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Stratford-on-Avon District Council

Housing Provision Options Study

Final Report

June 2011

GL HEARN

In association with

jg Consulting
Quality Specialist Research

Contents

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.

This document must only be treated as a draft unless it has been signed by the Originator and approved by a Director or Associate.

Date	Originator	Approved
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	Planning Associate Director	Planning Director
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Limitations

Executive Summary

INTRODUCTION

I. The Housing Options Study has been prepared by GL Hearn for Stratford-on-Avon District Council to inform and support policies for housing provision within the third draft of Council's Local Development Framework Core Strategy which is due to be published for consultation in November 2011.

II. The Study assesses housing need and demand, taking account of population and economic dynamics, and considers land availability and strategic infrastructure constraints to identify options for housing provision in the District over the 2008-28 plan period.

III. A high-level sustainability assessment is presented of the three options developed and guidance provided on what might represent a robust and defensible level of housing provision to take forward through the Core Strategy.

IV. The report also includes some further work relating changes in the demographic structure of the population to need and demand for different types and sizes of housing, to inform the Core Strategy policies on housing mix.

V. The Report is prepared against the context of the Government's stated intention to revoke Regional Spatial Strategies through the Localism Bill and return responsibility for determining housing requirements to local councils.

SETTING THE CONTEXT

VI. In 2008 Stratford-on-Avon District had a population of 118,700 and contained 51,300 households. It has a low proportion of people aged between 15-34 and an above average proportion of people aged between 45-85.

VII. Over the previous 20 years, the District's population has grown by 12%. With the exception of 2008-9, death rates have consistently exceeded births resulting in natural decrease in the population. This has been countered by in-migration, which has varied year-on-year but has generally been positive and has driven population growth. The majority of migration is a result of internal migration within the UK, with most moves being of a relatively short distance (linked to people's existing ties to places linked to networks of friends and family, work, schools etc).

VIII. Spatial variations in house prices are indicative of relative demand. The average (median) house price in Stratford-on-Avon District was £225,000 in Q4 2010 which was 27% above the Warwickshire and 53% above the West Midlands regional average. House prices fell in Stratford

District by -16% between Q4 2007 and Q1 2009. They have since recovered some of the lost ground, but remain just 2% below levels at the peak of the market in late 2007.

IX. Despite some reduction in prices, affordability remains a significant issue within the District. The ratio of lower quartile house prices to lower quartile earnings stood at 9.8 in 2010, which is above the 7.0 County average and significantly above average for the region (6.1) and England (6.7).

X. Looking solely at prices can give a false appreciation of housing market conditions. Sales trends indicate a very different picture. Housing sales in 2010 were 45% down on average levels in the decade to 2007 in Stratford-on-Avon District, consistent with trends across the West Midlands. This reflects a combination of factors but particularly mortgage finance constraints. The reduction in sales is indicative of a reduction in 'effective' demand for house purchases. The evidence does however suggest a stronger recovery in sales in the District in 2010 relative to 2009 compared to wider areas. However the ability of households to purchase homes does not substantially affect underlying household growth which drives need and demand. Instead it primarily displaces demand towards rented tenures.

PROJECTIONS OF HOUSING NEED & DEMAND

XI. A number of demographic projections have been developed to understand the implications of population trends and future economic performance, as key drivers of housing need and demand. The economic scenarios take account of the recent economic recession and weak economic growth prospects in the short-term. These have been used to identify three potential development options for the District.

XII. The full set of projections developed is shown in the table below. In addition to the projections which underpin the three options, a number of alternative projections were developed to understand the impact of various component drivers on housing need and demand.

Figure A: Summary of projections 2008 to 2028 – total							
Projection	Population Growth		Housing Numbers			Employment Growth	
	Total	% change	Total	Per Annum	% change	Total	% change
MAIN PROJECTIONS							
PROJ 1: Main Trend-Based	12,400	10.4%	10,350	517	19.7%	-960	-1.6%
PROJ 2: Lower Net In-Migration	7,560	6.4%	8,230	412	15.7%	-3,675	-6.0%
PROJ 6: Trend-based Economic	18,300	15.4%	12,960	648	24.6%	2,490	4.1%
COMPONENT ANALYSIS PROJECTIONS							
PROJ 3: Zero Net Migration	-6,970	-5.9%	1,880	94	3.6%	-11,820	-19.5%
PROJ 4: Zero Employment Growth	14,100	11.9%	11,100	555	21.1%	0	0.0%
PROJ 5: Zero Population Growth	0	0.0%	4,930	246	9.4%	-7,910	-13.0%
PROJ 7: 5% Growth in Labour	19,520	16.4%	13,460	673	25.6%	3,040	5.0%
PROJ 8: 10% Growth in Labour	24,940	21.0%	15,830	791	30.1%	6,075	10.0%
PROJ 9: Housebuilding of 280 pa (RSS Phase 2 Preferred Option)	1,530	1.3%	5,600	280	10.6%	-7,050	-11.6%
PROJ 10: Housebuilding of 375 pa (RSS Phase 2 Panel Recommendation)	5,880	5.0%	7,500	375	14.6%	-4,610	-7.6%

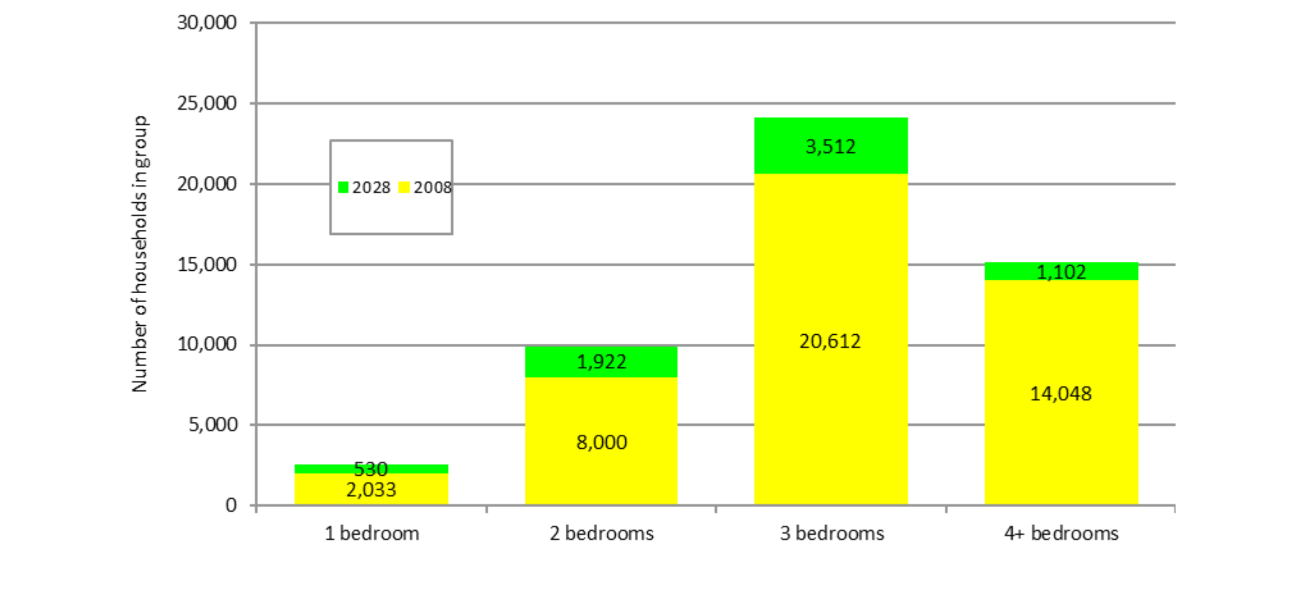
XIII. The component projections indicate that an average of 95 homes a year is required to meet locally-generated need and demand, with no net migration; however with no net migration the District's population declines by -5.9% over the period to 2028 and there is a reduction in employment of almost 12,000. They show that around 245 homes per annum are required to maintain the existing population of the District. Thus the housing figures in the Draft Regional Spatial Strategy (Phase 2 Review) Preferred Option would have supported minimal population growth of just 1.3% to 2028. They show that, because of the District's age structure, housing growth of 555 homes per annum is required to maintain the size of the District's working population.

XIV. A realistic assessment of housing need and demand taking account of demographic trends and demand arising from anticipated future economic performance within the District would fall between 10,000 – 13,000 dwelling range for the 2008-28 plan period.

CONSIDERING THE MIX OF HOUSING

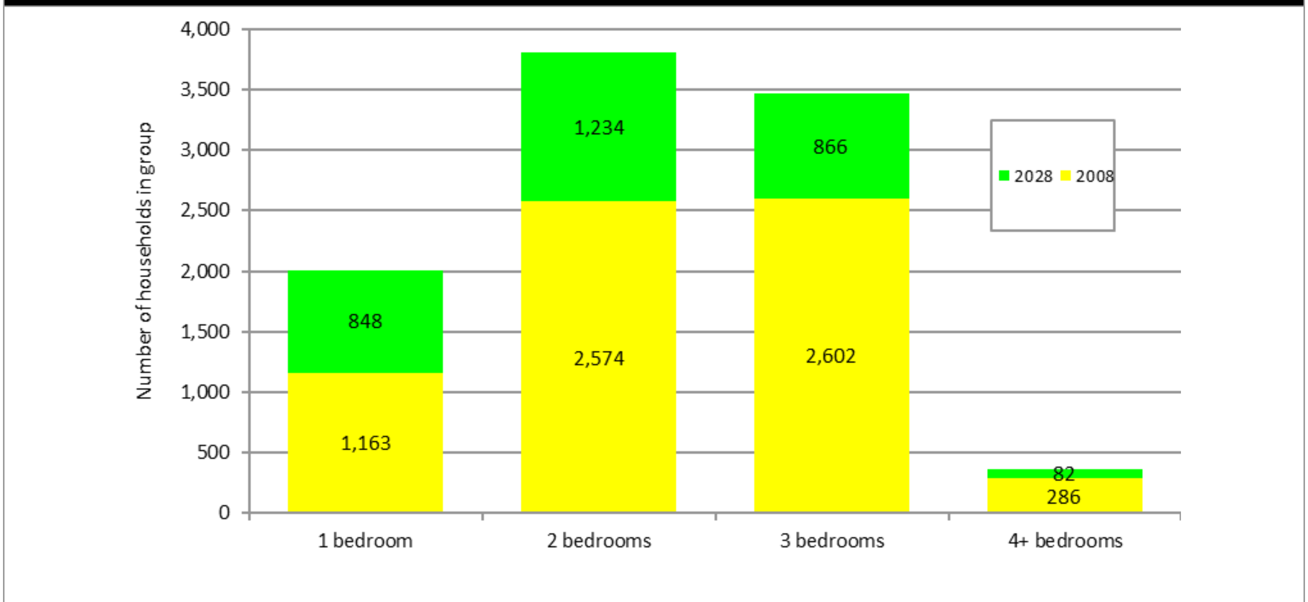
XV. The project has also involved modelling the implications of demographic trends on need and demand for different sizes of homes. In the market sector, the findings suggest a slight shift towards a requirement for smaller dwellings over the period to 2028 relative to the distribution of the existing stock. This is influenced by the ageing of the population.

Figure B: Impacts of Demographic Trends on Market Demand by House Size, 2008 to 2028 – Stratford-on-Avon



XVI. It has been assumed that 30% of new housing delivered is affordable, taking account of potential affordable housing policies, thresholds and funding. The modelling indicates a strong requirement for two and three bedroom affordable properties.

Figure C: Impacts of Demographic Trends on Affordable Housing Requirements by House Size, 2008 to 2028 – Stratford-on-Avon



XVII. This analysis is based on population trends and should be brought together with a wider understanding of housing market dynamics provided in the Strategic Housing Market Assessment and 2009 Market Update.

POTENTIAL LAND AVAILABILITY

XVIII. The District Council has undertaken a Strategic Housing Land Availability Assessment (SHLAA) to assess the potential land available which could support housing development. The findings of this are shown in the table below. In broad terms, there is a capacity for around 2,605 dwellings on sites which accord with current local plan policies, and nearer 18,500 if sites which are currently constrained by policy are included.

Figure D: Dwelling Capacity identified in SHLAA	
Sites with Planning Permission (Apr 2008)	919
Policy Compliant Large Sites	296
COM1 Sites	130
Windfall Allowance (to 2028)	1260
Sub-Total	*2605*
Sites within Broad Locations	6065
Sub-Total	*8670*
Policy Constrained Sites	*9788*
Total	*18,458*

XIX. The 'policy constrained sites' category includes a mix of sites, some of which are adjacent to the boundaries of existing settlements but were not contained within the 'broad locations' identified in the previous version of the draft Core Strategy and some which are detached from the main built-up areas. Of these sites there is capacity for 6750 dwellings on sites which are adjacent to built-up area boundaries.

XX. In identifying which sites should be taken forward for development there are some clear policy choices to be made which will need to consider, amongst other factors, the scale of development which is appropriate in different settlements over the period to 2028 as well as what infrastructure may be required and how it might be delivered.

XXI. Our experience of infrastructure planning is that it is physical infrastructure provision – transport, highways and utilities – which might be a critical factor in influencing the level of development in the aggregate which the District could accommodate. This is not intended to underestimate the importance of delivery of necessary social, community and green infrastructure alongside new development but recognises that these factors are less likely, in our experience, to present critical barriers to achieving a certain housing requirement.

XXII. The consultation draft Core Strategy recognises that transport is a major issue in the District due to the high car usage and lack of alternative means of transport for many. Supporting education provision is also recognised as a critical issue.

POTENTIAL OPTIONS FOR HOUSING PROVISION

XXIII. An assessment of the full range of projections together with the evidence of potential available land and strategic infrastructure constraints has informed the identification of the three options for housing provision. Each of the options has been assessed against a number of key sustainability objectives. This is set out below.

Option 1: Main Trend-Based Projection

XXIV. The principal projection developed is based on long-term population trends (PROJ 1). It assumes net in-migration of 960 persons per annum, the average between 1999-2009, which is 15% below the short-term five year trend of 1,140 recorded between 2004-9.

XXV. This results in a housing requirement for 10,350 homes over the 2008-28 plan period (517 homes a year). This is 7% above averages rates of development in the District between 2000-2010 (480 per annum) but broadly consistent with development rates in the pre-recession period. This level of housing development would support 10.4% population growth but because of changes in the age structure of the population would support a loss of employment of nearing 1,000 jobs or -1.6%.

XXVI. This option:

- Meets local need and demand based on past demographic trends, but results in lower population growth relative to the last decade and a reduced level of in-migration compared to recent demographic trends;
- Does not support growth in the workforce/labour supply within the District, with a -1.6% loss over the period to 2028, as a result of changes in the population structure. This does little to support economic growth;
- It also results in a reduction of -4.0% in the population aged under 15 which could impact on

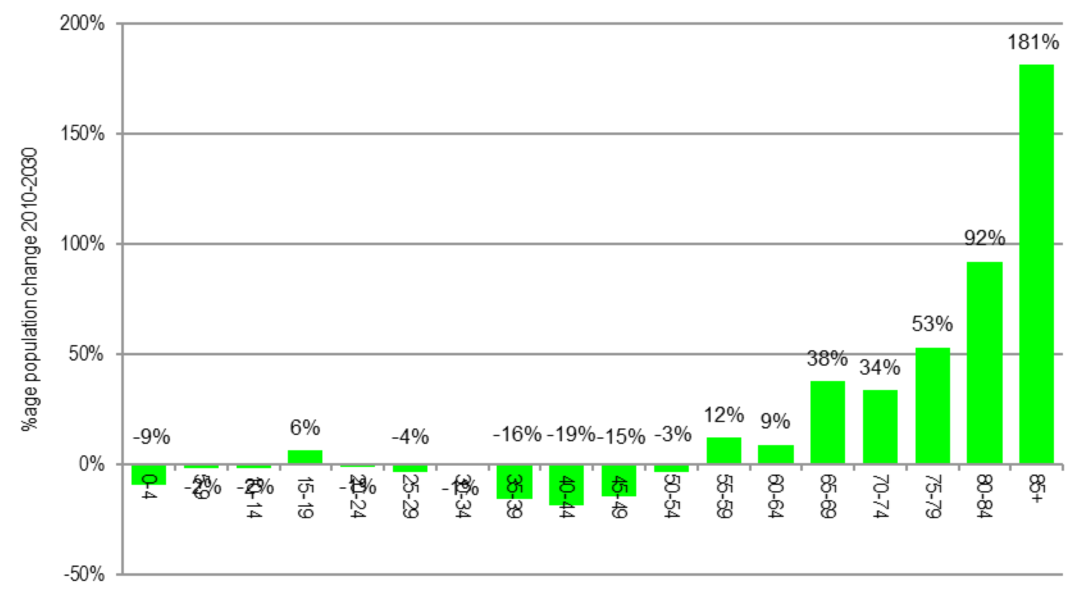
the viability of schools. Thus it has a very limited impact (and potentially a moderate negative impact) on achieving the objective of achieving a more balanced population structure;

- However in increasing the rate of development, albeit marginally, relative to past rates it likely, subject to further work, to require some greenfield development with an impact on environmental and sustainability objectives;
- The impact on the District's character is hard to judge, but is potentially greater than in Option 3, which is based on lower rates of development. However there are opportunities to mitigate this through the siting and design of development.

XXVII. Relative to the two other options considered, the impact of this option is assessed as moderate.

XXVIII. The chart below indicates how the population structure would change between 2006-26 in this option.

Figure E: Forecast Population Change by Age Group 2008 – 2028 (PROJ 1)



Option 2: Economic-Led Projection

XXIX. This option is more aligned with planning for a positive economic future for the District. It is based on the main economic-led projection developed (PROJ 6) taking account of expected employment growth across Warwickshire and a continuation of existing commuting patterns where there is some net in-commuting to Stratford-on-Avon District to work. It is informed by forecasts of employment growth developed by Cambridge Econometrics. It assumes that the labour market performs in relative terms quite strongly through the recession. Delivery of 13,000 homes is required over the 20 year plan period (650 per annum) in this option.

XXX. This option does the most to support economic prosperity both in supporting growth in the size of the workforce and growth in the population. Through the delivery of 13,000 homes to 2028, equivalent to 650 per annum, this option supports population growth of 16%. This is similar to rates of population growth over the last decade.

XXXI. In this option the rate of development over the 20 year period to 2028 is 35% above rates of development over the past 10 years (2000-2010). The housing stock grows at a rate of 1.2% per annum. We consider that this level of development is likely to be deliverable over the period to 2028, notwithstanding current somewhat depressed housing market conditions. This reflects the attractiveness of the District as a place to live.

XXXII. This option:

- Makes the greatest contribution to meeting housing need and demand, resulting in similar levels of population growth to the last decade;
- Positively supports the economy with growth in the workforce/labour supply within the District of 4.0% over the period to 2028;
- It supports modest growth in both the working-age population and school-age population. The population aged under 15 for instance increases marginally. This helps to retain a balanced population structure and while the elderly population grows it does so to a lesser extent in proportional terms relative to the other options;
- However as this scenario results in the highest rate of development, the potential impact on the environment is higher. Higher levels of greenfield development are likely to be required than in other options. There is also a risk that the higher level of development could impact on the character of the District (subject to further testing) if is not carefully planned.

XXXIII. Overall the impact of this option in social and economic terms is strongly positive, although this comes at a cost in that the environmental impact is expected to be higher.

Option 3: 25% Reduction in Net In-Migration

XXXIV. This option is specifically focused on testing the impacts of implementing a 'policy constraint' on levels of development relative to assessed housing need/demand. It is based on planning for a 25% reduction in net migration relative to long-term migration trends (1999-2009). It considers the implications of delivery of 8,200 dwellings over the 20 year plan period (410 per annum). Development rates over this period would thus be -15% lower than trends over the past decade (2000-10).

XXXV. It the Council wishes to adopt this approach it would need to develop a clear justification for adopting this approach. This could be justified as part of a sub-regional strategy to support regeneration of the Metropolitan Urban Areas, but would need to be supported by the wider approach adopted at this level. It is likely that this would need to be taken forward by the Local

Enterprise Partnership and need the support of neighbouring authorities. In the absence of a formal regional or sub-regional planning mechanism there are clear risks to this which means that a Core Strategy developed on this basis could be found unsound.

XXXVI. Overall it seems unlikely that development proposals elsewhere will provide a driver to reduce in migration to Stratford-on-Avon District. To take this option forward, the Council would likely need to demonstrate where displaced demand would be accommodated.

XXXVII. This option:

- Falls well short of assessed housing need and demand. It results in lower levels of population growth to the last decade with growth of 6.4% over 20 years compared to 8% in the 10 years to 2009;
- Does the least of the three options to support the economy, with the District's labour supply/workforce expected to decrease by -6% over the plan period. This does not align well with the Council's Corporate Plan albeit recognising the potential for commuting patterns across the wider labour market.
- Does little to support the Council's objective to see a more balanced population structure, with the reduction in absolute terms in the number of people in all broad age groups under 60 by 8,100 people (-9.5%) set against a growth in the population over 60;
- The option has major positive benefits in resulting in the lowest level of development on greenfield sites and potentially the lowest environmental impact. Less new infrastructure is required;
- In reducing the scale of development relative to past trends, this option is likely to do the most to preserve the character of the District.

XXXVIII. Overall, this option has the least environmental impact, but this potentially comes at a cost in terms of a higher potential impact in economic and social terms.

TOWARDS A PREFERRED OPTION

XXXIX. There are a set of trade-offs which need to be considered in determining which option is optimal. It would be possible to conclude that any of the above options were the most advantageous based on ascribing different weight to the environmental, economic and social considerations. This is a matter for the District Council to consider.

XL. GL Hearn consider that the housing requirement should fall within the range set out within the three options. We foresee significant risk factors associated with progressing with Option 3 in the absence of a regional planning mechanism, in that the District Council might have to identify how the underprovision against assessed need/demand would be met elsewhere within the region. This could prove difficult to achieve in practice.

XLI. GL Hearn's view is that a robust yet positive framework for development in the District should plan on the basis of a housing in the 11,000 – 12,000 range over the 20 year plan period, 2008 – 2028.

This level of development looks achievable based on the information available, but should be subject to further testing in terms of the availability of land and in regard to strategic infrastructure constraints (in consultation with infrastructure providers).

1. Introduction

1.1 Stratford-on-Avon District Council commissioned GL Hearn to prepare this Housing Provision Options Study to inform and support policies for housing provision within the Council's Local Development Framework (LDF) Core Strategy. The Council is working towards publication of a third draft of its Core Strategy for consultation in November 2011.

1.2 The Coalition Government has made clear its intention to revoke the West Midlands Regional Spatial Strategy (the 'RSS') and return responsibilities for determining housing requirements to individual local authorities. This is being taken forward through the Localism Bill which, at the time of writing, is working its way through Parliament. While the RSS currently remains part of the Development Plan, the Government has clearly stated its intention to revoke the RSS through the Localism Bill. The Government has however made it clear that local authorities will still need to be able to justify housing numbers in their plans and be able to defend them during the LDF examination process. Housing numbers must be based upon reliable information.

1.3 It is intended that the Study will provide evidence for housing policies to be included within the emerging Core Strategy and act as a starting point for determining the development strategy for the District.

1.4 The specific objectives of the Study are to:

- Undertake a rigorous assessment of the economic and demographic context for housing provision;
- Identify options for housing provision over the planning period 2008-28, taking into account demographic and economic factors, as well as growth proposals in surrounding areas;
- Recommend an option for housing provision based upon consideration of social, environmental and economic effects; and
- Consider the implications on provision of housing of different tenures, types, needs and sizes and for groups with special needs.

