ‘back’ projecting to provide fixed figures for the four year period from 2008 to 2012.

2.6 Firstly ONS has published mid-year population data for 2011 and this is taken to reflect the population profile at this time. This takes account of the results of the 2011 Census. Within these mid-year estimates figures are published for natural change and net migration from 2010 to 2011. This data suggested net migration of 300 people into the District along with no natural change (i.e. the number of births was in line with the number of deaths). We have therefore modelled the population in 2010 to be 300 less than in 2011. The profile of the population has been established by using 2010-based SNPP about the proportionate changes in age groups moving from 2010 to 2011 – with the overall change fixed to be 300. A similar ‘back’ analysis has been carried out to get back to a population estimate for 2008.

2.7 In moving from 2011 to 2012 we have data from the Council about the number of additional homes provided in that year which in turn may link to household growth. We have therefore adjusted the overall level of migration in 2011-12 to match the expected increase in households in that year. We also have data on completions for 2008-11 which allows us to estimate household change in those years. To reflect this in the modelling we have adjusted headship rates so that housing growth between 2008-11 matches expected growth based on housing delivery.

2.8 The various projections set out in this report therefore only 'project' population for the period from 2012 to 2028. The assumptions about population growth between 2008 to 2012 are consistent across all projections. For example, the projection (discussed below) looking at zero employment growth will only be zero post-2012 with employment changes from 2008-12 being included as it is considered to have already arisen.

## Projections Run

2.9 As part of this assessment we have run four projections to assess how the population might change under different assumptions. For each we also consider what level of growth in labour supply or employment this might support. The projections used reflect a reasonable range of assumptions against which decisions about future housing delivery targets can be set. The four projections run are listed below with a brief description of each following:

- PROJ 1 (linked to ONS 2010- and 2011-based Sub-National Population Projections);
- PROJ 2 (based on a linear projection of average migration over the last 10-years);
- PROJ 3 (linked to 2010 'baseline' econometric forecasts from the West Midlands Integrated Policy Model); and
- PROJ 4 (linked to 2011 economic growth forecasts from Experian).

2.10 PROJ 1 and PROJ 2 are based on projecting forward past population trends. PROJ 3 and 4 are based on considering how economic performance could affect future population trends, taking account of changes in the population's age structure, forecasts for employment growth and commuting dynamics.

2.11 In addition we have run four projections which have not been used in framing our conclusions but provide some useful context when looking at implications for population growth, employment growth and housing requirements: The additional projections, outputs for which are provided in Appendix 1, are:

- PROJ 5 (zero net migration (post-2012));
- PROJ 6 (zero employment growth from 2008 to 2028);
- PROJ 7 (provision of 11,000 homes (2008-28); and

- PROJ 8 (provision of 12,000 homes (2008-28)).
- 2.12 PROJ 5 has been developed to disaggregate the impact of migration on population growth and housing requirements. PROJ 6 is constructed to understand what level of housing provision would be required over the period to 2028 to maintain stable levels of residents in employment (with no employment growth). PROJ 7 and PROJ 8 were constructed to assess the demographic implications of different scenarios for housing provision being considered by the Council. These projections are not intended to inform an objective assessment of housing requirements – they are not an assessment of housing need/demand - but are constructed with the aim of aiding understanding of demographic dynamics or consider the demographic implications of different options for housing provision.
- 2.13 Whilst the projections relate to a consistent time period to those in the 2011 Housing Provision Options Study there are some differences in the scope of projections and timescales. The revised projections set out herein include projections based on 10-year migration trends, zero net migration and zero employment growth which are similar to those run in the 2011 Study. However the projections herein are based on data and trends to 2012, whilst those in the 2011 Study were based on data and trends to 2009.

***PROJ 1 (linked to ONS 2010- and 2011-based SNPP)***

- 2.14 Our first projection uses information in the ONS 2010- and 2011-based Sub-National Population Projections (SNPP) updated using 2011 Census data (which in turn has been 'back' projected to derive an estimated population profile for mid-2010 and earlier). The projection has been run for the 20-year period to 2028.
- 2.6 The last full set of SNPP published by ONS were 2010-based figures. These have subsequently been updated by 2011-based 'interim' projections which look at the ten year period to 2021. These interim projections use the same assumptions around fertility, mortality and migration profiles as 2010-based figures. However the 2011-based figures have updated estimates of future levels of migration (both in- and out-migration and by type of migration (e.g. international vs. internal).
- 2.7 Our projections therefore use the same assumptions as in the ONS 2010-based SNPP with regards to fertility, mortality and migration rates but with some adjustments to overall levels of migration on the basis of the 2011-based figures.
- 2.8 Figure 2.2 shows the average level of migration assumed in each of the 2010- and 2011-based projections for the period from 2011 to 2021 (the maximum period used in the 2011-based projections). We have used averages for the purpose of comparison although ONS projections do build in some small year-on-year differences.

2.9 The data shows that the 2011-based projections expect a slightly lower level of migration than the previous (2010-based) projections with an annual average net in-migration of 1,251 compared with 1,412. Looking at the detail behind this we see that there is expected to be a slightly higher level of internal net migration and a notably lower level of international net-migration – the latter is linked to a higher projected level of international out-migration. Although the differences seen are fairly small there will be impacts on both the population structure and the number of people in employment.

**Figure 2.2 Comparing migrations in 2010- and 2011-based SNPP (average figures 2011-2021)**

	2010-based SNPP	2011-based interim SNPP
Internal in-migration	6,428	6,453
Internal out-migration	5,563	5,521
Internal net migration	865	932
Cross-border in-migration	247	247
Cross-border out-migration	316	316
Cross-border net migration	-69	-69
International in-migration	1,229	1,229
International out-migration	614	842
International net migration	616	388
All in-migration	7,904	7,930
All out-migration	6,493	6,679
<b>All net migration</b>	<b>1,412</b>	<b>1,251</b>

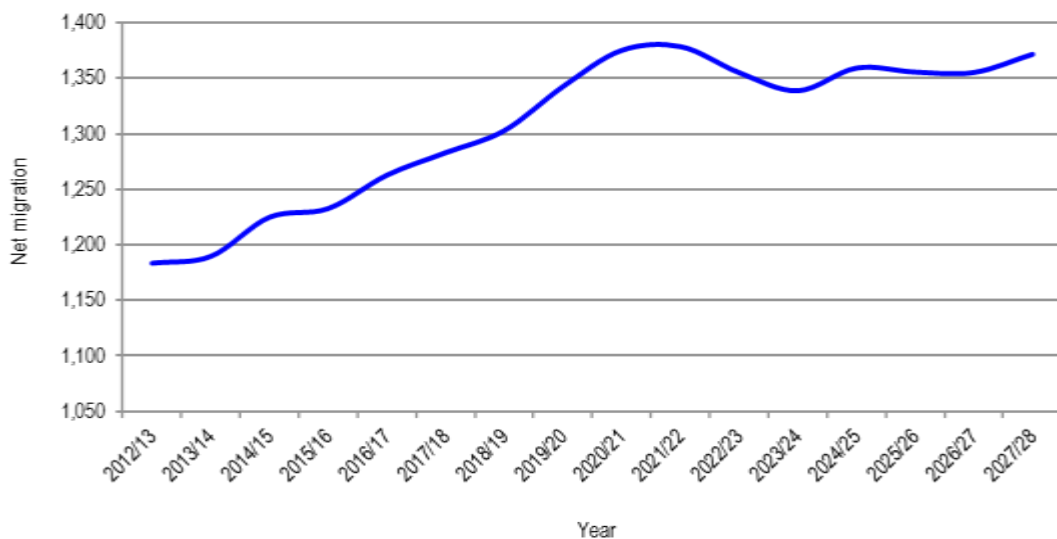
Source: 2010- and 2011-based SNPP

2.10 In taking this data forward into the projection modelling we have taken the projected migration patterns from the 2011-based SNPP for the period from 2011 to 2021. Beyond 2021 we have used 2010-based SNPP data but adjusted this to take account of the differences as shown in the table above. In keeping with the methodology used by ONS, figures for cross-border and international migration are held constant with internal figures changing slightly on the basis of the projected change in the 2010-based data (but from the adjusted baseline position for 2021 shown in 2011-based projections).

2.11 Figure 2.3 below shows the levels of net migration assumed by our projections from 2012/13 to 2027/28 – this figures start from 2012/13 as we have fixed the figures based on housing delivery up until 2012 (as discussed above). The projections start in 2012/13 with a net migration figure of around 1,180. This is expected to increase over time to reach a net in-migration of around 1,380 people in 2020/21. This figure is then expected to remain fairly constant with some year-on-year variation.

2.12 For the projection period studied as a whole, the average level of net migration is an in-migration of 1,307 people per annum.

**Figure 2.3 ONS migration assumption 2012/13 to 2027/28**



Source: ONS 2010- and 2011-based subnational population projections

**PROJ 2 (10-year migration trends)**

- 2.13 Our second projection looks at recorded trends in migration over the past ten years. Figure 2.4 below shows estimated net migration into the District from 2002/2 to 2010/11. The figures have been taken from ONS mid-year population estimates with data for 2005/6 to 2009/10 being adjusted to take account of improvements made by ONS in recording migration data.
- 2.14 The data shows that the figures can be quite variable over time, with some of the lower figures being at the start and in particular the end of the period studied. For the purposes of this projection, we have simply taken an overall average and projected this forward – over the last ten years (2001-11) the average level of net migration has been an in-migration of 963 people.
- 2.15 For the purposes of the projections we have assumed a constant level of net migration throughout the period consistent with trends over the past 10 years. Given variability in the migration data it seems reasonable to assume a constant level for the purposes of projection modelling. This approach of projecting constant migration levels is consistent with the analysis carried out in the previous projections run for the Council.

