APRIL 2015 | BIR.4361



WARWICK DISTRICT LOCAL PLAN

EXAMINATION 2015

MATTER 2 – OVERALL PROVISION FOR HOUSING

HEARING STATEMENT

ON BEHALF OF GALLAGHER ESTATES LTD

Pegasus Group

5 The Priory | Old London Road | Canwell | Sutton Coldfield | B75 5SH T 0121 308 9570 | F 0121 323 2215 | W www.pegasuspg.co.uk

Birmingham | Bracknell | Bristol | Cambridge | Cirencester | East Midlands | Leeds | London | Manchester

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MATTER 2 – OVERALL PROVISION FOR HOUSING

Issue: Whether the Local Plan has been positively prepared and whether it is justified, effective and consistent with national policy in relation to the overall provision for housing.

1.1 We note the Inspector's main issue is whether the Council has prepared a sound plan in relation to the matter of overall provision of housing. Having considered the evidence base to the Examination on this matter it is our clear conclusion that the Local Plan has <u>not</u> met the tests of soundness set out in the Framework at Paragraph 182. The Plan, in our view, will not deliver the key objective of the Framework as set out in paragraph 47 to: 'boost significantly the supply of housing'. The evidence set out in this Hearing Statement and in the accompanying Pegasus paper entitled "Identifying the Full, Objectively Assessed Need for Housing" demonstrates that the Plan is not founded on an evidence base that will ensure that the full, objectively assessed needs for housing in the HMA area will be delivered over the plan period. As such the Plan is not positively prepared, not effective and is inconsistent with national policy. It is unsound.

Question 1: What is the position of the authorities in the HMA regarding OAN?

1.2 The position of the six HMA authorities regarding OAN is set out in the report to the 'Coventry and Warwickshire and South East Leicestershire Economic Prosperity Board' (EPB Board 21 November 2014, Ref: LP20). This report draws on the evidence contained within the Joint Strategic Housing Market Assessment (November 2013 Ref H004) and Joint Strategic Housing Market Assessment Annex (September 2014 Ref: H008) prepared by G L Hearn for the Coventry and Warwickshire Housing Market Area (HMA). The EPB agreed at the 21st November meeting (subsequently endorsed by the six individual authorities) that the overall OAN for the HMA area should be consistent with the SHMA Annex (4,004 dwellings per annum 2011 to 2031) but that the distribution across the HMA area should reflect the 2013 earlier SHMA findings acknowledging that this will give a shortfall of 234 dwellings per annum across the HMA area.



- 1.3 The Pegasus evidence as set out in this Hearing Statement and accompanying Paper demonstrates that the figure of 4,004 dwellings per annum as agreed by the HMA authorities including Warwick District does <u>not</u> meet demographic starting point or economic requirements. It will not, in our view, deliver the full OAN in the HMA area and is inadequate. The Pegasus evidence demonstrates the demographic 'starting point' is in the region of 4,080 dwellings per annum for the HMA and that the robust dwelling requirement, which is broadly consistent with employment growth requirements as set out in the Local Plan and the SHMA Annex, should be derived for the HMA area over the period 2011 to 2031.
- 1.4 As set out in response to Matter 1 the 'starting point' distribution as agreed by the HMA authorities is arbitrary only and not based on up to date evidence based assessment work. It does not reflect demographic nor economic growth requirements as required by Planning Practice Guidance on *'Housing and economic development needs assessments'*. The 'starting point' distribution could result in a mismatch between supply and demand. This is likely to have unsustainable and undesirable consequences. A suitable dwelling distribution should be based on economic growth projections for the HMA.

Question 2: What do population and household projections indicate?

- 1.5 Scenario 1 of the Pegasus Group modelling work indicates for the Coventry and Warwickshire HMA, a population growth of 143,503 and dwelling growth of 81,516 (4,076 dwelling per annum) between 2011 and 2031. When comparing this figure to the Council's accepted equivalent scenario from the SHMA Update (September 2014), the HMA figure advocated by the authorities is lower at 4,004 dwellings per annum.
- 1.6 The Paper prepared by the Council in respect of the 2012 Based Subnational Household Projections (March 2015, Exam 4) appears to be factually correct. In terms of the housing need level, the household projections suggest a greater overall dwelling requirement for the HMA at 4,100 dwellings per annum for the period of 2011 to 2031. This figure is closer to the Scenario 1 dwelling requirement for the HMA prepared by Pegasus Group than the 4,004 dwelling figure accepted by the Councils. When looking at the figures for Warwick and Coventry, the figure for Warwick decreases and Coventry increases. Further



evidence on this aspect is contained in the accompanying Pegasus Group paper and below.

Question 3: How do the recently published 2012-based household projections affect the situation?

1.7 In terms of the implications of the 2012 Based Subnational Household Projections, it should be noted that they reflect short term trends covering a five year period, which for the 2012 Based data is from 2008 to 2012. It is important to consider factors affecting population and household growth including migration, dwelling completions, policy influences etc. as these can artificially suppress/inflate projections of household formation. In some cases, such factors are likely to change in the future, which would therefore result in differing rates of household growth.



- 1.8 As set out in the accompanying Pegasus Group paper, there a number of factors influencing past trends in the HMA.
 - Previous planning policy initiatives in the West Midlands sought to deliver urban renaissance, which was aimed at redirecting growth towards urban areas and restricting growth in the rural areas. This, therefore, was an artificial policy of constraint that meant the full, objectively assessed needs, in both demographic and economic terms, of the rural areas were not satisfied. For the urban area of Coventry within the HMA, conversely, the dwelling requirement was boosted in order to be the focus of growth.
 - A consequence of the lower dwelling requirements in the rural areas was that dwelling completions were easily achieved, which prompted both Warwick and Stratford on Avon District Councils to impose further artificial constraints on housing delivery by a housing moratorium. This restriction on delivery prevented both indigenous households from forming and migrating households from moving into those locations.
 - The recent severe economic recession further restricted household formation and internal migration.
 - Following the abolition of regional planning and the introduction of a new planning framework, there was and remains in a number of locations in the HMA, a policy vacuum. A lack of positive land use planning has resulted in under delivery of housing across the HMA to the disadvantage of existing and emerging households.
- 1.9 In light of the above, dwelling requirements arising from the 2012 Based Population and Household Projections need to be treated with caution and other scenarios, which may provide more balanced levels of growth across the HMA should be tested and where appropriate pursued.



Question 4: Does the Coventry and Warwickshire Joint SHMA 2013 and Addendum of 2014 provide a robust evidence base for OAN in the HMA and individual authorities?

- 1.11 The SHMA evidence combined provides an indication of the demographic 'starting point' and possible dwelling requirements arising from varying economic projections but does not specifically identify the full, objectively assessed need cognisant of market signals and employment land evidence both of which are required by Planning Practice Guidance to be taken into account. Accordingly we do not consider that the SHMA evidence as of itself provides a robust evidence base for determining OAN in the HMA and in particular the 2014 Annex did not conclude by providing an OAN for individual authorities.
- 1.12 In terms of the SHMA evidence as a 'starting point' there are differences between the figures identified by Pegasus Group in the accompanying paper and the 2014 SHMA Update based on the 2012 Based Subnational Population Projections. This is due to differences in approach to headship rates. It is considered, however, that a figure nearer 4,100 dwellings per annum 2011 to 2031 for the HMA should be the 'starting point' in light of the latest SNHP and headship rate data.
- 1.13 The SHMA Update has considered two varying sources of economic projections from both Cambridge Econometrics and Experian. As noted in paragraph 3.11, the Cambridge Econometrics figures have been used in the Coventry and Warwickshire Joint Employment Land Review (ELR). The ELR is helpful as, although the employment land requirements were identified through the subsequent Coventry and Warwickshire Strategic Employment Land Study October 2014, it identifies the level of employment land growth required based on the employment growth projection and concludes that the Local Plan provides employment land (36 ha) based on the amount of employment land associated with the level of growth projected by Cambridge Econometrics (31 ha). The report, however, does go on to conclude that a higher level of growth be provided (the job and dwelling requirements arising from this scenario have not been tested) and expresses caution that compared with past trend of employment land take up there may be a significant shortfall of employment land.



- 1.14 The Experian figures have been identified in isolation from any other evidence base. It would seem therefore perverse and contrary to guidance to use these projections to identify future dwelling requirements.
- 1.15 In terms of market signals, the 2014 Update attempts to justify adjustments to headship rates as suitable adjustments to account for market signals. It is considered that two separate adjustments are to be made for different reasons. Adjustments to headship rates are to allow households to form that are constrained from becoming a new household due to future projection replicating recessionary trends (i.e. larger household size). Separate to this, market signals are to be reviewed in accordance with Planning Practice Guidance and a worsening trend of any of the indicators will require an upward adjustment to planned housing numbers compared to those based solely on household projections. It is therefore considered that, although market pressure has been identified, no separate uplift for market indicators has been applied.

Question 5: What are the assumptions in terms of population change, migration, household size and household formation rates? Are these justified?

- 1.17 The assumptions for population change in the SHMA 2014 Update are that population growth levels of the 2012 Based Subnational Projections are appropriate as the 'starting point' for the full objectively assessed need. This base level is consistent with Pegasus Group Scenario 1 modelling. The population base is therefore justified.
- 1.18 In terms of migration, although varying options were considered as part of the original SHMA, no further scenarios are tested using the 2012 Based Subnational Population Projections in the SHMA 2014 Update. As set out within the accompanying Pegasus Group paper, migration levels have fluctuated over the past 10 years. In light of this it is worth considering the reasons for this and whether such trends are likely to arise again. As set out above, growth into the rural areas should not be suppressed as it has been in the past and therefore higher growth comparable with pre-recession levels is likely to occur.