1.5 Housing need and demand is driven by growth in the population and the changing structure and size of households. The Housing Options Study uses a scenarios-based approach to develop understanding and quantify the impacts of various housing market drivers, including both demographic and economic trends, in order to provide an informed assessment of housing need and demand over the proposed Core Strategy 2008-28 plan period.

1.6 Evidence of housing need and demand are then brought together with information which the Council holds on potential land available for housing development, and infrastructure requirements. A high level sustainability assessment is undertaken to consider and appraise the relative merits of different housing supply policies, which is used to present a consultants' recommended option to the Council.

1.7 The report also includes some further work relating changes in the demographic structure of the population to need and demand for different types and sizes of housing, to inform the Core Strategy policies on housing mix.

1.8 The remainder of the report is structured as follows:

- Section 2 outlines the context to the report, including national planning policies and the basis of the housing targets in the West Midlands Regional Spatial Strategy;
- Section 3 provides an overview of housing market performance and drivers, drawing on a range of existing studies;
- Section 4 sets out demographic-driven population projections for Stratford-on-Avon District for five year periods between 2008 - 2028;
- Section 5 considers how economic performance might affect future population dynamics, and develops economic-driven projections for population growth to 2028;
- Section 6 uses headship rates to identify levels of household growth and dwellings which can be expected to arise from each of the population growth scenarios developed;
- Section 7 assesses the implications of demographic change on need and demand for different sizes and types of homes over the period to 2028;
- Section 8 considers supply-side issues relating to the capacity of the district and availability of suitable land for housing development, as well as known infrastructure constraints; and
- Section 9 develops and assesses options for housing provision within the District.

2. Context to the Study

National Planning Policy

2.1 Planning Policy Statement 3 (PPS3) sets out national policy regarding the appropriate range of factors to be taken into account in determining levels of housing provision. It makes it clear that there are a range of factors which come together to inform consideration of housing requirements, as the box below outlines.

Assessing an Appropriate Level of Housing: Extract from Planning Policy Statement 3: Housing (PPS3)

The level of housing provision should be determined taking a strategic, evidence-based approach that takes into account relevant local, sub-regional, regional and national policies and strategies achieved through widespread collaboration with stakeholders.

In determining the local, sub-regional and regional level of housing provision, Local Planning Authorities [and Regional Planning Bodies, working together,] should take into account:

- Evidence of current and future levels of need and demand for housing and affordability levels based upon:
  - Local and sub-regional evidence of need and demand, set out in Strategic Housing Market Assessments and other relevant market information such as long term house prices.
  - [Advice from the National Housing and Planning Advice Unit (NHPAU) on the impact of the proposals for affordability in the region][A].
  - The Government's latest published household projections and the needs of the regional economy, having regard to economic growth forecasts.
- Local and sub-regional evidence of the availability of suitable land for housing using Strategic Housing Land Availability Assessments and drawing on other relevant information such as the National Land Use Database and the Register of Surplus Public Sector Land.
- The Government's overall ambitions for affordability across the housing market, including the need to improve affordability and increase housing supply.
- A Sustainability Appraisal of the environmental, social and economic implications, including costs, benefits and risks of development. This will include considering the most sustainable pattern of housing, including in urban and rural areas.
- An assessment of the impact of development upon existing or planned infrastructure and of any new infrastructure required.

[A]The NHPAU has been disbanded by the Coalition Government

2.2 Clearly therefore there are a range of factors which come together to inform consideration of housing requirements. This Study focuses on housing need and demand, but considers a number of the wider factors at a headline level to provide an indication of the potential approach which could robustly be adopted through the LDF.

2.3 PPS3 is clear that evidence of need and demand needs to be brought together with information on land availability, infrastructure constraints and requirements, and sustainability appraisal which must consider alternative policy options against social, economic and environmental objectives in determining housing requirements.

2.4 Housing targets have previously been set through Regional Spatial Strategies (RSS) which identified specific targets for local authorities. In the case of Stratford-on-Avon District, the housing target was set through the West Midlands RSS.

2.5 On 6th July 2010 the Coalition Government sought to revoke the Regional Spatial Strategies (RSS) under s76(6) of the Local Democracy Economic Development and Construction Act 2009. This has however been successfully challenged in the High Court by CALA Homes. At the time of writing therefore, the RSS remains part of the development plan; however the Government has made clear that it will be abolished in due course by a forthcoming parliamentary Localism Bill which is progressing through Parliament. This will mean that it no longer forms part of the development plan and that the Stratford-on-Avon District Local Development Framework will not have to accord with it. Instead, it will be for the District Council to determine through the LDF Core Strategy what represents an appropriate level of housing provision in the District.

2.6 However at a recent High Court appeal brought by CALA Homes it was found that Councils should not have regard to the Government's proposals to scrap regional plans in drawing up new development plan documents. This however is only likely to impact upon plans which are examined in advance of enactment of the Localism Bill. The timing of submission of Stratford-on-Avon District's Core Strategy is most likely to post-date this.

2.7 Government however has made it clear that local authorities will still need to be able to justify the housing numbers in their plans and be able to defend them during the LDF examination process. Housing numbers must be based upon reliable information. This provides a context to this report.

2.8 The Coalition Government has emphasised that the impetus behind the change of national policy is to reduce unnecessary bureaucracy and enhance community involvement in planning, in accordance with the principles of localism. Local communities will be consulted on the Council's housing policies through public consultation on the Draft Core Strategy.

2.9 In proposing to return powers in determining appropriate levels of housing provision to local authorities, the Government is also implementing a system to provide Councils with financial incentives to build new homes, allowing them to retain council tax receipts from new homes for six years. This 'New Homes Bonus' was introduced in February 2011. It aims to support investment in infrastructure required alongside housing growth.

2.10 Clause 90 of the Localism Bill proposes a duty to cooperate on local authorities in the preparation of development plans. The Government had recently indicated that it will seek to strengthen this measure to support sub-regional planning to address issues, which include housing supply and transport, which can have an impact beyond local authority boundaries.

2.11 We examine below previous housing targets for Stratford-on-Avon District.

Regional Spatial Strategy (2004)

2.12 The adopted RSS (2004) was based on seeking to reverse movement of people and jobs away from the Major Urban Areas (MUAs) in the region. These are Birmigham/Solihull, the Black Country, Coventry and North Staffordshire. This was to be achieved by promoting urban renaissance and restricting land supply in areas close to them.

2.13 The focus for housing development in settlements such as Stratford-upon-Avon was to be to accommodate local needs and support local regeneration, and they should accommodate migration from the MUAs. In rural areas, housing provision was to be restricted to meeting local housing needs (i.e. from the immediate area) and to supporting local services.

Stratford-on-Avon District Local Plan

2.14 The Warwickshire Structure Plan 1996 – 2011 provided for delivery of 8,200 dwellings over the 15 year plan period, equivalent to an annual average of 547 dwellings per annum.

2.15 The Structure Plan was superseded by the West Midlands Regional Spatial Strategy (RSS) which was published in 2004. This set out a requirement for delivery of 2000 dwellings per annum in Warwickshire to 2007, 1500 per annum from 2007-2011, and 1350 per annum from 2011-21. This was based on a strategy of seeking to reduce out migration from the region's Metropolitan Urban Areas.

2.16 The Stratford-on-Avon District Local Plan was adopted in 2006. The housing target was based on the RSS requirement for 18,000 dwellings in Warwickshire between 2001-2011, of which it was assumed 26.4% would be delivered in Stratford-on-Avon District in accordance with the Structure Plan distribution giving a requirement for 4752 dwellings (475 per annum).

2.17 At the point of adoption of the Local Plan in 2006, 3288 dwellings had been built, resulting in a residual requirement for delivery of 293 dwellings per annum to 2011. As this was considered achievable from sites with planning permission and identified urban capacity, the Local Plan restricted development of greenfield sites.

Regional Spatial Strategy Phase 2 Review

2.18 To accord with the requirements of the 2004 Planning & Compulsory Purchase Act, a review of the 2004 RSS was progressed to provide housing targets to a local authority level. The Phase 2 revisions dealt with housing and employment requirements. A draft Phase 2 Revision document was submitted to the Secretary of State in December 2007.

2.19 The Draft Phase 2 Revision identified that given the scale of housing need in the region, there was a need for additional development outside of the MUAs and on greenfield land. This was to be focused in ‘settlements of significant development’ (which did not include Stratford-upon-Avon). Housing in Stratford-on-Avon District was to continue to be focused on meeting local needs.

2.20 The Draft Phase 2 Revision proposes a housing requirement of 5,600 dwellings (net) for Stratford-on-Avon, equivalent to 280 dwellings per annum. This was equivalent to household growth of 0.6% per annum. The District Council resolved to support this figure in 2008.

2.21 At the regional level, the Draft Plan fell short of providing for projected household growth based on the Government’s 2004-based household projections. This issue was raised by Government on submission of the Draft Plan. A further Study was therefore commissioned from consultants Nathaniel Litchfield & Partners (NLP) to examine the potential for higher levels of housing provision in the West Midlands. This was published in October 2008.

2.22 The NLP Study explored the potential to accommodate between 51,500 – 80,000 more homes in the region over the plan period to 2026. It tested the ‘supply range’ then being promoted by the independent advisory body, the National Housing and Planning Advice Unit (NHPAU, June 2008). The Study found scope to identify additional land within the region, without harming the Plan’s objectives for urban renaissance. It found no evidence that supply outside the MUAs would reduce supply within them or increase out-migration.

2.23 A number of preferred scenarios were developed. For Stratford-on-Avon District the preferred options were all based on provision of an additional 4,500 homes raising the total requirement for the 2006-26 plan period to 10,100 dwellings. The proposed increase was justified on the basis of the undersupply of the Draft RSS figure against the CLG projections (2004-based) for the District, and the fact that completions were running above this figure. The shortlisting of an eco-town proposal at Middle Quinton (Long Marston MOD site), partly falling within the District, was also a factor.

2.24 A separate assessment of housing need and demand was prepared by the Cambridge Centre for Housing and Planning Research (CCHPR)[1] using a demographic-driven approach. This identified a requirement for 13,600 dwellings.

2.25 Following Examination in Public, the Panel Report recommended an increase in the housing requirement at the regional level over the period 2006-26 by 9% to a level between the upper and lower parameters identified by the NHPAU. It recommended an increase in the requirement for Stratford-on-Avon District from 5,600 to 7,500 dwellings, equivalent to delivery of an annual average of 375 dwellings or just over a third above the draft plan levels, based partly on additional capacity identified. Delivery of 7,500 dwellings would represent household growth of 0.7% per annum.

2.26 The Panel also indicated that a further study should be undertaken to consider the potential for sustainable provision of a further 2,500 - 3,000 dwellings between 2021-26. This would increase household growth to potentially 1.0% per annum. The Panel identified a number of potential distribution options which should be considered, these being further development at significant service centres; major development focused at Stratford-upon-Avon; a new settlement proposal; or a hybrid of these options.

2.27 The Panel Report clearly identifies that the difference between the Draft RSS figure of 5,600 dwellings and the CCHPR and NHPAU figures (13,600 and 14,400 dwellings respectively) was one of the highest in the region. It considered that on the basis of evidence available, including land availability and sustainability appraisals undertaken, provision of 7,500 + dwellings could be justified.

2.28 The Panel considered the overall RSS strategy of urban concentration and assessed, in regard to Stratford-on-Avon District, how far it would be reasonable to assume that trend population growth can be deflected by planning policy without adverse implications on affordability, provision of affordable housing, and the economy. It also considered the effect of increasing housing requirements in the District on the strategy of urban concentration and regeneration.

2.29 The Panel considered but did not endorse a major urban extension of Redditch for housing into the District. Neither did it support a proposed new settlement at the former Royal Engineers Depot at Long Marston.

[1] CCHPR (2008) Household Projection-based Estimate of Housing Demand and Need in the West Midlands Region 2006-26: Unconstrained

Stratford-on-Avon District Consultation Core Strategy (2010)

2.30 Stratford-on-Avon District Council has developed two iterations of its draft LDF Core Strategy to date. The latest, published as a Consultation Draft in February 2010 responded to the recommendations of the RSS Panel Report.

2.31 The Consultation Draft Core Strategy sets out some important findings in regard to the level of development to be planned for. It states that in regard to a proposed requirement for 7,500 dwellings between 2006-26 (375 pa):

"The Panel appointed by the Secretary of State that considered the Regional Spatial Strategy Phase Two Revision has recommended that a scale of housing development in the District that is considerably higher than that put forward by the Regional Assembly … (para 1.2.6)

The Panel concluded that a strategy of restricting inward migration would be unlikely to work, given there are significant movements from outside the District. Even if regional plans are abolished it is unlikely that a fresh independent assessment of the situation for Stratford-on-Avon District would come to a different view (para 1.2.7).

The evidence that has been gathered in preparing the Core Strategy shows that there are no fundamental infrastructure constraints to meeting the initial scale of development likely to be set for the District by the Secretary of State. Furthermore, there are no apparent significant environmental impacts with accommodating this level of growth. The Strategic Housing Land Availability Assessment also shows that there are potentially suitable, available and deliverable sites sufficient to meet this level of growth. If, in light of evidence, as Inspector recommended in support of this level of housing and it was rejected by the District Council, it would open up itself to legal challenge (para 1.2.8)

Delays to agreeing the amount and location of future development could lead to a vacuum and create risks of the District Council losing planning appeals on specific proposals. For these reasons the District Council has taken the view that a 7,500 dwelling target for the period 2006-2026 should be provided for through this Core Strategy (para 1.29).

2.32 In light of the comments in the 2010 Consultation Draft we consider that it would be difficult for the Council to argue that a requirement for below 7,500 homes to 2026 could not be sustainably accommodated, should this level of housing provision be supported by evidence of need and demand.

2.33 The consultation Core Strategy recognised the predominantly rural nature of the District and key constraints to development, including:

- The West Midlands Green Belt, covering most of the district north of Stratford-upon-Avon;
- The Cotswold Area of Outstanding Natural Beauty, extending into the south of the District;
- Strong heritage, character and quality of the built environment and a range of sites of ecological importance; and
- Areas which are susceptible to flooding.

2.34 It also highlighted the inherent attractiveness of the area which contributes to market demand for housing, recognising that the District is a very desirable area to live and attracts affluent households from the South East and, to a lesser extent, from elsewhere in the West Midlands.

2.35 The document set out a vision for the District which can be summarised as of maintaining its outstanding character and heritage, improving quality of life, ensuring everyone has access to first class services and amenities, and significantly reducing the District's carbon footprint.

2.36 The proposed spatial strategy sought to distribute development with a primary focus on Stratford-upon-Avon as the main town, a secondary focus on the Main Rural Centres, with provision for small scale development in Local Service Centres. It sought to protect the West Midlands Green Belt in the north of the District from inappropriate development except in very special circumstances, and to limit development within the Cotswolds AONB to meeting local needs. It did not propose planning for any strategic development adjoining Redditch.

2.37 The consultation Core Strategy also proposed 68 hectares of employment land provision, with a reserve of 17 hectares readily available during any five year period. In regard to housing distribution it proposed allocations with a capacity for:

- 2,100 dwellings in Stratford-on-Avon;
- 1545 dwellings in the Main Rural Service Centres;
- 500 dwellings at the Engineers Resource Depot, Long Marston.

2.38 It addition it planned for delivery of 950 dwellings in Local Service Villages.

2.39 In regard to the mix of housing, the consultation Core Strategy set out that a minimum of 35% of new residential floorspace on sites of over 10 dwellings/ 0.3ha in Stratford-upon-Avon and the Rural Service Centres, and a minimum of 50% on sites of over 5 dwellings/0.15 ha in Local Service Villages would be expected to be affordable housing.

2.40 A detailed schedule of infrastructure projects was included within the Core Strategy to support the level of development proposed. This included provision of a number of public transport improvements (e.g. Quality Bus Corridors, a bus-rail interchange at Stratford-upon-Avon Station), a Park and Ride for Stratford as well as a Western Relief Road for the town (associated with development west of Shottery). It also included delivery of new primary schools (Shottery and

Bishopston), additional secondary education capacity at Stratford-upon-Avon and Shipston, and a number of new health and community facilities.

Scope of this Study

2.41 With the revocation of the West Midlands RSS likely to occur within a year, and potentially in advance of the examination of the Council's draft Core Strategy to the Secretary of State, this Study has been prepared to support the Council in considering what level of housing provision it might look to plan for over the period to 2028. It will be for the Council to determine what level of housing it plans for.

2.42 The Study considers evidence of housing need and demand in Stratford-on-Avon District specifically, taking account of trends in the population and structure of households, as well as how future economic performance might influence demand for labour and thus levels of migration to and from Straford-on-Avon District. It draws on the latest data available. This is brought together with evidence of land availability and an assessment of high level infrastructure constraints, to establish potential options for housing provision in the District. A high level assessment of these options in then undertaken to consider what level of housing provision the District Council might look to take forward within the Local Development Framework.

3. Housing Market Performance & Drivers

3.1 It is important that consideration of future housing provision is set against a robust understanding of the housing market within Stratford-on-Avon District. This section explores housing market performance and drivers.

3.2 The diagram below captures our understanding of the key influences on housing demand.

Figure 3.1: Understanding Housing Demand

3.3 These factors play out at different spatial scales and influence both the level of housing demand (in terms of aggregate household growth) and the nature of demand for different types, tenures and sizes of homes.

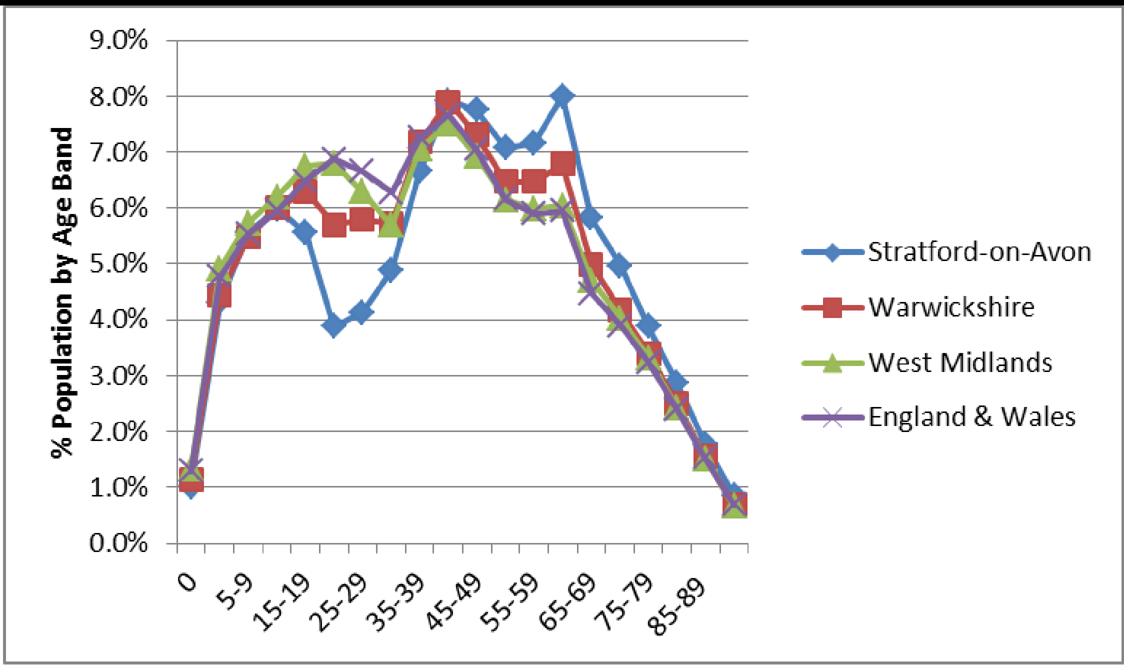
3.4 Key drivers of housing need and demand in the long-term are demographic and economic trends (which affect total housing requirements) and housing affordability (which particularly influences the tenure of housing required). This Study particularly addresses the first two of these factors.

Demographic Trends

3.5 In 2008 Stratford-on-Avon District had a population of 118,700 and contained 51,300 households. The average household size was 2.31.

3.6 The chart below shows the population structure, comparing the proportion of the population in five year age groups against the county, regional and national profiles. Stratford-on-Avon District has a particularly low proportion of people aged between 15-34 and an above average proportion of people aged between 45-85. There is a strong skew in the structure towards older age groups. The age structure has a significant influence on the level of housing required to support economic growth.

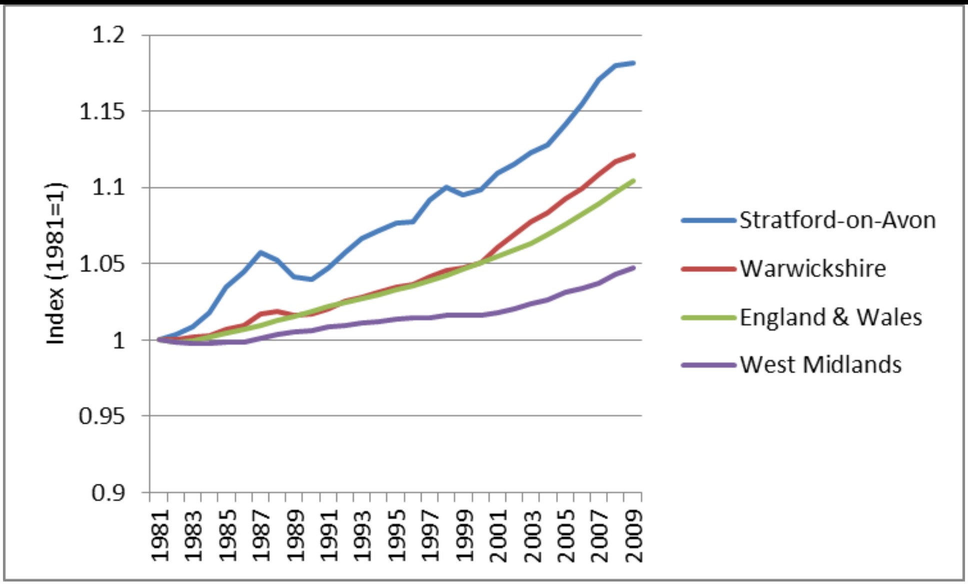
Figure 3.2: Population Structure, 2008



Source: ONS Mid-Year Population Estimate

3.7 The District's population has grown by 18% between 1981 – 2009 compared with growth of 12% across Warwickshire, 10% nationally, but just 5% across the West Midlands as a whole. The District's population has grown by 8% over the last decade compared to 3% across the West Midlands (and by 4.8% over the 2004-9 period).