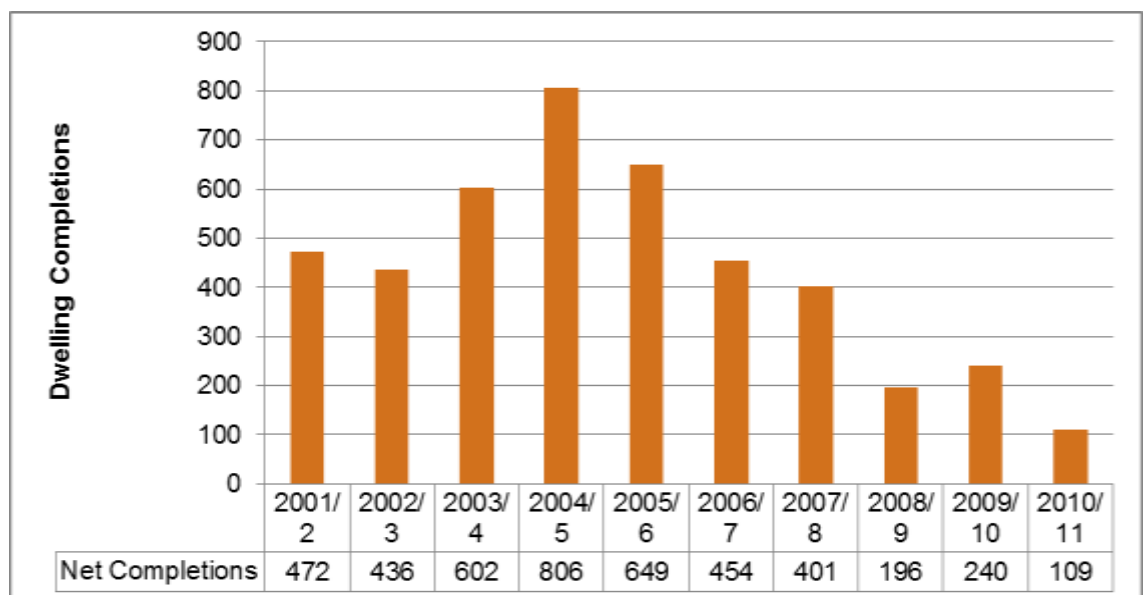
**Figure 2.4 Past trends in Net In-Migration**

Year	Net migration
2001/2	800
2002/3	800
2003/4	600
2004/5	1,500
2005/6	1,934
2006/7	1,744
2007/8	1,075
2008/9	250
2009/10	631
2010/11	300
Average (last ten years)	963

Source: ONS

- 2.16 The notable downward trend in net migration to Stratford-on-Avon District over the period since 2007/8 needs to be considered in context. This period saw a downturn in the housing market at both the national level and within the District; but saw particularly low levels of housing delivery – in part influenced by a housing moratorium. This can be seen with reference to trends in housing completions.
- 2.17 Average net completions over the last 10 years in the District have been 437 dwellings per annum. In the pre-downturn period (2001-8) completions were however stronger, averaging 545 per annum.

**Figure 2.5: Net Completions, 2001/2 – 2010/11**



Source: SOADC 2010/11 Annual Monitoring Report

2.18 The substantial downward trend in housing completions since 2004/5 and particularly since 2007/8 is likely to have been influenced by a number of factors. During the period 22 June 2006 to 31 March 2011 the Council applied a housing moratorium through its Managing Housing Supply SPD which meant that applications for housing development would normally be refused. The moratorium was intended to limit the potential over-provision of housing against the targets of the Regional Spatial Strategy. This, together with the impact of housing market conditions since 2008 have impacted on the trends in housing completions (as well as the development pipeline moving forwards). Trends in net migration (and thus projections developed on this basis) need to take account of this 'policy' constraint.

***PROJ 3 (linked to IPM employment growth forecasts)***

***PROJ 4 (linked to Experian employment growth forecasts)***

2.19 Projections 3 and 4 consider the interaction between demographic and economic growth. The interaction between housing and employment growth are sensitive to:

- a) Levels of employment growth within the District (and other areas to which people commute);
- b) Changes in economic participation (employment rates) overall and by age group;
- c) Changes to state pension ages over the period to 2028;
- d) Changes to commuting patterns and particularly the balance between in- and out-commuting.

2.20 The relationship is thus complex and it is necessary to make multiple assumptions to derive economic-led projections. It should also be recognised that economic forecasting is not an exact science and there is some uncertainty regarding how the economy might perform in the short-term which is heightened when looking over longer timeframes.

2.21 We set out later in this section our key assumptions regarding economic participation and state pensionable ages as these are common to establishing changes in the number of residents in employment across the full range of projections developed.

2.22 We have developed two economic-led projections. PROJ 3 replicated the analysis in the 2011 Study with some minor updating (this was termed PROJ 6 in the 2011 Study). This is based on 2010 economic forecasts from the West Midlands Integrated Policy Model, prepared by Cambridge Econometrics. PROJ 4 is based on a more recent set of economic forecasts from Experian, published in November 2012.

2.23 As in the 2011 Housing Options Study we have constructed forecasts for changes in residents in employment taking account of employment growth not just in Stratford-on-Avon District but in other



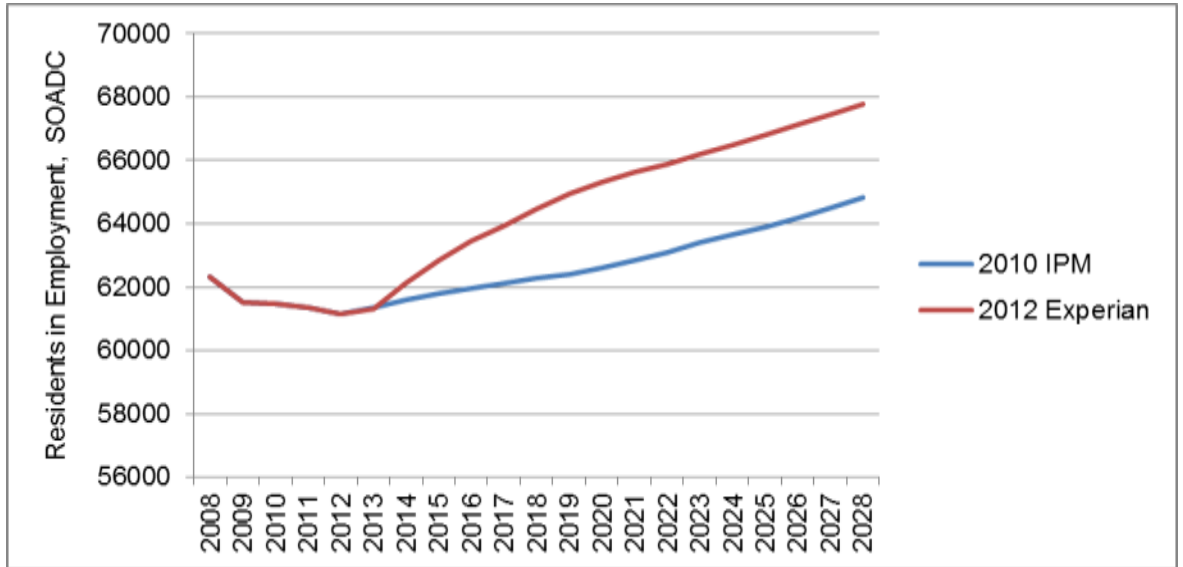
locations in which the District's residents work. However in this run of projections we have taken account of labour market data to estimate changes in residents in employment to 2012, and have used the projections to consider how the number of residents in employment might change over the 2012-28 period.

- 2.24 PROJ 3 broadly replicates PROJ 6 in the 2011 Study. It takes account of labour market data to estimate changes in residents in employment between 2008-12. From 2012 onwards it is based on forecasts for employment growth (total employment) in districts across Warwickshire and for the West Midlands as a whole provided in the West Midlands Integrated Policy Model. Assuming that the proportion of the workforce which is drawn from Stratford-on-Avon District remains consistent to 2001 Census levels, we have used these projections to construct forecasts for labour demand.
- 2.25 PROJ 4 is based on more recent Experian econometric forecasts released in November 2012. To model growth in residents in employment we have considered employment growth forecast from 2012-28 across the ten local authorities to which more than 500 Stratford-on-Avon District residents commuted to work in 2001. This comprises authorities adjacent to the District together with the cities of Birmingham and Coventry<sup>3</sup>. We have then considered employment across the Rest of the UK. We have assumed that the proportion of the workforce in these 11 areas which is resident in Stratford-on-Avon District remains consistent to the proportion shown in the 2001 Census data. Growth in residents in employment is projected on this basis.
- 2.26 The forecasts for trends in residents in employment in the two projections are shown in Figure 2.6 below. Over the period between 2012-28, PROJ 3 models growth in residents in employment of 3,678 based on the 2010 IPM forecasts. PROJ 4 models stronger growth in residents in employment of 6,625 based on the 2012 Experian forecasts.
- 2.27 These two projections are based on different economic forecasts. They take account of different expectations regarding the performance of different sectors in the local economy in 2010 and 2012 over the longer-term. The 2012 forecasts take account of more recent evidence, which has shown that the economy has performed better than expected in terms of job numbers through the recession than was expected to occur in 2010. In 2010 many forecasters expected employment to drop sharply through the recession; whereas the more recent evidence indicates that whilst economic output has fallen, companies have sought to retain employees where possible such as through reducing working hours or increasing part-time working. Thus employment has not fallen as much as expected but productivity (the output per worker) has fallen.

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<sup>3</sup> The full list comprises Warwick, Birmingham, Coventry, Redditch, Solihull, Rugby, Cherwell, Bromsgrove and Cotswold local authority areas

**Figure 2.6: Forecast Changes in Residents in Employment in Stratford-on-Avon, 2012-28**



Source: Experian, IPM Model, GLH

- 2.28 The modelled figures for growth in residents in employment of 6,600 over the 2012-28 period in the Experian forecasts (PROJ 4) are marginally higher than the 6,000 growth in jobs forecast in the District over this period.
- 2.29 For reference purposes, Figure 2.7 indicates the expected growth in economic output, Gross Value Added (GVA), per annum in the Experian forecasts<sup>4</sup>. Over the 2008-12 period GVA was forecast to have declined by an average of -0.3% per annum in the District. It is expected to grow moderately over the 2013-17 period by 1.5% per annum, with stronger growth of 2.1% per annum forecast between 2018-28. Over the plan period as a whole, the Experian forecasts indicate 1.4% per annum growth in GVA in the District and Warwickshire, which is above average for the West Midlands (1.2%) but below the national (UK) average (1.6%).

<sup>4</sup> GVA is a measure of the total value of goods and services produced in a local economy . It effectively measures the size of the economy.

**Figure 2.7: Forecast Economic Growth: % Annual Change in GVA**



2.30 We do not have a comparable set of figures for growth in output (GVA) from the IPM Model.

2.31 Again for comparative purposes, we have set out below how the economic-driven scenarios for 'residents in employment' compare to forecasts for employment growth within the District in Figure 2.8 below. PROJ 3 results in a level of growth in residents in employment over the plan period as a whole which is similar to the Convergence Scenario set out in the District's 2011 Employment Land Review (GL Hearn and Regeneris Consulting 2011). This scenario was based on the local economy growing comparatively more strongly (relative to the regional forecast) than it has in the past. It is comparable to this and PROJ 6 in the 2011 Housing Options Study. PROJ 4 assumes a stronger level of employment growth, but one which is consistent with current forecasts for economic performance across Warwickshire and the wider region.

