South Worcestershire

Housing Growth and Economic Prosperity Alignment Study

May 2012

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The authors of this report do not accept liability for any costs or consequential loss involved following the use of the analysis presented here, which is entirely the responsibility of the users of the analysis.
Executive Summary

E.1 This report has been commissioned to critically review the evidence base for the South Worcestershire Development Plan (SWDP) Preferred Housing Options; and to recommend improvements to the alignment of evidence and policy. The report should be read in conjunction with the National Planning Policy Framework's requirements for evidence to support the local Plan.

E.2 In addition to the evidence provided for the SWDP consultation, the report considers more recent evidence from the 2012 Strategic Housing Market Assessment (SHMA) and the 2010-based sub-national population projections released by the Office for National Statistics (ONS) in March 2012. It also considers criticisms of the evidence base and methodology that were made in representations on the consultation draft SWDP.

E.3 The SWDP was published at a time of significant economic and demographic uncertainty. Whilst well-intentioned in its desire to provide a basis for the long-term development of South Worcestershire’s housing stock, it left itself open to criticism due to: the evidence used; the methodologies employed; and the contradiction between the preferred housing growth strategy and economic considerations.

E.4 This review has concluded that the SWDP housing policies are not necessarily ‘wrong’ but that they are not properly evidenced. It is unlikely that the consultation draft SWDP and its supporting documents would satisfy the requirements of the National Planning Policy Framework. The recommendations suggest how to rectify this shortcoming in order to avoid further challenge.

E.5 The SWDP was right to reject the housing targets set by the RSS on the basis that its demographic evidence was drawn from methodologies and sources that have since been subject to major revision.

E.6 The SWDP cites the 2008-based population and household projections in support of the ‘Preferred Option’. However, it does not present sufficient evidence to explain or justify the differences between projected household growth and the ‘Preferred Option’.
Furthermore, evidence is not provided as to the degree of consistency between the SWDP housing and employment strategies. The NPPF requires that employment and housing assessments and strategies should be integrated. The SWDP could have made better use of new sources and more appropriate use of forecasting methodologies to derive its evidence base.

E.7 This report has summarised the uncertainty associated with demographic statistics in the UK, particularly the robust estimation of international migration. Data and methodological revisions continue and must form part of an updated evidence base to better inform South Worcestershire plans.

E.8 There were a wide variety of responses to the SWDP consultation process. The most significant ‘technical’ challenge came from NLP in support of Miller Homes Ltd and its proposed development at Middle Battenhall Farm in Worcester. It submitted a robust critique of the approach used to determine housing provision in the SWDP and developed a range of scenarios of future change, using the POPGROUP suite of forecasting products.

E.9 Using the latest available statistics on economic and demographic change, the (2012) SHMA for Worcestershire has produced a comprehensive analysis of the key drivers underpinning change in the housing market. The SHMA research involved a detailed and robust assessment of the likely future change in the number of households in South Worcestershire. A range of population and household scenarios were developed using the POPGROUP model suite. The SWDP was completed prior to publication of the SHMA.

E.10 Whilst the SHMA used the latest demographic information available to it at the time, there has subsequently been further significant change to the evidence base, referenced but not used in the SHMA. ONS released its ‘revised’ 2006-2010 mid-year estimates at the end of 2011; then in March 2012, new 2010-based sub-national population projections were published; important evidence that needs to be considered.

E.11 The range of evidence from the SWDP, the NLP study, the latest SHMA and the most recent 2010-based projections from ONS, present a spectrum of growth scenarios for South Worcestershire to consider. Ignoring the more unrealistic extremes (very high economic growth and natural change), these population growth scenarios suggest a
spectra of housing growth for South Worcestershire of 845 - 1,300 dwellings per year for 2010-2030, depending upon the assumptions chosen.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Population Growth (rounded) 2010-2030</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Growth</td>
</tr>
<tr>
<td><strong>High</strong></td>
<td></td>
</tr>
<tr>
<td>NLP - Employment-led</td>
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</tr>
<tr>
<td>SHMA - Employment-led</td>
<td>38,000</td>
</tr>
<tr>
<td>NLP - RSS</td>
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<tr>
<td>SNPP 2010</td>
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</tr>
<tr>
<td><strong>Medium</strong></td>
<td></td>
</tr>
<tr>
<td>SHMA - SNPP2008</td>
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<tr>
<td>SHMA - Employment-led (EA Sensitivity)</td>
<td>23,000</td>
</tr>
<tr>
<td>NLP - Baseline</td>
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</tr>
<tr>
<td>SHMA - Completion Rates (Last 6 Years)</td>
<td>16,000</td>
</tr>
<tr>
<td>SHMA - Migration-led</td>
<td>15,000</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td></td>
</tr>
<tr>
<td>NLP - SWDP</td>
<td>12,000</td>
</tr>
<tr>
<td>SHMA - Natural Change</td>
<td>2,000</td>
</tr>
</tbody>
</table>

*Summarising the scenario evidence*

**Key Recommendations**

E.12 To ensure it provides a robust and reliable base from which South Worcestershire’s housing strategy can be agreed and that it meets the requirements of the NPPF, the SWDP should update its content to include evidence from the latest SHMA, supplemented with the most recent evidence from the 2010-based projections from ONS (albeit using CLG’s 2008-based household model assumptions).

E.13 The SWDP should also include an evaluation of the demographic and economic impact of SWDPs preferred policy using SHMA methodologies; this will complement the work presented in the NLP report.

E.14 Analysis should be included for South Worcestershire in total and for the three constituent areas of Worcester City, Malvern Hills and Wychavon as the aggregate picture may hide
important district variations.

E.15 The SWDP needs to be supported by an analysis of economic and employment prospects, so as to demonstrate that housing and employment strategies are aligned. This could include commissioning new economic forecasts, although the continuing uncertainty with regards to recovery and growth suggests that this may be unwise. Better to evaluate a ‘range’ of jobs growth scenarios which consider what might be an acceptable balance between the size of the labour force, commuting patterns and the significant (and inevitable) ageing of the population.

**Other Recommendations**

E.16 It is recommended that any scenario evidence incorporated by the SWDP, should consider important sensitivities associated with:

a. Jobs growth and economic activity rates of the elderly
b. Rates of household formation given the likely stability in average household size in recent years
c. Migration, particularly international, which may fluctuate in the future, potentially having a substantial impact on the growth profile suggested by the latest, 2010-based population projections

E.17 There is also a need to consider the possible implications of the first population and household estimates from the 2011 Census, due in July, and how they differ from recent projections and estimates.

E.18 It is recommended that the base date of the SWDP aligns with that of the most recent set of evidence. This suggests a 2010-base, with a 2030 time horizon.
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1. Introduction

Context

1.1 In 2009/10 Malvern Hills District Council, Worcester City Council and Wychavon District Council began a collective review of the planning strategy for South Worcestershire; to develop a long-term South Worcestershire Development Plan (SWDP) which was not based on regional housing requirements previously set out in the emerging West Midlands Regional Spatial Strategy (RSS).