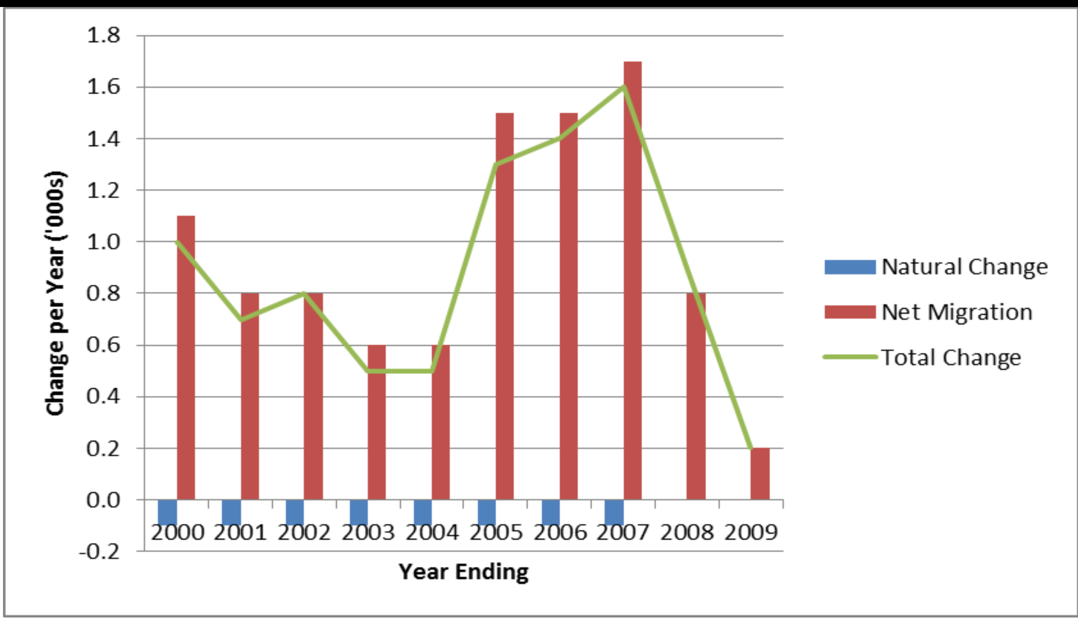
Figure 3.3: Population Growth in Stratford-on-Avon District, 1982 - 2009



Source: ONS Mid-Year Population Estimates

3.8 It is useful to analyse the components of population change. As Figure 3.4 indicates, with the exception of the past two years of data, death rates consistently exceeded births resulting in natural decrease in the population. This has been countered by in-migration, which has varied year-on-year but generally been positive (and has driven population growth) over the last 10 years. Migration has very much driven population growth over the decade to 2009.

Figure 3.4: Components of Population Change, Stratford-on-Avon District

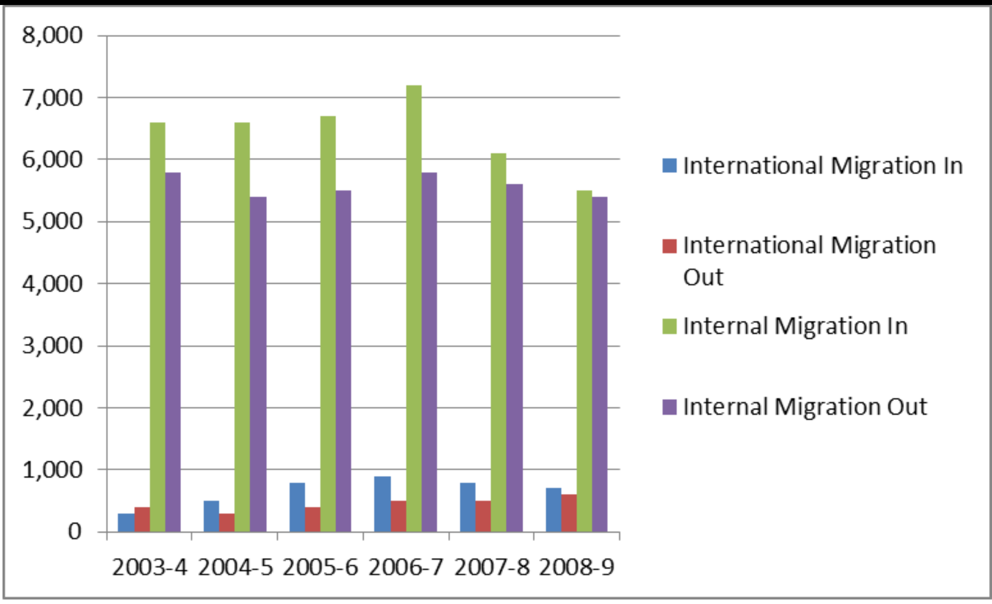


Source: ONS Mid-Year Population Estimates

3.9 It should be noted that past net migration will have been influenced and to some degree constrained by the Council's previous policies for housing provision, including the recent moratorium on housing provision and the Council's Local Plan policies for housing including Policy COM.1 which restricts development in the Main Rural Centres and Local Centre Villages to meeting housing needs where these have been specifically identified by the local community.

3.10 It is useful to consider the migration dynamics in a little more detail. Migration comprises internal and international migration. In Stratford-on-Avon the majority of migration is a result of internal migration within the UK, with most moves being of a relatively short distance (linked to people's existing ties to places linked to networks of friends and family, work, schools etc). This is shown in Figure 3.5.

Figure 3.5: Migration Dynamics, 2004 - 2009



Source: ONS Mid-Year Population Estimates

3.11 We have analysed net migration patterns to and from Stratford-on-Avon District over the five year period 2004/5 – 2008/9. The greatest flows are with the adjacent districts of Warwick, Redditch and Wychavon. There is a notable net flow from Warwick District to Stratford-on-Avon (195 persons per annum), but also strong flows from Solihull (200 per annum), Birmingham (180 persons per annum) and Redditch (95 persons per annum). The net flow from Coventry was minimal. Over the five year period examined, while there was a notable flow to and from London and the South East there was no net flow from London. There was a net inflow to the District from the South East region of 180 persons per annum.

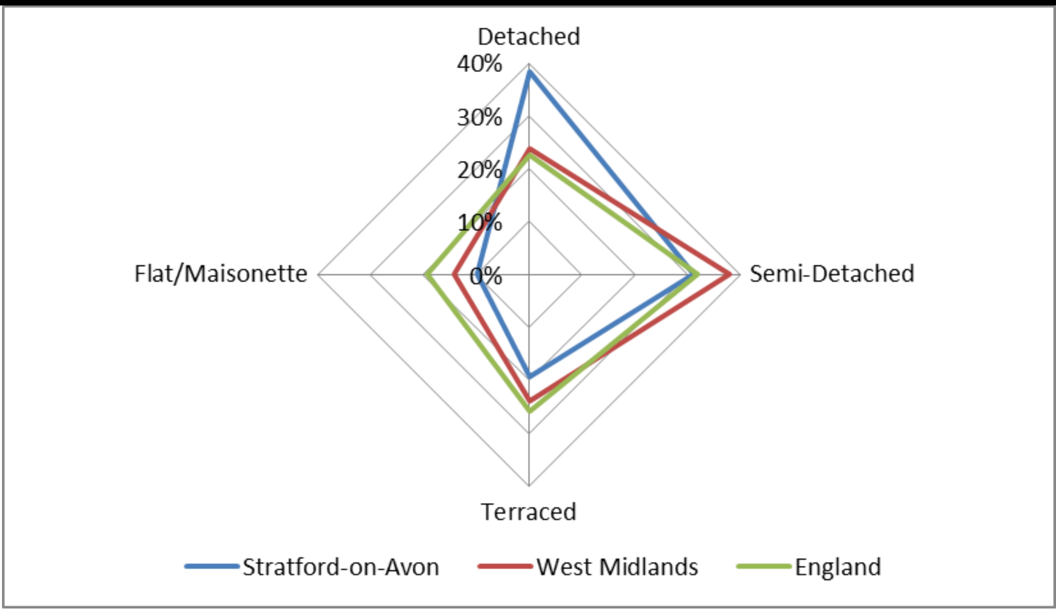
3.12 Future demographic trends will be influenced by both the population structure, which impacts on fertility and mortality rates and household structures; as well as migration trends, which are influenced by economic performance, lifestyle choices and housing supply. Changes in migration levels, and particularly the balance between in- and out-migration, can significantly impact on the rates of population growth. These are explored in further detail in later sections.

Housing Offer

3.13 86.7% of the housing stock is in private ownership[2] which is above the West Midlands average of 80.6% and the national average of 82.0%. The social housing sector contains 13.3% of properties and is below average in size. This likely contributes to affordability pressures. In 2001 11% of households in Stratford-on-Avon District were in the private rented sector, consistent with the national average, however we would expect this sector to have grown noticeably in size since then in common with national trends.

3.14 The district has a high proportion of detached housing, which made up 38% of the housing stock in 2001, compared to 24% across the West Midlands and 23% nationally. The proportions of other house types are correspondingly below average.

Figure 3.6: House Types, 2001



Source: Census 2001

3.15 Considering housing development in the District since 2001, 29% has been of flats and 71% of houses. It is therefore likely that the proportion of flatted properties may have increased slightly

[2] CLG, 2010

over this period, albeit recognising that new development over this period will account for a relatively small proportion of the total homes in the District.

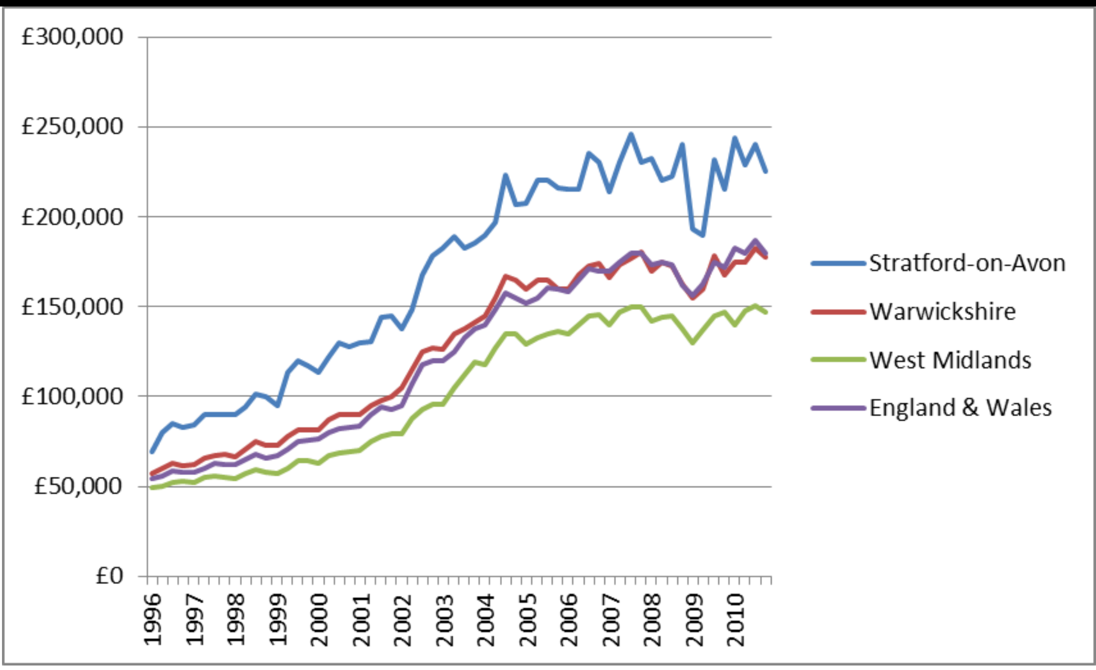
Housing Market Indicators

3.16 Spatial variations in house prices are indicative of relative demand. The average (median) house price in Stratford-on-Avon District was £225,000 in Q4 2010 which was 27% above the Warwickshire and 53% above the West Midlands regional average. Prices indicate that housing demand is relatively stronger than in some other parts of the region. This reflects the quality of life offer, economic base and strategic accessibility.

3.17 House price changes are indicative of the balance between supply and demand. Over the decade to 2007, average house prices increased by 273% in the District. However the downturn in market confidence, a reduction in the availability of credit, more cautious attitudes to lending and the recent economic recession have combined to cause a market correction. House prices fell in Stratford-on-Avon District by -16% between Q4 2007 and Q1 2009. They have since recovered some of the lost ground, but remain just 2% below levels at the peak of the market in late 2007.

3.18 The graph below clearly indicates the structural break between trends in the period to 2007 and since.

Figure 3.7: House Price Trends



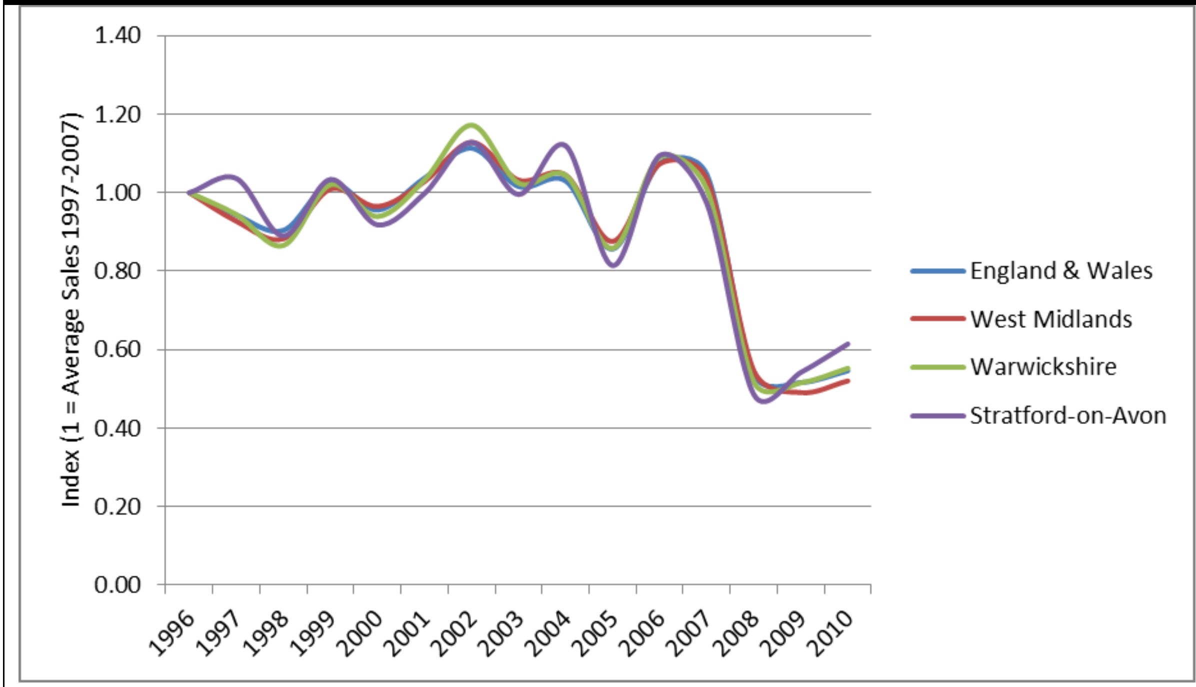
Source: HMLR/ CLG

3.19 At the time of writing, there are some risks that macro factors could result in some downward movement in prices as availability of credit and weak economic conditions continue to restrict demand. However the Stratford-on-Avon District market appears relatively more resilient; sales rates have recovered more strongly since 2008 (as indicated in Figure 3.8) and the housing offer is biased towards larger detached and semi-detached properties (as indicated in Figure 3.6) for which the buyer profile typically is of middle aged and older households with equity in existing homes. The market is thus less strongly affected by restrictions on mortgage finance, in terms of loan-to-value ratios, than other parts of the region.

3.20 Despite some reduction in prices, affordability remains a significant issue within the District. The ratio of lower quartile house prices to lower quartile earnings stood at 9.8 in 2010, which is above the 7.0 County average and significantly above average for the region (6.1) and England (6.7). Affordability pressures are influenced house prices as well as earnings levels, particularly of those working within the District.

3.21 Looking solely at prices can give a false appreciation of housing market conditions. Looking at sales, a very different picture is evident. Housing sales in 2010 were 45% down on average levels in the decade to 2007 in Stratford-on-Avon District, consistent with trends across the West Midlands. This represents a greater downturn in sales than seen nationally, and reflects a combination of factors but particularly mortgage finance constraints. The evidence does however suggest that a stronger recovery in sales in the District in 2010 relative to 2009 compared to wider areas.

Figure 3.8: Sales Trends



Source: HMLR/ CLG

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Housing Need

3.22 A Joint Housing Assessment was prepared for South Warwickshire in 2006 by Outside Consultants. It covered the districts of Warwick and Stratford-on-Avon and was informed by a survey of residents' housing needs. In 2009 the Council commissioned the consultants to update this and a Strategic Housing Market Assessment: Market Review was published for the District in August 2009. This took account of the change in housing market conditions since the original study in 2006.

3.23 The updated study found that 64% of households were unable to afford to buy an entry-level property in the District, but that private renting was more affordable and that 32% of households had an income insufficient to rent a 1-bed property privately and 45% had an income insufficient to rent a two-bed property. It found that although property prices had fallen between 2006-9, the availability of mortgage finance continued to restrict the ability of many households to buy a home.

3.24 The housing needs assessment identified an annual shortfall of 532 affordable dwellings. However if we interrogate the analysis, we find that it assumes that 64% of new households are unable to afford to buy or rent privately. In fact this appears from the report to the proportion who are unable to buy, and the analysis wrongly assumes that households are in housing need who might be able to rent privately without support. Moreover the Study does not consider the role which the Private Rented Sector (PRS) could play in meeting housing needs. Data from the Department for Work and Pensions indicates that in August 2009 there were 1,600 housing benefit recipients in the PRS (28% of total housing benefit recipients) suggesting that although housing in the PRS is not counted as affordable housing (as it is not available in perpetuity) in effect the sector is playing an important role in meeting the gap between supply and demand for affordable housing.

3.25 While we have some concerns around the analysis of housing needs, that there is significant need for new affordable housing is clear. There were 4,227 households on the Council's Housing Register in 2010.

3.26 The 2006 SHMA provided conclusions regarding need and demand for different sizes of property. It identified a significant shortfall of 2-bed owner-occupied housing, and to a lesser extent 3-bed owner-occupied housing and 2-bed private rented housing; and found that the highest levels of housing need were for 2- and 3-bed properties.

3.27 The projections in Section 4 and 5 of this report do not specifically take account of the backlog of housing need in the District but are instead driven by projections of population and household growth. While the housing needs evidence is important in demonstrating particular barriers to accessing market housing, the needs of some households in housing need are met in the private rented sector, supported by housing benefit. There is a limited background in needs figures being used in the development of RSS to determine specific housing targets, albeit that they form important background information. Moreover the ability to address housing need is influenced by the funding available to support delivery, meaning that in many circumstances it is unlikely to be possible to meet identified shortfalls.

Economic Performance

3.28 Overall Stratford-on-Avon District is a £2.4 billion economy[3]. Levels of productivity are close to the national average. It has a strong performing business base with 8,100 businesses and high levels of enterprise.

3.29 Levels of economic participation in the District are strong: 85% of the working-age population are economically active which is above average for the West Midlands and Great Britain (at 75% and 77% respectively). Within this, total unemployment in 2010 is estimated at 6% (compared to 8% nationally and 10% across the West Midlands). This picture is mirrored in levels of Job Seekers Allowance claimants, which stood at 1.5% compared to 4.7% across the West Midlands in April 2011.

3.30 Current data seems to suggest that employment in the District has held up relatively well through the recession. The employment rate for 2010 at 81.5% in Stratford-on-Avon District was substantially above both regional and national levels (67.8% and 70.4% respectively).

3.31 The commuting dynamics are interesting with strong commuting flows both in and out. The 2001 Census suggested an inflow of 18,900 people to work daily set against an outflow of 22,500 resulting in a net outflow of 3,600. However more recent evidence suggests that the District has an above average level of employment relative to its population, with a jobs density of 1.0 (one job per resident of working age) compared to 0.78 across the West Midlands and 079 nationally. Data from the Annual Population Survey in 2008 seems to suggest that commuting out to Warwick District has increased in proportional terms with more people commuting in from Warwick District, and overall a reduced proportion of people living and working locally (continuing longer-term trends).

3.32 There are a high level of skills in the local labour market with 39% of working-age residents qualified to degree level or equivalent (compared to 25% across the West Midlands), however there is evidence of out-commuting of people in higher skilled jobs. The skills profile of those working within the District is slightly lower. The District is an attractive place to live and this influences the skills profile. However on average those living in the District earn £5 more per week than those working within it.

[3] Estimated Gross Value Added (GVA), 2008: Stratford District Employment Land Review 2011

3.33 There is an important relationship between the housing market and economy which operates at a number of levels. Housing provision influences the labour market, as influencing the available supply of labour and skill levels. Housing supply constraints can potentially result in shortages of labour (overall and in certain sectors), which can contribute to recruitment difficulties and contribute to wage inflation; but can also lead to longer-distance commuting[4].

3.34 Housing provision can however contribute to economic growth, supporting jobs directly in the construction sector and local supply chains (in the short-term), and through supporting or increasing demand for local consumer-related service sectors.

4. Main Population Projections

Introduction

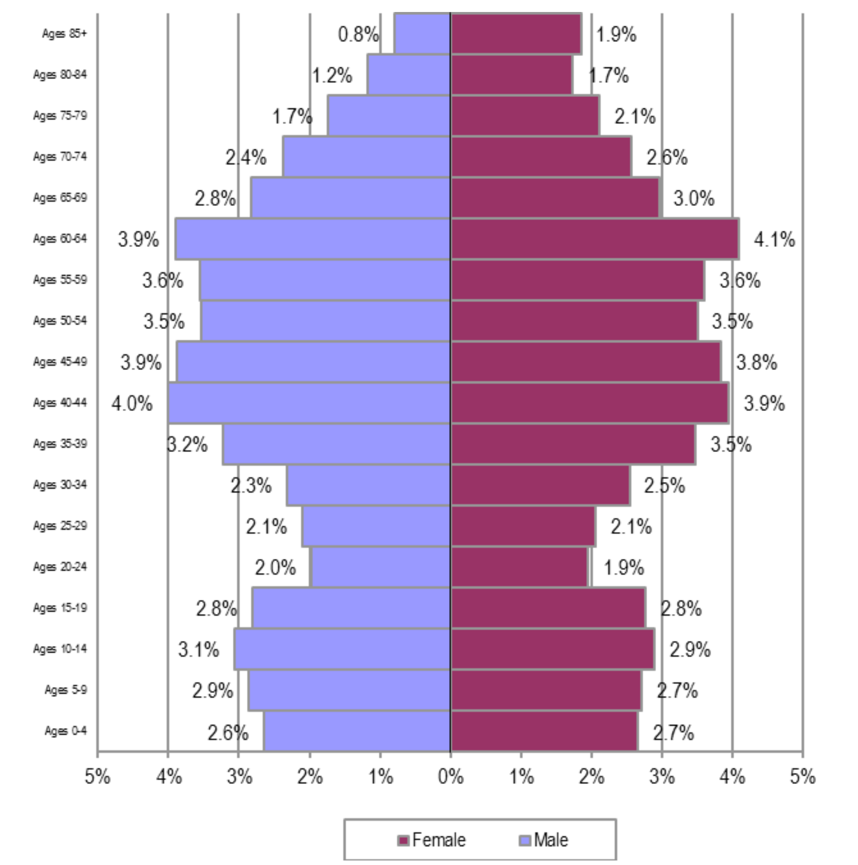
4.1 In this section we examine the structure of the existing population in Stratford-on-Avon, fertility and mortality rates and levels of migration into and out of the local authority area. This information is used to construct our principal trend-based population projections.

Baseline Population

4.2 The baseline for our projections is taken to be mid-2008 with the projection run for five year intervals over the period up to 2028. The estimated population profile as of 2008 has been taken directly from the ONS 2008-based population projections and is presented below. The overall population in mid-2008 was estimated to be 118,705 with slightly more females than males.

Figure 4.1 Population of Stratford-on-Avon (5 year age bands) – 2008

Age group	Male	Female
Ages 0-4	3,134	3,159
Ages 5-9	3,395	3,222
Ages 10-14	3,636	3,438
Ages 15-19	3,332	3,288
Ages 20-24	2,339	2,307
Ages 25-29	2,490	2,437
Ages 30-34	2,752	3,012
Ages 35-39	3,825	4,118
Ages 40-44	4,749	4,679
Ages 45-49	4,602	4,555
Ages 50-54	4,206	4,158
Ages 55-59	4,220	4,281
Ages 60-64	4,633	4,856
Ages 65-69	3,345	3,513
Ages 70-74	2,824	3,054
Ages 75-79	2,061	2,505
Ages 80-84	1,385	2,056
Ages 85+	940	2,199
All Ages	57,868	60,837



Source: Derived from ONS 2008-based population projections

Fertility Rates

4.3 To project the number of births we have projected age specific fertility rates. This is the number of births to women in particular age groups (taken in five year bands from 15 to 44). Below we have highlighted various data about fertility rates in Stratford-on-Avon (and other areas for comparative purposes) before moving on to set out the assumptions about future fertility used in our projection.

