

Report for:

**North West Leicestershire
District Council**

**Review of Housing
Requirements
(2011-31)**

Final Report – April 2016

Contents

1. Introduction.....	1
2. Updating the SHMA to take Account of EMGRFI	9
3. Trend-based Demographic Projections.....	15
4. Economic-led Housing Requirements	39
5. Market Signals and Affordable Housing Need	55
6. Impact of EMGRFI on Other Areas	77
7. Conclusions – Overall Housing Requirements	85

1. Introduction

Introduction

- 1.1 This document undertakes a review of housing needs and requirements in the North West Leicestershire (NWL) District for the period 2011 to 2031 (to align with the emerging Local Plan) to inform the consideration of what housing requirement to use in the Local Plan. The analysis undertaken does not supersede the 2014 Strategic Housing Market Assessment (SHMA) but has been developed to ascertain whether there is any local evidence which suggests that the housing need identified in the SHMA should be adjusted (specifically in relation to NWL) when translating into a housing requirement. In particular, this focuses on economic growth issues, recognising that the SHMA itself highlighted, but did not take account of a range of local policies (including the East Midlands Gateway Rail Freight Interchange (EMGRFI) which will have a particular impact on NWL).
- 1.2 All efforts have been made in this report not use the terms 'housing need' and 'housing requirement' interchangeably. For clarity, the term 'housing need' is used in this report to define the need for housing as set against a range of demographic trend-based projections and baseline economic forecasts; whilst the term 'housing requirement' is used when discussing any additional housing that might be required as a result of above baseline increases in the number of jobs in the District (specifically in relation to EMGRFI).
- 1.3 The analysis fulfils the key requirements of a SHMA as set out in the National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG) on Housing and Economic Development Needs Assessment.
- 1.4 The document is a partial update to the 2014 SHMA, completed for the Council and the other local authorities in the Leicester & Leicestershire Housing Market Area (L&L HMA) in July 2014. In particular, the study considers up-to-date information not available at the time the SHMA was prepared; including that from ONS mid-year population estimates, the 2011 Census, 2012-based ONS subnational population projections (SNPP), economic forecasts and CLG household projections (particularly the 2012-based version). Crucially, this report seeks to assess the potential impact on housing requirements of additional jobs expected to be created as a result of the EMGRFI.
- 1.5 The report studies the need/requirement for housing and the impact of EMGRFI in two ways (as described below):
 - **As an update to the 2014 SHMA** – this part of the analysis takes the data used in the SHMA and all related assumptions (e.g. about employment and household formation rates) to model an uplift to housing requirements to take account of the impact of EMGRFI. This can therefore be seen to be consistent with the current SHMA – a report which has been accepted as providing a robust assessment of the need for housing across the L&L HMA (see Charnwood Local Plan inspector's report).

- **As a full update to take account of new data** – this analysis recognises that since the 2014 SHMA was undertaken a number of new sources of information have become available. To ensure that the analysis is up-to-date a full reappraisal of this data has therefore been undertaken – this includes consideration of demographic data (e.g. population trends, migration and household formation rates) and economic forecasts. This updated analysis only focusses on NWL.

- 1.6 The need to update the assessment to reflect the EMGRFI can also be seen from a recent inspector's report in the District (January 2016 – Appeal Ref: APP/G2435/W/15/3005052; Land South of Greenhill Road, Coalville). This says in paragraph 26 '*... it is clear that the SHMA is out of date and should be recalculated to take account of the latest economic projections... the Council does not have a robust position on what its housing requirement should be and thus the Council cannot demonstrate (on that basis) that it has a 5-year housing supply*'.
- 1.7 This document does not constitute a full SHMA although key requirements of an SHMA are fully reviewed and updated. This is with particular regard to analysis of housing need and requirements using up-to-date demographic and economic data. The study is specific to NWL and does not consider needs across the wider L&L HMA. A similar exercise (the Housing and Economic Development Needs Assessment (HEDNA)) is expected to be undertaken during 2016 to look at wider HMA needs. This report does however review the current HMA-wide SHMA.