1.2 The SWDP is a joint plan which is part of the Local Development Framework for each of the three Local Planning Authorities. The SWDP supersedes earlier plan-making stages of the South Worcestershire Joint Core Strategy: Preferred Options and the Site Allocations Plan: Issues and Options which relied on emerging regional policy.

1.3 The SWDP Preferred Options Consultation Document was approved by Members in July 2011; setting out draft policies with locally derived housing and employment land use targets.

1.4 Having consulted widely on these Preferred Options in the autumn of 2011 the Councils are now considering the content of representations received. Of particular importance are the criticisms raised concerning the alignment between the SWDP locally-derived housing provision targets, the available demographic evidence and the concept of an economic, prosperity-led planning strategy (South Worcestershire Councils 2012a; 2012b).

Requirements

1.5 Given the range and diversity of issues that have been raised, the three South Worcestershire Councils wish to evaluate the emerging SWDP and its evidence base. Specific objectives of the evaluation have been identified as follows:

   a. A robust analysis of the validity of criticisms regarding the SWDP Preferred Options and its evidence base relating to the locally derived housing provision targets and housing supply calculations, in the context of soundness and legal tests

   b. An assessment of reasons to amend the locally derived housing provision targets in response to: analysis of the consistency between the SWDP Preferred Options targets and an economic prosperity led planning strategy; comparison with the population and household projections in the 2012 Strategic Housing Market Assessment and with the latest available population and household projections from ONS
c. An assessment of the options for improving the alignment between the SWDP’s housing provision targets, demographic evidence and an economic prosperity-led plan in order to reduce the risk of the plan not being sound or not meeting legal tests

d. Recommendations on how to strengthen that alignment, if needed, that would reduce the risks of the SWDP not being ‘sound’ or not meeting legal tests

1.6 The intention is for the study to become part of the evidence base that informs and supports policies to be included within the Local Development Frameworks for the three South Worcestershire Local Planning Authorities.

**Methodology**

1.7 In its critique of the SWDP, this review has incorporated the following evidence:

a. RSS approach and context

b. National Planning Policy Framework guidelines

c. SWDP Preferred Option representations (specifically, the material produced by Nathaniel Lichfield & Partners on behalf of Miller Homes Ltd)

1.8 In addition, the review has evaluated the latest 2012 Strategic Housing Market Assessment (SHMA) growth scenarios and their relevance to the SWDP content

1.9 Finally, the review has considered the methodological changes that have been implemented by ONS to produce revised mid-year population estimates for 2006-2010 and the latest 2010-based population projections that have resulted from these revisions.

1.10 In conclusion, the review provides a gap analysis of the evidence, to identify areas where further work is required to improve alignment of the SWDP with more recent and appropriate evidence.
2. Demographic Evidence & Methodologies

**Official statistics & methods**

2.1 In the absence of a population register, England and Wales rely on successive, annual updates of 2001 Census data to produce mid-year population estimates, from which are derived national and sub-national population and household projections (Figure 1).

![Figure 1: Official statistics: population and households](image)

2.2 Each successive mid-year population estimate for a local area takes account of the births, deaths and migration in the preceding 12 months. Birth and death statistics are derived from vital statistics registers and provide an accurate measure of natural change by local area. Internal migration data are derived from GP registers, providing an accurate representation of inter-district flows, albeit with some issues with regard to potential under-registration in certain age-groups (young males, in particular). International migration is the most difficult component to estimate with confidence. ONS has had an ongoing ‘Migration Statistics Improvement Programme’ (MSIP), developing new methodologies to ensure the most accurate data on immigration and emigration are used in its mid-year population estimates and sub-national projections.

2.3 It is imperative that the evidence used to support the strategic planning process is the most recent and the most robust available. Since 2004, interpretation of the evidence has been challenging due to the implementation of a number of methodological developments that have significantly altered the population and household estimates and projections for local authority areas (Figure 2).

2.4 In 2010, CLG implemented a new methodology for projecting household numbers in its 2008-based projections. A new 17-fold classification of households was introduced,
together with updated household formation (headship) rates using a combination of Census and Labour Force Survey statistics. These methodological changes make comparison with the results of the 2004 and 2006 household projections difficult; highlighting the importance of updating RSS plans using more recent evidence and methods.

<table>
<thead>
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<th>Year</th>
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<th>Sub-national Household Projections</th>
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<tr>
<td></td>
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<td>MYE</td>
<td>NPP</td>
<td>SNPP</td>
<td>HP</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td>MYE-2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>MYE-2010</td>
<td>NPP 2010-base</td>
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<td>2012</td>
<td></td>
<td>Census-2011</td>
<td>SNPP 2010-base</td>
<td></td>
<td>HP 2010-base</td>
<td>MYE 2001-2010</td>
</tr>
</tbody>
</table>

**Figure 2: Changes to national demographic and household data sources**

2.5 In 2010, ONS released a set of ‘revised’ mid-year estimates for 2001-2009 and a revised 2008-based population projection, which took account of a number of methodological ‘improvements’; specifically, the improved handling of onward student moves and the integration of administrative data sources to better estimate the local impact of international migration.

2.6 A more fundamental change to the estimation of international migration was undertaken in 2011, resulting in the release of a further set of ‘indicative’ mid-year estimates for 2006-2010 (Boden & Rees, 2010; ONS, 2011). Whilst not replacing the published mid-year estimates, the new ‘indicative’ mid-year estimates have provided the basis for the development of ONS’ latest, 2010-based sub-national population projections.

2.7 Finally, during 2012, ONS will release the results of the 2011 Census. These will include the latest 2011 mid-year population estimate plus a retrospective recalculation of all mid-year
estimates 2002-2010. These data will provide the definitive history of demographic change in each local authority over the last ten years. First results are due in July.

2.8 Revisions to mid-year estimates of population are extremely important in the development of alternative growth scenarios; specifically the accuracy of the ‘components of change’ (births, deaths, internal migration and international migration) as these feed directly into the development of sub-national population projections (and therefore the household projections). Historical trends for a prior five-year period provide the key to the ‘trend’ based SNPP (i.e. evidence from 2006-2010 will drive the 2010-based projections). Recognition of the relative importance of the components of change within the mid-year estimates is necessary in order to interpret what is driving the 25-year trend projection of the SNPP and in the development of alternative, trend-based scenarios.

A preferred approach to evidence analysis

2.9 For a local authority considering the development of its housing strategy, the most-recent ONS and CLG ‘official’ statistics on population and households provide the ‘benchmark’ against which a range of alternative evidence should be compared. Paragraph 159 of the National Planning Policy Framework draws attention to the importance of these projections. However, the ONS sub-national population projections provide only one growth trajectory; a trend-led forecast that is typically based on historical data that may have already been superseded by more recent evidence.

2.10 In developing a robust, realistic and defendable evidence base to support housing policy and plans, it is advisable to consider a range of alternative growth scenarios. These scenarios should ideally make use of the latest demographic evidence, should evaluate previous ‘policy’ scenarios and should test a range of growth trajectories based upon dwelling development, economic forecasts and local policy drivers.