4.4 The Total Fertility Rate (TFR) is the average number of live children that a group of women would bear if they experienced the age-specific fertility rates of the calendar year in question throughout their childbearing lifespan. The data shows that Stratford-on-Avon District had a TFR of 2.0 in 2008 and 1.78 in 2009; this compares with a regional figure of 2.07 and a national average of 1.95 in 2009. The birth rate in Stratford-on-Avon District is below average.

Figure 4.2 Live Births by residence of Mother and Total Fertility Rate (2009)

Area	Live births	TFR
Stratford-on-Avon	1,070	1.78
Warwickshire	5,997	1.86
West Midlands	71,042	2.07
England	671,058	1.95

Source: Office for National Statistics

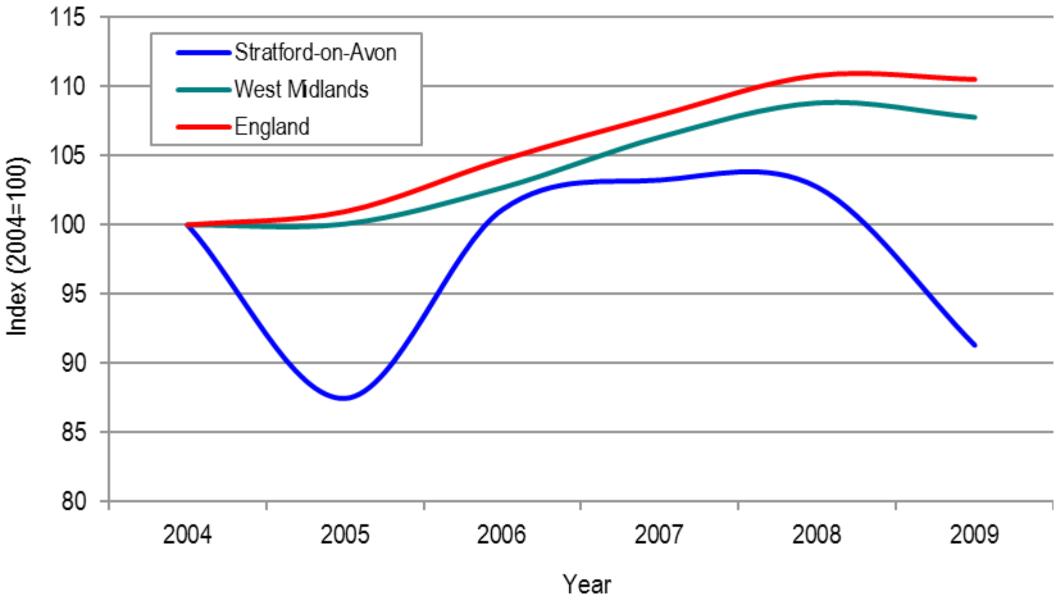
4.5 Local level figures can be quite variable year on year and we have therefore looked at the period from 2004. The table and figure below shows the number of live births in each of Stratford-on-Avon, the West Midlands and England. In the figure these have been based to 100 for 2004.

4.6 The data shows that the number of births in England has steadily increased over this period (with roughly the same pattern for the West Midlands). Since 2008, the number of births nationally and regionally has levelled off (or dropped slightly). The figures for Stratford-on-Avon are more variable with no discernable overall trend.

Figure 4.3 Live Births, 2004 to 2009			
Year	Stratford-on-Avon	West Midlands	England
2004	1,172	65,911	607,185
2005	1,025	65,958	613,028
2006	1,185	67,688	635,748
2007	1,210	70,098	655,357
2008	1,204	71,726	672,809
2009	1,070	71,042	671,058

Source: Office for National Statistics

Figure 4.4 Number of Live Births 2004 to 2009 (Indexed 2004=100)



Source: Office for National Statistics

4.7 We can also look at longer term trends. The figure below shows the TFR in England from 1991 to 2009. The data shows that fertility rates dropped between 1991 and 2001 and have been steadily rising since then. The data also shows a slight drop in TFR since 2008.

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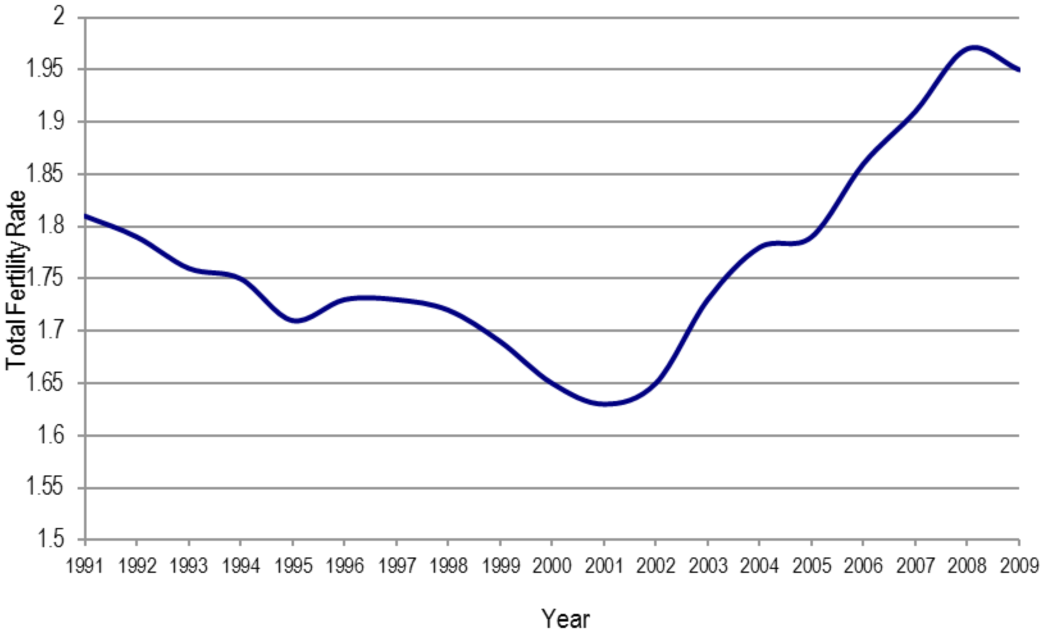
Figure 4.5 Total Fertility Rate in England 1991 to 2009



Source: Office for National Statistics

Fertility Rate Assumptions

4.8 Given the evident trends, as described above, it is clear that assumptions about future fertility rates will be difficult to accurately predict. Again we have drawn on information from ONS about future fertility rates. The general position taken by ONS currently is that fertility rates will be fairly constant over the next 25-years and at a level about 5% below 2008 estimates. For the purposes of modelling (particularly when looking 20 years forward) we have reduced the estimated TFR for 2008 of 2.0 in Stratford-on-Avon by around 5% and therefore assume a TFR of 1.90 (this figure is held constant throughout the projection period).

Age-Specific Fertility Rates

4.9 In addition to establishing overall fertility rates it is necessary to make an estimate of the distribution of births amongst women of different ages. We have assumed that the national distribution of Age-Specific Fertility Rates (ASFRs) applies to Stratford-on-Avon (suitably adjusted for differences in the overall fertility rate). The table below sets out the ASFRs by age. The data again remains unchanged throughout the projection period for our main analysis.

4.10 The data shows that the number of births is predicted to rise from 27 per thousand for females aged under 20 to peak at a little over 100 in the 25-34 age group (figures are births per year) before dropping off to reach around 12 per thousand in the over 40 age group. To be consistent with national projections the fertility rates for the youngest age group are applied to the female population aged 15-19 whilst the figures for the oldest age group are applied to the population aged 40-44.

Figure 4.6 Age Specific Fertility Rates in Stratford-on-Avon	
Age group	Rate (per thousand)
Under 20	27.0
20-24	74.8
25-29	102.9
30-34	107.7
35-39	55.7
Over 40	11.9

Source: Based on ONS data

Ratio of Male to Female Births

4.11 A further consideration required for projecting the population is the ratio between male and female births. For the purpose of our projection we have assumed a ratio of 1.05 male births per female birth which is consistent with national data for the period from 2004 to 2009.

Death Rates

4.12 Death rates input into the model are based on life tables produced by ONS for use in national projections. These are then adjusted to take account of life expectancy in the local authority area. A life table is a table which shows, for each age, what the probability is that a person of that age will die before their next birthday. Life tables are constructed separately for men and for women because of their different mortality rates.

4.13 For data on death rates we have looked at estimates of life expectancy at birth. The table below shows average life expectancy from January 2007 to December 2009 for Stratford-on-Avon, the West Midlands and England. The data shows that life expectancy in Stratford-on-Avon is better than found nationally and regionally.

Figure 4.7 Life Expectancy at Birth, 2007-2009		
Area	Males	Females
Stratford-on-Avon	79.5	83.0
West Midlands	77.5	81.9
England	78.3	82.3

Source: Office for National Statistics

4.14 When projecting changes in death rates in to the future, we are driven by the assumptions used in national projections. The national figures set out three options for mortality plus a scenario where there is no change in mortality (which has been called a 'special case' scenario). We believe that death rates are likely to improve and have therefore used the 'principal variant' scenario from ONS and applied this to data for Stratford-on-Avon. The ONS data looks at a period from 2008 to 2033 (i.e. 25 years) and we have assumed a linear improvement in death rates over this period.

4.15 The table below sets out the key scenario used in ONS projections and how this is estimated to apply to Stratford-on-Avon. The ONS figures are for 2008 and 2033 whilst we are principally looking at the period 2008 to 2028. The figures show improvements for both sexes with greater improvements in areas with currently lower life expectancy (consistent with ONS projections). In addition, for females the improvements in life expectancy are slightly lower than for males. This pattern is consistent with ONS assumptions '*that for most ages these improvements will gradually converge to common 'target rates' of improvement*'.

Figure 4.8 Life Expectancy, 2008 to 2033				
Year	England		Stratford-on-Avon	
	Male	Female	Male	Female
2008	77.9	82.0	79.5	83.0
2028	-	-	84.9	87.9
2033	83.5	87.1	-	-

Source: Based on ONS data

Migration

4.16 Probably the hardest assumption to make for a local level projection is around migration. Although the 2001 Census would be considered as the main source of information about the profile of migrants it is slightly problematic, particularly as international out-migration is not measured; and the Census is for one year only.

4.17 We have therefore looked at past trend data about the overall level of in and out-migration (including estimates of international out-migration) and data from ONS about the projected profile of in and out migrants (split between male and female and in 5 year age bands). These two pieces of information are discussed below.

Overall Level of Migration

4.18 The figure below shows annual estimates of net in-migration to Stratford-on-Avon over the past 15 years. The data shows how variable migration rates have been over this period with data for individual years ranging from an out-migration of 500 people to net in-migration of 1,700. Taking trends over the past ten years suggests an annual net in-migration of 960 - if we were to take a longer-term (15 year) view on migration then the average annual figure is 813 whilst data for the past five years is higher (at 1,140 per annum).

Figure 4.9 Net in-migration to Stratford-on-Avon 1994-2009

Period	Net in-migration	Period	Net in-migration	Period	Net in-migration
1994-95	400	1999-2000	600	2004-05	1,500
1995-96	200	2000-01	1,100	2005-06	1,500
1996-97	1,500	2001-02	800	2006-07	1,700
1997-98	1,000	2002-03	800	2007-08	800
1998-99	-500	2003-04	600	2008-09	200
Average 1994-99	520	Average 1999-2004	780	Average 2004-09	1,140
				Average 1999-2009	960
				Average 1994-2009	813

Source: Office for National Statistics

Migration assumptions used for modelling

4.19 To develop a trend based projection we have used the average level of net migration over the past ten years as a guide. Using information for just the last five years (as would be done by ONS in their trend based projections) shows figures which are atypical from longer-term trend whilst there are some concerns about the validity of data collected more than 10-years ago – it was around ten years ago that ONS improved their collection and reporting of migration data.

4.20 It is also worth noting that our projection runs from 2008 to 2028 and therefore we already have information about migration for the first year of this period (for 2009 – net in-migration of 200). This figure is therefore included as the migration level for all of our projection variants with different migration levels being modelled from 2009 onwards.

4.21 In addition to the trend-based migration projection we have modelled an alternative projection under the assumption that migration in the future will be at 75% of the trend-based level – net in-migration of 720 people per annum. This projection seeks to test the implications of a reduction in net migration relative to long-term trends.

Profile of Migrant Population

4.22 In looking at the profile of in and out-migrants in Stratford-on-Avon we have again drawn on information provided by ONS about their migration assumptions in the 2008-based population projections. Data from the ONS projections has been taken and then adjusted to meet the net migration levels required for analysis – to adjust the figures we have increased or decreased levels of in-migration until the net figure is met.

4.23 The table below shows annual migration patterns for the first and last 5-year periods of our projection. The data shows that the figures do not vary substantially over time although there is a general increase in both in- and out-migration (consistent with a growing population) whilst figures for older people tend to get larger later on in the projection (this is again consistent with a greater proportion of the population being in older age groups).

4.24 Because the projection is run from 2008 and we have data for the 2008-2009 period relating to migration (net in-migration of 200) the trend based assumption for 2008-2013 is slightly lower than for other time periods. For 2008-2013 the average annual level of migration is assumed to be 808 per annum with a figure of 960 assumed for other time periods.

Figure 4.10 Estimated Trend-based Levels of In- and Out-Migration by Age and Sex – Stratford-on-Avon												
	2008-2013						2023-2028					
Age group	Male			Female			Male			Female		
	In	Out	Net	In	Out	Net	In	Out	Net	In	Out	Net
Ages 0-4	242	151	91	248	148	100	255	158	97	261	154	108
Ages 5-9	168	110	58	147	101	46	186	120	67	164	109	56
Ages 10-14	126	109	17	124	108	16	139	116	23	136	118	19
Ages 15-19	183	423	-240	238	545	-307	187	462	-275	244	590	-346
Ages 20-24	445	426	19	643	583	60	425	415	10	615	544	71
Ages 25-29	375	345	31	491	456	35	376	348	28	491	452	39
Ages 30-34	353	281	72	436	323	113	408	313	95	498	367	131
Ages 35-39	319	218	101	320	253	67	378	251	127	372	281	91
Ages 40-44	286	214	72	253	203	50	292	207	85	245	192	54
Ages 45-49	220	177	43	206	169	37	200	156	44	180	146	34
Ages 50-54	173	130	43	161	139	22	172	127	45	157	137	20
Ages 55-59	127	118	10	140	111	29	156	139	17	167	130	37
Ages 60-64	125	109	15	136	98	38	143	124	20	157	109	48
Ages 65-69	99	85	14	83	79	4	112	94	18	94	86	8
Ages 70-74	57	50	8	62	53	9	72	62	10	76	66	10
Ages 75-79	39	31	8	57	35	21	60	51	9	80	56	25
Ages 80-84	36	23	13	60	34	25	57	44	13	83	56	27
Ages 85+	41	21	20	115	65	51	89	54	35	176	113	64
All Ages	3,415	3,022	393	3,917	3,502	415	3,708	3,241	467	4,198	3,705	493

Source: Derived from ONS 2008-based population projections

4.25 In translating the above figures into data for use in our projection modelling there are two other factors that need to be taken into account. These relate to the fact that we are running a projection model for five year periods and for five year age bands.

4.26 Firstly we need to recognise that within each five year age band people of certain ages are more likely to move than others. The key group affected by this is the 15-19 age group where typically the majority of migrants are aged 18 or 19 (normally reflecting moves to educational establishments). We have therefore adjusted figures on the basis of Census data to reflect a greater proportion of those in the 15-19 age group being aged 18 or 19.

4.27 Secondly, the data from ONS is for single years – when translating this into a projection over five years we also need to recognise that some people will be both an in- and an out-migrant to or from an area. Whilst this doesn't make any difference to net migration figures it will impact on the gross levels of both in- and out-migration. Again the figures have been adjusted to take account of likely multiple moves (based on the proportions of each age group who are in and out-migrants). This adjustment mainly affects those groups with high levels of both in- and out-migration (particularly the 20-29 age groups).

4.28 When projecting migration patterns for other scenarios we have used the figures in the above tables 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.

Population Projections: Initial Trend-Based Scenarios

4.29 The figure below shows the three initial population projections carried out – the first (PROJ 1) is based on our trend-based assumptions about migration (net in-migration of 960 people per annum) and the second (PROJ 2) is based on projecting net in-migration to be at 75% of current trend-based levels (i.e. 720 per annum). The third projection (PROJ 3) is modelled under the assumption of zero net migration - this projection sets levels of in and out-migration the same but does allow for changes in the population due to different age profiles of in and out migrants. In addition to these we have reproduced the 2008-based ONS projections for comparison.

Figure 4.11 Description of Projections used for Population Modelling

Projection	Description
PROJ 1	Trend based – linked to migration over past ten years
PROJ 2	Lower migration – net migration at 75% of trend-based levels
PROJ 3	Zero net-migration
ONS 2008-Based	2008-based ONS population projections

4.30 The figure below summarises the results from each of the above projections (for 5 year periods up to 2028). The table shows that under our main trend based projection, PROJ 1, the population is expected to rise by 10.4% to 2028. This represents growth in the population of around 12,400 people over the 20 years to 2028.

4.31 With the lower migration assumption (PROJ 2) we would expect to see a population increase over the 20-year period of 6.4% whilst the zero net-migration scenario shows a loss in population of around 6% over the 20-year period. This is consistent with earlier data showing that natural increase in the district has generally been negative over the past few years.

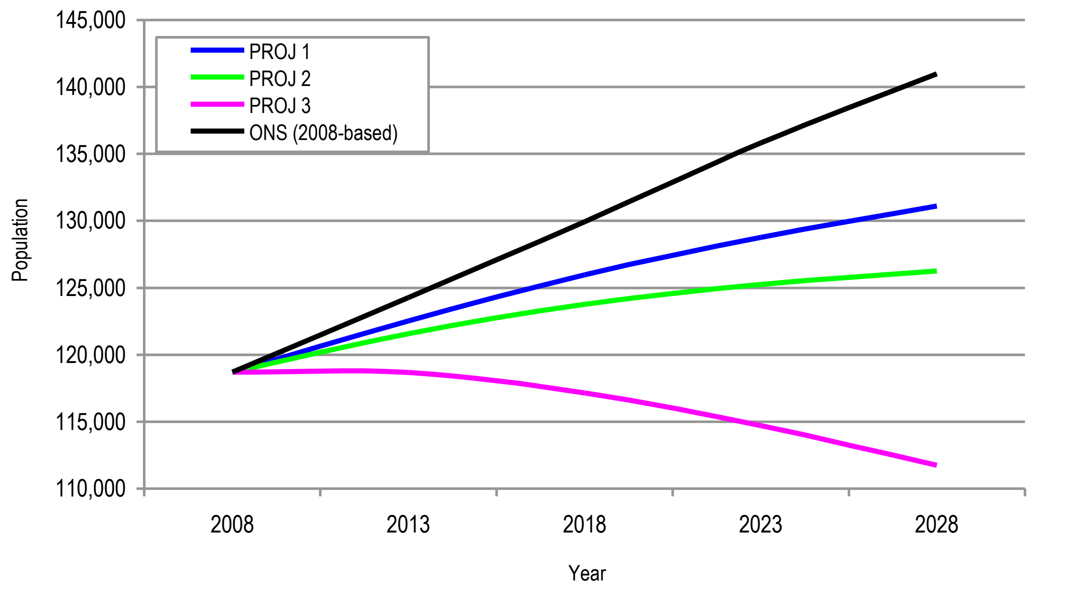
4.32 Finally, ONS projections show a higher level of population growth over the 20-year period. This is due to assumptions about migration with the ONS figures being based on the five-year period 2003-2008 which tended to show high migration relative to longer-term trends.

Figure 4.12 Population Estimates 2008 to 2028 – Initial Scenarios

	2008	2013	2018	2023	2028
PROJ 1	118,705	122,527	125,981	128,768	131,103
	0.0%	3.2%	6.1%	8.5%	10.4%
PROJ 2	118,705	121,567	123,770	125,255	126,261
	0.0%	2.4%	4.3%	5.5%	6.4%
PROJ 3	118,705	118,687	117,137	114,719	111,735
	0.0%	0.0%	-1.3%	-3.4%	-5.9%
ONS 2008-Based	118,705	124,279	129,950	135,809	140,993
	0.0%	4.7%	9.5%	14.4%	18.8%

4.33 The figure below shows the results of the initial demographic-driven projections in graphical form. The figure confirms that under our main trend based assumptions the population of Stratford-on-Avon is expected to continue to grow at an average of about 0.5% per annum.

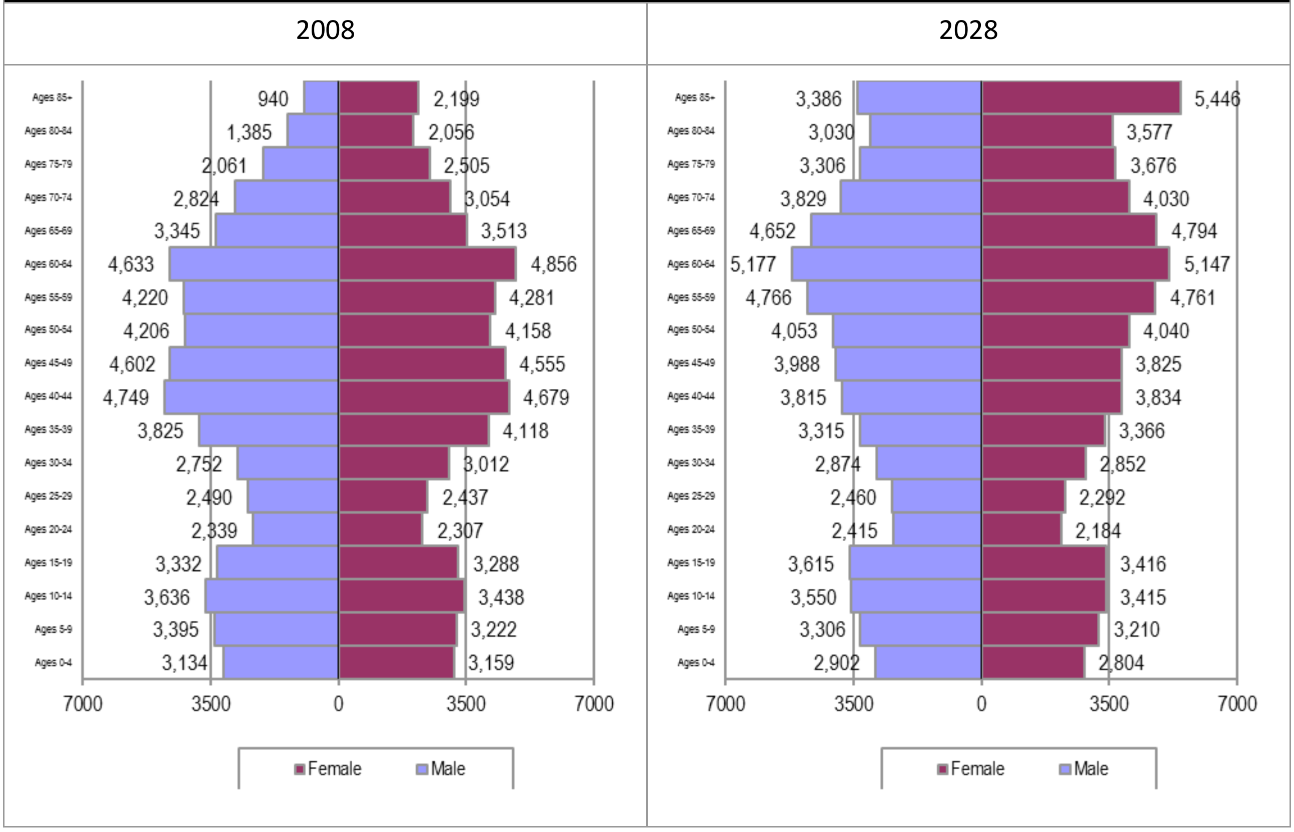
Figure 4.13 Population Change, 2008 – 2028 – Initial Scenarios



Main Trend-Based Projection, PROJ 1

4.34 The figure below shows population pyramids for 2008 and 2028 under our main trend based assumption (PROJ 1). The 'pyramids' clearly show the growth in population overall and highlight the ageing of the population with a greater proportion of the population expected to be in age groups aged 60 and over (and even more so for older age groups) - in particular the oldest age group (85+) shows an increase from 3,139 people to 8,832.