Policy Background

National Planning Policy Framework

- 1.8 The Government published its National Planning Policy Framework (NPPF) in March 2012. The NPPF sets out that the purpose of planning is to help achieve sustainable development. It establishes a presumption in favour of sustainable development (para 14) which should be seen as a golden thread running through both plan-making and decision making. It sets out that for plan making this means:
- *Local planning authorities should positive seek opportunities to meet the development needs of their area;*
 - *Local Plans should meet objectively assessed needs, with sufficient flexibility to respond to rapid change, unless:*
 - *any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework as a whole; or*
 - *specific policies in the Framework indicate development should be restricted.*

- 1.9 Core planning principles which should underpin both plan-making and decision-making are set out in Paragraph 17. The third principle is relevant to determining housing provision, and provides that planning should:

“Proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country meets. Every effort should be made objectively to identify and then meet the housing, business and other development needs of an area, and respond positively to wider opportunities for growth. Plans should take account of market signals, such as land prices and housing affordability, and set out a clear strategy for allocating sufficient land which is suitable for development in their area, taking account of the needs of residential and business communities.”

- 1.10 Paragraph 47 explains that the Government’s ambition is to significantly boost the supply of housing. To do so LPAs should:

“Use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area, as far as is consistent with policies in the Framework, including identifying key sites which are critical to the delivery of the housing strategy over the plan period.”

- 1.11 This is reaffirmed in Paragraph 50 which provides that local planning authorities should plan for a mix of housing based on current and future demographic trends, market trends and the needs of different groups in the community.

- 1.12 A Local Plan is required to set out the strategic priorities for the area, including the homes and jobs needed. In paragraph 158 the Framework provides that:

“Local Plans should be 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 take full account of relevant market and economic signals.”

- 1.13 Paragraph 159 explains that a Strategic Housing Market Assessment (SHMA) should form the key part of the evidence base for policies for housing provision. The Strategic Housing Market Assessment should assess full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries. The scope of the SHMA is defined as follows:

“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;*
- *caters for housing demand and the scale of housing supply necessary to meet this demand.”*

National Planning Policy Guidance – Housing and Economic Development Needs Assessments

- 1.14 New guidance was issued by Government in March 2014 (“PPG”) as part of its review of planning practice guidance. This includes advice on ‘*Housing and Economic Development Needs Assessments*’ and is maintained online and updated periodically. The Guidance is relevant to this report in that it provides clarity on how key elements of the NPPF should be interpreted, including the approach to deriving an objective assessment of the need for housing.
- 1.15 The PPG defines “need” as referring to:
- “...the scale and mix of housing and the range of tenures that is likely to be needed in the housing market area over the plan period – and should cater for the housing demand of the area and identify the scale of housing supply necessary to meet this need.”*
- 1.16 The PPG sets out that the assessment of need should be realistic in taking account of the particular nature of that area, and should be based on future scenarios that could be reasonably expected to occur. It should not take account of supply-side factors or development constraints, although the PPG confirms that such factors will need to be taken into consideration ‘*when bringing evidence bases together to identify specific policies within development plans*’.
- 1.17 The PPG outlines that whilst estimating future need is not an exact science and that there is no one methodological approach or dataset which will provide a definitive assessment of need, the starting point for establishing the need for housing should be the latest population and household projections published by the Department for Communities and Local Government (CLG).
- 1.18 It sets out that there may be instances where these national projections require adjustment to take account of factors affecting local demography or household formation rates, in particular where there is evidence that household formation rates are or have been constrained by supply. It suggests that proportional adjustments should be made where the market signals point to supply being constrained relative to long-term trends or other areas in order to improve affordability.
- 1.19 With regard to economic evidence, the PPG indicates that job growth and economic forecasts should be considered. It sets out that:
- “Where the supply of working age population that is economically active (labour force supply) is less than the projected job growth, this could result in unsustainable commuting patterns (depending on public transport accessibility or other sustainable options such as walking or cycling) and could reduce the resilience of local businesses. In such circumstances, plan makers will need to consider how the location of new housing or infrastructure development could help address these problems.”*
- 1.20 It cautions against reducing migration assumptions based on economic evidence unless this approach is agreed with other local planning authorities under the duty to cooperate.