2.11 With the demise of the RSS, local authorities across England and Wales have been confronted with the need to produce new plans and policy for housing development. The POPGROUP suite of software has, for many local authorities, provided the basis from which a range of evidence has been produced, to both scrutinise previous growth forecasts and to derive alternative population, household, labour force and housing trajectories.
3. SWDP – its use of the RSS and updated evidence

**RSS housing targets and evidence base**

3.1 The West Midlands Regional Assembly’s (WMRA) preferred housing option for the West Midlands RSS Phase 2 Review proposed 24,500 net additional dwellings over the period 2006-2026 in South Worcestershire. The Independent Panel that carried out the Examination in Public (EiP) recommended a slightly higher figure of 25,000. The draft SWDP puts forward a lower figure of 20,361 dwellings over the longer period 2006-2030 (Worcester City 8,402 dwellings, Wychavon 7,803 dwellings, Malvern Hills 4,156 dwellings).

3.2 This section considers the relation between RSS and SWDP with regard to: the procedural implications of rejecting the draft housing policies of the RSS Review; and the quality and continued relevance of the evidence assembled during the consideration of regional housing targets in the RSS Phase 2 review process. In addition, the section considers the evidence and methodology that has been employed to derive the revised housing targets presented in the SWDP.

**Procedural Issues**

3.3 The Government’s stated intention, to abolish the RSS, passed a major milestone with the enactment of the Localism Bill in November 2011. The final version of the National Planning Policy Framework (NPPF), published in March 2012 (CLG, 2012) states:

‘Regional strategies remain part of the development plan until they are abolished by Order, using powers taken in the Localism Act. It is the government’s clear policy intention to revoke the regional strategies outside of London, subject to the outcome of the environmental assessments that are currently being undertaken.’

3.4 The foreword to the SWDP states that ‘*The Preferred Strategy is no longer led by targets set by the West Midlands RSS.*’ Although RSS remain in force for the present, it appears reasonable to proceed on the assumption that the SWDP will not be required to adhere to RSS policies. Nevertheless, the South Worcestershire Councils may wish to take legal advice, particularly if the Parliamentary Order is subject to lengthy delay or further legal challenge.
**RSS Evidence Base**

3.5 Despite this situation, it may be appropriate to use material from the RSS process to inform the development of the SWDP. The NPPF states in paragraph 218:

‘Where it would be appropriate and assist the process of preparing or amending Local Plans, regional strategy policies can be reflected in Local Plans by undertaking a partial review focusing on the specific issues involved. Local planning authorities may also continue to draw on evidence that informed the preparation of regional strategies to support Local Plan policies, supplemented as needed by up-to-date, robust local evidence.’

3.6 A considerable and lengthy process of technical work on housing and demographic issues was undertaken for the RSS Phase 2 Review. In 2009, the work was subject to detailed scrutiny at an EiP before an independent Panel. A range of commercial and community interests, agencies and experts put forward evidence to support or counter the RSS proposals. The Panel submitted its report with recommendations to the Secretary of State in September 2009. A Government response was not issued, being overtaken by the decision of the new government to abolish the RSS. Nevertheless, the RSS review contains a substantial body of evidence that has been subject to careful scrutiny in public.

3.7 Given that the SWDP’s proposed housing figures differ significantly from those proposed by the RSS Phase 2 Review, it would be unwise to dismiss the RSS evidence without consideration as to its continuing relevance. To this end, the SWDP authorities commissioned a study of the RSS evidence base on demographics and housing demand need as part of a ‘... series of technical Background Papers which undertake a focused sub-regional review of the regional evidence base to inform the South Worcestershire authorities in the progression of their Joint Core Strategy.’ (Preuss & Pattinson, 2010)

3.8 The Focussed Review, published in November 2010, brought together, summarised and commented on evidence from the RSS review, together with more recent material. A number of salient features were identified:

a. The preferred option in the RSS Review was informed by the official 2004-based sub-national population and household projections: for South Worcestershire this gave a household growth of 28,000 between 2006 and 2006. By the time of the EiP, projections on a 2006 base were available; these gave a slightly lower household growth of 26,000. In addition to projections, a range of other evidence and opinion
about housing demand and need was presented at the EiP and considered by the Panel.

b. The Panel proposed a net housing provision of 25,000 for 2006-2026 for South Worcestershire, slightly higher than the WMRA’s preferred option of 24,500 (Table 8, Preuss & Pattison). Both figures are slightly lower than the household growth in either the 2004 or 2008 projections.

c. Neither the Preferred Option nor the Panel’s recommendations fully met the household projections or other estimates of housing need. Indeed the difference may be greater as the projections relate to households, while the targets relate to dwellings.

d. The decision on the housing targets, balanced projections against a range of other considerations. This is summarised in paragraph 11.4 of the Focussed Review:

‘In reaching their conclusions and recommendations in respect of the level and distribution of housing provision, the RSS Phase Two EiP Panel brought together the ‘theoretical’ numerical calculations of housing need/demand and more in-depth consideration of the issues for each part of the West Midlands, including local policy, environmental, market and other factors...’

3.9 The EiP Panel’s conclusions, based on the evidence can be regarded as authoritative at the time. However, the Focused Review is correct to identify that its continued relevance is challenged by more recent demographic evidence.

3.10 There is a more fundamental difficulty in making direct use of the quantitative demographic material from the RSS review. As section 2 has highlighted, the methodology and data used to calculate the official population estimates and the sub-national projections have been the subject of an ongoing programme of change since 2004. The MSIP initiative at ONS, has sought to improve the estimation of migration, a key factor in future growth. This programme has led to revisions in demographic datasets for earlier years. Thus the fundamental demographic evidence base which was used to inform RSS is no longer comparable with that currently in use for population estimation and projection. Similarly, CLG’s household model on which RSS analysis was based was subject to a fundamental revision with the release of the 2008-based projections.
**SWDP Evidence Base**

3.11 The SWDP states that its, ‘Preferred Strategy is no longer led by targets set by the West Midlands RSS.’ At the same time it remarks that, ‘Greater emphasis is placed on delivering economic prosperity for the benefit of South Worcestershire as a whole.’

3.12 The SWDP refers to the Focused Review as an important component of the evidence base in deriving its revised housing targets for South Worcestershire. In addition, it references a number of other key inputs to SWDP development: Strategic Housing Market Assessment (2007), Local Housing Needs Report for South Worcestershire, Affordable Housing Development Viability Study, Strategic Housing Land Availability Assessment, South Housing Market Area Monitoring report 2009/10, Worcestershire Demographic Report 2011.

3.13 The Focussed Review presented results from ONS’ 2008-based Sub-National Population Projections, which became available in May 2010 after the RSS Panel had concluded its work. However, the authors did not offer a conclusion about the implications of the projections for the RSS targets; neither did the Review consider the 2008-based CLG projections, published in November 2010.