1.19 With regard to household size and household formation, the Council's consultants proposed a partial return to trend that assumes household formation patterns from the 2011 Based Household Projections until 2021 and then revert to the rate of change projected in the 2008 Based Household Projections rebased from 2021 to 2031 and more recently sensitivity testing. In addition, more sophisticated sensitivity testing models the implications of returning household formation rates over the period to 2031 back to levels envisaged in the 2008 based household projections. The Stratford on Avon Local Plan Inspector considered this approach to be a reasonable assumption, however, due to little sign of an improvement to average real incomes and thus affordability, the Inspector found no clear basis to assume a full return to trend.

Question 6: How has the issue of unattributable population change been dealt with and is this justified?

1.20 As recognised by Inspector's elsewhere in the West Midlands (Stratford on Avon and Birmingham), there is no justification for adjustments to take account of unattributable change in the latest population projections. It is understood that unattributable change was not taken into consideration as part of past trends for projecting forward growth in the 2012 Based Subnational Population Projections.

Question 7: What are the assumptions regarding economic / employment growth and are these justified?

1.21 As highlighted above, the Cambridge Econometrics data tested within the SHMA Update 2014 was also used to inform the Coventry and Warwickshire Strategic Employment Land Study October 2014. The Cambridge Econometrics data is considered to be more robust in that it has been demonstrated to be consistent with a similar level of employment land growth to that proposed in the Warwick Local Plan. Scenario 2 of the accompanying Pegasus Group paper provides appropriate dwelling requirements based on providing the HMA level of economic growth and indicates a housing requirement of **20,005** for Warwick (**1,000 dwellings per annum**) over the plan period 2011 to 2031. For the reasons identified above, it is considered that a dwelling requirement based on this data source provides the full, objectively assessed need. There is concern that the Experian levels of



projected growth would be inconsistent with employment land requirements and may prevent the economy from meeting its full potential.

Question 8: How have market signals and affordable housing needs been taken into account?

1.22 As identified above, although market signals have been considered within the original SHMA, the SHMA evidence does not propose an appropriate uplift specifically to alleviate market pressure to the dwelling requirements arising from the 2012 Based Subnational Population Projections in the SHMA 2014 Update. It is our view that by providing dwelling requirements consistent with economic growth projections, the increase in housing delivery will increase supply to meet demand, which will address market signals, increasing overall affordable housing provision.

Question 9: What effect have all of these factors had on the figures for OAN in individual authorities and the HMA as a whole? ie how have household/population projections been adjusted?

1.23 There is concern that the SHMA evidence does not define the full, objectively assessed need. It does confirm a 'starting point' of a minimum of 4,000 dwellings per annum in the HMA, which the authorities have signed up to. As identified above, other factors such as economic projections and market indicators need to be taken account iof in accordance with the Framework and the PPG.

Question 10: Will there be unmet needs? Specifically what is the situation in Coventry?

1.24 There is a consensus that there will be unmet needs within the HMA particularly in Coventry, utilising the OAN for the HMA of 4,004 dwellings per annum over the period 2011 to 2031 which the HMA authorities believe is the appropriate OAN figure. As the Inspector will note from this Hearing Statement and the accompanying Pegasus Group paper it is our view that the OAN for the HMA is greater than the 4,004 dwellings per annum figure advocated by the HMA authorities. Indeed, using the robust methodology of the Chelmer Model it is considered that the demographic-led requirement is **36,484** for Coventry (**1,824**



dwellings per annum). In our view this is likely to be the full OAN for Coventry and will not be capable of being accommodated within the City's boundaries. It is also our view that Coventry City Council is over-estimating the capacity within its boundaries, and the scale of unmet need arising will therefore be significant and must be quantified and provided for in other parts of the HMA, including Warwick District, in order for plan making to be found sound and the Duty to Cooperate discharged.

Question 11: Will these needs be met elsewhere in the HMA? Is this clear?

1.25 There is no evidence before the Inspector which demonstrates that the need will be met elsewhere in the HMA. It is therefore unclear as to how the OAN for Coventry and the HMA as a whole will be met.

Question 12: What is the approach of the authorities in the HMA to addressing this issue? What additional work needs to be undertaken and over what timescale?

- 1.26 The District Council will point to the shared process and timetable contained at Table 2 of the 21st November 2014 EPB Board report as approved by the six authorities as a means of demonstrating that the matter will be addressed. We would agree that this is helpful in clarifying work streams to be progressed jointly (such as the Green Belt assessment) but it does little to provide an effective and definitive outcome as to how the issue of housing provision across the HMA will be approached and addressed. There remains uncertainty in this regard.
- 1.27 There is an anticipation that a mechanism will be in place to accommodate unmet need somewhere between 2017 and 2019 and that this will have been achieved through the preparation of a Joint Core Strategy (which seems unlikely given the lack of support for this approach from some authorities) or presumably through certain authorities agreeing to review their Local Plans to accommodate unmet need arising from Coventry. We would respectfully suggest that this is an inadequate response given that the unmet need is arising now. See also the Pegasus response to Matter A: Duty to Cooperate.



Question 13: Is the approach of the Local Plan to this issue (in particular Policy DS20) appropriate? What are the implications of this approach in terms of soundness?

- 1.28 The issue of unmet need within the HMA has not been quantified, addressed or resolved. The Local Plan proposes to deal with this issue through proposed Policy DS20 which 'commits' the Council to future working on the strategic matter of unmet housing needs arising outside of the District. When evidence is clearly available now that there is unmet need this approach means the Local Plan is not positively prepared, not consistent with national policy, is not effective cognisant of Paragraph 182 of the NPPF, and is unsound.
- 1.29 Policy DS20 is not a policy which is capable of delivering on key aspects of soundness. The policy will not deliver a key outcome as required by the NPPF namely to meet objectively assessed development requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so over the plan period. It is a policy which seeks to delay this matter until further work under duty to cooperate has taken place (please refer to the Pegasus response to Matter A). Certainly this is not an approach which is consistent with national policy which requires authorities, in paragraph 47 to "boost significant the supply of housing" and "use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area". The evidence base supporting the Plan (for reasons explored throughout this Hearing Statement) does not ensure that full, objectively assessed needs of the HMA are going to be met and Policy DS20 does not rectify this fundamental flaw.
- 1.30 To conclude, we would respectfully suggest that Policy DS20 is not an appropriate approach and does not accord with the PPG (PPG ID 9-011-2014036) requirement for co-operation to produce effective policies on cross boundary strategic matters with concrete actions and outcomes. In our view there is clear and robust evidence that demonstrates unmet housing need arising in the HMA. The Warwick District Local Plan, in order to be found sound and legally compliant, should take account of this now.



Question 14: What is the specific basis for the figure for OAN in Warwick District? Is it justified and appropriate?

- 1.31 The basis for the figure the Council use as the OAN in Warwick District is the figure of 606 dwellings per annum. However, this is the demographic 'starting point'. Both the SHMA and Pegasus Group modelling agree that this is the case. It is understood that the Local Plan requirement of 714 dwellings per annum was formerly the 'starting point' based on earlier projections and the Council has maintained this figure. There is no justification for the arbitrary 106 dwellings per annum difference other than it being convenient and possibly politically and publically acceptable.
- 1.33 It is our view that building upon the 'starting point', economic and market signals need to be taken into account. The accompanying Pegasus Group paper presents three scenarios and it is proposed that Scenario 2, which is based on applying the HMA level of growth as identified by Cambridge Econometrics, and projects 1,000 per annum for Warwick, is the full OAN for housing in the District.

Question 15: Is the level of housing planned in the Local Plan sufficient to meet OAN in the District? And in the HMA?

1.34 As highlighted above the Local Plan dwelling requirement is neither justified nor appropriate and fails to take account of the full, objectively assessed need (taking account of economic and market signals) and unmet need arising from Coventry. Likewise, the alleged HMA figure of 4,004 falls short of the full, objectively assessed need, as illustrated by projections based on jobs growth in the SHMA 2014 Annex.



Question 16: What would be the implications for population change, migration and employment growth?

1.35 Should the proposed Local Plan requirement be taken forward, there is concern that population levels would reflect longer term policies of restraint and recessionary trends, which could stifle economic growth in the District. In terms of migration, only those with higher incomes (possibly older people less likely to contribute economically to the locality) would be able to migrate into Warwick. The younger indigenous population could be forced to move into more affordable locations to form households. Commuting into the District may increase to fulfil economic labour force requirements. Potentially, due to a shortage of labour force, businesses may choose to locate in other areas where there is a better To conclude, there are number of unsustainable and labour force supply. undesirable consequences that could arise as a result of under-providing dwellings. The Inspector is therefore asked to review alternative evidence within the accompanying paper, which suggests a dwelling requirement that is considered to meet the full, objectively assessed need (Scenario 2).

Question 17: Is the level of housing planned appropriate? Should it be increased or decreased? If so to what level and on what basis?

- 1.36 To conclude the level of housing planned is not appropriate and should be increased in order to properly consider economic growth projections broadly consistent with employment land requirements contained within the Local Plan.
- 1.37 It is recommended that Warwick should plan to deliver 1,000 dwellings per annum, which is Scenario 2 of the Pegasus Group paper entitled Identifying the Full, Objectively Assessed Need. A more detailed justification is provided within the accompanying paper.

Question 18: Is the plan period to 2029 appropriate? Should it be extended?