**Figure 2.8: Comparison of Forecasts with Employment Land Review Scenarios**

	2008-13	2013-18	2018-23	2023-28	2008-28 Total	
Forecast Growth in Jobs						
ELR Base (IPM)	-2866	798	988	1277	197	
ELR Austerity (SQW)	-2971	629	924	1285	-133	
ELR Convergence (REG)	-2283	1308	1418	1634	2077	
Experian 2012 Labour Demand	449	3081	1439	1269	6238	
Forecast Changes in Residents in Employment						
	2008-12	2012-13	2012-13	2018-23	2023-28	2008-28 Total
PROJ 3 (IPM)	-1167	186	945	1117	1081	2162
PROJ 4 (Experian)	-1167	146	3143	1739	1597	5458

2.32 We would advise that the employment-based projections are treated with some caution, not least because of the dynamic nature of labour markets which cross administrative boundaries, the multiple assumptions which are necessary to inform the modelling and the accuracy of employment forecasts, particularly at the current time. The recent double-dip recession and uncertainty regarding the nature and pace of recovery effect the error margin associated with any long-term forecasting.

***PROJ 5 (zero net migration post-2012)***

***PROJ 6 (zero employment growth from 2008)***

2.33 The next two projections are 'component' projections and look at the impact on population, employment and housing requirements of holding certain aspects of the projection constant over time. These are not intended to inform the objective assessment of development requirements as required by the NPPF.

2.34 The first projection looks at housing requirements if there were to be no net migration into the District over the remainder of the plan period (2012-28). Whilst net migration is held at zero this projection does allow for in- and out-migration, so there will be changes in the age structure due to migration trends as well as those created by natural change (i.e. births minus deaths).

2.35 The second 'component' projection looks at what level of housing growth would be required to achieve stable employment level, but with no employment growth over the plan period as a whole (2008-28). Within this projection (and indeed all other projections) we have also looked at the impact of the economic downturn on the number of people in employment and considered the scope for some local residents to return to work if additional jobs were available. We have also considered the likely impact of changes in pensionable age throughout the projection period as and when these become relevant.

2.36 It should be noted that both of the component projections are run from 2008 to 2028 with data for 2008-12 being fixed by reference to ONS mid-year population estimate data (for 2011), estimates of demographic change for the period 2008-11 and further estimates of change from 2011 to 2012 linked to housing delivery. Hence the 'component' is only fixed for 16 years of the 20-year period studied. In the case of zero employment growth the data shows a growth in employment from 2012 to 2028 equivalent to our estimates of the decrease in employment in the previous four years.

**PROJ 7 (provision of 11,000 homes (2008-28))**

**PROJ 8 (provision of 12,000 homes (2008-28))**

2.37 The Secretary of State for Communities and Local Government issued a decision in October 2012 in regard to the appeal against determination of planning permission for Land West of Shottery, South of Alcester Road and North of Evesham Road, Stratford-upon-Avon (Ref: 09/02196/OUT).

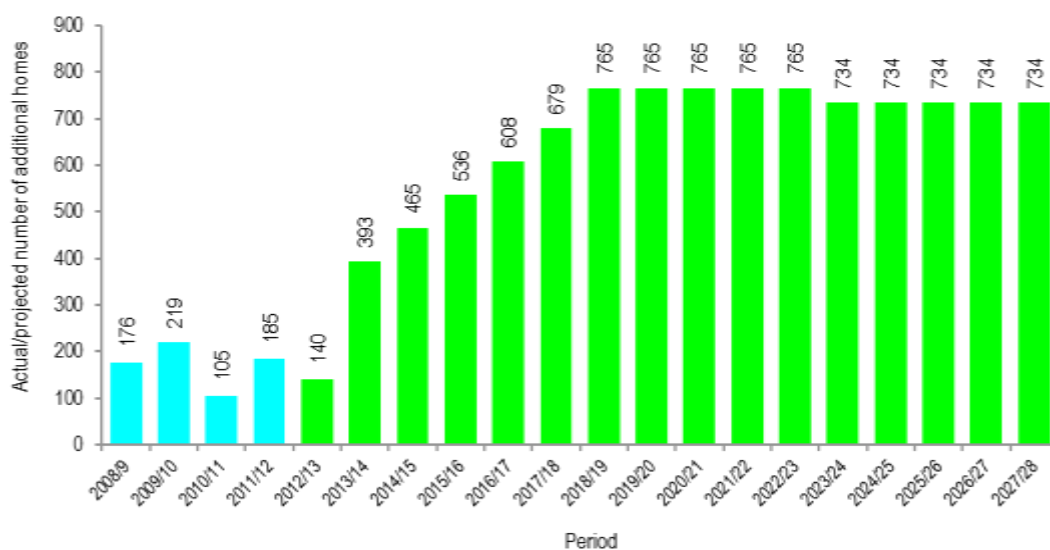
2.38 The appeal decision considered the balance of evidence and identified housing provision of between 11,000 – 12,000 homes over the plan period as more closely according with the requirements of the NPPF for local planning authorities to plan to meet the full, objectively-assessed needs for market and affordable housing in their housing market area. This was based on the conclusions of GL Hearn’s 2011 Housing Options Study.

2.39 For comparative purposes, we have therefore sought to remodel the demographic implications of housing provision between 11,000 – 12,000 homes in PROJ 7 and PROJ 8. In doing so, we have constructed an indicative housing trajectory taking account of:

- a) Expected build-out of sites currently with planning consent (as at April 2012);
- b) The potential phasing of improvements in market circumstances over time; and
- c) The identified housing requirement which needs to be delivered over the plan period as a whole.

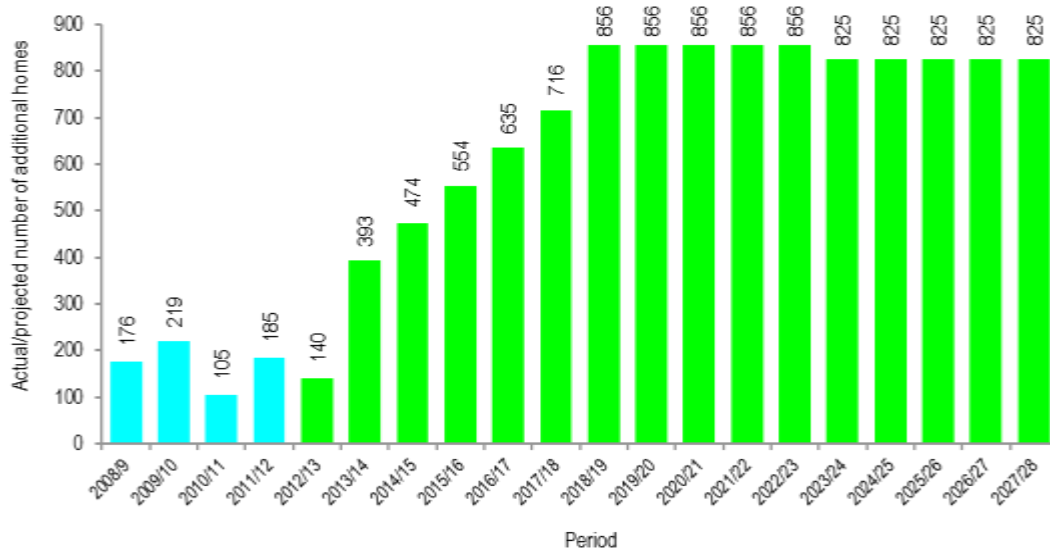
2.40 The indicative trajectories for housing delivery have been informed by the conclusions of the 2012 SHLAA Review.

**Figure 2.10 Housing Supply Assumptions – 11,000 homes (2008-2028)**



Source: Stratford-on-Avon District Council

**Figure 2.11 Housing Supply Assumptions – 12,000 homes (2008-2028)**



Source: Stratford-on-Avon District Council

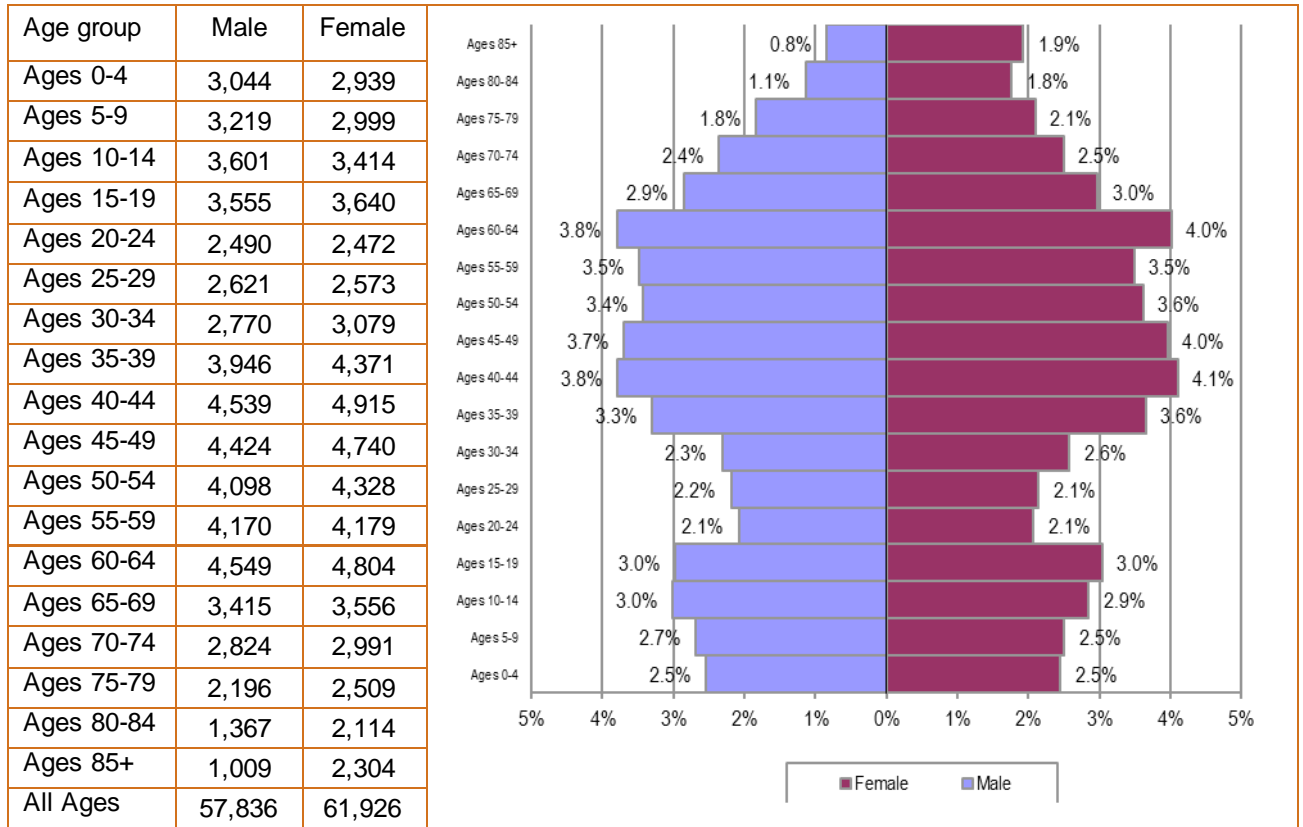
2.41 As with other projections run the figures for the first four years (2008-2012) have been fixed by reference to estimated population change in the 12-month period. For the purposes of the housing trajectory projection this takes account of dwelling completions of 685 homes from 2008-2012.