3.14 The Worcestershire Demographic Report, provides comparisons between CLG’s 2008-based household projections and projections that informed the RSS (Figure 3). It identifies growth of 18% or 21.6k households over the period 2008-2030. Importantly, it identifies that the majority (70%) of the household increase is associated with one-person households, which are projected to rise by 15.6k; the largest proportion amongst persons aged 75-plus.

![Figure 3: CLG household projections, South Worcestershire, 2008-30](image-url)
3.15 The difference between CLG’s 2006-based and 2008-based household projections is the SWDP’s primary basis for its new housing targets. The SWDP key statement on demographics (paragraph 2.21) identifies that the levels of development set out in the West Midlands RSS were partly based upon the 2006-based CLG household projections; since when, the 2008-based household projections show a fall of over 20% in household growth. On this basis, the SWDP proposes, ‘an overall reduction of some 20% against the regional housing requirements for South Worcestershire’. However, there are significant differences between the household growth in the 2008-based projections and SWDP’s housing proposals. The SWDP proposals are lower than projected household growth over the period 2006-2030.

3.16 Whilst the supporting documents (Worcestershire County Council, 2010; Preuss & Pattinson, 2010), provide useful contextual material to the SWDP, neither provide a direct justification for the housing target revision. The SWDP documents do not provide substantial evidence or a robust methodology to explain or justify the proposed housing figure. In this respect there are grounds for criticism of the SWDP.

3.17 The apparent contradiction between an economic growth strategy and reduced housing targets is also not explained.

3.18 The shortcomings are of particular importance given the requirements set out in the National Planning Policy Framework published in March 2012. This sets out a clear requirement for a robust evidence base, and calls for integrated assessments of housing and employment:

‘158. Each local planning authority should ensure that the Local Plan is based on adequate, up-to-date and relevant evidence about the economic, social and environmental characteristics and prospects of the area. Local planning authorities should ensure that their assessment of and strategies for housing, employment and other uses are integrated, and that they take full account of relevant market and economic signals.’
4. SWDP representations

Summary of representations

4.1 The SWDP consultation process resulted in a wide range of representations. Each of these has been captured and summarised to enable an appropriate response to be formulated. Specific criticisms of the SWDP have included the following:
   a. The robustness and completeness of its evidence base
   b. The use of the evidence base to justify policy and strategy
   c. Internal consistency between the policies and the Plan’s vision and objectives
   d. Consistency with NPPF

4.2 In addition, a number of representations have objected to SWDP’s proposed distribution of housing development within South Worcestershire, between and within districts. This highlights a need to explain the relationship between household projections and the spatial distribution of housing development, particularly where these differ in scale. In this respect it should be borne in mind that demographic evidence is generally based on administrative boundaries; housing development may overlap these boundaries.

4.3 The summary analysis in section 3 of this report, suggests that there may be some justification for the criticisms raised, specifically in relation to:
   a. The evidence used
   b. The methodologies employed
   c. The alignment between the demographic evidence and the economic strategy

4.4 The SWDP was completed in parallel with the emerging Worcestershire SHMA. However, project timing prevented use of the SHMA analysis in the SWDP. As a result, detailed scrutiny of evidence on housing market drivers and the variety of growth scenarios evaluated by the SHMA, did not form part of SWDP development.

4.5 With little direct analysis of demographic evidence and without testing alternative growth scenarios, the SWDP exposed itself to criticism from local stakeholders. The most significant ‘technical’ challenge has come from Nathaniel Lichfield & Partners (NLP), in support of Miller Homes Ltd and its proposed development at Middle Battenhall Farm in Worcester. The NLP study is reviewed below.
**NLP study on behalf of Miller Homes Ltd**

4.6 NLP, acting on behalf of Miller Homes, submitted a critique of the approach used to determine the housing provision in the SWDP (NLP, 2011). Its report also contains a range of scenarios of future change using the POPGROUP suite of demographic forecasting products (NLP, 2011).

4.7 The critique argues that the SWDP has not provided substantial evidence to support its proposed housing target; suggesting that the information and methods used in the development of the SWDP would not meet the requirements for an evidence base set out in the NPPF. The critique also questions the decision to extend the Plan Period to 2030 without making provision for any additional household formation in the period 2026-2030.

4.8 The NLP report presents a strong argument that is underpinned with a robust analysis of the demographic evidence and appropriate use of the POPGROUP technology to develop alternative growth forecasts.

4.9 The NLP scenarios are generated from a 2010 base year, although ‘backcasts’ to 2006 are provided to allow comparison with the SWDP proposals. The calculation of the backcasts is problematic, given that they refer to a historical period for which evidence of estimated change is available. 2006 may no longer be the most appropriate baseline given that 5 years have elapsed and more recent demographic and other data is available. There is a case for aligning the base date with that of the bulk of the available evidence. The NLP report does itself argue in paragraph 4.2 for a 2010 base date.

4.10 The NLP scenarios are generated using the 2008-based population projections as its basis. Later mid-year estimates are incorporated into the analysis but no attempt is made to ‘recalibrate’ the 2008-based migration assumptions using the more recent demographic evidence.

4.11 Furthermore, the NLP analysis does not incorporate any evidence from the 2006-2010 mid-year population estimate revisions and does not include the latest evidence from the 2010-based population projections.

4.12 The analysis has been undertaken at a district level but the majority of output is presented for South Worcestershire in total. Five alternative scenarios have been generated,
illustrating change in population, households, dwellings and jobs (Figure 4).

<table>
<thead>
<tr>
<th>Change 2010-2030</th>
<th>Scenario A. Baseline</th>
<th>Scenario B. Experian Forecast</th>
<th>Scenario C. SHMA 2007 (Evidence of Need)</th>
<th>Scenario D. RSS</th>
<th>Scenario E. SWDP</th>
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<tr>
<td>Dwellings (per year)</td>
<td>1,121</td>
<td>1,674</td>
<td>2,305</td>
<td>1,224</td>
<td>848</td>
</tr>
<tr>
<td>Jobs</td>
<td>-595</td>
<td>12,595</td>
<td>4,868</td>
<td>-3,926</td>
<td></td>
</tr>
<tr>
<td>Jobs (per year)</td>
<td>-30</td>
<td>630</td>
<td>243</td>
<td>-196</td>
<td></td>
</tr>
</tbody>
</table>

Source: Table 4.7, NLP (2011)

**Figure 4: NLP projections, South Worcestershire, 2010-30**

Scenario A is a demographic projection, using assumptions from the 2008-based projection.

Scenario B is led by an economic forecast provided by an external agency (Experian). There are no details of the assumptions and evidence that support this forecast, without which, the scenario cannot be accorded much weight, except as an illustration of the implications of very rapid employment growth. The forecast assumes a growth of 12,600 jobs over the 2010-2030 period, with the increase apportioned evenly over each year. It is not clear how growth differs between the individual districts of South Worcestershire.