1.38 Paragraph 157, NPPF is clear that Local Plans should be drawn up over an appropriate time scale, preferably a 15 year time horizon. Assuming adoption in early 2016, then a 15 year timeframe will take the Plan to 2031. At present the Plan covers only a 13 year timeframe. This is a matter that was considered by the



Lichfield District Local Plan Inspector in his Initial Findings (September 2013) whereby Mr Yuille stated:

"That being so the Plan, which runs to 2028, would only have a 14 year life – rather than the 15 year time horizon which the NPPF indicated would be preferable. The Council should, therefore, consider extending the end date of the Plan to 2029 and making the necessary adjustment to housing numbers." (paragraph 39, Lichfield District Local Plan Inspector Initial Findings, September 2013)

1.39 In light of the above and given the provisions of the NPPF we do not consider the plan period to be appropriate and can see no justification for failing to extend the plan period to 2031 representing a 15 year timeframe. This allows the Plan to take account of longer time requirements and would be consistent with the role of the Local Plan to plan positively for the development required in the area in accordance with the NPPF.

April 2015 | BIR.4361



IDENTIFYING FULL OBJECTIVELY ASSESSED HOUSING NEEDS

WARWICK DISTRICT

APRIL 2015

Pegasus Group

5 The Priory | London Road | Canwell | Sutton Coldfield | B75 5SH T 0121 308 9570 | F 0121 323 2215

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1. INTRODUCTION

- 1.1 The purpose of this Paper is to provide evidence to demonstrate the full, objectively assessed need for housing in Warwick District based upon projections generated by the Chelmer Housing and Population Model, which uses a demographic methodology to determine future housing provision. The Chelmer Model also has an economic module that integrates the testing of workplace growth projections. An assessment of market signals and other relevant factors is undertaken to identify if uplift is necessary in order to derive the full, objectively assessed housing need for Warwick.
- 1.2 The Chelmer Model is a variant of official Government projection methodologies which derives household and dwelling projections and was developed by the Population and Housing Research Group at Anglia Polytechnic. It provides the ability to vary inputs and provides a robust and credible basis for predicting household growth and dwelling requirements. The reference period for the projections in this paper is 2011-2031.
- 1.3 This Paper summarises the projections generated by the Chelmer Housing and Population Model and the outputs of the model are included as appendices to this paper.
- 1.4 The paper also provides evidence in relation to the housing needs of the wider Coventry and Warwickshire Housing Market Area (HMA) and of Coventry City. This is important to set the wider, HMA context for the housing needs of the area and to reflect the importance of the housing needs arising in Coventry. Recent case law is clear, though, that the primary duty of the LPA is to assess the needs of the LPA area.



2. THE POLICY CONTEXT

The National Planning Policy Framework

- 2.1 The National Planning Policy Framework (the Framework) was published in March 2012 and sets out Government policy including in relation to plan preparation and housing. The Government's imperative to boost significantly the supply of housing is set out clearly in paragraph 47, which requires local planning authorities to ensure their local plans meet the full, objectively assessed needs for market and affordable housing in the housing market area, consistent with the policies set out in the Framework.
- 2.2 In relation to establishing a housing requirement, paragraphs 50, 158, and 159 from the Framework set out a number of matters that should be taken into account. Local Council's should ensure that their assessment of and strategies for housing, employment and other uses are integrated, and they take full account of relevant market and economic signals (paragraph 158). In order to assess full housing needs, there is a need to take into account evidence of current and future demographic trends, market trends and the needs of different groups in the community (paragraph 50). Paragraph 159 explains that this means:
 - Meeting household and population projections, taking account of migration and demographic change.
 - Addressing the need for all types of housing including affordable housing and the needs of different groups in the community.
 - Catering for housing demand and the scale of housing to meet this demand.

Planning Practice Guidance

- 2.3 On 6 March 2014 the Department for Communities and Local Government (CLG) launched the Planning Practice Guidance (PPG) web-based resource. This was accompanied by a Written Ministerial Statement which included a list of the previous planning practice guidance documents cancelled when the web site was launched.
- 2.4 The PPG seeks to explain further elements set out in the Framework. With respect to the objective assessment of housing need, it makes the following points amongst others:

Housing and economic development needs assessments

- Household projections provide the starting point of overall housing need (ID 2a-015).
- They may require adjustment, for example to reflect previously suppressed household formation rates due to under-supply and worsening affordability.



Assessments should therefore reflect the consequences of past under delivery of housing. Importantly, the projections do not reflect unmet housing need and a view should be taken on the extent to which household formation rates are or have been constrained by supply (ID 2a-015).

- It is relevant to take account of labour force supply relative to projected job growth in assessing housing need (ID 2a-018).
- The housing need number suggested by household projections should be adjusted to reflect market signals and other indicators of the balance between supply and demand, and worsening trends will require upward adjustment (ID 2a-019 & 020).
- Affordable housing need must be calculated and then be considered in the context of its likely delivery given the probable percentage to be delivered in market housing led developments. An increase in total housing should be considered where it could help deliver required affordable homes (ID 2a-029).

Planning Advisory Service Technical Advice Note – June 2014

- 2.5 The Planning Advisory Service (PAS) provides consultancy and peer support, training sessions and online resources to help local authorities understand and respond to planning reform. The PAS is grant funded by the DCLG. Peter Brett Associates (PBA) has prepared an advice note entitled Objectively Assessed Need and Housing Targets (June 2014) on behalf of the PAS, which the PAS state is "*based on existing good practice, our own experience and most importantly on the recommendations of planning Inspectors."*
- 2.6 The Advice Note is a welcome summary of policy in the Framework and the guidance set out in PPG. It states that housing needs assessments should start from the CLG household projections, which in turn are based on the ONS population projections (SNNP). However, it goes on to point out that official projections roll forward demographic trends from the past ('the base period') and do not necessarily provide a true picture of future demand, for three main reasons: firstly, the projections might be technically flawed for example because they are based on out-of-date information; secondly, they do not take account of future change in the external factors that drive demographic change, such as the economy or land supply in neighbouring areas; and, thirdly, they effectively assume that in the past planning met the demand for housing land in full and therefore in places where planning constrained past demand, projections will understate future demand. To overcome these flaws as far as possible, the Note advises projections may be adjusted to produce alternative scenarios.
- 2.7 The Advice Note goes on to state that in accordance with the PPG, market signals should be analysed to see if planning in the past has constrained housing development. Where that was the case, demographic projections will carry forward that under-provision, and therefore should be adjusted upwards. With regard to affordable housing need the Advice Note sets



out a fuller explanation of paragraph ID 2a–029, confirming the importance of considering an increase in the total OAN figure to "meet a reasonable proportion of the affordable need".

2.8 With regard to the relationship between job growth forecasts and housing need, the Advice Note is clear that future labour market requirements cannot be used to cap demographic projections. In other words, if demographic projections do not provide enough resident workers to fill the expected workplace jobs they should be adjusted upwards until they do. But if the demographic projections provide more workers than are required to fill the expected jobs, they should not be adjusted downwards. The Advice Note states, if both a job-led projection and a trend-led demographic projection have been prepared, the higher of the two resulting housing numbers is the objectively assessed need.



3. DEMOGRAPHIC CONTEXT

This chapter presents demographic contextual data (i.e. population, natural change, migration and households) published by ONS and CLG for Warwick District, the wider Coventry and Warwickshire HMA and Coventry City within the period 2011 to 2031 to reflect the 2011 Census and the most up to date population and household projections. Publication of data from the 2011 Census enables projections to be properly calibrated and forms the most up to date and robust evidence.

Office for National Statistics (ONS) 2012-based Sub-National Population Projections (SNPP)

- 3.1 The most recent SNPP data available is the 2012-based sub-national population projections. These were published by the Government on 29 May 2014. This statistical release projects the population at national and sub-national level over a 25 year period 2012 to 2037. PPG at paragraph ID 2a-017 indicates that account should be taken of the most recent information, including ONS population projections. The 2012 SNPP rebase sub-national projections with the latest available population estimates based on the results from the 2011 Census. Although the projections are therefore robust, they are based largely on trends recorded over the preceding 5 years (2007-2012), including periods of severe recession, and some caution should be used when interpreting modelling based upon them.
- 3.2 As shown in Table 1 below, the 2012-based SNPP for the Coventry and Warwickshire HMA projects an average population growth in the order of 7,510 people per annum between the years 2011 to 2021 (10 years) and 7,070 between the years 2011 to 2031 (20 years). For comparison purposes, earlier SNPP are shown.

	2010	2011	2016	2021	2026	2029	2031
2012 SNPP	-	862.4	900.4	937.5	973.6	993.9	1,003.8
2011 Interim SNPP	-	863.5	910.9	955.5	-	-	-
2010 SNPP	860.6	870.4	923.6	974.0	1,022.0	1,048.8	1,065.7
2008 SNPP	856.3	862.8	895.2	929.0	962.6	981.3	992.7
2006 SNPP	853.0	859.7	893.1	927.7	961.0	979.3	990.7
2004 (Rev) SNPP	840.4	844.0	863.3	883.3	901.9	-	-

Table 1: ONS Population Estimates and Projections for Coventry and Warwickshire HMA (000's)

	2011 - 2021	2011 - 2031
2012 SNPP	75,100/7,510 PA	141,400/7,070 PA
2011 Interim SNPP	92,000/9,200 PA	-
2010 SNPP	103,600/10,036 PA	195,300/9,765 PA
2008 SNPP	66,200/6620 PA	129,900/6,495 PA

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2006 SNPP	68,000/6800 PA	131,000/6,550 PA
2004 (Rev) SNPP	39,300/3930 PA	-

Source: Office for National Statistics

2004 (Rev) SNPP

3.3 Table 2 identifies the 2012-based SNPP for Warwick which projects average population growth in the order of 960 people per annum between the years 2011 to 2021 (10 years) and 935 between the years 2011 to 2031 (20 years). For comparison purposes, earlier SNPP are shown.