**Baseline Population**

2.42 The baseline for our projections is taken to be 2008 with the projection run for each year over the period up to 2028. The estimated population profile as of 2008 has taken into account data released from the 2011 Census in September 2012. The base population in 2008 has been ‘back’ projected on the basis of likely population change given information by ONS about the components of population change between 2008 and 2011.

2.43 The overall population in 2008 is estimated to be 119,762 with slightly more females than males as shown in Figure 2.12. The baseline population figure (of 119,762) is higher than was assumed in the last set of projections run for the District Council (118,705).

**Figure 2.12: Population of Stratford-on-Avon (5 year age bands) – 2008**



Source: Derived from ONS data

2.44 As well as there being a difference in estimated population in 2008 in this assessment when compared with the previous projections run, there are also some differences in the age structure. This is shown in Figure 2.13 below. The main difference is in relation to the 15-19 age group with the current population being estimated to be higher than previously thought (9% higher for this age group). The population aged 20-24 and 25-29 are also shown to be higher than previously estimated. Only a small number of age groups show lower population levels in this assessment when compared with previous projections and the main ones can be seen to be children aged under 10).

**Figure 2.13: Difference in baseline population age structure**

Age group	Previous projections	Current estimate	Difference	% difference
Ages 0-4	6,293	5,983	-310	-4.9%
Ages 5-9	6,617	6,218	-399	-6.0%
Ages 10-14	7,074	7,015	-59	-0.8%
Ages 15-19	6,620	7,195	575	8.7%
Ages 20-24	4,646	4,962	316	6.8%
Ages 25-29	4,927	5,194	267	5.4%
Ages 30-34	5,764	5,849	85	1.5%
Ages 35-39	7,943	8,317	374	4.7%
Ages 40-44	9,428	9,455	27	0.3%
Ages 45-49	9,157	9,164	7	0.1%
Ages 50-54	8,364	8,425	61	0.7%
Ages 55-59	8,501	8,349	-152	-1.8%
Ages 60-64	9,489	9,352	-137	-1.4%
Ages 65-69	6,858	6,971	113	1.7%
Ages 70-74	5,878	5,815	-63	-1.1%
Ages 75-79	4,566	4,705	139	3.0%
Ages 80-84	3,441	3,481	40	1.2%
Ages 85+	3,139	3,312	173	5.5%
All Ages	118,705	119,762	1,057	0.9%

### Fertility and Mortality Rate Assumptions

- 2.45 For modelling of fertility we have used the rates contained within the ONS 2010-based population projections. For the period from 2011 to 2028 the total fertility rate (the expected average number of live births per woman throughout their childbearing lifespan) has been calculated to be 2.03 in 2011 reducing to 1.87 in 2028. These figures compare with the figure of 1.9 which was used throughout the projection period in the previous run of projections. Over the full projection period these figures are therefore fairly consistent. In any case they will make little difference to housing requirements over the period to 2028 as very few of those born in the projection period would also be expected to form a household during that time.
- 2.46 We also interrogated the ONS 2010-based projections with regard to death rates which suggested that life expectancy is expected to increase over time for both males and females. It is not possible to provide exact life expectancy figures from the 2010-based SNPP as this to some degree will depend on the assumptions made about the death rates for age groups beyond 90 (the ONS data stops at a figure for 90+). However in modelling life expectancy on the most similar basis as possible we suggest that the figures will see an improvement from 79.9 to 83.1 for males from 2011 to 2028 with figures of 83.5 to 86.3 expected for females. These figures are not dissimilar to those



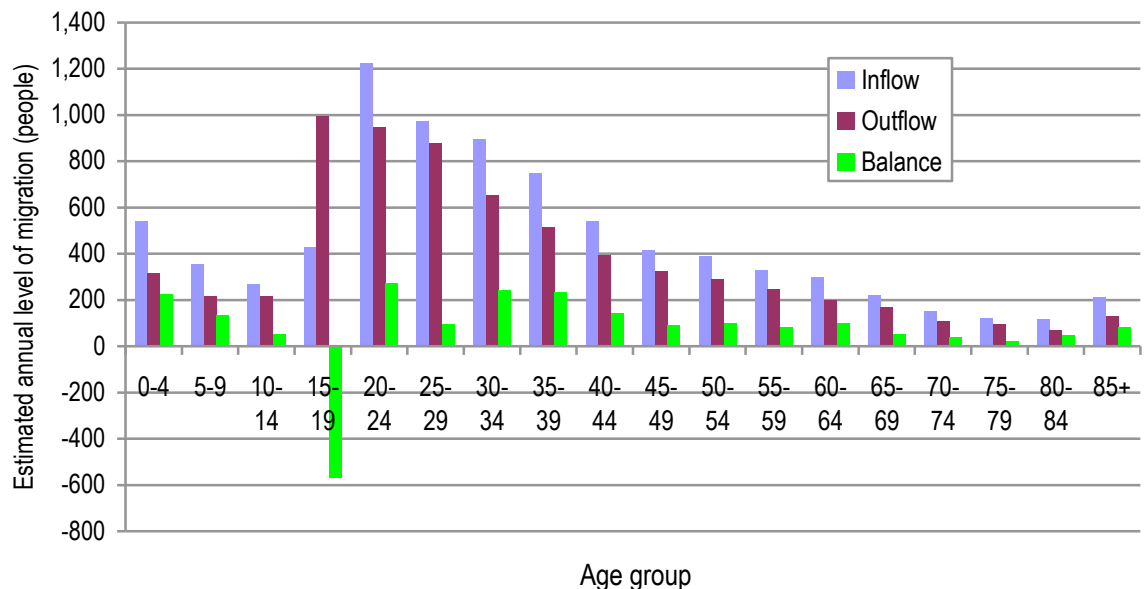
in the previous projections run which projected life expectancy to rise from 79.9 to 84.3 for males and 83.4 to 87.3 in the case of females. Overall, the 2010-based SNPP project for a slightly lower improvement in life expectancy than we have previously assumed.

### Migration Assumptions

2.47 For the purposes of understanding the profile of migrants we have again drawn on the ONS 2010-based Sub-National Population Projections. Over the period from 2011 to 2028 the ONS figures show an average annual level of net in-migration of 1,453 people made up of in-migration of 8,221 and out-migration of 6,767. The data clearly shows that the most important age groups are from 15 to 34. The data is interesting in that it shows net out-migration of those aged 15-19 but net in-migration for all other age groups.

2.48 As noted above, the more recent 2011-based SNPP suggests some change in migration patterns with a greater level of international out-migration being the main projected difference. We do not have a migration profile directly associated with the 2011-based SNPP (although it has been based on 2010-based figures). Hence the pattern below should be considered as indicative as there will be differences in the modelled outputs to take account of different profiles for different types of migrant.

**Figure 2.14: Estimated annual level of net migration by five-year age band (2011-2028)**



Source: Derived from ONS 2010-based Population Projections

2.49 We can also compare the migration assumptions used in these projections with the last projection run for the Council. In the last projections the figures were derived from the 2008-based SNPP and

were adjusted to model a range of scenarios (as has been done in this report). Over the period from 2011 to 2028 the 2008-based SNPP suggested an average level of net in-migration of 1,333 people which is slightly lower than the figure (of 1,453) shown in the 2010-based projections.

2.50 The data (shown in Figure 2.15 below) shows that the differences between the two sources of migration information are not that great – compared with previous figures the key difference is for those aged 20 to 24 with the 2008-based projections suggesting a net in-migration of 157 people per annum and the 2010-based projections a net in-migration of 274. In the context of levels of gross in- and out-migration in the region of 7-8,000 per annum these differences are fairly minor and unlikely to have much impact on the projections moving forward.

**Figure 2.15: Difference in levels of net in-migration (from 2008-based and 2010-based SNPP) – 2011 to 2028**

Age group	2008-based	2010-based	Difference
Ages 0-4	229	225	-3
Ages 5-9	136	137	0
Ages 10-14	50	51	1
Ages 15-19	-566	-570	-4
Ages 20-24	157	274	117
Ages 25-29	115	94	-21
Ages 30-34	267	243	-24
Ages 35-39	231	235	4
Ages 40-44	151	145	-6
Ages 45-49	100	91	-9
Ages 50-54	88	98	10
Ages 55-59	65	83	18
Ages 60-64	72	101	28
Ages 65-69	33	53	20
Ages 70-74	27	40	13
Ages 75-79	36	22	-14
Ages 80-84	44	46	3
Ages 85+	98	83	-14
All Ages	1,333	1,453	120

Source: Derived from ONS 2008- and 2010-based SNPP

2.51 When projecting migration patterns we have used the migration data and adjusted levels of in-migration to match the requirements of our scenario (e.g. when testing what level of migration is required to support a workforce of a particular size). This approach has consistently been adopted across all analysis and is consistent with the approach used in the previous projections. The adjustments to migration are in addition to changes made to reflect the different profile of migrants highlighted by the 2011-based SNPP.