Scenario C uses information on estimates of affordable housing need from the 2007 SHMA to build a total housing requirement. This has not been evaluated using the POPGROUP projection model but generates the highest dwelling requirement, more than double that of the ‘baseline’ Scenario A. The detail of scenario C is perhaps no longer relevant; it draws on the 2007 SMHA, whereas a new SMHA is now complete. However, the reconciliation of the need for affordable housing and the SWDP’s annual overall housing provision is a major issue.

Scenario D is based on the RSS proposal for 24,500 dwellings for the period 2006-2026, but extended to cover the period 20006-2030.

Scenario E uses the POPGROUP model and NLP’s baseline assumptions to estimate likely growth based upon the housing proposals from the SWDP.
4.13 The NLP report and analysis was submitted on behalf of a single client but raised general issues of concern. Other representations have been made on behalf of other parties concerning the level and distribution of housing; each of which add to the debate on future housing strategy. In addition, the 2012 SMHA provides an extensive and updated evidence base, together with a further range of scenarios. The SHMA output is discussed below and is compared to the SWDP and NLP suite of scenarios in the concluding section.

4.14 The NLP submission and scenarios do help to clarify a number of general issues about the evidence base and the way that it should be used to develop policy. Specifically:

a. The relationship between household growth and proposed dwelling provision. SWDP’s dwelling requirement is smaller than the projected household growth for 2006-2026 and SWDP’s plan period was extended from 2026 to 2030, without provision for household growth in the additional years.

b. The relationships between economic, employment and demographic change and the consistency of SWDP’s housing and economic strategies.

c. Any implications for the SWDP housing targets of the needs for affordable housing. In particular: the ‘backlog’ of housing needs that are unmet at the start of the plan period; the relationship between forecast future needs for additional affordable housing, total household growth and the overall scale of housing provision.

d. The extent of the Plan’s period, in particular whether it should be aligned to the latest date (2010) for which evidence is available.
5. Strategic Housing Market Assessment, 2012

Context

5.1 In March 2011 GVA and Edge Analytics were commissioned to prepare a Strategic Housing Market Assessment (SHMA) for Worcestershire and its constituent districts. Whilst recognising the prevailing economic conditions and the challenges that this presents to forecasting, the SHMA used a range of sources and methodologies to deliver an updated evidence base to help inform policy development.

5.2 Using the latest available statistics on economic and demographic change, the SHMA has produced a detailed analysis of the key drivers underpinning change in the housing market. This analysis has been presented in the main SHMA report and as a series of individual reports for each of the six districts of Worcestershire (GVA, 2012)

Scenario Development

5.3 The SHMA research involved a detailed and robust assessment of the likely future change in the number of households in South Worcestershire. A range of population and household scenarios were developed, taking account of demographic, economic and policy factors. All scenario development was undertaken using the POPGROUP model suite.

5.4 The consideration of a range of potential growth scenarios and supporting datasets follows the advice of the NPPF. Delivered using the POPGROUP software, this has provided South Worcestershire local authorities with a sound evidence base to inform emerging strategy and policy development.

5.5 The SHMA ‘core’ scenarios presented for the South Worcestershire districts were as follows:

Core Scenario 1: SNPP
Population growth consistent with the 2008-based ONS projections

Core Scenario 2: Migration-led
An updated ‘trend’ scenario integrating more recent (2009) mid-year estimates to the calibration of future migration assumptions. This has an important impact upon the trend projection due to the general reduction in mobility since 2008.
Core Scenario 3: Natural Change

A ‘trend’ scenario to illustrate how the population would change based solely on births and deaths and an absence of migration; useful as a benchmark but not for policy development.

Core Scenario 4: Employment-constrained

A scenario which aligns demographic change to the most recent (2009) economic forecasts (provided by Advantage West Midlands). The relationship between jobs and the resident labour force population is controlled through the application of economic activity rates, an unemployment rate and commuting ratios, all of which are kept constant throughout the projection period.

Core Scenario 5: Dwelling-constrained

A scenario which aligns demographic change to annual housing growth that is consistent with historic completion rates (2004-2009). The relationship between dwellings and the resident population is controlled through the application of a vacancy rate, household headship rates and a measure of the non-household population. This scenario provides a useful benchmark against future demand driven projections in relation to supply trends but the SHMA notes that historic development rates should not necessarily be used to set future policy.

Sensitivity Scenario: Economic Activity Rates of Older Persons

The employment-constrained scenario is modified to evaluate the impact of higher rates of economic participation in the older age-groups during the projection period. Economic activity rates have been modified for the age cohorts 50-64 and 65+.

5.6 To provide a more accurate baseline estimate of household numbers in each South Worcestershire district, the POPGROUP model rescaled household totals to match Council Tax Statistics on occupied dwellings. This changed the base year household total but retained the CLG trend of household formation in each district.

5.7 The projected household growth trajectories that result from these scenarios range from 435 households per year for the natural change scenario, to 1,178 households per year for the economic-led scenario (Figure 5).
The use of the most recent (2009) mid-year estimate in the trend calibration has a significant impact, demonstrated by ‘Scenario 3 – Migration-led’, with growth estimates reduced for Malvern Hills and Wychavon, whilst increased for Worcester City, relative to the SNPP scenario. This reflects lower levels of household mobility since 2008.

The ‘Sensitivity’ scenario demonstrates that increasing levels of economic participation in the older age-groups (to reflect pension-age changes) reduces the requirement for additional in-migration to each of Malvern Hills, Worcester City and Wychavon. A larger labour force is sustained for a longer period as fewer people leave the labour force each year.

5.8 Contrasting housing requirements are presented for two scenarios: ‘Scenario 3 - Migration-led’ and the economic-led ‘Sensitivity’ scenario. These suggest housing growth of 844-1002 per year over the 19 year period 2011/12 – 2029/30 (Figure 6).
5.9 The SHMA analysis was completed during 2011, using the latest available demographic evidence in combination with POPGROUP forecasting software. The approach adopted by the SHMA in compiling the new evidence base would have been very appropriate in the development of the SWDP. However, the SWDP was completed and published whilst the SHMA was in development and so did not benefit from the additional intelligence that it has provided on future housing growth in South Worcestershire.

5.10 Whilst the SHMA used the latest demographic information available to it at the time, there has subsequently been further significant change to the evidence base. ONS released its ‘revised’ 2006-2010 mid-year estimates at the end of 2011; then in March 2012, new 2010-based sub-national population projections were published. The impact of these new data is examined in section 6.

5.11 An additional issue with the SHMA evidence is the robustness of the economic forecasts used to underpin the analysis. The Advantage West Midlands forecasts were generated in 2009. Economic conditions have changed since then and, although the prevailing conditions make robust economic forecasting extremely challenging, South Worcestershire should consider the evaluation of a range of alternative economic growth scenarios as part of an updated evidence base to support the SWDP.
6. The latest evidence

2010-based Projections

6.1 Changes to ONS’ methodology for estimating international migration have resulted in the publication of revised mid-year estimates (2006-2010) for all local authority areas. These new ‘indicative’ estimates, whilst not classified as official statistics, have been used as the basis for the development of ONS’ 2010-based sub-national population projections. The revised 2006-2010 historical evidence has been used to estimate likely trends in births, deaths and migration (internal and international) for individual local authorities.