	2010	2011	2016	2021	2026	2029	2031
2012 SNPP	-	136.0	141.1	145.6	150.2	153.0	154.7
2011 Interim SNPP	-	137.7	143.0	148.7	-	-	-
2010 SNPP	137.8	139.1	146.3	152.8	159.4	163.2	165.5
2008 SNPP	141.4	143.0	150.3	157.1	164.0	167.9	170.2
2006 SNPP	140.3	142.1	151.1	159.8	167.8	172.2	174.9
2004 (Rev) SNPP	140.3	141.9	149.6	156.8	163.1	-	-
		2011 - 2	021		20	11 - 2031	
2012 SNPP		9,600/960				700/935 PA	
2011 Interim SNPP		11,000/1,1				-	
2010 SNPP	13,700/1,370 PA				26,400/1,320 PA		
2008 SNPP	14,100/1,410 PA				27,200/1,360 PA		
2006 SNPP		17,700/1,7	70 PA		32,8	00/1,640 PA	4

Table 2: ONS Population Estimates and Projections for Warwick (000's)

3.4 Finally, in Table 3 below, the 2012-based SNPP for Coventry projects an average population growth in the order of 4,270 people per annum between the years 2011 to 2021 (10 years) and 4,005 between the years 2011 to 2031 (20 years). Again, for comparison purposes, earlier SNPP are shown.

14,900/1,490 PA

Table 3: ONS Population Estimates and Projections for Coventry (000's)

	2010	2011	2016	2021	2026	2029	2031	
2012 SNPP	-	318.6	341.4	361.3	380.6	391.7	398.7	
2011 Interim SNPP	-	316.9	342.7	364.3	-	-	-	
2010 SNPP	321.7	326.8	353.6	377.9	401.1	414.3	422.7	
2008 SNPP	315.2	317.6	329.0	340.8	353.2	360.3	364.6	
2006 SNPP	312.8	314.6	323.8	333.6	343.7	349.6	353.3	
2004 (Rev) SNPP	303.8	303.9	305.3	307.7	310.9	-	-	
		2011 2021			2011 2021			

	2011 - 2021	2011 - 2031
2012 SNPP	42,700/4,270 PA	80,100/4,005 PA
2011 Interim SNPP	47,400/4,740 PA	-
2010 SNPP	51,100/5,110 PA	95,900/4,795 PA
2008 SNPP	23,200/2,320 PA	47,000/2,350 PA



2006 SNPP	19,000/1,900 PA	38,700/1,935 PA
2004 (Rev) SNPP	3,800/380 PA	-

Source: Office for National Statistics

ONS Estimates and Projections of Natural Change

- 3.5 Natural change is one of the components of population change. The natural change statistics for the Coventry & Warwickshire HMA (Table 4), Warwick (Table 5), and Coventry (Table 6) show an increasing population over the period 2011 to 2031.
- 3.6 Please note the data for natural change in the table below are given as actual mid-year figures. They are not annual rates.

Table 4: ONS Natural Change Estimates and Projections for Coventry & Warwickshire HMA (000's)

	2010	2011	2016	2021	2026	2029	2031
2012 SNPP	-	-	3.9	4.0	3.8	3.3	3.1
2011 Interim SNPP	-	-	4.2	4.2	-	-	-
2010 SNPP	-	3.4	4.5	4.6	4.0	3.6	3.4
2008 SNPP	2.9	3.0	3.5	3.7	3.2	2.8	2.6
2006 SNPP	3.0	3.2	3.6	3.6	3.0	-	2.4
2004 (Rev) SNPP	1.5	1.6	1.9	1.9	1.4	-	-

Source: Office for National Statistics

Table ELONG Natural	Change Estimates and Projection	- for Monuick	$(\Omega \cap \Omega'_{\alpha})$
Table 5. UNS Natural	Change Estimates and Projections		(UUUS)

	2010	2011	2016	2021	2026	2029	2031
2012 SNPP	-	-	0.5	0.5	0.5	0.4	0.4
2011 Interim SNPP	-	-	0.5	0.5	-	-	-
2010 SNPP	-	0.5	0.5	0.5	0.4	0.4	0.3
2008 SNPP	0.4	0.4	0.5	0.6	0.5	0.5	0.4
2006 SNPP	0.5	0.6	0.7	0.8	0.7	-	0.6
2004 (Rev) SNPP	0.3	0.3	0.4	0.5	0.5	-	-

	2010	2011	2016	2021	2026	2029	2031
2012 SNPP	-	-	2.7	3.0	3.1	3	3
2011 Interim SNPP	-	-	2.7	3.1	-	-	-
2010 SNPP	-	2.2	3.1	3.4	3.3	3.3	3.3
2008 SNPP	1.9	2.0	2.5	2.7	2.6	2.6	2.6
2006 SNPP	1.9	2.1	2.4	2.4	2.3	-	2.3
2004 (Rev) SNPP	1.2	1.2	1.4	1.5	1.4	-	-

Table 6: ONS Natural Change Estimates and Projections for Coventry (000's)

ONS Estimates of Net Migration

3.7 Net migration is one of the inputs of population change. Table 7 identifies levels of net migration since 2001 for the Coventry and Warwickshire HMA as a whole. It should be noted that this data has been revised to take account of the 2011 Census.

	Internal Net Mig	International Net Mig	Total Net Mig
2001-02	1,068	2,441	3,509
2002-03	1,526	2,756	4,282
2003-04	-7	1,126	1,119
2004-05	745	4,430	5,175
2005-06	474	6,383	6,857
2006-07	-183	5,634	5,451
2007-08	-146	7,339	7,193
2008-09	-654	4,080	3,426
2009-10	-470	4,829	4,359
2010-11	-84	5,388	5,304
2011-12	-998	5,058	4,060
2012-13	-1,084	5,425	4,341

Table 7: ONS Revised Estimate of Net Migration in Coventry & Warwickshire HMA

	Net Mig. Annual Average 2008-2013	Net Mig. Annual Average 2003-2013
Warwickshire HMA	4,298	4,729

Source: Office for National Statistics

3.8 When examining the annual average figures for the Coventry & Warwickshire HMA, over the past ten years net migration has annually averaged approximately 4,729 people and therefore this has been a key driver for population change in the HMA. More recently, the annual average over the past five years has decreased to 4,298.



	Internal Net Mig	International Net Mig	Total Net Mig
2001-02	1,634	595	2,229
2002-03	1,859	503	2,362
2003-04	1,702	131	1,833
2004-05	1,051	611	1,662
2005-06	370	428	798
2006-07	521	204	725
2007-08	-67	555	488
2008-09	388	-18	370
2009-10	-322	-216	-538
2010-11	-742	-139	-881
2011-12	302	68	370
2012-13	-597	50	-547

	Net Mig. Annual Average 2008-2013	Net Mig. Annual Average 2003-2013
Warwick	-245	428

3.9 Table 8 shows that the annual average figures for Warwick over the past ten years net migration has annually averaged approximately 428 people and therefore this has been a key driver for population change in the Warwick. More recently, the annual average over the past five years has decreased to -245.

	Internal Net Mig	International Net Mig	Total Net Mig
2001-02	-2,566	1,887	-679
2002-03	-1,899	2,109	210
2003-04	-2,861	1,005	-1,856
2004-05	-2,280	3,093	813
2005-06	-1,732	3,825	2,093
2006-07	-2,775	4,206	1,431
2007-08	-1,487	4,994	3,507
2008-09	-1,355	3,376	2,021
2009-10	-946	4,668	3,722
2010-11	-774	5,206	4,432
2011-12	-992	5,116	4,124
2012-13	-596	5,359	4,763

Table 9: ONS Revised Estimate of Net Migration in Coventry

	Net Mig. Annual Average 2008-2013	Net Mig. Annual Average 2003-2013
Coventry	3,812	2,505



3.10 Table 9 shows that the annual average figures for Coventry over the past ten years net migration has annually averaged approximately 2,505 people and therefore this has been a key driver for population change in the City. More recently, the annual average over the past five years has significantly increased to 3,812.

ONS Projections of Net Migration

- 3.11 Migration projections, which form part of the SNPP, are calculated using migration propensities by age from one area to another. The data is summarised in Tables 10, 11 and 12.
- 3.12 Please note the data in the tables below are given as actual mid-year figures.
- 3.13 Table 10 identifies that if recent propensities are to be maintained within the Coventry & Warwickshire HMA, according to the 2012 SNPP annual net migration will increase and reach levels of over 4,000 people per annum from 2016, and decrease thereafter.

vai wicksiille fima (ut	arwickshire HMA (000 S)							
	2010	2011	2016	2021	2026	2029	2031	
2012 SNPP	-	-	4.0	3.3	3.3	3.3	3.1	
2011 Interim SNPP	-	-	5.1	4.6	-	-	-	
2010 SNPP	-	6.1	5.9	5.3	5.2	5.1	4.9	
2008 SNPP	3.7	3.5	3.1	3.1	3.4	3.1	3.0	
2006 SNPP	3.6	3.5	3.3	3.3	3.4	3.3	3.3	
2004 (Rev) SNPP	2.0	2.0	2.0	2.1	2.2	2.1	-	

Table 10: ONS Migration Estimates and Projections (Annual Figures) Coventry & Warwickshire HMA (000's)

Source: Office for National Statistics

3.14 Table 11 identifies that if recent propensities are to be maintained within Warwick, according to the 2012 SNPP annual net migration will increase and reach levels of over 500 people per annum from 2016, which dip in 2021 and then maintain 500 thereafter.