- 1.21 The PPG effectively describes a process whereby the latest population and household projections are a starting point; and a number of “tests” then need to be considered to examine whether it is appropriate to consider an adjustment to housing provision. These tests are:
- Is there evidence that the official population projections need adjustment due to specific local evidence about migration and population growth?
 - Is there evidence that household formation rates in the projections have been constrained?
 - What do economic forecasts say about job growth? Is there evidence that a different spatial distribution of housing would be needed to support this?
 - Do market signals point to a need to increase housing supply?
 - How do the demographic projections ‘sit’ with the affordable housing needs evidence, and should an increase in housing supply be considered to support delivery of affordable housing?

Planning Advisory Service (PAS) – Technical Advice Note

- 1.22 In June 2014 PAS published a Technical Advice Note ‘*Objectively Assessed Need and Housing Targets*’. This advice was subsequently updated in July 2015 (Second edition). The advice has no official status but has been developed based on existing good practice and the recommendations of Planning Inspectors. Where relevant, key parts of the PAS Advice Note have been quoted within this report – this is particularly in relation to affordable housing need.

Housing and Planning Bill

- 1.23 In October 2015, the government published the Housing and Planning Bill 2015-16. This set out a number of government initiatives which are likely to directly influence the supply and demand for housing and affordable housing.
- 1.24 The detail of the Bill is not yet available and is not expected until April 2016 at the earliest. However, in its current version (December 2015) the Bill will introduce a statutory requirement for local authorities to promote the supply of starter homes in England. Starter homes are defined as:
- a new dwelling;
 - which is available for purchase by qualifying first-time buyers only;
 - First Time Buyer, Under 40,
 - is to be sold at a discount of at least 20% of the market value;
 - is to be sold for less than the price cap;
 - £250,000 outside London, and
 - Is subject to any restrictions on sale or letting specified in regulations made by the Secretary of State.
- 1.25 Starter homes will also fall under the definition of an affordable home. The impact on this on the supply of affordable homes has not yet been determined but could trigger a targeted update of affordable housing calculation once a greater understanding is achieved. This issue is not addressed in this report (which is predominantly looking at overall housing needs/requirements) but is an issue which will need consideration in the forthcoming HEDNA.

- 1.26 There have also been a number of other initiatives which may impact on the supply and demand for general and affordable homes, although the full impact is yet to be understood. These include:
- **A requirement for social rents to be reduced by 1% for four years from April 2016.** The likely impact of this will be to reduce income for both the local authorities (which have housing stock) and housing associations. This in turn may reduce the LA or RP reinvestment funding and may subsequently reduce the development of new affordable homes.
 - **The extension of the Right to Buy to Registered Providers' tenants.** Although not enforceable this could reduce affordable housing stock and reduce thus the number of re-lets. Research by Joseph Rowntree Foundation predicts that nationally 8.3% of housing association tenants will be eligible for and could afford the RTB, and that 71% of those will purchase their home over the first five years.
 - **Local authorities to sell high value social housing stock as it becomes vacant.** Whilst the detail of this has yet to be confirmed this is will reduce the number of available properties which are available for re-lets each year. Higher value areas will be impacted most although it may provide additional funding for smaller affordable properties.
 - **Increasing rent to market rates for social housing tenants earning over £30,000.** This “pay to stay” initiative will ensure those who can afford to pay market rates will do so. However, it may mean that people are more likely to exercise their right to buy thus reducing the stock level of affordable housing.
 - **Capping social housing rents at Local Housing Allowance.** For some Registered Providers this will limit their income to a multiple of the Local Housing Allowance. In the long term this may influence the type of homes they build with more smaller homes being likely. The proposal will see any single claimants under 35 only being eligible for the LHA Shared Accommodation Rate which at present is much lower than the LHA for one bedroom flats. This could result in reduced demand for RP properties with a shift toward the Private Rented Sector (PRS).
 - **The introduction of 3% higher stamp duty on buy to let properties and second homes.** This may result in a reduction in the number of Buy-to-let landlords; both through sales of their existing properties and new landlords seeing the sector it as unviable. The Bank of England expressed their concerns that the proliferation of Buy-to-let landlords could result in a housing crash if they flood the market with their unwanted property. While the introduction of the new rules may not result in a flood of sales it may well reduce the supply of PRS properties.