6.2 The latest ONS projections also incorporate ‘long-term’ assumptions on the ‘expected’ national trend in fertility, mortality and international migration. These are important changes when considering forecasts for the next 25 years as these national trends have an impact upon local area projections. Fertility rates are expected to remain at a higher level in the 2010-based projections, falling to a level consistent with the 2008-based projection from 2025 onwards. Continued improvements in mortality are expected but at different rates to the 2008-based projection depending upon year of birth. Net international migration is expected to decline from its peak in 2012, to an average of +200k per year for the UK – 20k higher than the 2008-based long-term assumption (and a long way from the government’s <100k target). Further comparisons between the 2008-based and 2010-based assumptions are presented in Appendix 1, with guidance notes drawn directly from the latest ONS publications (ONS, 2012).

6.3 The 2006-2010 mid-year estimate revisions resulted in a minor downward adjustment to the 2010 population total for South Worcestershire (-0.1%). However, the 2010-based projections suggest some important changes to the growth trends for South Worcestershire and contrast to previous 2004-based, 2006-based and 2008-based projections (Figure 7). Whilst lower than the 2006-based scenario, demographic change anticipated by the latest projection, suggests higher population growth compared to the 2008-based projection.

The 2010-based projection estimates that South Worcestershire’s population is projected to increase by 10% between 2010-2030 (compared to 8% in the 2008-based scenario).
The South Worcestershire totals hide some important variations between the three constituent districts. Worcester City’s 2010 mid-year estimate was adjusted marginally downwards (-0.4%) as a result of ONS’ changes to international migration estimation. However, the 2010-based growth trajectory has increased significantly from the 2008-based projection (Figure 8). Expected population change 2010-2030 is now estimated at 11%, compared to 6% in the 2008-based scenario.

The adjustment to Malvern Hills’ 2010-based mid-year estimate was more significant with a
1% reduction from the original. In terms of future population growth, the 2010-based growth trajectory is lower than the 2008-based projection (Figure 9). Expected population change 2010-2030 is now estimated at 9%, compared to 10% in the 2008-based scenario.

**Figure 9: ONS population estimates and projections, Malvern Hills**

6.6 The adjustment of Wychavon’s 2010-based mid-year estimate resulted in a 0.8% increase in the original. The growth rate suggested by the 2010-based projection is higher than that evident from the 2008-based version (Figure 10). Expected population change 2010-2030 is now estimated at 11%, compared to 9% in the 2008-based scenario.

**Figure 10: ONS population estimates and projections, Wychavon**
**Scrutinising the 2010-based projections**

6.7 These latest projections of growth in the South Worcestershire districts represent a ‘trend’ projection, based on recent historical evidence in combination with future assumptions on fertility, mortality and migration. In the development of future development plans, it is important to recognise how the ‘components’ of population growth in these official projections are driving the projected change over time. The ‘sensitivity’ of these components is an important consideration in the evaluation of alternative growth scenarios.

6.8 There are three components of population change: natural increase (the difference between births and deaths); net internal migration (the difference between in-migration and out-migration to/from the rest of the UK); net international migration (the difference between immigration and emigration). The relative importance of each component varies between the local authority areas of South Worcestershire (Figure 11).

6.9 For Malvern Hills, future population growth is projected to be a balance between an increasing net loss resulting from natural change (more deaths than births) due to the more elderly age profile, and an increasing net gain due to net migration. The dominant migration component is expected to be internal migration with a relatively small contribution from net international migration.

6.10 For Worcester City, the balance is very different. Growth through natural change is expected to remain positive throughout the projection period due to the more youthful resident population. Internal migration is projected to result in a continued net loss of population, whereas growth through net international migration is expected to be positive throughout the projection period.

6.11 For Wychavon, again the balance is different. A small but increasing net loss due to natural change is balanced by growth due to migration; with the dominant component being growth from international migration. The importance of migration as a driver of change increases over the projection period.
Figure 11: Components of change, 2010-based population projections (ONS, 2012)
6.12 Migration, whether internal or international, is clearly a key driver of the 2010-based projections for the South Worcestershire districts. Whilst these new projections are the definitive ‘official’ projections, it is appropriate to evaluate how the new projection assumptions on migration compare to the most recent historical evidence (Figure 12).

<table>
<thead>
<tr>
<th>Malvern Hills</th>
<th>Average 2006-10</th>
<th>Average 2011-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Internal Migration</td>
<td>461</td>
<td>617</td>
</tr>
<tr>
<td>Net International Migration</td>
<td>45</td>
<td>136</td>
</tr>
<tr>
<td>Net Migration</td>
<td>506</td>
<td>753</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Worcester</th>
<th>Average 2006-10</th>
<th>Average 2011-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Internal Migration</td>
<td>(286)</td>
<td>(318)</td>
</tr>
<tr>
<td>Net International Migration</td>
<td>45</td>
<td>271</td>
</tr>
<tr>
<td>Net Migration</td>
<td>(241)</td>
<td>(48)</td>
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</table>

<table>
<thead>
<tr>
<th>Wychavon</th>
<th>Average 2006-10</th>
<th>Average 2011-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Internal Migration</td>
<td>252</td>
<td>313</td>
</tr>
<tr>
<td>Net International Migration</td>
<td>251</td>
<td>406</td>
</tr>
<tr>
<td>Net Migration</td>
<td>503</td>
<td>719</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>South Worcestershire</th>
<th>Average 2006-10</th>
<th>Average 2011-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Internal Migration</td>
<td>427</td>
<td>612</td>
</tr>
<tr>
<td>Net International Migration</td>
<td>341</td>
<td>812</td>
</tr>
<tr>
<td>Net Migration</td>
<td>767</td>
<td>1,424</td>
</tr>
</tbody>
</table>

**Figure 12: Migration components of change, historical and projected**

6.13 Malvern Hills’ net migration is expected to be considerably higher than the average for the five-year period 2006-10, most significantly due to internal migration. Worcester is projected to experience an ‘increase’ in the level of overall net migration, albeit remaining as a net loss. This change from the 2006-2010 period is due primarily to significantly higher levels of net international migration. Wychavon is also projected to experience higher net migration overall, with international migration changing most significantly from the 2006-2010 period.

For South Worcestershire in total, the change in the impact of net migration is a two-fold increase from that evident in 2006-2010, with an average annual net impact of +1,424 per
year. Whilst flows from elsewhere in the UK are expected to rise, it is the increase in the projected level of net international migration that has the most significant impact.