Figure 4.14 Distribution of Population 2008 and 2028 for PROJ 1 – Main trend-based Assumptions



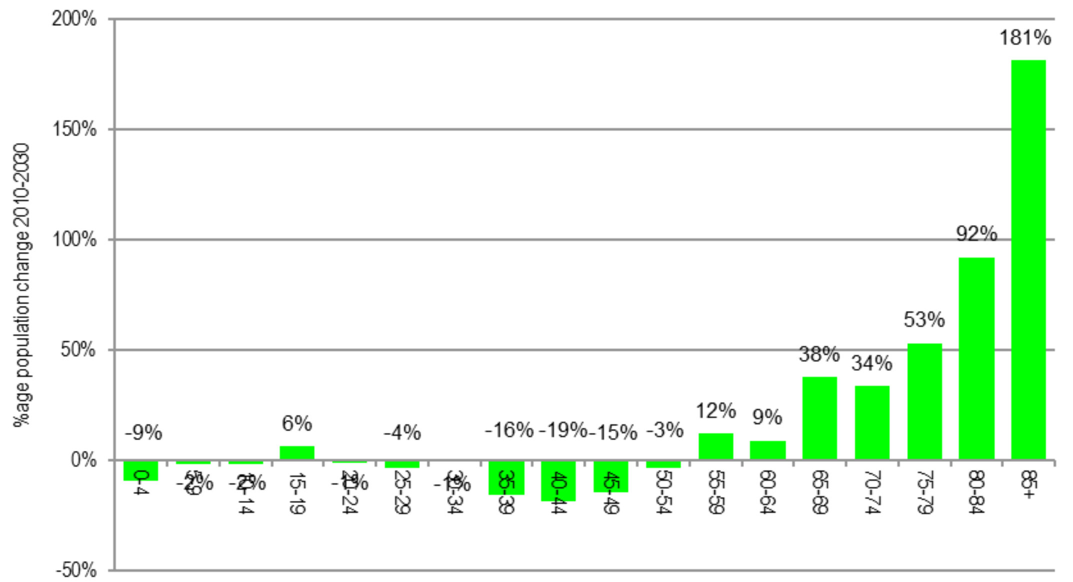
4.35 The figure below summarises the findings for key (15 year) age groups under PROJ 1. The largest growth will be in people aged over 60. Indeed there is significant growth projected to occur at the top end of the population structure. In 2028 it is estimated that there will be 50,049 people aged 60 and over. This is an increase of 16,678 from 2008, representing growth of 50%. The population aged 75 and over is projected to increase by an even greater proportion, 101%.

4.36 Looking at the other end of the age spectrum we can see that there are projected to be around 4% less people aged under 15 with a small increase in the 15-29 age group and population decline for each of the 30-44 and 45-59 age groups. These findings are particularly important as this influences the size of the economically active population and population catchment for schools.

Figure 4.15 PROJ 1 population changed 2008 to 2028 by five year age bands				
Age group	Population 2008	Population 2028	Change in population	% change from 2008
Under 15	19,984	19,186	-798	-4.0%
15-29	16,193	16,381	188	1.2%
30-44	23,135	20,054	-3,081	-13.3%
45-59	26,022	25,433	-589	-2.3%
60-74	22,225	27,629	5,404	24.3%
75+	11,146	22,420	11,274	101.2%
Total	118,705	131,103	12,398	10.4%

4.37 The figure below shows the percentage changes for each five year age group. The most stark trend is the increase in the population aged 85 and over (up 181%) which may have implications for future housing delivery as many of this group may require some form of specialist housing. In contrast we see decreases in most age groups up to age 54.

Figure 4.16 Forecast Population Change by Age Group 2008 – 2028 (PROJ 1)



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5. Economic Driven Population Projections

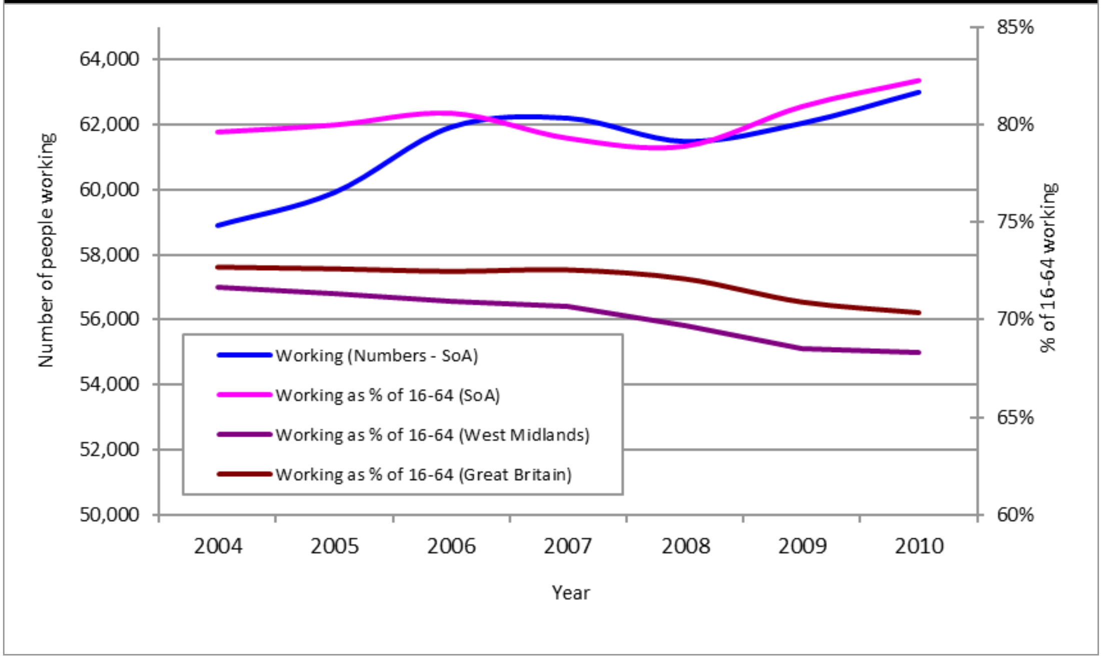
5.1 In this section we consider the relationship between the economy and the housing market in terms of aggregate demand for housing. We assess changes in the working-age population which would arise from the trend-based projection (PROJ 1) and the zero net-migration projection (PROJ 2). We then consider a number of potential scenarios for rates of employment growth to 2028, and consider what growth in the labour force would be necessary to support this. This is used to adjust levels of in-migration, recognising that employment growth will influence housing demand.

Employment Rates

5.2 It is necessary first to consider the demographic make-up of the current labour force in Stratford-on-Avon. The figure below shows data from Annual Population Survey about the number of people who are working and the proportion of people of working age who are working.

5.3 The data shows that the number of people working has generally increased over time whilst the employment rate has remained fairly static. Employment rates in the District are significantly above regional or national equivalents for the whole of the period studied.

Figure 5.1 Number of People Working and Proportion of Population Working



Source: NOMIS/Annual Population Survey

5.4 For our projections we want to estimate the number of people who are working by both age and sex and we have therefore drawn on information from the 2001 Census to give us a steer on the likely proportions of different groups who work and how this might change as the population changes over time. The figure below shows the total number of people in each age/sex group and the number who are working.

5.5 It should be noted that the Census does not record persons aged over 74 who might be in work and so it is possible that a small number of people who are working are not included in the table below.

Figure 5.2 Estimated Employment Rate by Age and Sex (2001)

Age group	Male			Female		
	Working	Persons	% working	Working	Persons	% working
Aged 16 to 19	697	2,218	31.4%	589	2,405	24.5%
Aged 20 to 24	1,877	2,295	81.8%	1,634	2,217	73.7%
Aged 25 to 29	2,423	2,688	90.1%	2,226	2,758	80.7%
Aged 30 to 34	3,393	3,649	93.0%	2,894	3,805	76.1%
Aged 35 to 39	3,926	4,176	94.0%	3,346	4,428	75.6%
Aged 40 to 44	3,831	4,140	92.5%	3,291	4,140	79.5%
Aged 45 to 49	3,636	3,947	92.1%	3,191	3,971	80.4%
Aged 50 to 54	4,054	4,525	89.6%	3,531	4,633	76.2%
Aged 55 to 59	3,306	4,083	81.0%	2,581	4,129	62.5%
Aged 60 to 64	1,960	3,295	59.5%	1,077	3,390	31.8%
Aged 65 to 69	658	2,782	23.7%	365	2,861	12.8%
Aged 70 to 74	286	2,316	12.3%	151	2,718	5.6%
Total	30,047	40,114	74.9%	24,876	41,455	60.0%
Aged 16-64	29,103	35,016	83.1%	24,360	35,876	67.9%

Source: NOMIS (from 2001 Census)

5.6 Using the information in this table we are able to calculate that around 75.4% of people in the age range 16 to 64 were working at the time of the 2001 Census. This figure is lower than more recent evidence suggests, as presented in Figure 5.1 based on the Annual Population Survey. In making an estimate of the number of people working to use in our projection we have therefore adjusted the profile of employment rates by age shown in Figure 5.2 to correspond to the more recent evidence of employment rates recorded by the Annual Population Survey and shown in Figure 5.1.

5.7 In addition, during the projection period the pensionable age for both men and women is due to change. The key changes can be summarised as:

- The State Pension age for women born on or after 6 April 1950 will increase gradually to 65 between 2010 and 2020;
- From 6 April 2020 the State Pension age will be 65 for both men and women; and
- State Pension age for men and women will increase from 65 to 66 between April 2024 and April 2026.

5.8 In addition we need to consider the scope for changes in the underlying employment rate as the projection develops. As shown in the data earlier in this section, there has been no discernable trend in the proportion of people working over the past few years whilst employment rates have been consistently high. This situation is different to that experienced regionally and nationally where there has been a notable decline in employment rates. In Stratford-on-Avon therefore there does not appear to be much scope for employment to increase without the requirement for additional people to fill any new jobs (due to current high employment rates).

5.9 For the purposes of our modelling we have therefore assumed that employment rates remain at current levels (other than adjustments for pensionable age). The changes to pensionable age have therefore been applied to employment rates as they become relevant during the projection period. The figures below show our adjusted employment for all age groups for 2008 and 2028. The adjusted figures also take account of NOMIS data for the period 2004 to 2010 about age specific employment rates.

Figure 5.3 Adjusted Employment Rates by Age and Sex – Stratford-on-Avon

Age group	Male			Female		
	2001 Census	Adjusted 2008	Projected 2028	2001 Census	Adjusted 2008	Projected 2028
Aged 16 to 19	31.4%	60.8%	60.8%	24.5%	48.8%	48.8%
Aged 20 to 24	81.8%	79.5%	79.5%	73.7%	76.9%	76.9%
Aged 25 to 29	90.1%	96.4%	96.4%	80.7%	83.6%	83.6%
Aged 30 to 34	93.0%	99.4%	99.4%	76.1%	78.8%	78.8%
Aged 35 to 39	94.0%	95.9%	95.9%	75.6%	78.6%	78.6%
Aged 40 to 44	92.5%	94.4%	94.4%	79.5%	82.7%	82.7%
Aged 45 to 49	92.1%	94.0%	94.0%	80.4%	83.6%	83.6%
Aged 50 to 54	89.6%	95.2%	95.2%	76.2%	90.5%	90.5%
Aged 55 to 59	81.0%	86.1%	86.1%	62.5%	74.2%	74.2%
Aged 60 to 64	59.5%	63.2%	63.2%	31.8%	37.7%	54.7%
Aged 65 to 69	23.7%	28.8%	31.8%	12.8%	11.3%	14.0%
Aged 70 to 74	12.3%	15.0%	15.0%	5.6%	4.9%	4.9%

Source: NOMIS (from 2001 Census) adjusted using NOMIS data

5.10 When we apply the employment rates to our base population for 2008 we find an estimated 60,749 people who are working, with an employment rate (per person aged 16-64) of 80.0%. Both of these figures are consistent with the trend data presented above.

Commuting Patterns

5.11 In addition to studying the age profile of people in work it is worthwhile to consider commuting patterns to and from Stratford-on-Avon. The table below summarises the data about commuting from the 2001 Census. The table shows that around 3,600 more people commute out of Stratford-on-Avon for work than commute in. The data also shows that around 64% of people working in Stratford-on-Avon also live in the area whilst around 60% of people who live in the area (and are working) actually work in the area.

5.12 ONS neighbourhood statistics provide 2008 based estimates of commuting patterns based upon the annual population survey (APS) - estimates are compared to the 2001 Census. As the APS is based upon sampling ONS states whether findings can be regarded as significant and generally this is not the case for Stratford-on-Avon.

Figure 5.4 Travel to work patterns to and from Stratford-on-Avon (2001)

Area	Live in Stratford-on-Avon work in…	Work in Stratford-on-Avon live in…	Net flow out of Stratford-on-Avon
Birmingham	2,651	1,365	1,286
Coventry	2,024	1,068	956
Redditch	1,823	2,894	-1,071
Solihull	1,469	1,185	284
Stratford-on-Avon	33,866	33,866	0
Warwick	6,511	3,344	3,167
Wychavon	751	2,262	-1,511
Rest of West Midlands	2,121	2,768	-647
East Midlands	885	798	87
South East	2,227	1,255	972
South West	954	996	-42
East	217	166	51
All other regions	862	793	69
Total	56,361	52,760	3,601
Total in/out migration for work	22,495	18,894	-
% self-containment	60.1%	64.2%	-

Source: 2001 Census (NB Figures exclude people working abroad or off-shore)

5.13 Additional employment creation could have a number of impacts. It could create demand for additional housing, leading to more people living and working within the area. It could provide more local job opportunities for those current commuting out of the area, reducing the number commuting out and the net level of out-commuting. Alternatively it could result in an increase in the level of people commuting into Stratford-on-Avon to work.

5.14 For the purposes of our projections we are only assessing the number of people living locally who are working and so the data about commuting patterns is mainly presented to assist an overall understanding of local employment. It is however important information when considering the potential impact of additional employment opportunities locally.

Initial Results

5.15 The tables below show the estimated number of people working under each of our three main projections. The data shows that under the main trend based assumptions (PROJ 1) the number of people working is projected to decrease by 959 from 2008 to 2028. This is a decrease of 48 people working per annum. It is also notable that the decrease is highest towards the end of the projection period.

Figure 5.5 Estimated Number of People Working 2008 to 2028 (PROJ 1)

Year	Number of People Working	Change in Working	Annual Change	Cumulative Change
2008	60,749	-	-	-
2013	60,513	-236	-47	-236
2018	60,765	252	50	15
2023	60,474	-291	-58	-276
2028	59,790	-684	-137	-959
Total/average	-	-959	-48	-

5.16 Under our alternative migration-based assumption (PROJ 2 – migration at 75% of trend-based levels) we see a larger drop in the number of people working. Over the 20-year projection period PROJ 2 shows a drop of 3,675 people working (184 per annum).

Figure 5.6 Estimated Number of People Working 2008 to 2028 (PROJ 2)

Year	Number of People Working	Change in Working	Annual Change	Cumulative Change
2008	60,749			
2013	59,927	-823	-165	-823
2018	59,451	-476	-95	-1,299
2023	58,446	-1,004	-201	-2,303
2028	57,075	-1,372	-274	-3,675
Total/average		-3,675	-184	

5.17 The figures derived under PROJ 3 (zero net-migration) show a substantial drop in the number of people working. Under this scenario the number of people working drops from 60,749 in 2008 to 48,928 in 2028 – a drop of 11,821 or 19%.

Figure 5.7 Estimated Number of People Working 2008 to 2028 (PROJ 3)

Year	Number of People Working	Change in Working	Annual Change	Cumulative Change
2008	60,749	-	-	-
2013	58,167	-2,582	-516	-2,582
2018	55,508	-2,659	-532	-5,241
2023	52,364	-3,144	-629	-8,385
2028	48,928	-3,436	-687	-11,821
Total/average	-	-11,821	-591	-

Component Analysis

5.18 As well as looking at the employment numbers related to a range of different migration driven scenarios we have looked at the number of people working and the population profile related to two additional scenarios as described below.

Figure 5.8 Description of additional migration lead projections

Projection	Description
PROJ 4	Zero employment growth – to assess the population change (and migration) required to maintain current employment levels
PROJ 5	Zero population growth – to assess the consequences on the size of the working population with no increase in population

Zero Employment Growth

5.19 Under PROJ 4 it can be seen that to maintain the size of the current workforce in the district there would need to be an increase in the population. This is due to the ageing of the population and the fact that as the number of older persons increases there are a lower proportion of people of working age. It is estimated that to maintain the workforce at 2008 levels would require an increase in the population of around 12% to 2028 – an increase of about 14,000 people (or 700 per annum). This would require migration above trends over the last 10 years.

Figure 5.9 Population Estimates 2008 to 2028 – PROJ 4 – Zero Employment Growth					
	2008	2013	2018	2023	2028
PROJ 4	118,705	122,866	126,762	130,008	132,813
	0.0%	3.5%	6.8%	9.5%	11.9%

Zero Population Growth

5.20 If there were no increase in the overall size of the population in the district – with the population remaining at 2008 levels - there would be a significant decrease in the number of people who are working (again mainly linked to the ageing population). Maintaining a stable population throughout the projection period would see an estimated loss of about 7,900 people working in the period 2008 to 2028 – an average loss of about 396 people per annum.

5.21 This scenario would result in a notably change in the age structure of the population, with a higher proportion of people of retirement age compared to the main trend-based projection, PROJ 1.

Figure 5.10 Estimated Number of People Working 2008 to 2028 (PROJ 5 – zero population growth)				
Year	Number of People Working	Change in Working	Annual Change	Cumulative Change
2008	60,749	-	-	-
2013	59,011	-1,738	-348	-1,738
2018	57,400	-1,611	-322	-3,349
2023	55,283	-2,117	-423	-5,466
2028	52,837	-2,446	-489	-7,912
Total/average	-	-7,912	-396	-

5.22 We conclude that **because of the ageing of the population, population growth of 700 per annum is needed just to maintain the number of people in work to 2008 levels without which the workforce would shrink at a rate of 395 persons per annum to 2028**.

Economic-Driven Projections

5.23 Having estimated the likely number of people working for each time period under our main trend-based and zero net migration projections we proceed by building a number of scenarios based on future employment growth.

5.24 As we have explained, a key question which has arisen in the course of this project is what level of net migration we might expect to see in Stratford-on-Avon. The initial trend based projections indicate that future population growth is particularly sensitive to assumptions regarding future levels of net migration. Migration to Stratford-on-Avon is driven by a range of factors, including employment opportunities and its quality of life offer.

5.25 While recognising that the reasons why people move to Stratford-on-Avon vary, we consider that economic performance will be a key driver of trends. We have sought to examine what level of migration the economy might be able to support, aiming to deliver a sustainable future for the area where there is balanced growth in housing and employment.

5.26 There is a considerable degree of uncertainty associated with any projections for economic performance related to the structural impact of the recent recession and uncertainty in how the economy might perform moving forward. The UK economy is struggling to shrug off the effects of the recession and it becoming clear that these effects are going to be with us for some time to come. The Bank of England has recently revised down its output forecasts, as has the Treasury, raising the level of uncertainty associated with predictive work. This heightens the degree of error associated with any economic forecasts.

5.27 For the purposes of this exercise we need to construct forecasts of labour demand rather than employment. In 2001 just 60% of people living in Stratford District worked with it. This is partly influenced by the geography of the district and the location of a number of larger employment centres close to its boundaries. On this basis it does not seem robust to at labour demand arising just from employment creation within the District's boundaries.

5.28 For the purposes of this exercise we have drawn on economic forecasts from Cambridge Econometrics derived from the West Midlands Integrated Policy Model (IPM). These forecast employment growth (total employment) by sector to 2030. Forecasts have been provided for each of the Districts in Warwickshire and for the West Midlands as a whole. Assuming that the proportion of the workforce which is drawn from Stratford-on-Avon District remains consistent to 2001 levels, we have used these projections to construct forecasts for labour demand.

5.29 The initial projections indicated a reduction in labour demand of 4,400 over the initial five year period to 2013. This did not seem realistic given wider labour market indicators. Based on triangulating available information we estimate a net drop in labour demand over this period for the District of nearer -1000 jobs. Our projections are based on this assessment. **In this regard the trend-based projection of labour demand should be regarded as indicative.** These projections of labour demand are shown below.

Figure 5.11: Projected Labour Demand

	2008-13	2013-18	2018-23	2023-28
Projected Labour Demand	-1000	945	1117	1430

Source: West Midlands Integrated Policy Model/ GL Hearn

5.30 Recognising the uncertainties associated with econometric modelling and issues related to availability of up-to-date data on employment trends, we have modelled two comparative scenarios to consider the housing implications of employment growth of 5% and 10% over the 2008 – 2028 period.

5.31 For comparative purposes in the pre-recession period, 2003 – 2008 employment in the District grew by 17%, albeit that it fell by 5% between 2008-9 with a net loss of 2600 jobs.

5.32 GL Hearn is currently leading preparation of an Employment Land Review for the District. This will in due course provide a more detailed assessment of economic prospects which can be used to assess the realism of alternative economic scenarios presented herein.

Figure 5.12 Description of economically driven projection

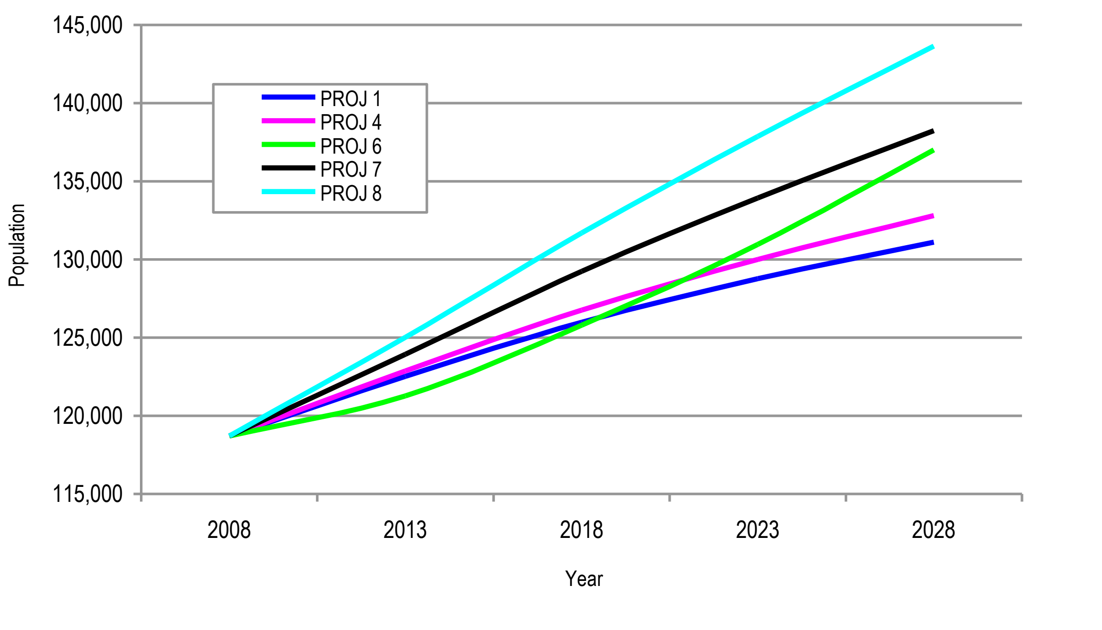
Projection	Description
PROJ 6	Trend-based growth in Labour Demand
PROJ 7	Growth of 5% in Labour Demand in the period 2008 to 2028
PROJ 8	Growth of 10% in Labour Demand in the period 2008 to 2028

5.33 The table below indicates the projected population change under these scenarios (along with our base demographic scenario (PROJ 1)). The data shows that to achieve employment growth in line with the projections by Cambridge Econometrics shows an increase in population of about 15% - this is close to the 5% employment increase projection (PROJ 7) – 16.4%. The projection looking at a 10% increase in the number of people living in the area who are working shows a much higher level of population increase – 21% over the 20-year period.