Leicester & Leicestershire Strategic Housing Market Assessment (2014)

- 1.27 The Strategic Housing Market Assessment (SHMA) was prepared as required by the NPPF and PPG for the relevant Housing Market Area (HMA) covering Leicester and Leicestershire. It adopted the approach recommended in the PPG (on housing and economic development needs assessments) – starting with the latest official demographic projections and official data, and then considering whether there is a case to adjust the assessment of housing to take account of evidence from market signals (to support improved affordability), of the need for affordable housing or trends/forecasts for employment growth. All of this information was brought together to provide a view about the Objectively Assessed Need for Housing (OAN) across the HMA and for individual local authorities.
- 1.28 The SHMA assessed housing need across the HMA. The starting point was a need for 66,700 homes between 2011 and 2031 based on extending the 2011-based Household Projections to 2031 (3,335 dwellings per annum). An upwards adjustment was made to this to reflect the latest population data, increasing the need by 3% to 68,800 homes (3,440 per annum). Taking account of market signals, the assessed need was adjusted upwards further to 75,500 homes (3,775 per annum) by remodelling household formation rates based on a midpoint between those in the 2008- and 2011-based CLG Household Projections. This formed the basis of the lower end of the OAN range defined.
- 1.29 The upper end of the range took account of Experian 2013 econometric forecasts, which the modelling indicated would require provision of 77,100 homes across the HMA (3,855 dwellings per annum). Incorporating further upwards adjustments to enhance affordable housing delivery and improve the affordability of market housing in parts of the HMA, the upper end of the range was set higher still at 84,300 homes (4,215 per annum) over the 2011-31 period.
- 1.30 A consistent approach was used in the SHMA to derive figures for individual local authorities on a 'policy off' basis. This resulted in a need for 285 – 350 homes per year in North West Leicestershire. The following section provides more information about the outputs of the SHMA in terms of housing need in NWL.

Summary – Introduction

The National Planning Policy Framework (NPPF) sets out that Local Plans should seek to meet objectively-assessed development needs in their areas where feasible and should plan to deliver a mix of housing based on current and future demographic trends, market trends and the needs of different groups within the community.

The NPPF provides greater policy freedoms regarding development densities, levels of brownfield development and site size thresholds for affordable housing. In determining affordable housing policies, account though needs to be taken of wider policies in the Plan including sustainability standards, infrastructure policies, its relationship to CIL and wider economic viability.

National Planning Policy Guidance (PPG) provides some clarity about how parts of the NPPF should be interpreted. This is particularly in relation to calculating Objectively Assessed Needs for housing, although guidance is also provided around affordable housing needs, market signals, housing market area definitions and the needs of specific groups in the population.

Development needs should be met at a housing market area level with a 'duty to cooperate' with adjoining local authorities where it is clear that cross-boundary linkages exist. The 2014 SHMA studied needs across the HMA and concluded a need for up to 4,215 dwellings per annum in the period 2011-31 (including up to 350 in NWL).

This report is structured around the key requirements of the PPG and is split into a number of sections which build up an understanding of need in NWL. The sections that follow are:

- Trend-based Demographic Projections
- Economic-led Housing Requirements
- Market Signals and Affordable Housing Need
- Conclusions – Overall Housing Requirements

2. Updating the SHMA to take Account of EMGRFI

Introduction

- 2.1 The first piece of analysis takes the modelling and assumptions underpinning the 2014 SHMA and seeks to study the impact of the EMGRFI in terms of the potential growth in the number of jobs in the District and the number of these likely to be filled by people who will live in the area. It is considered that the potential increase in the number of residents in employment (over and above a baseline position) will drive a requirement for more housing to be delivered given that not all of the new jobs can realistically be expected to be filled by people commuting in from other areas.
- 2.2 The analysis below begins by summarising some of the key outputs in the SHMA (for NWL) before moving on to consider job growth and changes to the resident workforce as a result of EMGRFI. The analysis concludes by looking at the potential uplift to the housing requirements as a result of increased job growth.