## Economic (Employment) Assumptions

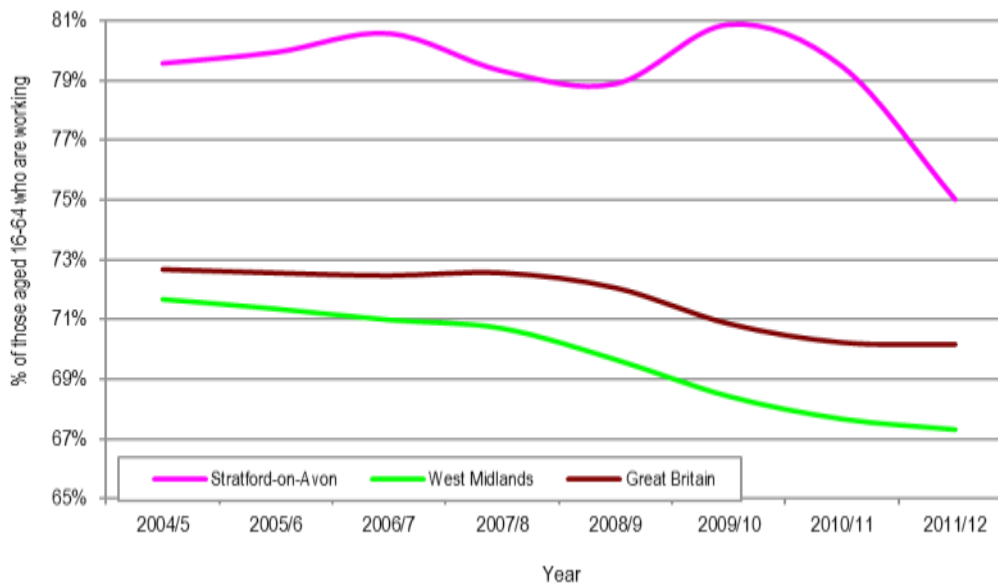
- 2.52 With the change in demographic structure will come changes in the number of people who are working (as the population of people of working age changes). The next stage of the projection process was therefore to make estimates about how employment levels would change under each of our main projections and also to consider the demographic implications of different levels of employment growth. The process is set out below.

**Figure 2.16 Overview of Economic-Driven Projection Methodology**



- 2.53 The first stage of the process was to consider employment rates of those resident in the District. Figure 2.17 shows data on the proportion of people living in the District who were in employment (based on the proportion of the population aged 16-64 who are working).
- 2.54 The employment rate has declined over time from a typical average of about 80% pre-economic downturn (up until about 2008) to an average of closer to 78% (if we take an average over the past three years). This broad trend is consistent with that seen in the West Midlands and for the whole of Great Britain although year-on-year variations are greater (which is most probably due to the sample nature of the APS source from which the data has been taken). Throughout the period studied the employment rate in Stratford-on-Avon District has been consistently above both the regional and national average.

**Figure 2.17: Proportion of Population Working**



Source: Annual Population Survey

- 2.55 Using the above data to provide us with an overall picture of employment patterns we also drew on 2001 Census data and more detailed information from the Annual Population Survey (APS) to consider differences in employment rates by age and sex. In projecting forward we have also drawn on APS data about unemployment levels and claimant count data to help smooth the rates and remove some of the year-by-year variation shown in the figure above.
- 2.56 Our projections assume that employment rates in 2008 start at about 78.7% before dropping slightly to 2011/12. Following this we have modelled that figures will recover slightly eventually reaching a figure of about 80.4% in 2028. Adjustments over time have also been made to take account of changes in pensionable age.
- 2.57 Figure 2.18 shows the age specific employment rates used for modelling in 2008 and 2028. From the population modelling exercise it was estimated that in mid-2008 there were around 62,326 people in employment – this is projected to have dropped to 61,159 by 2012. Our approach in this report is slightly different to the previous projections run (where we assumed constant employment rates other than for changes to pensionable age) but will not have a significant impact on the outputs given that assumed rates in 2008 are not hugely different to those for 2028.

**Figure 2.18: Employment Rates by Age and Sex**

Age group	Male		Female	
	2008	2028	2008	2028
<b>Aged 16 to 19</b>	58.3%	59.1%	49.7%	50.4%
<b>Aged 20 to 24</b>	77.3%	78.4%	75.2%	76.2%
<b>Aged 25 to 29</b>	93.0%	94.3%	81.4%	82.5%
<b>Aged 30 to 34</b>	95.9%	97.2%	76.7%	77.8%
<b>Aged 35 to 39</b>	93.7%	95.0%	79.4%	80.5%
<b>Aged 40 to 44</b>	92.2%	93.5%	83.5%	84.7%
<b>Aged 45 to 49</b>	91.8%	93.1%	84.4%	85.6%
<b>Aged 50 to 54</b>	93.1%	94.3%	90.4%	91.7%
<b>Aged 55 to 59</b>	84.1%	85.3%	74.2%	75.2%
<b>Aged 60 to 64</b>	61.8%	62.6%	37.7%	53.5%
<b>Aged 65 to 69</b>	47.0%	52.4%	21.5%	26.1%
<b>Aged 70 to 74</b>	24.5%	24.9%	9.4%	9.5%

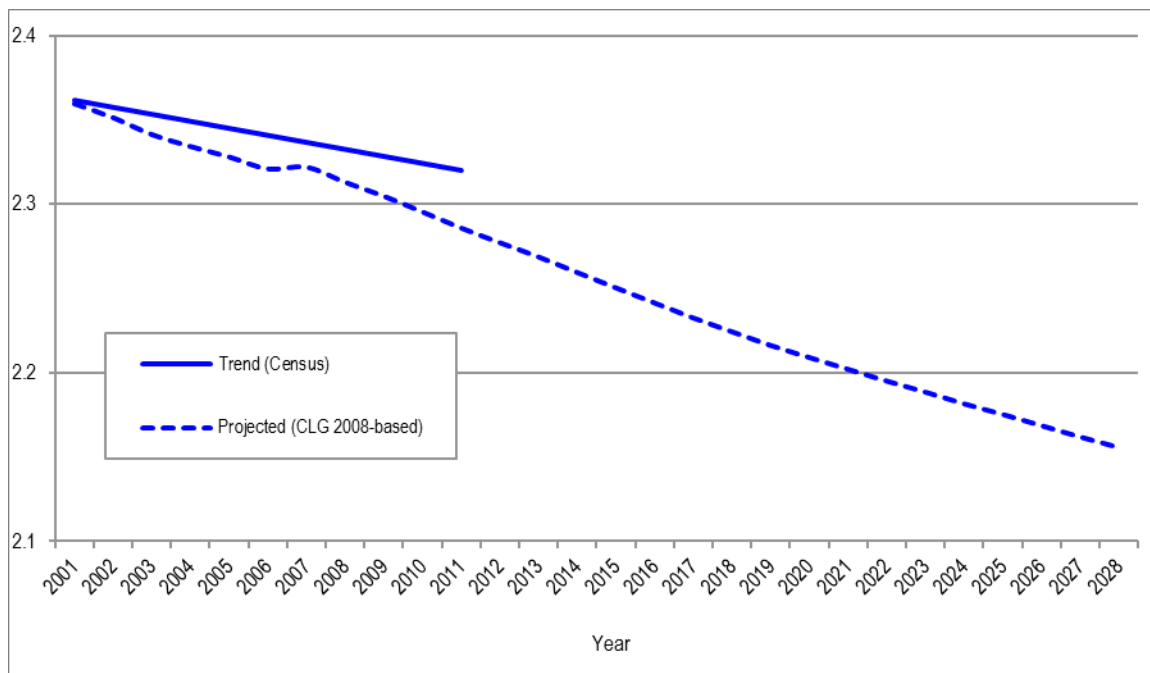
Source: Annual Population Survey - adjusted using 2001 Census data

## Household (and Housing) Growth Projections

- 2.58 Having estimated the population size and the age/sex profile of the population, the next step in the process is to convert this information into estimates of the number of households in the area. To do this we use the concept of headship rates.
- 2.59 Headship rates can be described in their most simple terms as the number of people who are counted as heads of households (or in this case the more widely used Household Reference Person (HRP)).
- 2.60 We have analysed information contained in the 2008-based CLG household projections about the relationship between the total population in an age group and the number of household reference persons (HRPs) in that age group. We have however also taken account of recent trends in household formation which have generally seen less households being formed from the population than was projected in the CLG 2008-based household projections. This is clearly shown in Figure 2.19.
- 2.61 Figure 2.19 shows the estimated average household size in Stratford-on-Avon from 2001 to 2011 and how this was projected to change in the future under the 2008-based CLG projections. The data for 2001 and 2011 has been based on the relationship between total population numbers and the number of households shown in each of the relevant Census with a linear trend being plotted in the absence of any other up-to-date information. The data clearly shows that household sizes have

moved significantly away from long-term trends with the District showing a larger average household size than was expected through the 2008-based CLG household projections in 2011. It would therefore not be appropriate to use the CLG headship figures without some adjustment to bring them in line with up-to-date Census information.

**Figure 2.19: Past and projected trends in Average Household Size – Stratford-on-Avon**



Source: Derived from ONS and CLG data (including 2001 and 2011 Census)

- 2.62 Moving forward it is difficult to accurately predict what will happen with headship rates (and hence household sizes), although the data is clear that there has been a shift away from CLG projected trends.
- 2.63 For the purposes of our analysis we have used headship rates that fit between recent trends and long-term projections (which show significantly decreasing household size). Hence we project decreasing household sizes in the future, but at a lesser rate than was projected by CLG in 2008.
- 2.64 For the purposes of PROJ 1 (linked to the 2010- and 2011-based SNPP) we have assumed that average household sizes start at about 2.32 in 2008, remain fairly constant to 2012 and then reduce down to about 2.25 by 2028. Other projections will show slightly different changes in average household size depending on the population profile but have been calculated on the basis of a consistent set of headship rates.
- 2.65 Figure 2.20 below shows headship rates derived from our analysis for each of the key periods of 2008 and 2028. The data shows that whilst most headship rates remain at a fairly constant level

over time there are a number of groups where notable changes are projected to occur (both in an upward and downward direction and particularly in relation to women).