Table 11: ONS Migration Estimates and Projections (Annual Figures) Warwick (000's)

			J · · · /		-/	
2010	2011	2016	2021	2026	2029	2031
-	-	0.5	0.4	0.5	0.5	0.5
-	-	0.7	0.6	-	-	-
-	0.8	0.8	0.7	0.8	0.8	0.8
1.2	1.2	0.9	0.7	0.8	0.8	0.7
1.4	1.3	1.1	0.9	0.8	0.7	0.7
1.3	1.2	1.0	0.9	0.8	0.7	-
	2010 - - 1.2 1.4	2010 2011 - - - - - 0.8 1.2 1.2 1.4 1.3	2010 2011 2016 - - 0.5 - - 0.7 - 0.8 0.8 1.2 1.2 0.9 1.4 1.3 1.1	2010 2011 2016 2021 - - 0.5 0.4 - - 0.7 0.6 - 0.8 0.8 0.7 1.2 1.2 0.9 0.7 1.4 1.3 1.1 0.9	2010 2011 2016 2021 2026 - - 0.5 0.4 0.5 - - 0.7 0.6 - - 0.8 0.8 0.7 0.8 1.2 1.2 0.9 0.7 0.8 1.4 1.3 1.1 0.9 0.8	- 0.5 0.4 0.5 0.5 - - 0.7 0.6 - - - 0.8 0.8 0.7 0.8 0.8 1.2 1.2 0.9 0.7 0.8 0.8 1.4 1.3 1.1 0.9 0.8 0.7

Source: Office for National Statistics

3.15 Table 12 identifies that if recent propensities are to be maintained within Coventry, according to the 2012 SNPP annual net migration will achieve 1,900 people per annum at 2016 and decrease thereafter.



	2010	2011	2016	2021	2026	2029	2031
2012 SNPP	-	-	1.9	0.8	0.8	0.6	0.4
2011 Interim SNPP	-	-	2.0	1.1	-	-	-
2010 SNPP	-	2.8	2.1	1.3	1.2	1.0	0.9
2008 SNPP	0.6	0.4	-0.1	-0.3	-0.1	-0.4	-0.5
2006 SNPP	-0.1	-0.2	-0.4	-0.4	-0.3	-0.4	-0.4
2004 (Rev) SNPP	-1.1	-1.1	-1.1	-0.9	-0.7	-0.8	_

Table 12: ONS Migration Estimates and Projections (Annual Figures) Coventry (000's)

Source: Office for National Statistics

Communities and Local Government (CLG) 2012-based Sub-National Household Projections (SNHP)

- 3.16 The most recent SNHP data available is the 2012-based Sub-national Household Projections. These were published by the Government on 27th February 2015. The PPG at paragraph ID 2a-015 is clear these should provide the starting point in assessing overall housing need. The household projections are produced by applying projected household representative rates to the population projections, in this instance the ONS 2012-based interim sub-national population projections.
- 3.17 The 2012-based household projections cover the period up to 2037. The projected household representative rates applied to the population projections will reflect trends which occurred in the severe recession and as such it can be argued that they are unduly influenced by these extreme events.
- 3.18 The Methodology Report produced by CLG accompanying the 2012-based SNHP sets out that the methodology used for these projections follows previous projections (2011 interim and 2008-based SNHPs). For the 2011-based interim SNHP some changes needed to be made to the methodology in order to incorporate information from the 2011 Census. The Methodology Report indicates that, at the present time, results from the 2011 Census show that the previous projections were overestimating the rate of household formation and that household formation rates, particularly for the younger population, have fallen since the results of the 2001 Census. Since then, further information from the Census 2011 has become available and has been incorporated into the 2012-based projections where possible, building on the approach used for the 2011-based interim projections.
- 3.19 The 2012-based SNHP for the Coventry & Warwickshire HMA projects an average growth of 3,950 households per annum between 2011 and 2031 (20 years). Table 13 below provides a comparison between the household projections published in past series.

- 3.20 Table 14 shows that between 2011 and 2031 (20 years) for Warwick the 2012-based SNHP projects an average growth of 550 households per annum. The table again shows the comparison between the household projections published in past series.
- 3.21 For Coventry the 2012-based SNHP projects an average growth of 1,900 households per annum between 2011 and 2031 (20 years). Table 15 shows the comparison between the household projections published in past series.

Table 13: CLG Household Estimates and Projections for Coventry & Warwickshire HMA (000's)

	200 1	2010	2011	2016	2021	2026	2029	2031
2012 SNHP	332	357	360	379	400	420	431	439
2011 Interim SNHP	333	-	360	381	400	-	-	-
2008 SNHP	333	362	365	385	406	425	436	444
2006 SNHP	333	-	369	390	411	431	-	449
2004 (Rev) SNHP	333	362	365	382	399	413	420	-

	2011 - 2021	2011 - 2031
2012 SNHP	40,000/4,000 PA	79,000/3,950 PA
2011 Interim SNHP	40,000/4,000 PA	-
2008 SNHP	41,000/4,100 PA	79,000/3,950 PA
2006 SNHP	42,000/4,200 PA	80,000/4,000 PA
2004 (Rev) SNHP	34,000/3,400 PA	-

Source: Communities and Local Government

Table 14: CLG House	ehold Estimates	and Projections for	- Warwick ((000's)

	2001	2010	2011	2016	2021	2026	2029	2031
2012 SNHP	53	59	59	61	64	67	69	70
2011 Interim SNHP	53	-	59	62	65	-	-	-
2008 SNHP	53	62	62	66	71	76	78	79
2006 SNHP	53	-	63	68	73	77	-	81
2004 (Rev) SNHP	53	62	63	68	72	76	79	-

	2011 - 2021	2011 - 2031
2012 SNHP	5,000/500 PA	11,000/550 PA
2011 Interim SNHP	6,000/600 PA	-
2008 SNHP	9,000/900 PA	17,000/850 PA
2006 SNHP	10,000/1,000 PA	18,000/900 PA
2004 (Rev) SNHP	9,000/900 PA	-

Source: Communities and Local Government

Table 15: CLG Hou	ehold Estimates and Projections for Coventry	(000's)

Table 15. CLG Household Estimates and Projections for Coventry (000 S)								
	2001	2010	2011	2016	2021	2026	2029	2031
2012 SNHP	121	127	128	138	148	157	162	166
2011 Interim SNHP	122	-	129	138	146	-	-	-
2008 SNHP	122	129	130	136	143	148	152	155
2006 SNHP	122	-	133	139	145	151	-	157
2004 (Rev) SNHP	122	129	130	133	137	140	142	-

	2011 - 2021	2011 - 2031
2012 SNHP	20,000/2,000 PA	38,000/1,900 PA
2011 Interim SNHP	17,000/1,700 PA	-
2008 SNHP	13,000/1,300 PA	25,000/1,250 PA
2006 SNHP	12,000/1,200 PA	24,000/1,200 PA
2004 (Rev) SNHP	7,000/700 PA	-

Source: Communities and Local Government

Summary

In respect of the demographic context, this section has demonstrated that the population of 3.22 the Coventry & Warwickshire HMA, including Warwick and Coventry, is projected to continue to increase as is the number of households. The latest SNPP reinforce this sustained growth in population and households, albeit the rate of growth has slowed in the more recent projections. The SNHP show a broadly consistent picture across the HMA since the 2006based series, but with a decrease in Warwick in the 2011 and 2012 SNHP and a corresponding increase in Coventry in the same projections.



4 CHELMER POPULATION AND HOUSING MODEL FORECASTS

- 4.1 This chapter summarises the Scenarios based on projections generated by the Chelmer Population and Housing Model (Chelmer Model). The Chelmer Model is a demographic regional housing model that can produce forecasts for specific local areas. It is based on population projections methodology allowing the projection of natural changes (births and deaths) and the projection of migrants into and out of an area. The projection population (by age and gender) is converted into household projections by the application of projected household formation rates. Household projections are then converted into dwellings in respect of vacancies and second homes.
- 4.2 The underlying data sets used in the Chelmer Model are set out in full within Appendix A.In summary, the data includes:
 - Revised Mid Year Population Estimates to 2011 and Mid Year Population Estimates thereafter (published by ONS);
 - 2012, 2011 Interim and 2010 Based Sub National Population Projections
 (published by ONS, and previously by the Government's Actuary Department);
 - 2011 Based Interim Sub National Household Projections (published by Department of Communities and Local Government);
 - 2011 Census;
 - Annual Population Survey; and
 - Internal Migration Estimates by Local Authority to 2010 (published by ONS).

Adjustments to the Chelmer Model

4.3 A number of adjustments have been made to the baseline Chelmer Model in order to reflect appropriate future circumstances and render the projections more robust as a basis for deriving the full, objectively assessed need for housing. These adjustments are in respect of: headship rates; migration population profiles; economic activity rates; and, unemployment. Each of the adjustments is explained below.

Headship Rates

4.4 A midpoint has been taken between headship rates included within the 2008 Based and 2011 Based SNHP (as the 2012 Based SNHP data relating to household formation has not been calibrated into the Chelmer Model due to late timing of the release). This assumption is made on the basis that since the economic downturn household formation rates have fallen (as seen through analysis of the 2011-based interim SNHP). It is therefore suggested that as a result of the severe recession and financial crisis, people who wanted to form their own household could not due to factors such as constraints on housing supply, affordability and mortgage lending. As economic circumstances improve it is reasonable to assume that a



'correction' will occur whereby those previously constrained from forming households will be able to do so, increasing the household formation rate over and above the rate assumed in the 2011-based projections, thus increasing growth in households. This scenario assumes that this trend will occur from 2016 onwards, a view supported by the work of Professor Alan Holmans who actually concluded that it would seem reasonable to assume that economic/housing market effects on household formation remain to 2015 and thereafter the annual net increase in households can be assumed to move back towards the long-term trend.

- 4.5 This adjustment is to primarily address future unmet need from arising. In addition to this, it is important to note existing unmet need. The 2011 Census has identified that there were 639 concealed households in Warwick District. This level of existing unmet need reinforces the importance of adjusting the headship rates as part of the modelling work.
- 4.6 This adjustment is applied to all Scenarios. **Appendix B** includes headship rates from the 2008 Based SNHP; 2011 Based SNHP; and the midpoint from both data sets.