Figure 5.12 Population estimates 2008 to 2028 for Different Projection Variants					
Projection	2008	2013	2018	2023	2028
PROJ 1	118,705	122,527	125,981	128,768	131,103
	0.0%	3.2%	6.1%	8.5%	10.4%
PROJ 6	118,705	121,277	125,807	130,963	137,008
	0.0%	2.2%	6.0%	10.3%	15.4%
PROJ 7	118,705	123,939	129,235	133,937	138,229
	0.0%	4.4%	8.9%	12.8%	16.4%
PROJ 8	118,705	125,013	131,707	137,864	143,644
	0.0%	5.3%	11.0%	16.1%	21.0%

5.34 The figure below compares the economic-driven projections to those based on past demographic trends. We have also added the zero employment growth projection (PROJ 4) for comparative purposes.

Figure 5.13 Projected Population Growth, 2008 to 2028 (Five Scenarios)



6. Household (and Housing) Growth Projections

6.1 Having estimated the population size and the age/sex profile of the population the next step in the process is to convert this information in to estimates of the number of households in the area. To do this we use the concept of headship rates. For the purpose of this analysis we have used 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. This method is described in more detail below.

Methodology

6.2 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)). For the purposes of our analysis we have used data in the CLG 2008-base household projections, these take males to be the default HRP in cases where the household is headed by a couple.

6.3 This approach is different to that taken in the Census where defining the HRP is based on economic activity and age (ahead of sex). For example, in a household with only one adult (e.g. a lone parent household) the HRP is taken as that person. In a household with more than one adult (e.g. a couple household) the HRP is chosen on the basis of their economic activity (in the priority order of full-time job, part-time job, unemployed, retired, other). If both (or all) people have the same economic activity, the HRP is defined as the elder of the two, or if they are the same age, the first member on the form.

6.4 The table below shows headship rates derived from the 2008-based CLG projections 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 females).

Figure 6.1 Estimated Headship Rates by Age and Sex (2008 and 2028) – Stratford-on-Avon				
Age group	Male		Female	
	2008	2028	2008	2028
Ages 15-19	1.0%	1.1%	1.6%	1.7%
Ages 20-24	20.6%	20.8%	11.7%	13.5%
Ages 25-29	57.0%	55.1%	15.4%	17.8%
Ages 30-34	82.1%	82.9%	19.8%	26.3%
Ages 35-39	88.5%	87.7%	18.7%	23.9%
Ages 40-44	91.2%	91.5%	18.2%	19.5%
Ages 45-49	93.6%	93.1%	18.0%	18.0%
Ages 50-54	95.4%	93.9%	17.7%	20.5%
Ages 55-59	96.8%	96.5%	19.0%	23.9%
Ages 60-64	97.5%	95.8%	21.3%	25.2%
Ages 65-69	98.1%	97.5%	28.8%	30.1%
Ages 70-74	97.7%	97.1%	35.8%	34.3%
Ages 75-79	96.8%	96.7%	51.1%	42.9%
Ages 80-84	94.2%	94.6%	61.0%	50.6%
Ages 85+	87.9%	90.5%	61.9%	55.8%

Source: CLG 2008-based household projections

6.5 When applying these headship rates to our population we derive an estimated number of households in 2008 of 51,318.

Findings for Main Projections

6.6 By applying these headship rates we find the following household estimates under our principal projections (PROJ 1 to PROJ 3). The data shows that under our trend based projection (PROJ 1) there will be an additional 505 households per annum in the period 2008 to 2028 (10,096 in total). The lower net migration projection (PROJ 2) shows an annual increase of just over 400 households per annum whilst under zero net-migration assumptions (PROJ 3) the growth in households is expected to be fairly small (only averaging 92 per annum over the period from 2008 to 2028). It should however be remembered that this scenario sees a significant drop in employment levels.

Figure 6.2 Estimated Household Growth under PROJ 1 to PROJ 3									
Year	PROJ 1			PROJ 2			PROJ 3		
	Total hhs	Change in hhs	Cum. change	Total hhs	Change in hhs	Cum. change	Total hhs	Change in hhs	Cum. change
2008	51,318	-	-	51,318	-	-	51,318	-	-
2013	54,123	2,805	2,805	53,722	2,404	2,404	52,521	1,203	1,203
2018	56,767	2,644	5,449	55,836	2,114	4,518	53,045	524	1,727
2023	59,124	2,357	7,806	57,636	1,800	6,318	53,175	130	1,857
2028	61,414	2,290	10,096	59,349	1,713	8,031	53,155	-19	1,837
Average PA	-	505	-	-	402	-	-	92	-

Estimated Household Growth under CLG Projections

6.7 Below we have provided an analysis of the growth in households estimated under the 2008-based CLG household projections (for Stratford-on-Avon). The data shows that these projections expect an increase in households of around 14,000 over the period from 2008 to 2028 – 704 per annum.

Figure 6.3 Estimated Household Growth under national household projections			
Year	CLG 2008-based household projections		
	Total households	Change in households	Cumulative change
2008	51,318	-	-
2013	54,777	3,459	3,459
2018	58,419	3,642	7,101
2023	62,053	3,634	10,735
2028	65,405	3,352	14,087
Average PA		704	

Component Projections

6.8 The data shows that under PROJ 4 (no change in the size of the workforce) the number of households is expected to rise from 51,318 in 2008 to 62,143 in 2028 – an average of 541 households per annum. This level of household growth is thus necessary just to maintain the current size of the labour force.

6.9 Under the no growth in population projection (PROJ 5) the increase in households is far lower (240 per annum) – it does however need to be remembered that under this scenario the number of people living locally who are also working is expected to drop significantly, with significant potential implications for economic performance and commuting patterns.

Figure 6.4 Estimated Household Growth under PROJ 4 and PROJ 5

Year	PROJ 4			PROJ 5		
	Total hhs	Change in hhs	Cum. change	Total hhs	Change in hhs	Cum. change
2008	51,318	-	-	51,318	-	-
2013	54,264	2,946	2,946	53,097	1,779	1,779
2018	57,095	2,831	5,777	54,384	1,287	3,066
2023	59,649	2,553	8,331	55,316	931	3,998
2028	62,143	2,494	10,825	56,128	812	4,810
Average PA	-	541	-	-	240	-

Economic Projections

6.10 As well as estimating the number of household from our trend based projections we can apply the same process to our economically driven projections (PROJ 6 to PROJ 8). Household estimates from each of these are shown below.

6.11 The data shows that under PROJ 6 (Trend-based Employment Growth) the number of households is expected to rise from 51,318 in 2008 to 63,965 in 2028 – an average of 632 households per annum. To achieve 5% employment growth in the 20-year period would see a projected increase in households of 657 per annum with this figure rising to 772 per annum with a 10% employment increase.

Figure 6.5 Estimated Household Growth under PROJ 6 to PROJ 8									
Year	PROJ 6			PROJ 7			PROJ 8		
	Total hhs	Change in hhs	Cum. change	Total hhs	Change in hhs	Cum. change	Total hhs	Change in hhs	Cum. change
2008	51,318	-	-	51,318	-	-	51,318	-	-
2013	53,601	2,283	2,283	54,712	3,394	3,394	55,160	3,842	3,842
2018	56,700	3,099	5,382	58,136	3,424	6,818	59,177	4,017	7,859
2023	60,073	3,373	8,755	61,312	3,176	9,994	62,975	3,799	11,657
2028	63,965	3,892	12,647	64,452	3,140	13,134	66,761	3,786	15,443
Average PA	-	632	-	-	657	-	-	772	-

Vacant dwellings

6.12 The analysis so far has concentrated on the number of additional households and has then translated this into an estimate of the number of additional homes required. 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 with figures shown in the table below. This is intended to allow for frictional turnover in new stock.

Figure 6.6: Estimated annual housing numbers with 2.5% vacancy allowance (to 2028)		
Projection variant	Household growth	Annual requirement with vacancy allowance
PROJ 1	505	517
PROJ 2	402	412
PROJ 3	92	94
PROJ 4	541	555
PROJ 5	240	246
PROJ 6	632	648
PROJ 7	657	673
PROJ 8	772	791
CLG 2008-based household projections	704	722

6.13 The current vacancy rate within the District was recorded at 3.1% compared to 2.8% at the regional and national levels in 2010. We consider that a vacancy rate of between 2.5 – 3% is required to support turnover of properties within the housing market. The District's vacancy rate is not materially above this, and there the local authority is likely to have a limited ability to influence the level of vacant properties. Against this context, we do not consider it appropriate to assume that existing vacant properties could contribute to housing supply over the plan period.

Implications of 'Option 1' numbers

6.14 For comparative purposes we have assessed the demographic implications of the Option 1 housing target of 280 dwellings per annum included within the draft RSS Phase 2 Review. This target was based on a substantial redistribution of housing requirements at a regional level to support the Metropolitan Urban Areas (MUAs) and restrict development elsewhere. This scenario models the implications of development at the Option 1 level of 280 dwellings per annum.

Figure 6.7: Description of housebuilding rate projection

Projection	Description
PROJ 9	Annual housebuilding of 280 units per annum in the period 2008 to 2028

6.15 In carrying out this projection the growth in dwellings is fixed with the growth in households estimated to be slightly lower than this (due to the 2.5% vacancy allowance). The key outputs from this model will be to understand the implications of a particular housebuilding rate on the population and economy and below we have provided tables to look at these two issues.

6.16 The first table below shows estimated population change under the housebuilding scenario. We see an increase in population over the twenty year period of about 1.3%. This scenario would however see a large drop in the number of people living in the area who are working. As the second table below shows; under this scenario it is projected that the number of people working will drop by 11.6% over the 20-year period.

Figure 6.8: Population estimates 2008 to 2028 for housebuilding rate scenarios

Projection	2008	2013	2018	2023	2028
PROJ 9	118,705	120,373	121,020	120,887	120,239
	0.0%	1.4%	2.0%	1.8%	1.3%

Figure 6.9: Number of people in employment - 2008 to 2028 for housebuilding rate scenarios					
Projection	2008	2013	2018	2023	2028
PROJ 9	60,749	59,197	57,816	55,925	53,697
	0.0%	-2.6%	-4.8%	-7.9%	-11.6%

Implications of RSS Panel Numbers

6.17 For comparative purposes we have also assessed the demographic implications of the housing target of 375 dwellings per annum (7,500 over the plan period) as recommended by the RSS Panel Report and taken forward in the Council's 2010 Draft Core Strategy. This scenario models the implications of development at the 2010 Draft Core Strategy levels of 375 dwellings per annum.

Figure 6.10: Description of housebuilding rate projection	
Projection	Description
PROJ 10	Annual housebuilding of 375 units per annum in the period 2008 to 2028

6.18 In carrying out this projection the growth in dwellings is fixed with the growth in households estimated to be slightly lower than this (due to the 2.5% vacancy allowance). The key outputs from this model will be to understand the implications of a particular housebuilding rate on the population and economy and below we have provided tables to look at these two issues.

6.19 The first table below shows estimated population change under this second housebuilding scenario. We see an increase in population over the twenty year period of about 5%. This scenario would however still see a large drop in the number of people living in the area who are working. As the second table below shows; under this scenario it is projected that the number of people working will drop by 7.6% over the 20-year period.

Figure 6.11: Population estimates 2008 to 2028 for housebuilding rate scenarios					
Projection	2008	2013	2018	2023	2028
PROJ 10	118,705	121,235	123,006	124,041	124,586
	0.0%	2.1%	3.6%	4.5%	5.0%

Figure 6.12: Number of people in employment - 2008 to 2028 for housebuilding rate scenarios					
Projection	2008	2013	2018	2023	2028
PROJ 10	60,749	59,724	58,996	57,745	56,136
	0.0%	-1.7%	-2.9%	-4.9%	-7.6%

Combined Results

6.20 The headline results of all of the scenarios in terms of population, housing requirements (i.e. including a vacancy allowance) and employment numbers between 2008 and 2028 are summarised below. The first table shows annual figures with the second table showing these figures for the full twenty year projection period. Firstly we summarise the nine projections carried out:

- PROJ 1 – Main trend based projection
- PROJ 2 – Lower net in-migration (at 75% of trend-based levels)
- PROJ 3 – Zero net migration
- PROJ 4 – Zero employment growth
- PROJ 5 – Zero population growth
- PROJ 6 – Trend-based growth in Labour Demand
- PROJ 7 – 5% growth in labour demand from 2008 to 2028
- PROJ 8 – 10% growth in labour demand from 2008 to 2028
- PROJ 9 – Housebuilding at 280 units per annum
- PROJ 10 – Housebuilding at 375 units per annum

Figure 6.13: Summary of projections 2008 to 2028 - annual						
Projection	Population growth		Housing numbers		Employment growth	
	Per annum	% change	Per annum	% change	Per annum	% change
PROJ 1	620	0.5%	517	1.0%	-48	-0.1%
PROJ 2	378	0.3%	412	0.8%	-184	-0.3%
PROJ 3	-349	-0.3%	94	0.2%	-591	-1.0%
PROJ 4	705	0.6%	555	1.1%	0	0.0%
PROJ 5	0	0.0%	246	0.5%	-396	-0.7%
PROJ 6	915	0.8%	648	1.2%	125	0.2%
PROJ 7	976	0.8%	673	1.3%	152	0.2%
PROJ 8	1,247	1.1%	791	1.5%	304	0.5%
PROJ 9	77	0.1%	280	0.5%	-353	-0.6%
PROJ 10	294	0.2%	375	0.7%	-230	-0.4%

Figure 6.14: Summary of projections 2008 to 2028 – total						
Projection	Population growth		Housing numbers		Employment growth	
	Total	% change	Total	% change	Total	% change
PROJ 1	12,398	10.4%	10,348	19.7%	-959	-1.6%
PROJ 2	7,556	6.4%	8,232	15.7%	-3,675	-6.0%
PROJ 3	-6,970	-5.9%	1,883	3.6%	-11,821	-19.5%
PROJ 4	14,108	11.9%	11,096	21.1%	0	0.0%
PROJ 5	0	0.0%	4,930	9.4%	-7,912	-13.0%
PROJ 6	18,303	15.4%	12,963	24.6%	2,492	4.1%
PROJ 7	19,524	16.4%	13,463	25.6%	3,037	5.0%
PROJ 8	24,939	21.0%	15,830	30.1%	6,074	10.0%
PROJ 9	1,534	1.3%	5,600	10.6%	-7,052	-11.6%
PROJ 10	5,881	5.0%	7,500	14.6%	-4,613	-7.6%

7. Implications for House Types

Introduction

7.1 As we have set out there are a range of factors which influence housing demand. These include: the existing housing stock; housing affordability; the accessibility of the area (and relationship to employment locations); demographic changes (including the scale of population growth and changes in the age structure); quality of place; and the economy (in terms of its influence on migration/ labour demand and on incomes). These factors play out at different spatial scales and impact aggregate housing demand and demand for different housing products.

7.2 This project has considered demographic drivers in detail, including how these relate to economic performance (in terms of its influence on migration trends). In this section we consider in more detail the implications of demographic drivers on demand for different housing products.

7.3 The analysis in this section seeks to use the information available about the size and structure of the population and household structures; and consider what impact this may have on the types and sizes of housing required in the future. For the proposes of this analysis we have looked at the required household split for PROJ 1, which is the principle trend-based demographic projection.

7.4 This assessment looks specifically at the implications of demographic trends. It is not intended to replicate the full analysis of factors affecting housing need and demand which is the purpose of a comprehensive Strategic Housing Market Assessment. As such its conclusions are purely indicative.

Implications of Demographic Change: Methodology

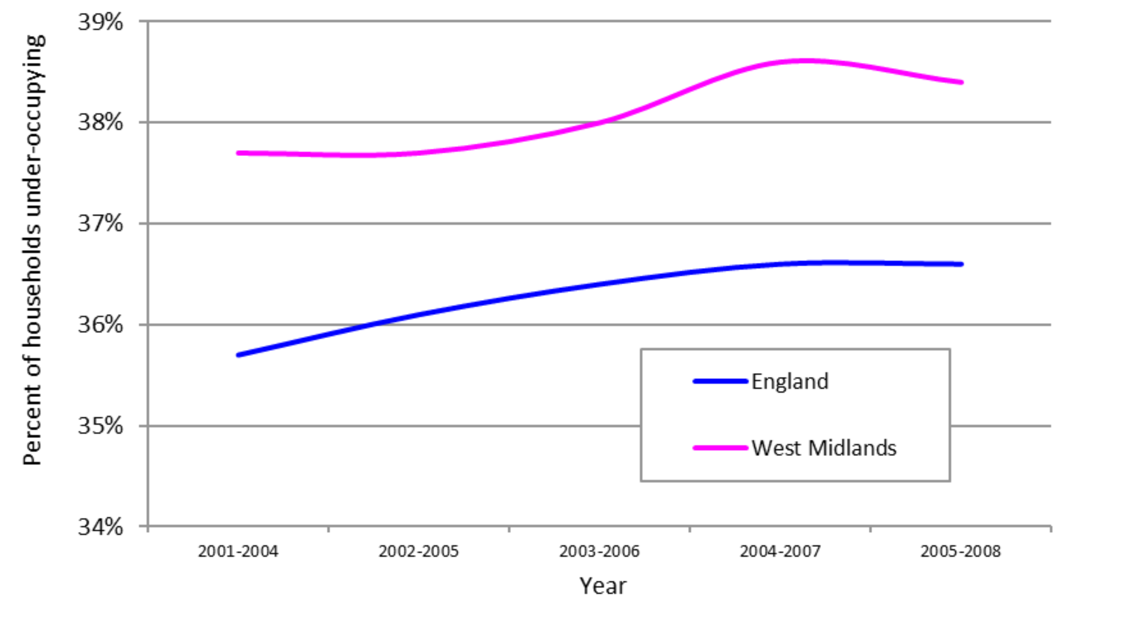
7.5 The starting point for our analysis is to consider the implications of demographic trends on demand, in the longer-term, for different types and sizes of housing.

7.6 As with converting population data into households, it is not a simple task to convert the net increase in the number of households in to a suggested profile for additional housing to be provided. The main reason for this is that in the market sector households are able to buy or rent any size of property (subject to what they can afford) and therefore knowledge of the profile of households in an area does not directly transfer into the types of property to be provided. The size of housing which households occupy relates more to their wealth and age than the number of people which they contain.

7.7 For example, there is no reason why a single person cannot buy (or choose to live in) a four bedroom home as long as they can afford it and hence projecting an increase in single person households does not automatically translate in to a need for smaller units. This is particularly important as a high proportion of the increase in single person households is made up of older households, who often have significant equity in their existing homes.

7.8 The figure below demonstrates this, using data from the Survey of English Housing about the proportion of households who under-occupy their dwellings. It can be seen that nationally over a third of households under-occupy with a figure of around two-fifths in the West Midlands. It is also notable that this has not changed to any significant degree over the past few years.

Figure 7.1 Proportion of Households Under-Occupying in England and the West Midlands



Source: Survey of English Housing 2002-2009

7.9 The data therefore suggests that it would be reasonable for our projection to assume that households will continue to occupy dwellings in the same way in the future as they do currently. Our projections for housing types and sizes are developed on this basis.

7.10 The general methodology is therefore to use the information derived in the projections (in this case PROJ 1, the main trend-based projection) about the number of household reference persons (HRPs) in each age and sex group and apply this to the profile of housing within these groups. The data for this analysis has been formed from a commissioned table by ONS (Table C1213). An extract of this is shown in the figure below.

7.11 The extract shows the number of male owner occupiers in selected age groups along with the size of accommodation that they occupy. By estimating how the number of HRPs in each age group changes over time we are also able to estimate the profile of housing that they would be likely to occupy.

7.12 The table shows for example that 28.6% of male HRPs aged 25 to 29 live in a home with six or more rooms, for the 45 to 49 age group this figure rises to 73.7%. The age profile of HRPs will therefore have an impact on the sizes of homes we would expect to be occupied. From the Commissioned Table information is available for all HRP age bands up to 85+ and for both sexes. In addition, information is available about the types of accommodation occupied (which we have split in to houses and flats).

Figure 7.2 Extract from ONS Commissioned Table C1213 – Male HRPs in Owner-Occupied Housing by Size of Dwelling (Stratford-on-Avon)

Dwelling size	Age of Household Reference Person									
	25-29		30-34		35-39		40-44		45-49	
	No.	%	No.	%	No.	%	No.	%	No.	%
1-3 rooms	160	14.2%	164	6.8%	138	4.5%	104	3.3%	75	2.5%
4 rooms	388	34.4%	459	19.1%	372	12.3%	245	7.8%	227	7.4%
5 rooms	257	22.8%	648	27.0%	603	19.9%	599	19.0%	504	16.5%
6 rooms	183	16.2%	445	18.5%	622	20.5%	598	19.0%	600	19.6%
7 rooms	80	7.1%	315	13.1%	465	15.3%	546	17.3%	530	17.3%
8+ rooms	60	5.3%	369	15.4%	834	27.5%	1,057	33.6%	1,125	36.8%
Total	1,128	100.0%	2,400	100.0%	3,034	100.0%	3,149	100.0%	3,061	100.0%

Source: ONS Commissioned Table C1205

7.13 When using the data from the Census we have made some adjustments to provide the best possible outputs. The key problem is that the Census only collects information about the number of rooms in a home rather than the number of bedrooms (which is more useful in considering dwelling sizes). Data about the number of rooms in a dwelling has therefore been adjusted to provide an estimate of the number of bedrooms. The table below shows the assumptions used to make this conversion. Information in the table has been based on a range of surveys where information about both bedrooms and rooms was collected.