6.14 This analysis can provide the basis for the derivation of alternative ‘trend’ scenarios which consider different migration variants; the basis for comparison with scenarios based upon housing and/or employment growth forecasts.
7. Summary & recommendations

Summary

7.1 The SWDP was published at a time of significant economic and demographic uncertainty. Whilst well-intentioned in its desire to provide a basis for the long-term development of South Worcestershire’s housing stock, it left itself open to criticism due to: the evidence used; the methodologies employed; and the contradiction between the preferred housing growth strategy and economic considerations. It is unlikely that the consultation draft SWDP and its supporting documents would satisfy the requirements of the National Planning Policy Framework (Appendix 3).

7.2 In developing a robust, realistic and defendable evidence base to support housing policy and plans, it is advisable to consider a range of alternative growth scenarios. These scenarios should ideally make use of the latest demographic evidence, should evaluate previous ‘policy’ scenarios and should test a range of growth trajectories based upon dwelling development, economic forecasts and local policy drivers. This is consistent with NPPF guidelines. The SWDP did not apply this approach; rather it modified previous RSS totals on the basis of change evident in the 2006-based and 2008-based household projections (a 20% reduction). Supporting demographic analysis is referenced in the SWDP but is not used directly to derive the revised housing targets.

7.3 The SWDP was right to reject the housing targets set by the RSS on the basis that its demographic evidence was drawn from methodologies and sources that have since been subject to major revision. But the SWDP could have made better use of new sources and more appropriate use of forecasting methodologies to derive its housing target revision.

7.4 This report has summarised the uncertainty associated with demographic statistics in the UK, particularly the robust estimation of international migration. Data and methodological revisions continue and must form part of an updated evidence base to better inform South Worcestershire plans.

7.5 Using the latest available statistics on economic and demographic change, the (2012) SHMA for Worcestershire has produced a detailed analysis of the key drivers underpinning change in the housing market. The SHMA research involved a detailed and robust assessment of
the likely future change in the number of households in South Worcestershire. A range of population and household scenarios were developed, taking account of demographic, economic and policy factors. All scenario development was undertaken using the POPGROUP model suite. Unfortunately, the SWDP was completed and published whilst the SHMA was in development and so did not benefit from the additional intelligence that it has provided on future housing growth in South Worcestershire.

7.6 Whilst the SHMA used the latest demographic information available to it at the time, there has subsequently been further significant change to the evidence base. ONS released its ‘revised’ 2006-2010 mid-year estimates at the end of 2011; then in March 2012, new 2010-based sub-national population projections were published; important evidence that needs to be considered.

7.7 There were a wide variety of responses to the SWDP consultation process. The most significant ‘technical’ challenge came from NLP in support of Miller Homes Ltd and its proposed development at Middle Battenhall Farm in Worcester. It submitted a robust critique of the approach used to determine the housing provision in the SWDP and developed a range of scenarios of future change, again using the POPGROUP suite of forecasting products.

7.8 The range of evidence presented by the SWDP, NLP, the latest SHMA and the most recent 2010-based projections from ONS, present a spectrum of growth scenarios for South Worcestershire (Figure 13). (They are presented here as ‘population’ growth to avoid any issues with the consistency between household, dwelling, labour force and housing calculations in the methods employed).

7.9 Scenarios at either end of the spectrum are probably unrealistic. Natural change assumes no migration; the NLP employment-led scenario assumes levels of economic growth that require further scrutiny to validate. But the balance between population (household) growth and economic growth is an important one. As a general rule, population growth in South Worcestershire of below 10% (2010-2030) suggests a decline in the size of the resident labour force – a reduction in the jobs requirement of its population. Maintenance of the labour force in the face of significant population ageing requires continued net in-migration, whether from internal or international sources. Higher net in-migration can only be fuelled by the availability of jobs and housing, unless there are fundamental changes to
the commuting structure of South Worcestershire.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Population Growth (rounded) 2010-2030</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Growth</td>
</tr>
<tr>
<td>High</td>
<td></td>
</tr>
<tr>
<td>NLP - Employment-led</td>
<td>52,000</td>
</tr>
<tr>
<td>SHMA - Employment-led</td>
<td>38,000</td>
</tr>
<tr>
<td>NLP - RSS</td>
<td>31,000</td>
</tr>
<tr>
<td>SNPP 2010</td>
<td>29,000</td>
</tr>
<tr>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>SHMA - SNPP2008</td>
<td>23,000</td>
</tr>
<tr>
<td>SHMA - Employment-led (EA Sensitivity)</td>
<td>23,000</td>
</tr>
<tr>
<td>NLP - Baseline</td>
<td>23,000</td>
</tr>
<tr>
<td>SHMA - Completion Rates (Last 6 Years)</td>
<td>16,000</td>
</tr>
<tr>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>SHMA - Migration-led</td>
<td>15,000</td>
</tr>
<tr>
<td>NLP - SWDP</td>
<td>12,000</td>
</tr>
<tr>
<td>SHMA - Natural Change</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Figure 13: Summarising the scenario evidence

7.10 The circular nature of the relationship between migration, jobs and housing is difficult to disentangle but is clearly fundamental to the selection of a ‘preferred’ growth trajectory for South Worcestershire. The SHMA has attempted to provide a ‘balanced’ perspective on growth, driven by both demographic and economic assumptions, albeit using economic forecast that are now out-of-date.

The increased levels of economic participation in the elderly age-groups (to reflect pension-age changes) modelled in the SHMA is something that the SWDP should consider in its assessment of housing and economic growth; higher participation maintains the size of the labour force for longer, reducing the need for in-migration, lessening the housing requirement.

In addition, the sensitivity of ‘headship rates’ in the calculation of household totals should also be considered. Recent evidence suggests that rates of household formation (average household size) may have stabilised, contrary to the assumptions implied by the CLG’s latest household projections. The 2011 Census will confirm this trend but in the meantime it is appropriate to consider the potential implications of slower rates of household formation.
7.11 In terms of dwelling growth that the scenarios spectrum implies (ignoring any minor methodological differences to facilitate a comparison):

The SWDP suggested annual housing development of 848 dwellings per year. The SHMA migration-led scenario corresponds with this total.

The incorporation of an economic growth forecast, coupled with a change in levels of economic activity of the elderly age-groups, suggests dwelling growth of approximately 1,000 per year.

The latest ONS 2010-based sub-national population projections would imply approximately 1,100 per year, albeit on the basis of high net in-migration related to the last five years.

The SHMA economic-growth scenario, using a 2009-based forecasts and with no consideration of greater economic participation of the older age-groups, implies dwelling growth of approximately 1,300 per year.

**Key Recommendations**

7.12 To ensure it provides a robust and reliable base from which South Worcestershire’s housing strategy can be agreed and that it meets the requirements of the NPPF, the SWDP should update its content to include evidence from the latest SHMA, supplemented with the most recent evidence from the 2010-based projections from ONS (albeit using CLG’s 2008-based household model assumptions).

7.13 The SWDP should also include an evaluation of the demographic and economic impact of SWDPs preferred policy using SHMA methodologies; this will complement the work presented in the NLP report.

7.14 Analysis should be included for South Worcestershire in total and for the three constituent areas of Worcester City, Malvern Hills and Wychavon as the aggregate picture may hide important district variations.