Key Outputs from the SHMA

- 2.3 The table below shows the key outputs from the SHMA in terms of the estimated housing need under a range of scenarios. Overall the scenarios showed a range of need from 252 to 478 dwellings per annum and the report ultimately concluded, when considering all of the evidence in the round, that the OAN for NWL was for 350 dwellings per annum. This figure was higher than the range of demographic based projections developed but below outputs from projections linked to economic growth. The scenarios modelled are briefly described below:
- **Start point projection** – this used information from the 2011-based SNPP and CLG household projections and extended the information to 2031 (noting that the 2011-based projections only provided data up to 2021)
 - **Updated demographic projection** – this took the start point projections described above and updated key population data (e.g. about migration) to take account of more recent published data
 - **Reduced household formation constraint** – this used the updated demographic projection but recognised that there was some suppression of household formation within the 2011-based CLG household projections. Household formation was therefore partially returned to the rates seen in the earlier 2008-based projections
 - **Housing need to meet economic forecasts (NWL)** – this projection took forecast job growth from Experian and projected what level of housing delivery might be needed if there were to be sufficient growth in the resident workforce. This projection used the job growth forecast data specifically for NWL.
 - **Housing need to meet economic forecasts (HMA)** – a similar projection to the one above; however, in this case job growth was spread evenly across each of the local authorities in the HMA

Figure 2.1: Scenario Outputs from the SHMA – North West Leicestershire

Scenario	SHMA source	Housing need (per annum)	Housing need (2011-31)
Start point projection	Table 10	290	5,805
Updated demographic projection	Table 16	252	5,041
Reduced household formation constraint	Table 18	284	5,672
Housing need to meet economic forecasts (NWL)	Table 21	478	9,555
Housing need to meet economic forecasts (HMA)	Table 23	372	7,442
Overall need for housing (upper end of range)	Table 84	350	7,000

Source: 2014 SHMA

- 2.4 As noted previously, the outputs of the SHMA have been accepted as robust through the Local Plan Examination process (in Charnwood) and indeed the figure of 350 dwellings per annum for NWL has been accepted at a Section 78 inquiry in NWL (Lower Packington Road, Ref: 2217036). It is however recognised that this figure does not take account of the potential impact of the EMGRFI. The figure of 350 dwellings per annum does however provide a reasonable start point against which any uplift for EMGRFI can be assessed.

East Midlands Gateway Rail Freight Interchange

- 2.5 East Midlands Gateway is a proposed Strategic Rail Freight Interchange (EMGRFI) which will accommodate new distribution and storage buildings. The project will include a rail freight terminal and will have direct connections into the National Freight Network. It is to be built on farmland between the village of Castle Donington, East Midlands Airport and the M1. It is being promoted by Roxhill (Kegworth) Limited and was approved on the 16th January 2016.
- 2.6 This is a substantial proposal which is expected to generate significant job growth in the NWL area. Indeed, the Environmental Statement for the East Midlands Gateway SRFI (July 2014) estimates the creation of 7,317 jobs once fully operational. The table below show the number of jobs by type and whether or not these are full- or part-time.

Figure 2.2: Projected Direct Employment by Job Type

Job type	Approximate number of jobs	Full-time	Part-time
Warehouse staff	3,120	2,746	374
Drivers	759	668	91
Admin Staff	897	789	108
Managerial Staff	644	567	77
IT, engineering, sales, customer services	1,852	1,630	222
Rail terminal staff	45	45	0
TOTAL	7,317	6,445	872

Source: EMG SRFI Environmental Statement (Table 4.8)

- 2.7 In terms of modelling what level of additional housing might be required it would be possible just to take the figure of 7,317. However, the reality is likely to be more complex than this with a number of issues needing to be considered:
- Displacement – the extent to which people may move between different companies and sectors and therefore not provide any additional jobs (for example a self-employed person might take up a job at EMGRFI or someone might move from an existing business and not be replaced. In such circumstances there would be no additional ‘job’ created);
 - Additionality – the extent to which the EMGRFI will further increase jobs, such as through supply chains or as a result of new workers spending money in the local area, this could see new businesses started or existing businesses providing additional employment.
- 2.8 The Environmental Statement referred to above has considered both of these points and concluded (in Table 4.9) that the site would provide an additional 6,881 full-time equivalent (FTE) jobs and that the total net additional effect would be 6,688 FTEs. The calculations in the Environmental Statement are based on best estimates and it is difficult to say for certain how robust these assumptions are; however, on the basis of the figures above it would be reasonable to conclude that the number of FTE jobs created will be broadly similar to the net additional effect in terms of FTE.
- 2.9 It would therefore be reasonable to also assume that the number of jobs (both full- and part-time) will be similar to the net additional effect in terms of jobs. Hence it is assumed that the number of jobs expected (7,317) will be in addition to the jobs (and growth in the resident workforce) implicit within the SHMA housing need projections – it should be noted that the SHMA (as is typical in analysis of this nature) focuses on the number of jobs rather than a FTE.
- 2.10 The analysis therefore proceeds on the basis that the Council should be looking at planning for 7,317 jobs over and above the numbers in the SHMA projections. It is assumed that these jobs will be created in the period to 2031, to be consistent with the SHMA demographic modelling and the Council’s emerging Local Plan.