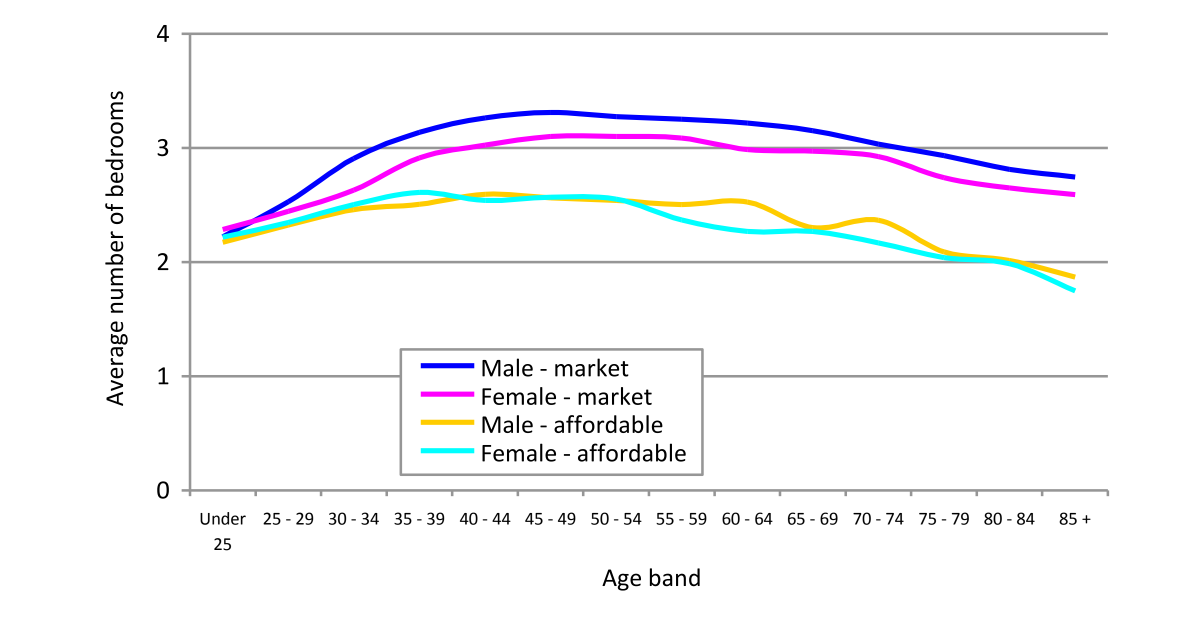
Figure 7.3 Relationship between the Number of Rooms and Number of Bedrooms

Number of rooms	Number of bedrooms				Total
	1 bedroom	2 bedrooms	3 bedrooms	4+ bedrooms	
1-3 rooms	76%	24%	0%	0%	100%
4 rooms	3%	79%	18%	0%	100%
5 rooms	0%	15%	83%	2%	100%
6 rooms	0%	5%	82%	13%	100%
7 rooms	0%	1%	40%	59%	100%
8+ rooms	0%	0%	12%	88%	100%

Source: JGC analysis of Survey Data

7.14 The figure below shows an estimate of how the average number of bedrooms varies by different ages of HRP and different sexes. The figure shows that in the market sector the average size of accommodation rises over time to typically reach a peak around the 45-49 age group. In the affordable sector this peak appears earlier (in the 35-44 age groups). After sizes peak the average dwelling size decreases – possibly due to a number of people down-sizing as they get older. It is also notable that the average size for affordable housing dwellings are lower than those for market housing whilst in market housing male HRPs live in larger accommodation for virtually all age groups, while there is no discernable trend in the affordable sector.

Figure 7.4 Average Bedrooms by Age, Sex and Tenure (Stratford-on-Avon)



Source: Derived from ONS Commissioned Table C1213

7.15 One final issue in the analysis is that the Census uses a different definition of household reference person to the CLG 2008-based household projections (upon which our projections are based). In the Census, determining an HRP takes account of economic status and age whilst the CLG projections automatically assign males as HRPs where a household is headed by a mixed sex couple. We have therefore made further adjustments to the Census data to match the definition of headship used in our projections.

Baseline Position

7.16 As of 2008 it is estimated that there were 51,318 households living in Stratford-on-Avon. Analysis of these households based on headship rates and the size, type and tenure of homes provides us with an estimate of the profile of the housing stock in 2008, as shown in the figure below.

7.17 The table shows that in Stratford-on-Avon an estimated 12.9% of households live in affordable housing with 87.1% being in the market sector (the size of the affordable sector has been fixed to the number of occupied social rented homes shown on the 2008 HSSA). The data also suggests that homes in the market sector are generally bigger than in the affordable sector with 77.5% having three or more bedrooms compared to 43.6% for affordable housing. The data about the split between flats and houses suggests that around 2% of homes in the market sector are flats compared with 35% of affordable housing.

Figure 7.5 Estimated Profile of Dwellings in 2008 by Size and Types – Stratford-on-Avon						
Size/type of housing	Market		Affordable		Total	
	Number	%	Number	%	Number	%
1 bedroom	2,033	4.5%	1,163	17.6%	3,196	6.2%
2 bedrooms	8,000	17.9%	2,574	38.8%	10,574	20.6%
3 bedrooms	20,612	46.1%	2,602	39.3%	23,214	45.2%
4+ bedrooms	14,048	31.4%	286	4.3%	14,334	27.9%
Total	44,692	100.0%	6,626	100.0%	51,318	100.0%
Houses	43,806	98.0%	4,302	64.9%	48,108	93.7%
Flats	886	2.0%	2,324	35.1%	3,210	6.3%
Total	44,692	100.0%	6,626	100.0%	51,318	100.0%
% in tenure	87.1%	-	12.9%	-	100.0%	-

Source: Derived from ONS Commissioned Table C1213

Tenure Assumptions and Projections

7.18 Our projections are derived from PROJ 1, our main trend-based projection. We have also assumed that 30% of additional housing will be affordable and 70% market.

7.19 The key assumption here is not a policy target but expected delivery. Our assumption is influenced by a range of factors. The Council's 2009 SHMA[5] provides evidence of considerable housing need. A Viability Study undertaken in 2009[6] supports a policy of requiring 35% affordable housing provision identifying that this would be achievable in most circumstances. In fact, it found that 5 of the 12 development scenarios assessed were viable, 5 were 'marginally viable' and four were not viable with 35% affordable housing. All of the sites assessed were for schemes of 20 or more units. The Viability Study did not consider (and therefore does not support) a policy requiring affordable housing on smaller sites (< 15 dwellings) and thus it is unlikely that a policy would cover small dwellings based on the current evidence base. Moreover affordable housing delivery often runs below targets set as a result of sites which fall below thresholds or cannot viable deliver affordable housing. On the basis of information available we believe that 30% is probably about the maximum

[5] Outside Consultants (2009) Strategic Housing Market Assessment: Market Update

[6] Baker Associates (2009) Development Viability Assessment Model

affordable housing delivery likely to be achieved. This for instance compares to 18.5% delivery over the plan period to date (2008-10).

7.20 The table below sets out the estimated number of households in each of market and affordable housing for the key time periods of 2008 and 2028. The figures are based on the household growth projected through our main trend-based projection and assume that 30% of new housing delivery will be in the affordable sector.

7.21 It can be seen that even by assuming 30% of additional housing to be affordable the total proportion of affordable housing by 2028 in Stratford-on-Avon still only represents 16% of the total stock, below the national average of around 19%, although the size of the affordable sector does increase.

Figure 7.6 Estimated Split between Market and Affordable Housing 2008 to 2028 with 30% Affordable Housing Delivery

Year	Market housing	Affordable Housing	Total	Affordable as % Total Stock
2008	44,692	6,626	51,318	12.9%
2028	51,759	9,655	61,414	15.7%

Findings: Market Housing

7.22 The table below shows estimates of the sizes and types of market housing required from 2008 to 2028. The data suggests a requirement for 7,067 additional market units with around half of these being three bedroom homes. In addition the data suggests that the majority of housing required will be in the form of houses (or bungalows)[7].

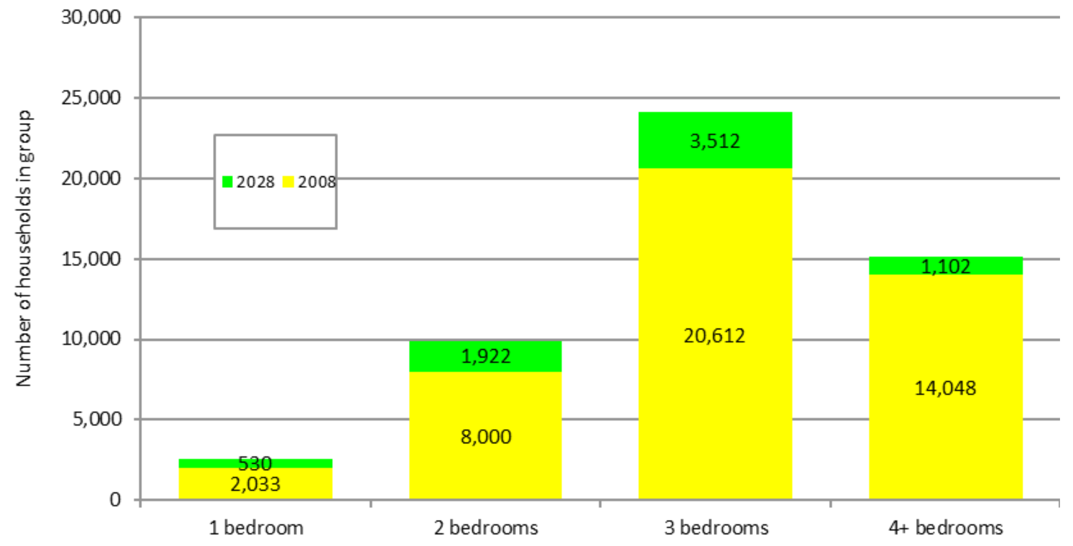
[7] It should be recognised that the type profile is influenced by the stock profile in 2001. We would attach greater weight to the profile of housing by size than the profile by house type as shown.

Figure 7.7 Estimated Size and Type of Dwellings Required 2008 to 2028 – Market Housing (Stratford-on-Avon)

Type/size	2008	2028	Additional homes 2008-2028
1 bedroom	2,033	2,563	530
2 bedroom	8,000	9,922	1,922
3 bedroom	20,612	24,124	3,512
4+ bedroom	14,048	15,150	1,102
Total	44,692	51,759	7,067
Houses	43,806	50,664	6,858
Flats	886	1,095	209
Total	44,692	51,759	7,067

7.23 The figure below shows how our estimated market requirement compares with the current stock of housing in the district. The data suggests a slight shift towards a requirement for smaller dwellings relative to the distribution of the existing stock. This is understandable given the ageing of the population.

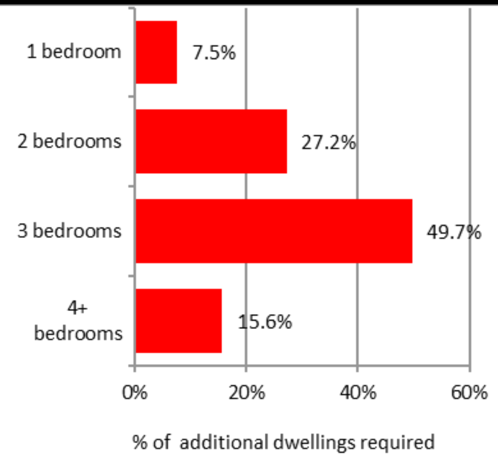
Figure 7.8 Impacts of Demographic Trends on Market Demand by House Size, 2008 to 2028 – Stratford-on-Avon



7.24 The graphs and statistics are based solely upon our modelling of demographic trends. It should be recognised that a range of factors including affordability pressures and market signals will continue to be important in understanding market demand.

7.25 Below we have provided a summary of estimates of market requirements by size for the period 2008 to 2028.

Figure 7.9 Size of Market Housing required 2008 to 2028 – Stratford-on-Avon



7.26 The analysis of demand for different sizes of homes in the market sector should be used to inform the mix of sites allocated within the LDF and for monitoring purposes. In accordance with national policies in PPS3 it is not intended to support specific planning policies relating to the mix of market housing.

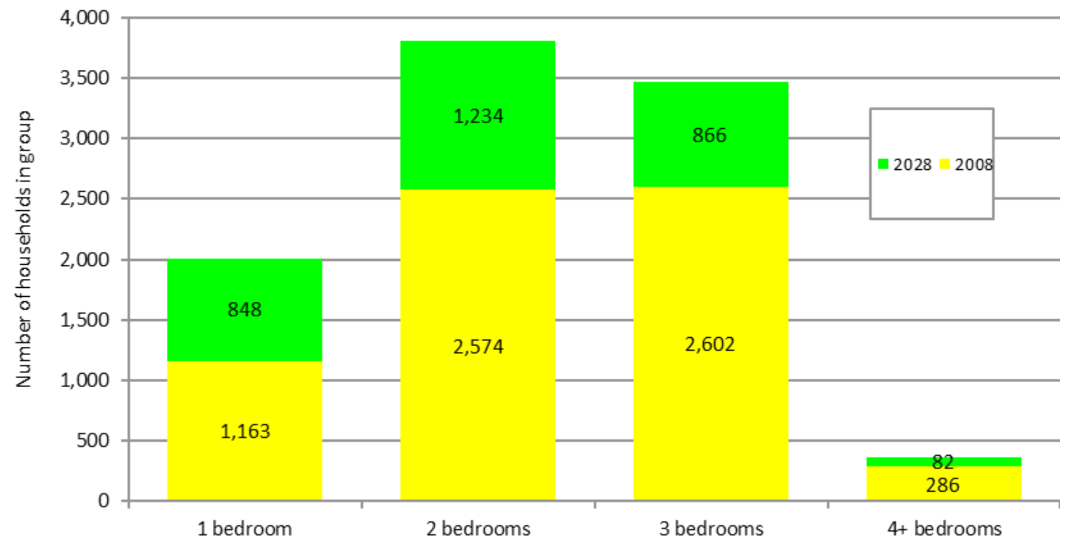
Findings: Affordable Housing

7.27 The table below shows estimates of the sizes and types of affordable housing required based on our understanding of demographic trends for Stratford-on-Avon. Looking at the key period between 2008 and 2028 the data suggests that the majority of the requirement is for one and two bedroom homes, although there is also a considerable requirement for three bedroom accommodation. In addition the data suggests that just under two-fifths of the housing required should be in the form of flats.

Figure 7.10 Estimated Size and Type of Dwellings Required 2008 to 2028 – Affordable Housing (Stratford-on-Avon)			
Type/size	2008	2028	Additional homes 2008-2028
1 bedroom	1,163	2,011	848
2 bedroom	2,574	3,808	1,234
3 bedroom	2,602	3,468	866
4+ bedroom	286	368	82
Total	6,626	9,655	3,029
Houses	4,302	6,145	1,843
Flats	2,324	3,510	1,186
Total	6,626	9,655	3,029

7.28 The figure below show how our estimated affordable requirement compares with the current stock of affordable housing. As with market housing, the data shows that there is a move towards a requirement for smaller dwellings.

Figure 7.11 Impacts of Demographic Trends on Affordable Housing Requirements by House Size, 2008 to 2028 – Stratford-on-Avon



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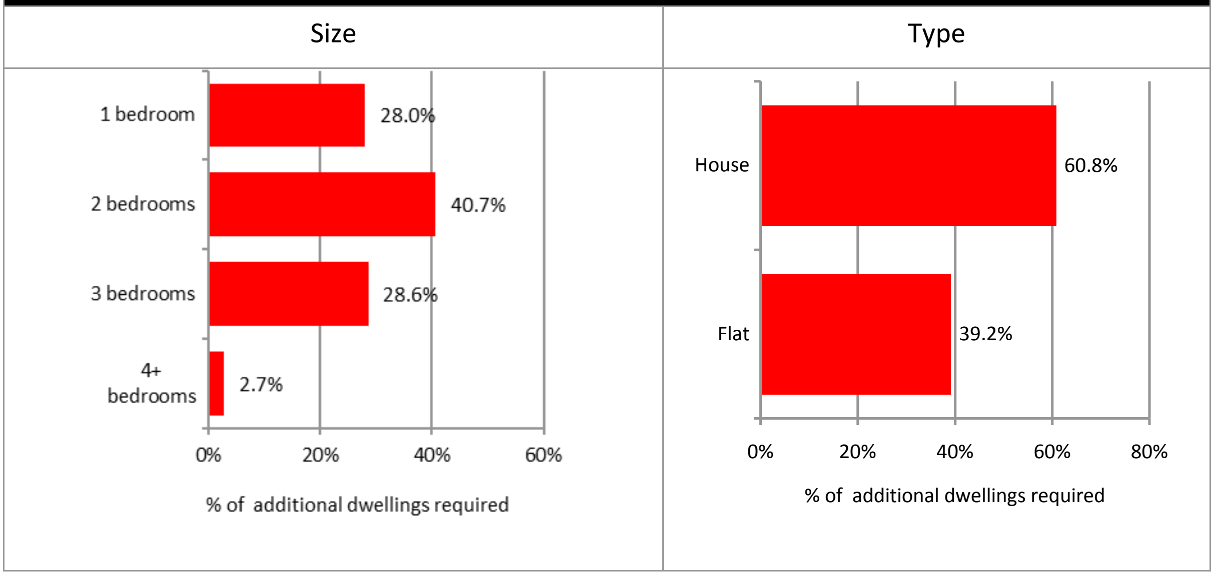
7.29 However in determining policies for affordable housing it should be borne in mind that 1-bed properties can lack the flexibility to accommodate households' changing requirements, whilst provision of larger family homes can often support improvements in the management of existing stock through release of other properties.

7.30 The figure below shows estimated size and type requirements in the affordable sector in the period 2008 to 2028.

Figure 7.12 Size and Type of Affordable Housing required 2008 to 2028 - Stratford-on-Avon



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8. Land Availability & Infrastructure

8.1 In this section we consider potential land available for development, as well as the potential infrastructure requirements based on information currently available.

Land Availability

8.2 A Strategic Housing Land Availability Assessment (SHLAA) report was prepared by consultants, Baker Associates, and published in July 2009. This updated the mid 2007 Assessment and provides an overview of potential land for residential development within Stratford-on-Avon District.

8.3 The SHLAA Study has considered the following sources of supply:

- Sites with planning permission;
- Sites without planning permission but which would be compliant with Local Plan Policy COM.1;
- Potential broad locations for development on the existing main settlements;
- Potential sites the development of which is not consistent with the Council's current planning policies but might otherwise be regarded as developable; and
- Potential development from 'windfall' sites not currently identified.

8.4 The SHLAA considers the period 2006-26 but includes details of completions in 2006-7 and 2007-8. We have therefore considered the 2008-26 period. It considered sites capable of accommodating 6 or more dwellings; and we have thus included a windfall allowance for development on smaller sites.

8.5 The Study indicates that sites with planning permission as at April 2008 were anticipated to yield 919 dwellings.

8.6 In addition to the above, a total of 450 proposed sites were assessed in the 2008 SHLAA and a further 35 through the 2009 SHLAA Review. The Assessment identifies a capacity for 296 dwellings on sites which could be considered available, suitable and achievable; with suitability judged on the basis of location and compliance with the adopted Local Plan Policy.

8.7 The Study also considered the potential for development on the edge of settlements (within 'broad locations' with some potential for future development as identified in the 2008 SHLAA). On specific sites within these areas, the SHLAA identifies potential for delivery of 6,065 dwellings. This assessment was limited to areas where land was being promoted for development. In most cases the development of these sites has not been accepted in policy terms.

8.8 For a number of other sites the Study identified that housing development might contribute to a sustainable pattern of development, but this is restricted by current policy. The potential yield from these sites was identified as 9,788 dwellings although it should be recognised that the development of many of these sites may not be acceptable.

8.9 The capacity of sites identified above was focused on Stratford-on-Avon and the eight Main Rural Centres within the District. The SHLAA has also considered the potential for development of sites elsewhere within the District that could come forward in line with the Council's 'local choice' policy (COM.1). Eleven such sites were identified in the District with the potential to provide 130 dwellings over the period to 2018.

8.10 An assessment of potential windfall development was also undertaken, considering potential housing delivery from unidentified sites. Windfall development is assumed to contribute to supply only towards the back end of the plan period, at a rate of 180 dwellings per annum (60 per annum on small sites with a capacity of 6 or less, and 120 per annum on large sites) in accordance with national policy set out in PPS3: Housing[8]. Applying this rate to the revised plan period to 2028, we calculate a supply from windfall sites of 1260 dwellings.

8.11 Drawing the assessment together, the total identified capacity of sites is as follows:

Figure 8.1: Dwelling Capacity identified in SHLAA

Sites with Planning Permission (Apr 2008)	919
Policy Compliant Large Sites	296
COM1 Sites	130
Windfall Allowance (to 2028)	1260
Sub-Total	*2605*
Sites within Broad Locations	6065
Policy Constrained Sites	*9788*
Total	*18,458*

8.12 In broad terms, there is a capacity for around 2,605 dwellings if the policy constrained sites are excluded, and more nearer 18,500 if these are included.

8 CLG (2011) Planning Policy Statement 3: Housing

8.13 The ‘policy constrained sites’ category includes a mix of sites, some of which are adjacent to the boundaries of existing settlements but were not contained within the ‘broad locations’ and some which are detached from the main built-up areas. Of these sites there is capacity for 6750 dwellings on sites which are adjacent to built-up area boundaries, although sometimes cross a bypass, are being promoted for development and according to the SHLAA could be considered suitable. This excluded sites where an existing use is protected (e.g. for employment, allotments, open space, or minerals) or which are detached from a settlement.

8.14 In identifying which sites should be taken forward for development there are some clear policy choices to be made which will need to consider, amongst other factors, the scale of development which is appropriate in different settlements over the period to 2028 as well as what infrastructure may be required and how it might be delivered.

8.15 We note that the Council’s 2010 draft Core Strategy consultation suggested that a figure of 7,500 homes could sustainably be accommodated in the District.

Infrastructure Requirements

8.16 The Council’s consultation draft Core Strategy in February 2010 included an assessment of infrastructure requirements to support the proposed level of development of 7,500 dwellings to 2026. It set out that “*providing necessary and adequate infrastructure to support new development is critical to achieving sustainable communities. This means meeting the diverse needs of people, including access for all members of the community to a wide range of community infrastructure, such as education, health, leisure and open space. It also means ensuring that development is supported by adequate transport networks and water supply and management systems and has sufficient sewage treatment capacity” (para 4.12.1).*

8.17 Our experience of infrastructure planning is that it is physical infrastructure provision – transport, highways and utilities – which might be a critical factor in influencing the level of development in the aggregate which the District could accommodate. This is not intended to underestimate the importance of delivery of necessary social, community and green infrastructure alongside new development but recognises that these factors and less likely, in our experience, to present critical barriers to achieving a certain housing requirement.

8.18 The consultation draft Core Strategy recognises that transport is a major issue in the District due to the high car usage and lack of alternative means of transport for many. The plan included a schedule of infrastructure projects. This included quality bus corridors, a new parkway station, bridge improvements and traffic management on Clopton Bridge, a park and ride on the south side of Stratford-upon-Avon, and a western relief road to the town; as well as improvements to the A46 and a bypass to Hockley Heath. No critical requirements for investment in utilities infrastructure were identified.

8.19 At the time of writing, no further information has been made available to GLH in regard to critical infrastructure issues which might impact on the level of development which is feasible over the plan period to 2028. We would recommend that Stratford-on-Avon District Council liaises with the Highways Agency, Warwickshire County Council and utilities providers to confirm any critical constraints which could affect the feasibility of different development options (as examined in the next section).

9. Assessment of Development Options

9.1 In this section we seek to appraise the various projections developed to consider what might be considered a robust and defensible level of housing provision to be taken forward through the Council's LDF Core Strategy.

9.2 PPS3 is clear that evidence of need and demand needs to be brought together with information on land availability, infrastructure constraints and requirements, and sustainability appraisal which must consider alternative policy options against social, economic and environmental objectives in determining housing requirements. Consultation with local communities and other stakeholders is also critically important. It is not the role for this report to bring together this full range of factors. However the Study has sought to consider on the basis of information currently available what might represent a robust and defensible approach for the District Council to consider moving forward. This should be subject to further testing through the Core Strategy preparation process.