Migration Population Profile

- 4.7 For all scenarios, a midpoint has been taken between the 2008 Based and 2012 Based SNPP migration population profiles (for both in migration and out migration) as this reflects the characteristics of a more economically active migrant population coming to/going from the Borough consistent with periods of both economic growth and recession, as opposed to reflecting recession-based trends. This amendment results in a more balanced age profile of the migrant population and a greater amount of economically active people.
- 4.8 **Appendix C** includes migration profiles from the 2008 Based SNPP; 2012 Based SNPP; and the midpoint from both data sets.

Activity Rates

- 4.9 Changes to activity rates have been made in order to reflect changes to state pension age, based on the Kent County Council methodology, which adjusts the 2006 based ONS Labour Force Projections but for smaller five year age bands to be consistent with those used by the Chelmer Model. In summary, the method is as follows:
 - For the period 2011-20, it is assumed the same rates as the ONS projections for all age bands. The activity rates have then been held constant from 2020-36 for the following age bands: 16-24, 25-29, 30-34, 35-39, 40-44, 70+;
 - For all other age bands (other than female 60-64), it is assumed that activity rates will continue to grow over 2020-30, but by half the rate seen over the last ten years (2010-20).

- For the female 60-64 age band, it is assumed that the activity rate over 2020-30 will grow at the same as it has over the last 10 years.
- The rates have all been held constant from 2030 onwards.
- 4.10 The annual growth rates for the UK are applied to the 2011 local area activity rate data (from the Annual Population Survey 2011), which is consistent with the 2011 Census.
 Appendix D includes the Kent County Council methodology as well as the UK Activity Rate (2006-based ONS Labour Force Projections and Cambridge Econometrics).

Unemployment

4.11 Unemployment data within the Chelmer Model is taken from the Annual Population Survey at 2006 and 2011. Without adjustment, the model maintains 2011 levels throughout the plan period. In order to reflect a potential reduction in unemployment within the plan period, an adjustment will be made to gradually reduce unemployment to prerecession levels (2006 Annual Population Survey data) by 2021, which is maintained thereafter. This is considered to be a conservative approach to adopt as it is assumed that unemployment will not rise again in the plan period, which is entirely possible.

Converting projected household growth to dwellings

Vacancies and Second Homes

4.12 A percentage figure for vacancies and second homes has been applied for the HMA of 3.2%, Warwick 3.2% and Coventry 3.4%; 2011 Census Table KS401EW.



Scenarios Tested by the Model

- 4.13 Three different scenarios have been tested.
 - Scenario 1 Validation of 2012-based SNPP
 - Scenario 2 Variation of the 2012-based SNPP with targeted labour force growth to reflect Cambridge Econometrics HMA Job Growth of 20% consistent with Coventry & Warwickshire Strategic Employment Land Study Base Scenario (October 2014)
 - Scenario 3 Variation of the 2012-based SNPP with targeted labour force growth to reflect a midpoint of Cambridge Econometrics and Experian HMA Job Growth of 16% obtained from the Coventry & Warwickshire Strategic Housing Market Assessment (September 2014)



Scenario 1

Validation of 2012-based Sub-National Population Projections

4.14 Forecasts on population, household and dwelling growth are derived here using the ONS 2012-based sub-national population projections being the most up to date data. The methodology for the 2012-based sub-national population projections, in general terms, means that internal migration assumptions are based on replicating recent past trends (over a five year period) and international migration assumptions reflect the most recent level of migration held constant over the plan period.

Coventry and Warwickshire HMA

4.15 The key figures from the model output sheet, specifically the growth in population, labour force, households and dwellings between 2011 and 2031, for Coventry and Warwickshire HMA are summarised in Table 7 below. The model output sheet is enclosed as **Appendix E**.

2011 - 2031	2011	2016	2021	2026	2031	Difference 2011-2031
Population	863,397	900,800	938,300	973,300	1,006,900	143,503
Labour Force	433,174	448,879	460,668	469,614	479,285	46,111
Workplace Employment	417,691	433,178	444,564	453,186	462,513	44,822
Households	361,422	381,275	400,873	420,362	440,692	79,270
Dwellings	371,660	392,075	412,229	432,270	453,176	81,516

 Table 7: Analysis of Scenario 1, Coventry and Warwickshire HMA

4.16 The total number of dwellings required to meet demographic requirements based on short term trends under Scenario 1 is 81,516 for Coventry and Warwickshire HMA (4,076 dwellings per annum). It should be noted that on the basis of the demographic projections using short term trends, the labour force is projected to have limited growth of 46,111 within Coventry and Warwickshire HMA, which is an increase of 10.6%. The population, however, is projected to increase by 16.6% (143,503). This is likely to be as a consequence of the population profile (i.e. a young or an ageing population).

Warwick

4.17 The key figures from the model output sheet, specifically the growth in population, labour force, households and dwellings between 2011 and 2031, for Warwick are summarised in Table 6 below. The model output sheet is enclosed as **Appendix E**.

Table 6: Analysis of Scenario 1, Warwick



2011 - 2031	2011	2016	2021	2026	2031	Difference 2011-2031
Population	137,700	141,000	146,000	150,100	155,000	17,300
Labour Force	71,503	72,561	74,045	74,850	76,176	4,673
Workplace Employment	62,449	63,693	65,344	66,028	67,197	4,748
Households	59,097	61,700	64,853	67,437	70,827	11,730
Dwellings	61,051	63,740	66,997	69,667	73,168	12,117

4.18 The total number of dwellings required to meet demographic requirements based on short term trends under Scenario 1 is 12,117 for Warwick (606 dwellings per annum). It should be noted that on the basis of the demographic projections using short term trends, the labour force is projected to have limited growth of 4,673 within Warwick, which is an increase of 6.5%. The population, however, is projected to increase by 12.6% (17,300). This is likely to be as a consequence of the population profile (i.e. a young or an ageing population).

Coventry

4.19 The key figures from the model output sheet, specifically the growth in population, labour force, households and dwellings between 2011 and 2031, for Coventry is summarised in Table 7 below. The model output sheet is enclosed as **Appendix E**.

2011 - 2031	2011	2016	2021	2026	2031	Difference 2011-2031
Population	317,700	341,300	361,300	380,800	398,600	80,900
Labour Force	163,181	166,951	176,004	184,397	192,174	28,993
Workplace Employment	177,328	195,265	208,302	218,229	227,430	50,102
Households	130,701	138,598	147,573	157,035	166,177	35,476
Dwellings	134,414	142,536	151,766	161,496	170,898	36,484

Table 7: Analysis of Scenario 1, Coventry

- 4.20 The total number of dwellings required to meet demographic requirements based on short term trends under Scenario 1 is 36,484 for Coventry (1,824 dwellings per annum). It should be noted that on the basis of the demographic projections using short term trends, the labour force is projected to have limited growth of 28,993 within, which is an increase of 17.8%. The population, however, is projected to increase by 25.5% (80,900). This is likely to be as a consequence of the population profile (i.e. a young or an ageing population).
- 4.21 To conclude, this forecast for all areas is based on short term nationally consistent assumptions for determining the number of dwellings that will be required over the plan period 2011 to 2031. It uses demographic projections alone with adjustments to reflect reasonable assumptions in household formation beyond 2016. It is, however, underpinned



by short term trend based population projections, which (as set out in PPG ID 2a-015-20140306) provide household levels and structures that would result if assumptions based on previous demographic trends in population were to be realised in practice. As identified above, the past trends cover a five year period which was heavily influenced by the recession.

- 4.22 In terms of local circumstances which could have influenced the past trends, there are a number of factors that need to be taken into account. As set out previously, the West Midlands Regional Spatial Strategy sought to constrain housing in the rural areas of the region and housing provision policies did not provide for the full objectively assessed needs within many rural areas. Supply was heavily constrained, including in Warwick, which impacted on net-migration and may have resulted in fewer households being able to form.
- 4.23 Given the lower dwelling requirements, delivery exceeded the target and as a consequence Warwick and Stratford on Avon imposed housing moratoriums for a period of time prior to the recession, which further restricted indigenous household formation and migrating households from residing in these locations. The combined effects over a longer period of policy suppressing supply in the rural districts and the recession reducing net-migration and restricting household formation are very important factors to consider in relation to Warwick.
- 4.24 To conclude in respect of Scenario 1, it is considered that these figures represent the 'starting point' for determining the full, objectively assessed need for housing for the Warwick, in the context of the wider HMA and recognising the significance of neighbouring Coventry. As identified above, there are a number of factors that have affected future projections of household growth and it is therefore appropriate to consider suitable adjustments to properly derive the full, objectively assessed need.

Scenario 2

Variation of the 2012-based SNPP with targeted labour force growth to reflect Cambridge Econometrics HMA Job Growth of 20% consistent with Coventry & Warwickshire Strategic Employment Land Study Base Scenario

- 4.25 This Scenario projects population, household and dwelling growth in a different way to the above method, however, the 2012 Based SNPP remains the baseline population input. For this scenario a level of labour force is targeted. As the focus for the local plan must be the OAN for Warwick District itself, this Scenario has only been provided for Warwick
- 4.26 The calculation in the Model starts with the number of workers working within the area. A rate of increase in workers of 20% between 2011 to 2031 is applied from work place growth projections obtained from Cambridge Econometrics; Table 7 below. The SHMA update 2014 indicates that employment projections are much more robust across the HMA area than for individual local authority areas. The Chelmer model therefore uses the HMA wide figure for jobs growth which, as can be seen from the table below, is broadly consistent with the figures for Warwick District derived from the Cambridge Econometrics projections.