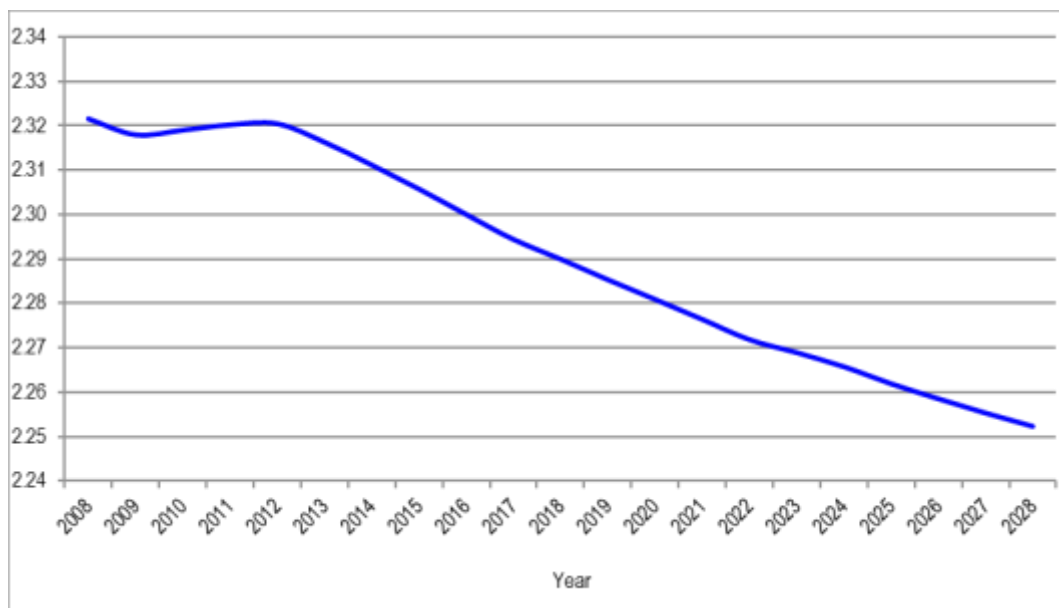
**Figure 2.20: Estimated Headship Rates by Age and Sex (2008 and 2028)**

Age group	Male		Female	
	2008	2028	2008	2028
<b>Ages 15-19</b>	1.0%	1.0%	1.6%	1.7%
<b>Ages 20-24</b>	20.7%	20.1%	11.8%	13.0%
<b>Ages 25-29</b>	57.1%	53.0%	15.5%	17.1%
<b>Ages 30-34</b>	82.3%	79.8%	19.8%	25.4%
<b>Ages 35-39</b>	88.7%	84.5%	18.7%	23.0%
<b>Ages 40-44</b>	91.4%	88.1%	18.2%	18.8%
<b>Ages 45-49</b>	93.8%	89.7%	18.0%	17.4%
<b>Ages 50-54</b>	95.6%	90.3%	17.8%	19.7%
<b>Ages 55-59</b>	97.0%	92.9%	19.0%	23.1%
<b>Ages 60-64</b>	97.7%	92.2%	21.3%	24.3%
<b>Ages 65-69</b>	98.4%	93.8%	28.9%	29.0%
<b>Ages 70-74</b>	98.0%	93.4%	35.9%	33.1%
<b>Ages 75-79</b>	97.0%	93.1%	51.3%	41.3%
<b>Ages 80-84</b>	94.4%	91.1%	61.1%	48.7%
<b>Ages 85+</b>	88.1%	87.2%	62.1%	53.7%

Source: Derived from CLG 2008-based household projections

2.66 Figure 2.21 shows the average household size for each year of our projection. As can be seen the decrease is broadly linear post-2012, with some small year-on-year variation.

**Figure 2.21: Average household sizes assumed for projections (2008-2028)**



*Source:* Derived from ONS and CLG data (including 2001 and 2011 Census)

- 2.67 When applying these headship rates to our population we derive an estimated number of households in 2011 of 52,074. This figure is consistent with the number of households shown in the 2011 Census. For 2008, the household figure derived is 51,586, which is higher than the assumed figure used in the previous projection run for the District (51,318).
- 2.68 When compared with the approach taken to headship rates in the previous set of projections run, the methodology used here is slightly different. In previous projections we rebased the figures for 2008 to our estimate of the number of households and then assumed that headship rates would broadly follow the pattern implied by the 2008-based CLG household projections. With the release of 2011 Census data we are now better able to look at actual trends in changing headship rates and this has lead us to moderate the figures slightly.
- 2.69 In converting an estimated number of households into requirements for additional dwellings we have also factored in a vacancy allowance. We have assumed 2.5% vacancy within the stock of additional homes reflecting the level of 'frictional vacancy' which we consider necessary within the new-build housing stock built over the plan period to support turnover within a functioning housing market. This vacant housing is required to facilitate moves within the housing market, renovations to properties etc. It relates only to new-build stock. The assumption around vacant homes makes very little difference to the outputs of the analysis.



### 3 REVISED PROJECTION RESULTS

#### Introduction

- 3.1 This section provides detailed outputs of the modelling under each of the four scenarios run to look at population growth, employment change and housing requirements. All the projections look at the period from 2008 to 2028 with outputs available for each year of the projection (although these have generally been summarised for five year periods). The projections run are summarised in Figure 3.1 below.

**Figure 3.1 Description of Projections used for Demographic Modelling**

Projection	Description
PROJ 1	Linked to ONS 2010- and 2011-based SNPP
PROJ 2	Linear projection of 10-year migration trends
PROJ 3	Linked to 2010 IPM employment growth forecasts (post 2012)
PROJ 4	Linked to 2012 Experian employment growth forecasts (post 2012)

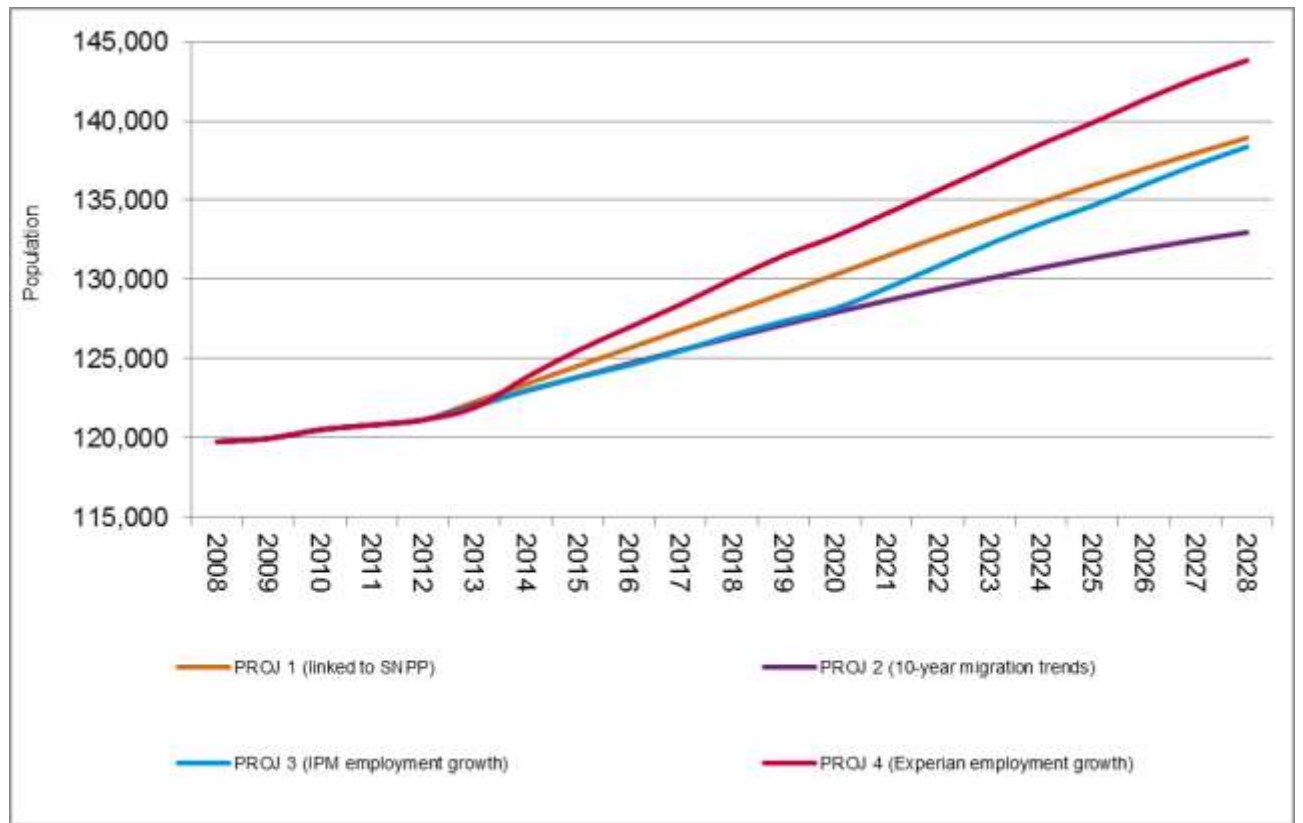
#### Population Projections

- 3.2 Figure 3.2 below shows the expected growth in population under each of the four scenarios. Under the projection linked to SNPP (PROJ 1) the population is expected to increase by about 16% over the 20-year projection period (an increase of 19,200 people). Based on average migration trends over the past 10-years (PROJ 2) the population growth drops to 11% - a growth of 13,200 people.
- 3.3 The first economically-driven projection linked to 2010 IPM forecasts (PROJ 3) shows a level of population growth which is close to the SNPP projection with total population increase of about 16% over 20-years. The projection linked to Experian economic forecasts (PROJ 4) shows a higher level of population growth with an additional 24,000 people expected under this scenario – representing a 20% increase in population from 2008 levels.
- 3.4 Figure 3.3 shows this data in graphical form for each year of each projection – all projections are the same for 2008-12.

**Figure 3.2 Population Estimates 2008 to 2028**

	2008	2013	2018	2023	2028
<b>PROJ 1 (linked to ONS 2010- &amp; 2011-based SNPP)</b>	119,762	122,277	127,970	133,793	138,940
	0.0%	2.1%	6.9%	11.7%	16.0%
<b>PROJ 2 (10-year migration trends)</b>	119,762	122,064	126,353	130,083	132,976
	0.0%	1.9%	5.5%	8.6%	11.0%
<b>PROJ 3 (IPM employment growth forecasts)</b>	119,762	121,980	126,495	132,241	138,371
	0.0%	1.9%	5.6%	10.4%	15.5%
<b>PROJ 4 (Experian employment growth forecasts)</b>	119,762	121,915	130,025	137,091	143,824
	0.0%	1.8%	8.6%	14.5%	20.1%