Bringing Together the Evidence of Housing Requirements

9.3 National Planning Policy, as set out in PPS3, is clear that evidence of housing need and demand need to be considered, taking account of demographic trends (including the latest official projections) and projected economic growth forecasts.

9.4 The latest official Government projections (2008-based) project household growth of 14,440 dwellings (720 per annum). This is a reasonable projection of housing demand influenced by recent migration trends by age cohort. The migration assumptions are principally based on trends in the five years between 2003 – 2008.

9.5 However this projection assumes higher levels of net in-migration relative to the long-term trend over the past decade (1999-2009). It would seem ambitious given recent and prospective economic conditions at least in the first five years of the plan period (2008-13).

9.6 We consider that a realistic assessment of housing need and demand within the District would lie between 10,000 – 13,000 dwellings over the 20 year plan period (500 – 650 per annum). The lower end of this range is based on our projection of long-term demographic trends (PROJ 1) with the higher end based on projected trend-based economic performance (PROJ 6), taking into account the impact of the recent economic recession[9].

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[9] This is based on economic projections but with our upwards adjustment to take account of evidence of strong labour market performance in Stratford District through the recession

9.7 From an initial review, the SHLAA and consultation draft Core Strategy do not point to any intractable issues in regard to land supply or physical infrastructure that might challenge the feasibility of delivering this scale of development in the period to 2028. We recommend that further assessment is undertaken to confirm this.

9.8 Because of changes in the age structure of the population, our projections estimate that around 11,100 dwellings (555 per annum) would be required just to maintain the current size of the workforce. There is a risk that delivery of housing at level notably lower than this, because of expected changes in the age structure of the population, could result in skills shortages and recruitment difficulties for local businesses and restrain the economy (particularly as the district already has an above average jobs density) or an increase in commuting into the District to work.

9.9 The District's Corporate Strategy seeks to increase economic vitality across the District. The Sustainable Communities Strategy encourages economic growth. It does not seem sensible to plan on the basis of a fall in employment. On this basis from a technical point of view that a housing requirement between 11,000 – 13,000 dwellings over the 20 year plan period would seem appropriate (550 – 650 per annum).

9.10 The projections clearly indicate that levels of net migration to Stratford-on-Avon District have a significant impact on housing requirements. Levels of net in-migration between 2003/4 – 2007/8 averaged 1,220 persons per year. Our main trend-based projection assumes that this reduces to a level consistent with the longer-term average (1998/9 – 2008/9) of 960 per year: a reduction of over 20%. We have however also developed a projection based on a reduction in in-migration of 25% on the long-term trend (PROJ 1 levels). This results in a housing requirement for 8,230 dwellings (410 per annum), but results in a net loss of population of working age. This however would represent a policy-driven scenario rather than an assessment of need/demand.

Potential Housing Requirement Options

9.11 On the basis of the projections developed, we consider that the following scenarios should be considered in further detail:

OPTION 1: MAIN TREND-BASED PROJECTION

9.12 Our Main Trend-Based Projection, PROJ 1, is based on continuation of long-term migration trends, but a reduction in migration of 15% on short-term migration trends (2004-9). Delivery of 10,300 homes is required over the 20 year plan period (515 per annum). This is marginally above averages rates of development in the District between 2000-2010 (480 per annum) but broadly consistent with development rates in the pre-recession period.

OPTION 2: ECONOMIC-LED PROJECTION

9.13 Our main Economic-Led Projection, PROJ 6, is based on expected employment growth across Warwickshire and a continuation of existing commuting patterns where there is some net in-commuting to Stratford-on-Avon District to work. It assumes that the labour market performs in relative terms quite strongly through the recession. Delivery of 13,000 homes is required over the 20 year plan period (650 per annum). This represents what we consider to be a positive scenario planning for economic growth in the District.

OPTION 3: 25% REDUCTION IN NET IN-MIGRATION

9.14 The final option is 'policy driven' and represents planning for a 25% reduction in net migration relative to long-term migration trends (1999-2009). This could be justified as part of a sub-regional strategy to support regeneration of the Metropolitan Urban Areas, but would need to be supported by the wider approach adopted at this level. In the absence of a regional planning mechanism there are clear risks to this. Delivery of 8,200 dwellings is required over the 20 year plan period (410 per annum).

9.15 We assess these scenarios in further detail below against key sustainability criteria), and consider their implications in terms of potential land available for development and infrastructure requirements (where known).

Initial Sustainability Assessment

9.16 We present herein an initial and high level assessment of the sustainability implications of the three proposed housing development options outlined. Further assessment work will be required as the Core Strategy progresses, including detailed Sustainability Appraisal incorporating the requirements of the EU Strategic Environmental Assessment (SEA) Directive. In this context, this initial assessment can be regarded as only indicative.

9.17 The assessment focuses on the levels of potential housing development and does not consider how this development might be distributed spatially within the District. In this context it is difficult to be definitive regarding infrastructure requirements, or to provide a detailed assessment of social, economic and environmental impacts. In undertaking the assessment, we have specifically sought to limit our comments to those areas where we can be reasonably definitive, rather than to speculate as to potential impacts which could be influenced by where development is located or mitigated by robust planning.

Identifying Sustainability Objectives

9.18 We have developed a sustainability assessment framework which responds to the objectives of the Council's Corporate Strategy, Sustainable Communities Strategy, and previous draft Core Strategy Sustainability Appraisal. We have drawn together key objectives from these documents as relevant to assessing alternative options for housing provision within the District over the period to 2028.

9.19 The assessment framework is tailored to those objectives which are likely to be influenced by the overall level of housing development as opposed to those which might be influenced by the spatial choices as to where this development is located within the District.

9.20 The Sustainability Assessment considers the tensions between social, economic and environmental objectives, and assesses the contribution which the different options might make to delivery of sustainable development.

Stratford-on-Avon District Corporate Strategy

9.21 The key objectives of the Council's Corporate Strategy are as follows:

1. Addressing local housing need
2. A district where business and enterprise can flourish
3. Improving access to services
4. Minimising impacts of climate change

9.22 Under the first of these, the Council seeks to provide more housing at a price local people can afford, whilst ensuring that residents feel that they have more influence over development that takes place in their area. Consultation will clearly be important in determining the appropriate level of development to be taken forward within the Core Strategy.

9.23 The Corporate Strategy seeks to increase economic vitality across the District, the percentage of residents who find it easy to access local services, as well as to minimise the impacts of climate change and reduce the district's carbon footprint.

9.24 The Quality of Life in Warwickshire Survey 2010 clearly highlights concern over the impact of large scale housing development on in-migration. However the Corporate Strategy identifies that the vitality of the local economy is also an issue as is access to services; and that that concerns over housing development need to be balanced against the need for additional housing in order to address affordability, and to ensure that the economy is supported by a more balanced housing market.

9.25 The Council's Corporate Strategy sets out a positive framework for planning moving forward and seems to suggest that, as a minimum, some element of population growth in the District should be planned for in order to support local services and facilities. This would require delivery of a minimum of 5,000 dwellings over the 2008-28 plan period, equivalent to 250 dwellings per annum as identified in PROJ 5.

Stratford-on-Avon Sustainable Communities Strategy

9.26 The Stratford-on-Avon District Partnership's Sustainable Communities Strategy similarly identifies a number of key challenges which are of relevance to this exercise, including:

- an ageing population;
- a shortage of affordable housing;
- access to services in rural areas;
- a need for economic revitalisation, promoting stronger and higher value economic growth to achieve a reduction in out-commuting;
- managing new development; and
- reducing the District's carbon footprint.

9.27 The Sustainable Community Strategy's vision focuses on improving quality of life for everyone living within the District, supporting a thriving economy including more rural businesses and jobs and better paid jobs, and ensuring that there is enough affordable housing to retain young people.

9.28 Key objectives of the Strategy include to increase affordable housing delivery in rural areas, to encourage economic growth and change, to reduce the District's carbon footprint, and to preserve the District's distinct character. The Strategy specifically identifies that more affordable housing is required to counter an ageing population by keeping more young people within the District and by strengthening the economy by increasing the labour pool locally. It argues that creating a stronger economy with more jobs in the District will benefit the environment by reducing outward commuting.

Core Strategy Sustainability Appraisal

9.29 The Council is undertaking a Sustainability Appraisal, which incorporates the requirements of the EU Strategic Environmental Assessment Directive, alongside and to inform the development of the Core Strategy. A number of sustainability objectives have been identified. These are set out below:

- Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance;
- Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities;
- Protect, enhance and manage biodiversity and geodiversity;
- Reduce the risk of flooding;
- Minimise the district's contribution to climate change;
- Plan for anticipated levels of climate change;
- Protect and conserve natural resources;
- Reduce air, soil and water pollution;
- Reduce waste generation and disposal, and achieve the sustainable management of waste;
- Improve the efficiency of transport networks by increasing the proportion of travel by

sustainable modes and by promoting policies which reduce the needs to travel;

- Reduce barriers for those living in rural areas;
- Protect the integrity of the district's countryside;
- Provide affordable, environmentally sound and good quality housing for all;
- Safeguard and improve community health, safety and well being; and
- Develop a dynamic, diverse and knowledge based economy that excels in innovation with higher value, lower impact activities.

9.30 The objectives reinforce and develop those of the Corporate Plan and Sustainable Communities Strategy and include providing housing for all and support economic development. They promote a strategy that minimises the environmental impact of development and supports sustainable travel patterns, and services in rural areas and which protects and enhances the district's character.

How do housing growth levels influence these factors?

9.31 The Council's policies can influence the mix of housing delivered however the delivery of affordable housing is also likely to be affected by levels of funding available. Currently most affordable housing is effectively delivered through mixed tenure development schemes where private housing creates value and subsides the delivery of affordable housing, which the Council secures as a planning obligation through a Section 106 agreement. While recognising there are exceptions to this, including sites acquired and delivered directly by housing associations and sites which can be allocated specifically for delivery of affordable housing; in the current policy and funding climate it is highly likely that if policy seeks to reduce or limit overall housing delivery, the number of affordable homes delivered could also be expected to fall.

9.32 In the market housing sector, restraining housing supply is unlikely to impact upon housing demand and under-provision of housing in the longer-term could be expected to drive growth in house prices, further reducing the affordability of market housing, albeit that it should be recognised that price dynamics are also substantially influenced by macro-economic factors and the supply/demand balance across wider sub-regional housing markets. This said, we would argue that a policy solution to improving housing affordability needs to consider and address both total housing supply (housing numbers) as well as the tenure mix.

9.33 Looking at population structure, we have considered this in detail through the demographic modelling. As we have described, population dynamics are influenced by births and deaths, and levels of in- and out-migration. The population structure is however ageing over time. The impact of lower levels of housing supply would be particularly to reduce levels of in-migration. With the dynamics of population change in the District, this means that 'natural change' becomes more important and that the working age population does not grow as strongly (or shrinks to a greater degree). Thus lower levels of housing provision relative to trend/economic-driven demand are likely to run counter to the Council's ambitions to support a more balanced population structure.

The impact here though is not just demographic, in that stronger growth in house prices is likely to reduce affordability for younger households with a greater proportion of buyers being from older households, often with significant equity in their existing homes.

9.34 Demand for consumer and public services is strongly linked to population, at a range of scales. This is particularly the case in smaller communities and rural areas. If no new housing is built, changes in the structure of households (a trend towards smaller households in particular) can result in a loss of population. Combined with improvements in mobility this can reduce demand for local services, including shops, pubs and community facilities in rural areas. This has influenced the options selected, and each of the three options outlined results in some population growth, ranging from 6 – 15% over 20 years.

9.35 However changes in the age structure of the population can reduce the school age population which means that without any population growth, the viability of local schools can be brought into question. Of our three options, Option 1 (515 homes pa) results in a modest reduction in the population under 15 of 800 persons to 2028 (-4%), and Option 3 results in a reduction of over double this (-1650 persons under 15, -8%). Only Option 2 (650 homes pa) results in stability or moderate growth (+100 persons under 15, 0.6%).

9.36 There is therefore some evidence that a degree of population growth, in both urban and rural areas, can help to support the viability and vitality of local communities.

9.37 Turning to look at the economy, our projections have considered in detail the relationship between changes in the population and age structure and potential labour supply. Within this we have considered the implications of people working longer, and potential for changes to economic activity (which is already extremely high within the District). Of the three options presented, Option 1 would result in a moderate reduction in labour supply (c. 1000 people) with a more substantial reduction in Option 3 of almost 6% (-3675) over the period to 2028. Only Option 2 would result in growth in labour supply (c. 2,500 people, +4%).

9.38 The impact of changes in labour supply on the economy is a moot point as the labour market operates across and beyond the District's boundaries. The baseline forecasts actually show a decline in employment of 1950 over the 2008-28 period in the District; as employment growth post recession does not recover job losses during the recession. However the labour market evidence paints a much more positive picture, with little 'space capacity' in the labour market having emerged during the recession: in contrast to many other areas. We cannot say definitively that levels of housing development which supported a decline in the size of the workforce would *necessarily* constrain the economy. However a static or declining workforce could create recruitment difficulties for local companies in the longer-term. The relationship to commuting also needs to be considered; and it is possible that employment growth could be supported by a decline in out-commuting (where local jobs are created at similar levels and rates of pay to those to which people currently commute out) or by an increase in commuting into the District.

9.39 These factors need to be set against the impact of housing development on the District, including in regard to the development of greenfield land, potentially in regard to the character of the District and in regard to transport and other infrastructure. It is difficult to consider these issues in detail at this strategic level, as for instance infrastructure requirement or impact on the road network would be affected by how development takes place where, whilst equally the distribution of development and how it is designed will affect any impact on character.

Sustainability Objectives

9.40 Against the context described above, we have identified the following sustainability objectives:

Figure 9.1: Sustainability Assessment Framework

Contribution Towards	Policy Link
Meeting Local Housing Need	Corporate Strategy Aim 1
Supporting Economic Growth	Corporate Strategy Aim 2; Core Strategy SA
Improving Access to Services	Corporate Strategy Aim 3; Core Strategy SA
Reducing Carbon Footprint	Corporate Strategy Aim 4
Balanced Population Structure	Sustainable Community Strategy
Preserving District's Character	Sustainable Community Strategy; Core Strategy SA
Protecting Natural Resources (including through limiting greenfield development)	Core Strategy SA

9.41 In addition for each of the options we have sought to quantify potential receipts from the Government's New Homes Bonus scheme.

Sustainability Assessment of the Options

9.42 We have sought to assess each of the defined options against the sustainability objectives defined. The options are assessed in turn below.

Option 1: Main Trend-Based Projection

9.43 This option is informed by a local-based assessment of housing need and demand (in contrast to previous housing numbers derived from the Regional Spatial Strategy). It is for delivery of **10,300 homes between 2008-28 equivalent to 515 per annum.** This is 7% above average rates of development in the last 10 years (480 homes pa) but is based on a reduced rate of net in-migration equivalent to 15% of short-term migration trends between 2004-2009.

9.44 This option:

- Meets local needs based on past demographic trends, but results in lower population growth relative to the last decade and a reduced level of in-migration compared to recent demographic trends;
- Does not support growth in the workforce/labour supply within the District, with a 1.6% loss over the period to 2028, as a result of changes in the population structure. This does little to support economic growth;
- It also results in a reduction of 4.0% in the population aged under 15 which could impact on the viability of schools. Thus it has a very limited impact (and potentially a moderate negative impact) on achieving the objective of achieving a more balanced population structure;
- However in increasing the rate of development, albeit marginally, relative to past rates it likely, subject to further work, to require some greenfield development with an impact on environmental and sustainability objectives;
- The impact on the District's character is hard to judge, but is potentially greater than in Option 3. However there are opportunities to mitigate this through the siting and design of development.

9.45 We regard the overall impact of this option as **moderate**.

Option 2: Economic-Led Projection

9.46 This option is more aligned with planning for a positive economic future for the District. It does the most to support economic prosperity both in supporting growth in the size of the workforce and growth in the population (which does in itself have a positive economic benefit). Through the **delivery of 13,000 homes to 2028, equivalent to 650 per annum**, this option supports population growth of 16%. This is similar to rates of population growth over the last decade.

9.47 In this option the rate of development over the 20 year period to 2028 is 35% above rates of development over the past 10 years (2000-2010). The housing stock grows at a rate of 1.2% per annum. We consider that this level of development is likely to be deliverable over the period to 2028, notwithstanding current somewhat depressed housing market conditions. This reflects the attractiveness of the District as a place to live.

9.48 This option:

- Makes the greatest contribution to meeting housing needs, resulting in similar levels of population growth to the last decade;
- Positively supports the economy with growth in the workforce/labour supply within the District of 4.0% over the period to 2028;
- It supports a better balance in the population structure with modest growth in both the working-age population and school-age population. The population aged under 15 for instance increases marginally. This helps to retain a balanced population structure and while the elderly population grows it does so to a lesser extent in proportional terms relative to the other options;
- However as this scenario results in the highest rate of development, the potential impact on the environment is higher. Higher levels of greenfield development are likely to be required than in other options. There is also a risk that the higher level of development could impact on the character of the District (subject to further testing) if is not carefully planned.

9.49 Overall the impact of this option **in social and economic terms is strongly positive**, although this comes at a cost in that **the environmental impact is expected to be higher**.

Option 3: 25% Reduction in Net In-Migration

9.50 This option is specifically focused on testing the impacts of implementing a 'policy constraint' on levels of development relative to assessed housing need/demand. The final scenario is 'policy driven' and represents planning for a 25% reduction in net migration relative to long-term migration trends (1999-2009). It considers the implications of delivery of 8,200 dwellings over the 20 year plan period (410 per annum). Development rates over this period would thus be -15% lower than trends over the past decade (2000-10).

9.51 It the Council wishes to adopt this approach it would need to develop a clear justification, and to explain where 'displaced demand' could be accommodated. This could be justified as part of a sub-regional strategy to support regeneration of the Metropolitan Urban Areas, but would need to be supported by the wider approach adopted at this level. It is likely that this would need to be taken forward by the Local Enterprise Partnership and need the support of neighbouring authorities. In the absence of a formal regional or sub-regional planning mechanism there are clear risks to this.

9.52 In preparing this report we have sought to consider how other Councils within the region in this are responding to the evolving policy context. As at May 2011,the picture is varied. Looking at locations from which people move to Stratford-upon-Avon, Birmingham is moving forward with a housing target notably below that proposed in the RSS Phase 2 Panel Report. It is looking like Solihull and Rugby figures will be similar to the Panel Report. It is not currently clear what policies Warwick District or Coventry might adopt. Looking into the South East region it seems most likely that planned delivery of housing will fall. Overall it seems unlikely that development proposals elsewhere will provide a driver to reduce in migration to Stratford-on-Avon District. To take this option forward, the Council would likely need to demonstrate where displaced demand would be accommodated.

9.53 This option:

- Falls well short of assessed housing need and demand . It results in lower levels of population growth to the last decade with growth of 6.4% over 20 years compared to 8% in the 10 years to 2009;
- Does the least of the three options to support the economy, with the District's labour supply/workforce expected to decrease by -6% over the plan period. This does not align well with the Council's Corporate Plan albeit recognising the potential for commuting patterns across the wider labour market.
- Does little to support the Council's objective to see a more balanced population structure, with the reduction in absolute terms in the number of people in all broad age groups under 60 by 8,100 people (-9.5%) set against a growth in the population over 60;
- The option has major positive benefits in resulting in the lowest level of development on greenfield sites and potentially the lowest environmental impact. Less new infrastructure is required;
- In reducing the scale of development relative to past trends, this option is likely to do the most to preserve the character of the District.

9.54 Overall, this option has **the least environmental impact**, **but this potentially comes at a cost in terms of a higher potential impact in economic and social terms**.

Potential New Homes Bonus Receipts

9.55 The Government has implemented a scheme, the New Homes Bonus, which will reward local authorities for delivering new homes. The scheme is intended to ensure that the economic benefits of growth are returned to the local authorities and communities where growth takes place. In addition, in doing so the New Homes Bonus is intended engender a more positive attitude to growth, and create an environment in which new housing is more readily accepted. The Bonus commenced in April 2011, and will match fund the additional council tax raised for new homes and properties brought back into use, with an additional amount for affordable homes, for the following six years.

9.56 There is currently a considerable debate ongoing at a national level as to whether financial considerations should be considered in determining planning policy or applications. This is a matter for the Council to consider.

9.57 In this report, we have used CLG's New Homes Bonus calculator to calculate the New Homes Bonus payments associated with the proposed level of development in each of the options. The figures set out below relate to the funding secured from development in a single year for each of the proposed options, i.e. they indicate the New Homes Bonus payments for delivery of 515 dwellings (Option 1), 650 dwellings (Option 2) and 410 dwellings (Option 3). Receipts are shown for the full six year period and on an annual basis.

9.58 The New Homes Bonus is split 80:20 between the District and County Councils. There is a premium of £350 associated with delivery of new affordable housing. We have assumed that 30% of new housing delivered is affordable. Calculations are based on national Council Tax levels for each band, and the existing distribution of housing in the District in each Band.

Figure 9.2: New Homes Bonus Receipts from Development in a Single Year

	New Homes PA		New Homes Bonus – Stratford-on-Avon District		New Homes Bonus - Warwickshire	
	Total	Affordable	1 Year	6 Years	1 Year	6 Years
Option 1	515	155	£675,964	£4,055,785	£168,991	£1,013,946
Option 2	650	195	£852,982	£5,117,892	£213,245	£1,279,473
Option 3	410	123	£538,035	£3,228,209	£134,509	£807,052

Source: CLG/GLH

9.59 For Option 1, delivery of 515 homes would result in New Homes Bonus payments of £4.1 million. For Option 2, delivery of 650 homes would result in payments of £5.2 million; whilst for Option 3, delivery of 410 homes would result in total payments of £3.2 million over the six years. These figures reflect delivery of development over a single year.

9.60 There is the potential to secure additional funding for infrastructure investment from developer contributions through implementation of a Community Infrastructure Levy (CIL).

Towards a Recommended Option

9.61 The analysis above has clearly identified that there are a set of trade-offs which need to be considered. It would be possible to conclude that any of the above options were the most advantageous based on ascribing different weight to the environmental, economic and social considerations. This is a matter for the District Council to consider.

9.62 We consider that the housing requirement should fall within the range set out within the three options. We foresee significant risk factors associated with progressing with Option 3 in the absence of a regional planning mechanism, in that the District Council might have to identify how the underprovision against assessed need/demand would be met elsewhere within the region. This could prove difficult to achieve in practice.

9.63 Our view is that a robust yet positive framework for development in the District should plan on the basis of a housing in the 11,000 – 12,000 range over the 20 year plan period, 2008 – 2028.

9.64 This level of development looks achievable based on the information available, but should be subject to further testing in terms of the availability of land and in regard to strategic infrastructure constraints (in consultation with infrastructure providers).

9.65 We have also sought to consider whether the evidence of need and demand would support a phasing policy within the Local Development Framework. The evidence from the projections is inconclusive in this regard. The main demographic-driven projection, PROJ 1, would support stronger housing provision within the first five and ten years of the plan (2008-28). However an economic-driven projection, PROJ 6, shows lower housing requirements during this initial 10 year period linked to the impact of the recent economic recession, with a stronger requirement post 2018.

9.66 We are of the view that the planning system should not seek to impose a policy which might constrain housing provision unduly in the early years of the plan period on the basis of assumed economic performance or housing market dynamics, as these factors can, in their own right, influence housing delivery rates. Policy should not seek to constrain market and economic recovery in this regard. However it may be appropriate to consider a phasing policy in the LDF which recognises and responds to the development proposals set out within it, taking account for instance of the lead-in time to delivery of strategic development sites, and based on a clear and justified housing trajectory which takes account of delivery factors.