	2011	2016	2021	2026	2031	Difference 2011 - 2031	% Increase
Warwick	90.4	98.9	102.0	105.6	109.3	19,000	20.9%
НМА	443.3	480.5.	496.9	545.4	534.1	90,800	20.4%
Coventry	152.5	160.8	165.1	171.6	178.2	25,800	16.9%

Table 7: Cambridge Econometrics Total Employment Growth 2011 to 2031

Source: CE August 2013

- 4.27 These Cambridge Econometrics projections are consistent with data sources used to generate the base scenario within the Coventry & Warwickshire Strategic Employment Study (Final Report) October 2014 (paragraph 4.5). This report forms part of the evidence base to the Strategic Economic Plan and the Warwick Local Plan and one of the core objectives was to assess the future employment land needs of the sub region by considering a range of scenarios, including a base scenario (based on Cambridge Econometrics' 45 sector employment forecasts prepared in August 2013) and baseline+ scenario (based on a higher growth scenario developed by Atkins). The Study concludes that the baseline+ is used as the minimum estimation of quantitative need in the sub region. The use of the 20% employment growth figure for Warwick is therefore a robust and potentially conservative basis for deriving a jobs-led forecast.
- 4.28 In terms of the modelling process followed, the number of workers who live and work in the area is calculated by removing the number of in commuters from the number of workers

working in the area. The number of locally resident workers (those who work in or outside the Borough) will be calculated by adding the number of out commuters to the number of workers who live and work in the area.

- 4.29 The commuting rates applied are those identified from the Annual Population Survey data as at 2011. These rates, which are in commuting of 36.6% (of workplace jobs) and out commuting of 42.5% (of employed residents), remain consistent throughout the plan period, as advised in the PAS Advice Note. This means that more people are commuting out of Warwick District than in.
- 4.30 The target labour force will then be calculated by adding the number of out commuters to the number of workers who live and work in the area. The target labour force by gender will then be calculated by applying the share of males and females in the locally resident workforce to the number of workers who live and work in the area and then adding the number of unemployed people by gender.
- 4.31 The population implied by the labour force and the required changes to migration, utilising the adjusted migrant population profiles, to achieve the implied population is calculated. For the given population profile, the number (and type) of households are determined by the likelihood of people in a particular age group forming households using household representative rates. The number of dwellings is then calculated using vacant dwellings assumptions (3.2%).
- 4.32 Scenario 2 includes adjustments to take account of anticipated improvements in activity rates reflecting changes to the state pension age, similar to the methodology identified by Kent County Council as described above and in **Appendix D.** The population profiles of the migrant populations have also been adjusted based on a midpoint between the profiles based on the 2008 and 2011-based SNPP so these reflect periods of both economic growth and recession and the commuting ratios remain the same as at 2011, reflecting current travel to work patterns. In addition, unemployment rates have been held constant at pre-recession rates from 2021.

Warwick

4.33 The key figures from the model output sheet for Warwick, specifically the growth in population, labour force, households and dwellings between 2011 and 2031, are summarised in Table 8 below. The model output sheet is enclosed as **Appendix G**.

Table 8: Analysis of Scenario 2, Warwick



2011 - 2031	2011	2016	2021	2026	2031	Difference 2011-2031
Population	137,700	149,269	155,309	163,248	171,443	33,743
Labour Force	71,503	77,133	79,391	82,277	85,241	13,738
Workplace Employment	62,449	67,689	69,990	72,580	75,195	12,746
Households	59,097	65,175	68,967	73,536	78,462	19,365
Dwellings	61,051	67,329	71,247	75,967	81,056	20,005

4.34 As identified above, the total number of dwellings required to meet Baseline economic projections is **20,005** for Warwick (**1,000 dwellings per annum**). The workplace employment growth is projected to increase by 12,746, an increase of 20.4%, which is consistent with the projection identified in Table 2 above. This is a lower number that the labour force growth, reflecting the balance of net out-commuting from Warwick. It should be noted that on the basis of the Scenario 2 the labour force is projected to increase by 13,738 for Warwick, an increase of 19.2%. This is a smaller proportional difference when compared to the growth in population of 33,743 (24.5%), which reflects improved activity rates is likely to be as a consequence of the population profile (i.e. a young or an ageing population).

Scenario 3

Variation of the 2012-based SNPP with targeted labour force growth to reflect a mid-point of Cambridge Econometrics and Experian HMA Job Growth of 17.4% from the Coventry & Warwickshire Strategic Housing Market Assessment Update (September 2014)

- 4.35 This Scenario projects the population, household and dwelling growth in the same way to the above method with the 2012 Based SNPP remains the baseline population input. For this scenario a level of labour force is targeted to achieve a mid-point between contrasting levels of economic growth set out within the September 2014 Update to the G L Hearne Strategic Housing Market Assessment.
- 4.36 Section 3 of the SHMA Update compares two economic projections from Cambridge Econometrics and Experian. The Cambridge Econometrics data is essentially that identified in Scenario 2, which we know has been used in the Coventry and Warwickshire Joint Employment Land Study and therefore provides a linkage between both housing and employment growth forecasts. In terms of the Experian data, this has not been used in generating employment growth forecasts. It is, however, data provided by another reputable forecaster and for comparison purposes should be considered.
- 4.37 In terms of the level of growth projected, the Experian data identifies a lower level of growth than the Cambridge data. In light of the variance, it is appropriate to consider a mid-point between the two data sets. Again, it is proposed that the HMA level of growth is applied as this is considered to be more robust as acknowledged by GL Hearn in paragraph 3.9 of the SHMA Update. The Cambridge Econometrics HMA projection identifies 20.4% growth and Experian HMA projection identifies 14.3% growth. A mid-point of 17.4% is arrived at and an average annual increase of workplace growth of 0.87% per annum is applied within the Model for each area. The findings are set out below.

Warwick

4.38 The key figures from the model output sheet for Warwick, specifically the growth in population, labour force, households and dwellings between 2011 and 2031, are summarised in Table 8 below. The model output sheet is enclosed as **Appendix H**.

2011 - 2031	2011	2016	2021	2026	2031	Difference 2011-2031
Population	137,700	143,681	150,802	159,397	169,800	30,798
Labour Force	71,503	74,226	77,035	80,348	83,802	12,299
Workplace Employment	62,449	65,155	67,956	70,879	73,926	11,477
Households	59,097	62,691	66,890	71,696	76,989	17,892
Dwellings	61,051	64,763	69,101	74,066	79,534	18,483

Table 8: Analysis of Scenario 3, Warwick

4.39 As identified above, the total number of dwellings required to meet the mid-point of HMA economic projections is **18,483** for Warwick (**924 dwellings per annum**). The workplace employment growth is projected to increase by 11,477, an increase of 18.3%, which is broadly consistent with the mid-point projection identified above. The lower level of employment growth projected compared to labour force is explained by the commuting ratios, which have been maintained at 2011 levels and reflect net out-commuting from Warwick. It should be noted that on the basis of Scenario 3 the labour force is projected to increase by 12,299 for Warwick, an increase of 17.2%. This is a smaller proportional difference when compared to the growth in population of 30,798 (22.4%). This is likely to be as a consequence of the population profile (i.e. a young or an ageing population).

5. MARKET SIGNALS & OTHER FACTORS

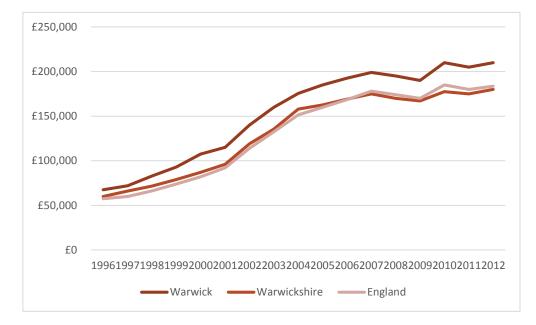
- 5.1 As identified above within the policy context, the PPG identifies that the housing need number suggested by household projections (the starting point) should also be adjusted to reflect appropriate market signals, as well as other indicators of the balance between the demand for and supply of dwellings (ID 2a-019). It further suggests that prices or rents rising faster than the national/ local average may well indicate particular market undersupply relative to demand. In order to identify if there is housing market pressure due to an under provision of dwellings a range of signals, as set out below, will be considered in relation to Warwick District:
 - House prices;
 - Affordability;
 - Rate of development; and
 - Unmet need (including overcrowding, concealed households and homelessness).

House Prices

- 5.2 Data obtained from CLG annual Median House Prices based on Land Registry Data from 1996 to 2012 is displayed for Warwick, Warwickshire and England in Figure 1 below. It identifies that Warwick has experienced strong house price growth since 1996. Warwick has had consistently high median house price above the national and Warwickshire average. In 2013, the median house price for Warwick was £209,950, which was £26,450 above the national average. In Q2 of 2013 (latest quarterly data available), the median house price for Warwick was £210,000, which was £28,000 above the County average and £26,000 above the national average.
- 5.3 When considering house price growth between 1996 and 2012, house prices in Warwick, Warwickshire and England have increased by 211%, 200% and 219% respectively. Interestingly, despite Warwick having a higher median house price over the entire period, the percentage difference for England has been slightly higher. This is possibly due to house prices in London significantly distorting the national average.



Figure 1: CLG Median House Prices based on Land Registry Data from Q1 1996 to Q2 2013 for Warwick, Warwickshire and England



5.4 Clearly, there has been significant inflation in house prices compared to the County average, with Warwick achieving consistently higher median price levels for the past 15 years and the level of growth exceeds that at the County level. In light of these indicators, there is evidence that there has been and continues to be and imbalance between the demand for and supply of housing, which has resulted in higher house priced in Warwick.