Converting Additional Jobs into Growth in the Resident Workforce

- 2.11 It would be possible to model the impact of additional jobs on a fairly standard basis (which would for example take account of current commuting patterns); however, such an approach would not be consistent with the EMGRFI clearly being a particular ‘shock’ in terms of job growth which would be expected to draw in labour from a range of areas and not just NWL.
- 2.12 For example, using a standard commuting ratio would not be appropriate given that in looking at the impact of the site the analysis is only looking at where the new workers are coming from (and not the net flow between locations). If all areas with commuting links to NWL were also proposing something of the scale of EMGRFI then there would be merit in looking at a two-way movement; however, this is not the case.

2.13 Therefore, to consider how many additional residents in employment might be expected, the analysis has looked solely at the locations from which people travel to work in NWL. Analysis of commuting patterns in the table below shows that (as of the 2011 Census) there were 53,975 people working in the District, included within this are 26,699 people who commute in. Therefore, the proportion of local jobs taken up by in-commuters can be calculated as 49.5%. This figure is potentially higher given that the number of people working in the District includes those working from home and with no fixed workplace.

Figure 2.3: Commuting patterns NWL (2011)	
	NWL
Live and work in LA/HMA	18,880
Home workers	5,069
No fixed workplace	3,327
Out-commute	19,246
In-commute	26,699
Total working in LA/HMA	53,975
Total living in LA/HMA (and working)	46,522
% of local workers commuting into District	49.5%

Source: 2011 Census

2.14 If this ratio (0.495) remained the same then it would be expected that 3,619 of the jobs would be filled by people commuting from other areas (with 3,698 being filled by residents of the District).

2.15 Clearly an assumption that a substantial proportion of the new jobs would be taken up by in-commuters does potentially have an impact on levels of population growth (and housing requirements) in other areas which will need to be considered as part of duty-to-cooperate discussions. However, it is clear (given current commuting patterns) that it would be unrealistic to expect more than about half of the additional jobs to be undertaken by people resident in the District. An assessment of the potential impact in housing terms on other locations can be found in Section 6 of this report.

2.16 On this point it is notable that Roxhill themselves (as part of the Socio-Economic Aspects report – para 4.9.23) only expect some 20% of employees at EMGRFI to seek to move to the area (and this is based on an ‘area of influence’ which covers a broad area and not just NWL). Hence the assumptions made in this report look more likely to over- rather than under-estimate the required growth in the resident workforce.

2.17 As well as commuting patterns the analysis also considers that a number of people may have more than one job (double jobbing). This can be calculated as the number of people working in the local authority divided by the number of jobs. Data from the Annual Population Survey (available on the NOMIS website) suggests that around 3.3% of workers have a second job (data averaged from data for the 2004-14 period to recognise relatively high error margins associated with data for individual years). This gives a double jobbing ratio of 0.967 (i.e. the number of jobs can be discounted by 3.3% to estimate the required change in the workforce).

- 2.18 Given that the EMGRFI is expected to provide a notable number of part-time jobs (about 12% of the total) it is considered appropriate to apply an allowance for double jobbing. On the basis of 3,698 jobs being taken up by people resident in the District and applying a 0.967 adjustment for double jobbing, it is estimated that to meet an additional 7,317 jobs there would be a further increase in the resident working population of some 3,576 people from 2011 to 2031.
- 2.19 It should be noted that whilst this 'double jobbing' estimate has been based on data for the whole of NWL (and is not specific to EMGRFI and the type of jobs expected to be created) it is only a small adjustment. Any different and reasonable view of double jobbing in relation to EMGRFI would not substantially impact on estimates of the required workforce and how this works through into estimates of housing requirements.