**Figure 3.3 Population Change, 2008 – 2028**



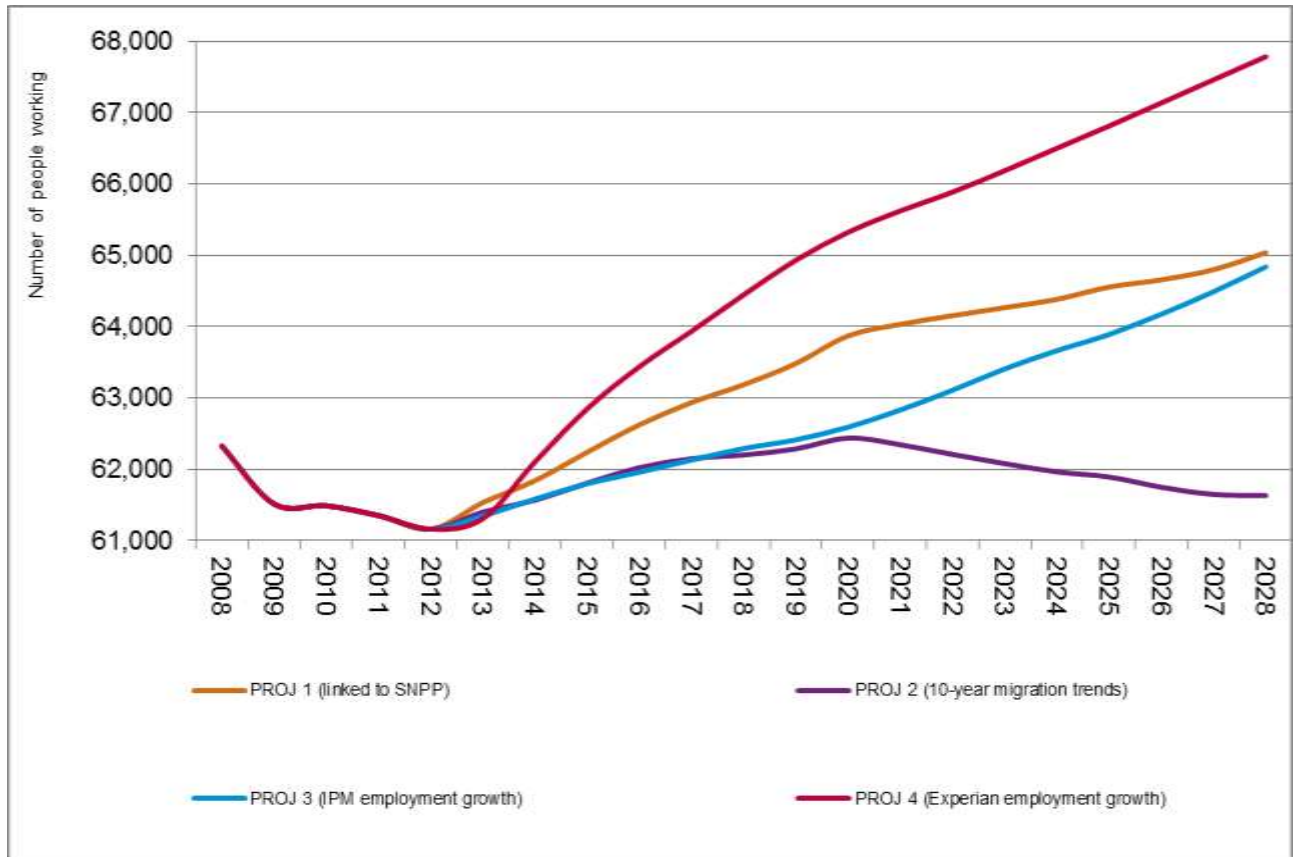
## Changes in Residents in Employment

- 3.5 Figures 3.4 and 3.5 below show the estimated number of people living in the District who are working under each of our four projections (residents in employment). The projection linked to SNPP assumptions (PROJ 1) and the scenario linked to IPM economic forecasts both show growth in residents in employment of about 4% over the 20-year period (2,500-2,700 additional people in employment). The projection linked to average migration over the past ten years (PROJ 2) shows a small decline in residents in employment whilst the Experian projection (PROJ 4) shows a more positive change in the local working population – an increase from 2008 of 9% or 5,500 more people who are working.
- 3.6 As with population the figures for employment are the same in each projection for 2008 to 2012 and the modelling shows that the number of people working is thought to have fallen in this period. Hence PROJ 2 (linked to 10-year migration trends) actually shows a small increase in residents in employment post 2012 although for the whole plan period (from 2008) there is a small decline in the total residents in employment shown.

**Figure 3.4 Estimates of Residents in Employment 2008 to 2028**

	2008	2013	2018	2023	2028
<b>PROJ 1 (linked to ONS 2010- &amp; 2011-based SNPP)</b>	62,326	61,532	63,186	64,266	65,036
	0.0%	-1.3%	1.4%	3.1%	4.3%
<b>PROJ 2 (10-year migration trends)</b>	62,326	61,398	62,200	62,078	61,629
	0.0%	-1.5%	-0.2%	-0.4%	-1.1%
<b>PROJ 3 (IPM employment growth forecasts)</b>	62,326	61,345	62,290	63,407	64,837
	0.0%	-1.6%	-0.1%	1.7%	4.0%
<b>PROJ 4 (Experian employment growth forecasts)</b>	62,326	61,305	64,448	66,187	67,784
	0.0%	-1.6%	3.4%	6.2%	8.8%

**Figure 3.5 Change in Residents in Employment, 2008 – 2028**



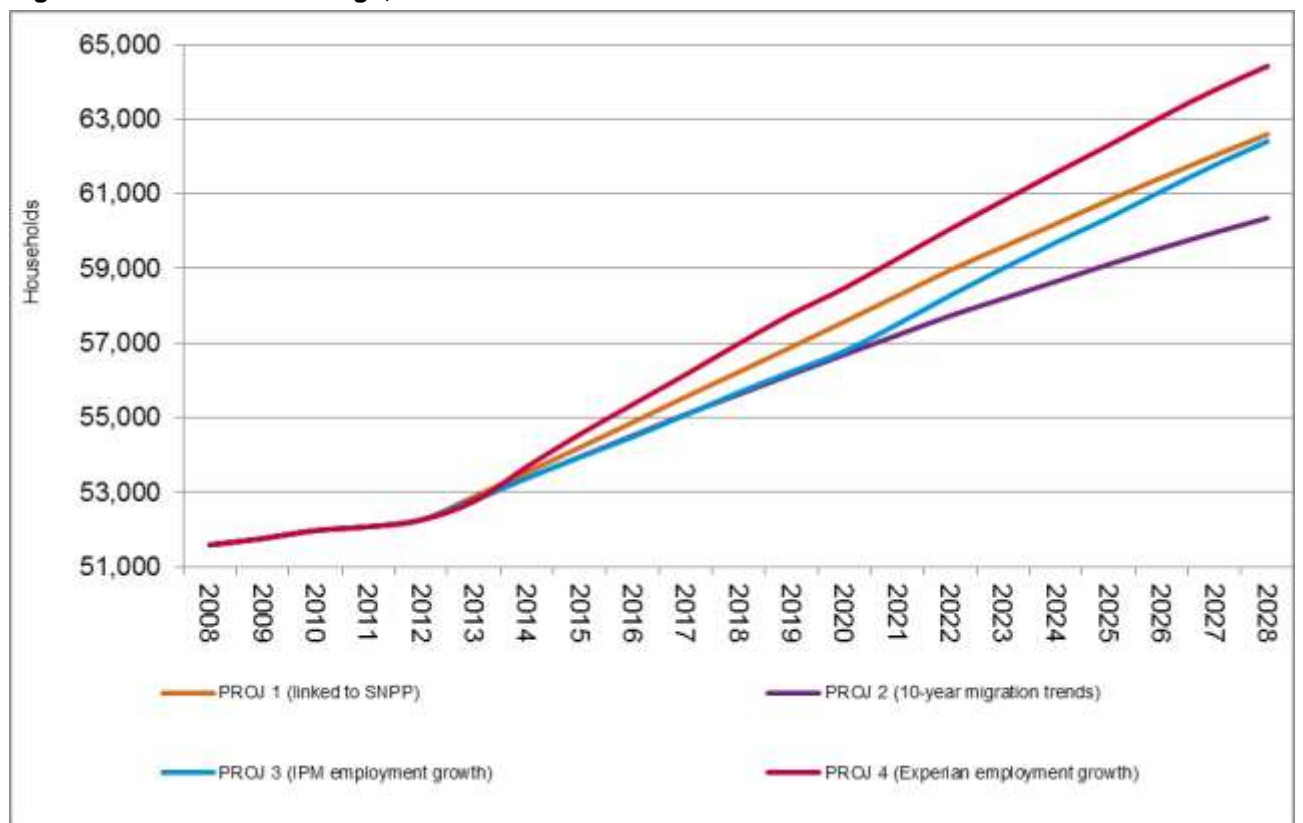
### Household (and Housing) Growth

- 3.7 Figures 3.6 and 3.7 below show the projected growth in the number of households under each of the four scenarios. The trend-based projection linked to SNPP (PROJ 1) shows household growth of about 21% over the 20-year period equating to 11,000 additional households whilst the trend based projection linked to 10-year migration trends (PROJ 2) is lower with a household increase of 8,800 (17%).
- 3.8 The projection linked to IPM employment forecasts (PROJ 3) shows household increase of about 10,800 over the 20-years whilst the projection linked to Experian economic projections comes out higher again (12,800 additional households – 25% increase).
- 3.9 The graph below shows that household change has less variation between projections when compared with either the population or employment figures – generally post-2012 each of the projections shows a roughly linear trend in household growth.

**Figure 3.6 Household Estimates 2008 to 2028**

	2008	2013	2018	2023	2028
<b>PROJ 1 (linked to ONS 2010- &amp; 2011-based SNPP)</b>	51,586	52,883	56,221	59,581	62,599
	0.0%	2.5%	9.0%	15.5%	21.3%
<b>PROJ 2 (10-year migration trends)</b>	51,586	52,806	55,623	58,191	60,356
	0.0%	2.4%	7.8%	12.8%	17.0%
<b>PROJ 3 (IPM employment growth forecasts)</b>	51,586	52,775	55,676	59,004	62,411
	0.0%	2.3%	7.9%	14.4%	21.0%
<b>PROJ 4 (Experian employment growth forecasts)</b>	51,586	52,752	56,983	60,815	64,426
	0.0%	2.3%	10.5%	17.9%	24.9%

**Figure 3.7 Household Change, 2008 – 2028**



3.10 The analysis above concentrated on the number of additional households. In reality there are always likely to be some vacant homes in the area and so the number of properties required to house all of these households will be slightly greater than the projected household numbers. We have therefore added a vacancy allowance of 2.5% to all of the above figures to make estimated housing requirements. This is shown in Figure 3.8.

**Figure 3.8 Estimated Housing Requirements with 2.5% Vacancy Allowance (to 2028)**

Projection variant	Annual household growth	Annual requirement with vacancy allowance	Requirement over 20-years
<b>PROJ 1 (linked to ONS 2010- &amp; 2011-based SNPP)</b>	551	564	11,288
<b>PROJ 2 (10-year migration trends)</b>	439	449	8,989
<b>PROJ 3 (IPM employment growth forecasts)</b>	541	555	11,096
<b>PROJ 4 (Experian employment growth forecasts)</b>	642	658	13,161

## 4 CONCLUSIONS

4.1 In this section we seek to draw together and interpret the projections prepared. The NPPF makes clear that Councils should plan on meeting 'objectively assessed' development needs for both market and affordable housing. We have thus sought to consider what this might be.