7.15 The SWDP needs to be supported by an analysis of economic and employment prospects, so as to demonstrate that housing and employment strategies are aligned. This could
include commissioning new economic forecasts, although the continuing uncertainty with regards to recovery and growth suggests that this may be unwise. Better to evaluate a ‘range’ of jobs growth scenarios which consider what might be an acceptable balance between the size of the labour force, commuting patterns and the significant (and inevitable) ageing of the population.

**Other Recommendations**

7.16 It is recommended that any scenario evidence incorporated by the SWDP, should consider important sensitivities associated with:

a. Jobs growth and economic activity rates of the elderly
b. Rates of household formation given the likely stability in average household size in recent years
c. Migration, particularly international, which may fluctuate in the future, potentially having a substantial impact on the growth profile suggested by the latest, 2010-based population projections

7.17 There is also a need to consider the possible implications of the first population and household estimates from the 2011 Census, due in July, and how they differ from recent projections and estimates.

7.18 It is recommended that the base date of the SWDP aligns with that of the most recent set of evidence. This suggests a 2010-base with a 2030 time horizon.

**Conclusion**

7.19 This review concludes that the SWDP housing policies are not necessarily ‘wrong’ but that they are not properly evidenced. The recommendations suggest how to rectify this shortcoming in order to avoid further challenge.

7.20 For South Worcestershire, the development of a more substantial evidence base would need to be balanced with the wider range of planning considerations, to derive a district distribution of housing growth. This will need to recognise that the three districts form a geographical unit and, whereas demographic statistics align to administrative boundaries, housing growth strategies may not. Different spatial growth scenarios can be assessed in terms of their demographic and economic effects, comparing directly with the evidence from policy-off, demographic trend scenarios.
Appendix 1: ONS long-term demographic assumptions

A1.1 Fertility

‘The long-term assumption of completed family size for the UK for the principal projection is unchanged from the 2008-based projections (1.84 children per woman). In the short-term, the UK fertility assumption is set to increase from current levels to a high of 2.02 in 2013 before decreasing to the long-term assumption of 1.84 by 2027. These short-term assumptions are very different to those used in the 2008-based projections which assumed a decreasing fertility rate and reached the long-term within five years. The 2010-based assumptions are higher and stay higher for longer reflecting the current relatively high trends in fertility’. (ONS, 2012)

![Figure 14: Long-term fertility assumptions, ONS 2010-based projections](image)

A1.2 Mortality

‘The 2010-based projections see a change from the 2008-based projections in terms of improvements in mortality. It has been assumed that over the first 25 years of the projection period (by 2035), annual rates of mortality improvement will converge to a common rate of 1.2 per cent a year for those born in 1939 and after, with those born in the years 1925 to 1938 assumed to experience higher rates of improvement. Conversely, for those born before 1924, annual rates of improvement are assumed to be lower than 1.2 per cent in 2035. Overall, these are the same assumptions for the rates of mortality improvement in the target year as those used in the 2008-based projections (where the target year was 2033) for those born before 1940; for those born in 1940 and later the proposed improvement rates in the target year of 1.2 per cent are higher than the 1.0 per cent assumed in the 2008-based projections’. (ONS, 2012)
A1.3 Migration

‘The new long-term assumption for net migration to the United Kingdom is +200,000 each year, compared with +180,000 a year in the 2008-based projections. The assumed level of annual net migration to England is 172,500, which is 15,500 higher than for the 2008-based projections but only 1,000 higher than the assumption made for the 2006-based. Compared with the principal assumptions, the high and low migration variants assume long-term annual net migration to the UK to be 60,000 persons higher or lower (that is, +260,000 and +140,000)’. (ONS, 2012)
Appendix 2: CVs

Dr Peter Boden
Peter Boden is Director of Edge Analytics Ltd. He is a specialist in geographical modelling methods and population analysis. He has a particular interest in the impact of internal and international migration upon demographic change in local areas. His latest research focus has been the evaluation and improvement of estimates of immigration to local areas in the UK as part of an initiative to produce ethnic population projections for UK local authorities (Boden & Rees, 2010).

Peter is a former Director of GMAP Ltd and the Callcredit Information Group, having spent 20 years delivering bespoke geographical modelling solutions to a range of businesses that included WHSmiths, Asda, Ford Motor Company, Esso, BP, NS&I and HBOS. In the provision of specialist services in population analysis, estimation and projection, Peter continues to work with a range of public and private sector organisations in the UK. In collaboration with the Local Government Association, Edge Analytics is responsible for the management, development and delivery of POPGROUP; a suite of demographic forecasting products used extensively across the UK public sector.

Greg Ball
Greg Ball is an independent demographic consultant. He has over 30 years’ experience providing demographic intelligence to support strategic spatial planning work in several local authorities, including four in the West Midlands. He has contributed to demographic work to inform the Regional Spatial Strategy and its forebears. For several years he contributed to the work of the Central Local Information Partnership (CLIP) population sub-group. He has served on specialist work groups, to advise the Office for National Statistics and Communities and Local Government on the development of official population statistics and the household projections.
Appendix 3: National Planning Policy Framework (extract)

Using a proportionate evidence base

158. Each local planning authority should ensure that the Local Plan is based on adequate, up-to-date and relevant evidence about the economic, social and environmental characteristics and prospects of the area. Local planning authorities should ensure that their assessment of and strategies for housing, employment and other uses are integrated, and that they take full account of relevant market and economic signals.

Housing

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

- prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries. The Strategic Housing Market Assessment should identify the scale and mix of housing and the range of tenures that the local population is likely to need over the plan period which:
  - meets household and population projections, taking account of migration and demographic change;
  - addresses the need for all types of housing, including affordable housing and the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes),\(^{34}\) and
  - caters for housing demand and the scale of housing supply necessary to meet this demand;
- prepare a Strategic Housing Land Availability Assessment to establish realistic assumptions about the availability, suitability and the likely economic viability of land to meet the identified need for housing over the plan period.

34 The planning policy for traveller sites sets out how travellers' accommodation needs should also be assessed.
## Appendix 4: Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLG</td>
<td>Communities and Local Government</td>
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<td>MYE</td>
<td>Mid-year estimate (population)</td>
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<td>NLP</td>
<td>Nathaniel Lichfield &amp; Partners</td>
</tr>
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<td>NPPF</td>
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<td>ONS</td>
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<tr>
<td>POPGROUP</td>
<td>Demographic forecasting software (Local Government Association)</td>
</tr>
<tr>
<td>RSS</td>
<td>Regional Spatial Strategy</td>
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<td>Strategic Housing Market Assessment</td>
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<td>South Worcestershire Development Plan</td>
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<td>Total Fertility Rate</td>
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<td>WMRA</td>
<td>West Midlands Regional Assembly</td>
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Appendix 5: References


South Worcestershire Councils (2012a) Analysis of representations on SWDP preferred options. Provided to this project for review

South Worcestershire Councils (2012b) Analysis of representations on SWDP preferred options. Member core briefing notes. Provided to this project for review