Modelling EMGRFI as an uplift to the SHMA

- 2.20 To model the impact of the EMGRFI the analysis has worked out the growth in the number of residents in employment for the range of scenarios described above and then modelled what additional population growth (and worked through to household growth and housing requirements) would be needed if the number of residents in employment were to increase by 3,576. There are a number of assumptions in the SHMA which are worthy of discussion and these are shown below:
- Employment rates – the SHMA methodology set employment rates (by age and sex) to be consistent with figures from the 2011 Census (the employment rate being calculated as the number of people working divided by the total population in any specific age/sex cohort). Moving forward from 2011 it was assumed that rates would change at half of the level seen in the previous (2001-11) decade – again based on Census data. This approach was highlighted in the Lower Packington Road appeal decision as being 'conservative' (para 41). In this context, the word 'conservative' was used to suggest that changes (particularly increases) in employment rates in the SHMA could reasonably have been projected to be higher; this would have the impact of reducing the population growth required to meet job growth forecasts and hence reduce the level of housing need.
 - Household formation rates – these are based on taking a midpoint between the rates of change in the 2011-based and 2008-based CLG household projections. This approach was described by the inspector to the Charnwood Local Plan Examination as being 'pragmatic and justified' (para 32).
- 2.21 The reason for highlighting these aspects of the SHMA analysis is that the full updating of information (carried out in the sections to follow) looks again at these issues. With regard to employment rates, it is considered that an approach which takes more direct account of changes to state pension age to be more robust. Regarding, household formation rates, it is the case that CLG have now published a new set (of 2012-based) figures; clearly these should be considered in any updating of information. However, for the purposes of looking at the impact of EMGRFI as an addition to the SHMA analysis, it is considered that the broad methodology in the SHMA remains sound (and is supported by a number of inspectors).

2.22 The table below shows the range of scenarios (plus the OAN) from the SHMA and the uplift to housing provision that would be required if the resident workforce were to increase by a further 3,576 people in the 2011-31 period. The analysis shows that around an additional 120 dwellings per annum would be required (approaching 2,500 across the whole plan period). Focussing on the uplift to the SHMA OAN conclusion, the analysis shows a requirement for 472 dwellings per annum – this is 9,440 homes in total over the 2011-31 period.

Figure 2.4: Scenario Outputs from the SHMA – North West Leicestershire			
Scenario	Housing need (per annum) – SHMA	Housing requirement (per annum) – SHMA+EMGRFI	Potential uplift (per annum)
Start point projection	290	410	+120
Updated demographic projection	252	372	+120
Reduced household formation constraint	284	406	+122
Housing need to meet economic forecasts (NWL)	478	600	+122
Housing need to meet economic forecasts (HMA)	372	495	+123
Overall need for housing (upper end of range)	350	472	+122

Source: 2014 SHMA and additional data modelling

Summary – Updating the SHMA to take Account of EMGRFI

The 2014 SHMA looked at a range of demographic and economic based projections and concluded that the objectively assessed need for housing in NWL was somewhere in the range of 285-350 dwellings per annum (with a main focus being on a figure at the top end of this range). This conclusion was not only based on data for NWL but also took account of the need and distribution across the whole HMA.

The SHMA analysis did not however take any account of the likely future job growth as a result of the EMGRFI (estimated to be around 7,300 additional jobs in NWL). Using the SHMA data and methodology an analysis has been undertaken which seeks to show what sort of level of uplift on the housing need might be appropriate if EMGRFI is included within the figures. Taking account of the locations from which people might be expected to commute (along with an adjustment for double jobbing) it was estimated that a further 3,600 resident workers would be required to fulfil this level of additional employment.

The analysis identified that this level of additional job growth would be likely to require an increase in provision of about 120 dwellings per annum to meet housing requirements. On the basis of an OAN of 350 dwellings per annum it is therefore suggested that SHMA+EMGRFI housing requirement assessment would be for provision of about 472 dwellings per annum in the 2011-31 period.