Affordability

- 5.5 CLG Live Table 576 provides data comparing ratio of lower quartile house price to lower quartile earnings from 1997 to 2013. Figure 2 below compares data for England, Warwickshire and Warwick. It identifies that the ratio of earnings to house prices has consistently been higher in Warwick, over a 15 year period, than regional and national ratio. When reviewing the changes over the 15 year period, the recession resulted in the ratio lowering and since then England and Warwickshire have had marginal increases, however, the ratio for Warwick has increased more rapidly and since 2011 has maintained an upward trajectory. This represents a worsening trend in terms of the guidance in the PPG. For the most recent year, the ratio was 7.82 in Warwick compared to 6.67 for the West Midlands and 6.45 for England.
- 5.6 In light of increasing house prices against wages, affordability in Warwick has worsened significantly. The increase in house prices are in part a result of housing supply not meeting the demand. Should current trends continue, lower paid local residents will be unable to buy their own home in the District and may therefore decide to live elsewhere, which could

result in a lower paid skills shortage and/ or increased commuting into the Borough for lower paid employment.

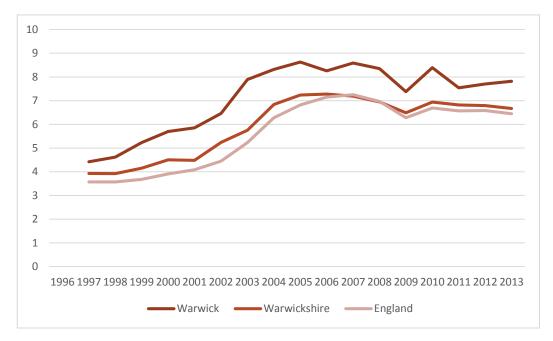


Figure 2: Ratio of lower quartile house process to lower quartile earnings 1997-2013

Rate of Development

- 5.7 This indicator identifies the past performance against previous housing requirement targets. This will identify if there has been any unmet need (i.e. households that were unable to form due to lack of dwelling provision, which are now concealed, overcrowding or homeless).
- 5.8 Table 9, below compares past completions against the annualised plan target. For comparison purposes, given that there has not been a definitive housing requirement for the area for a number of years the plan targets used are the Regional Spatial Strategy (adopted June 2004) and Phase II Review of the Regional Spatial Strategy (Preferred Option, December 2007).



Year	Net Additional Completions	Annualised Plan Target RSS 2004	Under/ Overprovision	Annualised Plan Target Phase II Rev	Under/ Overprovision
2006/ 2007	465	514	-49	540	-75
2007/ 2008	580	389	+191	540	+40
2008/ 2009	410	389	+21	540	-130
2009/ 2010	177	389	-212	540	-363
2010/ 2011	77	389	-312	540	-463
2011/ 2012	144	347	-203	540	-396
2012/ 2013	262	347	-85	540	-278
2013/ 2014	283	347	-64	540	-257
Total	2,398	3,111	-713	4,320	-1,922

Table 9: Comparison of Net Additional Completions against Annualised Plan Targets, Warwick

Source: Warwick District Council

- 5.9 As set out above, it is clear that prior to the impact of the recession, Warwick District was able to deliver a higher level of completions. Since the recession, however, and as a result of there being a moratorium and policy vacuum, completions have reduced significantly. This has resulted overall in an under provision of dwellings, which will have contributed to there being unmet need arising.
- 5.10 The PPG outlines that

"if the historic rate of development shows that actual supply falls below planned supply, future supply should be increased to reflect the likelihood of under delivery of a plan".

5.11 In accordance with the guidance set out above, suitable adjustments should be made in order to ensure unmet need is properly provided for in any future dwelling requirement.

Unmet Need

5.12 As identified above, if sufficient dwellings are not provided to meet arising need, it can result in either households choosing to migrate elsewhere to find a suitable and affordable dwelling or households becoming constrained and residing as an overcrowded or concealed household or possibly becoming homeless. The PPG outlined that a longer term increase in the number of such households may be a signal to consider increasing planned housing numbers

Overcrowding

5.13 The Census collects data on room occupancy ratings for each Local Authority. This data identifies whether a household is over or under occupied (i.e. -1 rooms would result in over occupancy, which is when there are insufficient rooms to accommodate the household and +1, +2 would result in under occupancy, which is when there are additional rooms to the requirements of the household). If a household is over occupied it implies that those particular households are overcrowded.



5.14 For Warwick, the 2001 Census identified that 2,939 households were over occupied (-1 or less), which represents 5.5% of all households. Ten years later, the 2011 Census identified that 3,830 households were over occupied (-1, -2 or less), which represents 6.5%. This increase in overcrowding demonstrates increasing unmet need and worsening affordability, which all indicates that there has been insufficient supply to meet arising demand.

Concealed Households

- 5.15 The Census also identifies the number of concealed families within the population (Table DC1110EW). It should be noted that the overcrowded data identified above may include concealed households and therefore the figures identified by this process are not to be combined as there may be an element of double counting.
- 5.16 In 2011, there were 639 concealed families in Warwick, which represents 1.68% of families.
 At the regional and national level, concealed families totalled 34,461 (2.2%) and 275,954 (1.9%) respectively. Unfortunately there is no comparison data available for 2001.

Other Factors

5.17 In addition to the market indicators, it is pertinent to consider other factors that could affect the housing requirement for Warwick, such as inability of neighbouring authorities to accommodate their own growth. It is widely accepted that Coventry cannot provide for the arising demographic needs as set out in Scenario 1. As identified in the previous section, Warwick is a location of strong economic growth potential, however, there is concern that there is insufficient local labour to provide for those economic needs projected based on existing economic conditions. An OAN which reflects the labour force implications of economic growth for the HMA could provide for an element of Coventry's unmet need for housing.



6. CONCLUSIONS

- 6.1 The figures included in Section 4 of this report illustrate the growth in dwellings forecast by the two scenarios over the plan period 2011 to 2031. In our view Scenario 1 determines the number of dwellings that will be required over the plan period of 2011 to 2031 based on demographic projections alone that replicate short term trends and reflect a period of recession. The figures arising from Scenario 1, namely 81,516 (4,076 dpa) for the HMA, do not reflect the full, objectively assessed needs likely to arise over the future plan period as required by the Framework and PPG. Comparing the demographic scenarios for Warwick, the wider HMA and Coventry has helped illustrate the relationships between these parts of the sub region, particularly the impact of differing net migration flows over the short and longer time periods.
- 6.2 Scenario 2, whilst following the method identified in Scenario 1, targets a level of labour force growth based upon workplace growth projections provided by Cambridge Econometrics (August 2013) and consistent with the Strategic Employment Land Study. This approach does facilitate an increase in population to fulfil economic growth within the District broadly in line with the economic projection and achieves a more balanced population and jobs growth profile in accordance with the Framework.
- 6.3 Scenario 2 is considered to be the full, objective assessment of need for the purposes of meeting the requirements of the Framework and PPG. The total number of dwellings required to meet Baseline economic projections from the Strategic Employment Land Study is **20,005** for Warwick (**1,000 dwellings per annum**). There is concern, however, that, as expressed within the Study, the job growth figures and resultant employment land targets will be insufficient compared to past trends in Warwick.
- 6.4 Scenario 3, again considers implications arising from economic growth projections, however, representing a mid- point between HMA level data from two reputable economic forecasters Cambridge Econometrics and Experian. Caution is expressed when considering output from this scenario in light of conclusions identified in the Strategic Employment Land Study that the employment land and job growth arising from the Cambridge Econometrics projections (which identify higher levels of growth than Experian) are low when compared to past trends and that actual demand for employment land could be greater. In our view, this approach is too cautious with regard to employment growth and understates the full, OAN for housing in Warwick.
- 6.5 The headline figures from the scenarios are set out in Tables 10, below.

2011 -2031	Pop Growth	Labour Force Growth	Workplace Employment	Households Growth	Dwelling Growth/ PA
Scenario 1	17,300	4,673	4,748	11,730	12,117/606
Scenario 2	33,743	13,738	12,746	19,365	20,005/1,000
Scenario 3	30,798	12,299	11,477	17,892	18,483/924

Table 10: Comparison of the Chelmer Model scenarios Warwick

- 6.6 Economic projections based on past trends should be integrated with the assessment of housing need to best deliver sustainable development. In both economic projection-led Scenarios higher dwelling requirements than the demographic starting point for Warwick District are demonstrated.
- 6.7 Section 5 of this report considers relevant market indicators and other factors. It has been demonstrated that all market indicators considered identify housing market pressure as a consequence of the supply of housing not meeting demand for housing. The PPG suggests that an upward adjustment to planned housing numbers compared to ones based solely on household projections should there be a worsening trend in any of the indicators (ID 2a-020-20140306). We have identified a worsening trend in affordability.
- 6.8 Using the robust methodology of the Chelmer Model it is considered that the 'starting point' for identifying a housing requirement to meet demographic requirements alone, based on short term trends, under Scenario 1 is **12,117** for Warwick (**606 dwellings per annum**). There remains concern, however, that the labour force growth arising from Scenario 1 would fail to meet economic forecasts based on current economic conditions (i.e. policy off), and issues of housing market pressures and affordability would not be addressed.
- 6.9 Based on labour force growth, which is derived from workplace employment growth as forecast by Cambridge Econometrics, the housing requirement is **20,005** for Warwick (**1,000 dwellings per annum**) over the plan period 2011 to 2031 from Scenario 2. It is considered that this is the Scenario that represents the full, objectively assessed need for housing, based on the most up to date demographic information as well as economic forecasts provided by reputable economic forecasters consistent with Strategic Employment Land Study for the area. There is concern, however, that when comparing employment land take up levels associated with this level of labour force growth with past trends, the actual demand for employment land and dwellings could be significantly greater.