4.2 The results of the demographic projections are brought together in Figures 4.1 and 4.2 below.

**Figure 4.1 Summary of Projections 2008 to 2028 – Annual – Stratford-on-Avon**

Projection	Population Growth		Housing Numbers		Employment Growth	
	Per annum	% change	Per annum	% change	Per annum	% change
<b>PROJ 1 (linked to ONS 2010- &amp; 2011-based SNPP)</b>	959	0.8%	564	1.1%	136	0.2%
<b>PROJ 2 (10-year migration trends)</b>	661	0.6%	449	0.9%	-35	-0.1%
<b>PROJ 3 (IPM employment growth forecasts)</b>	930	0.8%	555	1.0%	126	0.2%
<b>PROJ 4 (Experian employment growth forecasts)</b>	1,203	1.0%	658	1.2%	273	0.4%

**Figure 4.2 Summary of Projections 2008 to 2028 – Total – Stratford-on-Avon**

Projection	Population Growth		Housing Numbers		Employment Growth	
	Total	% change	Total	% change	Total	% change
<b>PROJ 1 (linked to ONS 2010- &amp; 2011-based SNPP)</b>	19,178	16.0%	11,288	21.3%	2,710	4.3%
<b>PROJ 2 (10-year migration trends)</b>	13,214	11.0%	8,989	17.0%	-697	-1.1%
<b>PROJ 3 (IPM employment growth forecasts)</b>	18,609	15.5%	11,096	21.0%	2,511	4.0%
<b>PROJ 4 (Experian employment growth forecasts)</b>	24,062	20.1%	13,161	24.9%	5,458	8.8%

4.3 The updated demographic information available has resulted in a remodelled set of demographic projections:

- There are more residents in the District aged 15-29 than previously thought (and thus a slightly younger age structure);
- Life expectancy is expected to improve to a slightly lesser extent than expected by ONS when the previous projections were prepared;
- The evidence suggests that household sizes have been falling over the last decade less rapidly than was previously thought in the District.

4.4 These factors above serve to reduce housing requirements in PROJ 2 and 3 which are comparable to the projections presented in the 2011 Study (PROJ 1 and 6).

- 4.5 Another key factor which has in effect reduced figures is falling levels of migration over the period since 2008. This has informed each of the projections prepared. This however needs to be considered in context. A key driver of the reduction in migration over the initial period to 2012 has been falling levels of housing delivery. Net migration to the District in the 2008-11 period fell by two-thirds relative to average levels over the 2001-8 period. This was consistent with a reduction of two-thirds reduction in completions levels over this period.
- 4.6 PROJ 1 is based on the latest ONS Sub-National Population Projections. It results in a requirement for 11,300 dwellings over the plan period (565 per annum).<sup>5</sup> This projection again takes account of low migration over recent years, influenced by the moratorium, but assumes that migration increases moving forwards over the period to 2020/1 taking account of population growth in areas from which people typically move to Stratford-on-Avon District. Migration in this scenario averages 1,300 per annum which seems reasonable set against the pre-2008 average of 1,200 per annum.
- 4.7 PROJ 2 indicates a requirement for 9,000 homes over the 2008-28 period. This projection has modelled net in-migration to the District moving forwards of on average c. 960 persons per annum. This is based on average migration figures over the last 10 years (2001-11). It is consistent with the migration assumptions which underpinned PROJ 1 in the 2011 HPOS Study moving forward, although the average migration over the plan period is notably lower as a result of lower net migration to the District in the 2008-11 period than was projected in the 2011 HPOS Study.
- 4.8 Set against the other projections, we consider that PROJ 2 is unduly influenced by the housing moratorium which was in place in the District between 2006-11. Furthermore it is reasonable to assume, as ONS predict, that net migration to the District will increase over the next decade as the economy recovers and taking into account growth in the population in areas from which people have historically moved to the District.
- 4.9 Furthermore we do not consider that PROJ 2 would represent a suitable basis for strategic planning policies as it would represent planning for levels of employment which are at best static, if not declining, over the plan period as a whole. We do not consider that this – as a policy approach – would be consistent with the NPPF which emphasises the role of the planning system in supporting sustainable economic growth.
- 4.10 We consider that PROJ 1 represents a more reasonable assessment of housing requirements based on past population trends.
- 4.11 The economic evidence from our work on the *Stratford-on-Avon District Employment Land Review* and from the *Coventry and Warwickshire Local Economic Assessment* both point towards an economy in South Warwickshire which has performed relatively strongly through the recession and

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<sup>5</sup> Rounded to be nearest 100 dwellings



is focused towards growth-orientated sectors. From our understanding of economic dynamics in the sub-region we would expect Stratford-on-Avon and Warwick District to grow more strongly (in terms of output and employment) than a number of other parts of the Coventry and Warwickshire LEP area.

- 4.12 PROJ 3, based on the IPM Economic Forecasts, comes out with a very similar set of results to PROJ 1: a requirement for 11,100 – 11,300 homes over the 2008-28 period. However it should be recognised that it is based on a now somewhat dated economic forecast which envisaged that there would be a stronger loss of employment over the last few years than appears to have occurred. Overall this scenario would support growth in residents in employment in the District of around 4.0% over the plan period (0.2% per annum). This equates to around 125 people per annum.
- 4.13 We would regard this level of employment growth as relatively modest. In the pre-recession decade, employment grew more strongly with growth in employment of 580 people per annum in the District over the 1998-2008 pre-recession decade. Whilst the changing age structure dynamics of the population in South Warwickshire could have some impact on economic growth moving forwards, we consider stronger economic growth than forecast in the 2010 IPM figures remains reasonable.
- 4.14 We consider that South Warwickshire's economy is relatively well aligned to grow over the medium- to long-term. The Coventry and Warwickshire Economic Assessment highlights its strengths within the wider Local Enterprise Partnership (LEP) area, including an economic structure which is aligned towards growth sectors and its quality of place.
- 4.15 PROJ 4, based on the most recent Experian data, needs to be considered in this context. Looking at GVA, it would see economic growth of 1.9% per annum moving forward (2012-28) which is relatively similar to the 2.0% forecast across Warwickshire and the region. This is based on much stronger forecast employment growth than in the IPM Forecasts – on average 0.6% per annum over the remainder of the plan period which is consistent with that forecast by Experian for Warwickshire, above the West Midlands but below the national average (0.5% and 0.7% pa respectively).
- 4.16 Ultimately therefore, forecast economic growth could support demand for potentially just over 13,000 homes over the 2008-28 plan period.
- 4.17 It is appropriate to consider the weight which should be attached to the demographic and economic-driven forecasts.
- 4.18 The demographic driven forecasts are influenced by past demographic trends. These have been affected by past planning policies for housing provision, and particularly the housing moratorium which was in place in the District between 2006-11. Against this context we would consider that they should be treated with caution in establishing an (unconstrained) assessment of need for market and affordable housing.

- 4.19 Equally, as the two economic-driven projections show, predicting future economic performance is not an exact science. The Experian scenario is based on a forecast which sees the District / South Warwickshire economy perform relative better than the region or UK over the period to 2018, but with more modest economic growth over the longer-term to 2028.
- 4.20 Given that housing provision has been unduly restricted by the housing moratorium over the plan period to date, and that this has fed into demographic trends over the period to 2012, we consider that it would be appropriate to include an allowance for unmet housing needs in establishing the housing requirement.
- 4.21 The housing needs evidence in the SHMA points to a backlog need for affordable housing for 351 dwellings in 2012. We can also consider unmet need through comparison of past completions with housing targets.
- 4.22 The RSS Phase 2 Revision although not formally adopted was subject to independent examination. This set out a housing requirement for 375 dwellings per annum. Comparing completions against this, there has been a shortfall in housing provision of 683 dwellings in the District between 2006-12. This includes market and affordable housing.

**Figure 4.3 Shortfall of Housing Provision against Past Targets, 2006-12**

Dwellings / Year	RSS Phase 2 Revision Requirement	Net Completions	Surplus/ Shortfall	Cumulative Surplus/ Shortfall
2006-7	375	454	79	79
2007-8	375	401	26	105
2008-9	375	177	-198	-93
2009-10	375	238	-137	-230
2010-11	375	102	-273	-503
2011-12	375	195	-180	-683
Total	2250	1567	-683	

- 4.23 Taking the four scenarios together into account, we consider that an objective assessment of development needs for housing over the plan period for Stratford-on-Avon District would fall between 12,000 – 13,000 homes over the 2008-28 period.
- 4.24 The lower end of this range takes account of past demographic trends (PROJ 1) together with the past shortfall of housing provision against housing targets.
- 4.25 The higher end of this range takes account of the Experian econometric projections. It is effectively based on a scenario whereby because of the age structure of the District's population, net migration into the District could rise as parts of the existing resident labour force move into retirement. This assessment in our view is based on a realistic outlook for the District's economy and takes into account commuting patterns and forecast economic growth in surrounding areas.

- 4.26 It should be recognised that the relationship between housing and employment is complex and influenced by a range of variables. Nonetheless it seems reasonable to assume (as for instance is set out in the *Coventry and Warwickshire Local Economic Assessment*) that economic growth in South Warwickshire could create pressures within the housing market over the plan period.

## APPENDIX 1 – SUMMARY OF ADDITIONAL PROJECTIONS

**Figure A1.1 Summary of Additional Projections 2008 to 2028 – Annual – Stratford-on-Avon**

Projection	Population Growth		Housing Numbers		Employment Growth	
	Per annum	% change	Per annum	% change	Per annum	% change
<b>PROJ 5 (zero net migration (post-2012))</b>	-184	-0.2%	125	0.2%	-513	-0.8%
<b>PROJ 6 (zero employment growth from 2008 to 2028)</b>	720	0.6%	472	0.9%	0	0.0%
<b>PROJ 7 (provision of 11,000 homes (2008-28))</b>	913	0.8%	550	1.0%	121	0.2%
<b>PROJ 8 (provision of 12,000 homes (2008-28))</b>	1,042	0.9%	600	1.1%	196	0.3%

**Figure A1.2 Summary of Additional Projections 2008 to 2028 – Total – Stratford-on-Avon**

Projection	Population Growth		Housing Numbers		Employment Growth	
	Total	% change	Total	% change	Total	% change
<b>PROJ 5 (zero net migration (post-2012))</b>	-3,687	-3.1%	2,500	4.7%	-10,256	-16.5%
<b>PROJ 6 (zero employment growth from 2008 to 2028)</b>	14,391	12.0%	9,450	17.9%	0	0.0%
<b>PROJ 7 (provision of 11,000 homes (2008-28))</b>	18,267	15.3%	11,000	20.8%	2,416	3.9%
<b>PROJ 8 (provision of 12,000 homes (2008-28))</b>	20,841	17.4%	12,000	22.7%	3,913	6.3%