3. Trend-based Demographic Projections

Introduction

- 3.1 In this section consideration is given to demographic evidence of housing need and trend-based projections. Such projections are critical to the SHMA process and this is emphasised in the NPPF (para 158) which states that local planning authorities should prepare a SHMA to identify the scale of housing which *'meets household and population projection, taking account of migration and demographic change'*.
- 3.2 The importance of such projections can also be seen in the PPG which states [2a-015] that *'household projections published by [CLG] should provide the starting point estimate of overall housing need'*. The CLG projections are directly linked to ONS subnational population projections (SNPP). Further emphasis is put on the CLG projections in 2a-017 where it is noted that *'the household projections... are statistically robust and are based on nationally consistent assumptions'*.
- 3.3 However, the PPG also identifies [2a-014] that *'establishing future need for housing is not an exact science. No single approach will provide a definitive answer'* and in 2a-017 notes that *'plan makers may consider sensitivity testing, specific to their local circumstances'* – this is particularly related to evidence that there have been particular events which may have impacted on migration or the profile of the local population. Furthermore, the PPG notes [2a-016] that *'where possible, local needs assessments should be informed by the latest available data'* – this is relevant in this area due to new population estimates having been published since the release of the last SNPP.
- 3.4 For information, the 2014 SHMA had access to a 2011-based set of SNPP and associated CLG household projections; 2012-based mid-year population estimates (MYE) from ONS has also been published. At the time of writing this report, a 2012-based set of population and household projections were available along with MYE for 2013 and 2014. Since the SHMA was written it is therefore clear that a significant amount of new data is available that can be used in analysis.
- 3.5 The PAS technical advice note provides some additional detail about sensitivity testing and in particular advises (para 6.24) that using a longer (10- to 15-year) past trend analysis should provide a more robust projection than the SNPP (which uses data from the previous 5-6 years). The PAS technical advice note also highlights the issue of Unattributable Population Change (UPC) – UPC is an adjustment made by ONS for discrepancies between Census data and annual monitoring. PAS states (para 6.35) that *'plan makers may take a view that the UPC, or part of it, should be included in the base period as past migration'*.

- 3.6 On the basis of the wording in both the PPG and the PAS technical advice note a number of observations can be made which are relevant to the assessment of trend-based demographic projections:
- CLG household projections (which link to ONS population projections) are robust and should be used as the ‘start point’ for assessing housing need
 - These projections can be sensitivity tested where there is evidence of changes over time (e.g. short-term changes to migration patterns) or where UPC may be related to recorded migration levels
 - Up-to-date information should be used where possible and this will include later releases of ONS mid-year population estimates (MYE)
- 3.7 Although guidance does not talk about either increasing or decreasing need as a result of sensitivities, it would seem logical that assessment could go in either direction. This is on the basis of a ‘common sense’ approach whereby any suggested increase in migration in one area will come with a commensurate decrease in other locations. It is also recognised that levels of population growth for individual local authorities (nationally) will need to sum to the total level of growth projected nationally (through ONS national population projections). This latter point is slightly complicated by a new set of national projections (published in October 2015 (2014-based)) which suggest population growth (2014-37) to be 6% higher than in the previous (2012-based) version. As yet there are no new (2014-based) SNPP – these being due to be published at the end of May 2016.
- 3.8 In considering whether or not projections can be increased or decreased from ONS figures some general trends should also be understood. In particular, it has been evident since about 2008 (the start of recession) that population growth has been relatively strong in many urban areas – this looks to be driven by a reduced trend of out-migration from such locations (which is likely to be linked to factors such as mortgage finance constraints). This has meant that more rural locations have typically seen lower levels of population growth than previously. These trends have not been observed universally across different types of locations but can give an insight into whether or not it is reasonable to move away from official projections.
- 3.9 In understanding what a reasonable projection is a number of factors can be considered. In particular, this would include overlaying past and projected population growth (to see if there is a correlation) and also to compare past and projected levels of migration – this needs to recognise that migration may well be expected to change over time as the age structure of the population changes.
- 3.10 Overall, it is clear that developing the most reasonable and realistic projections for housing need is far from straightforward and will involve a degree of professional judgement. The need for judgment can clearly be seen in a recent High Court case in Kings Lynn (CO/914/2015) where it is noted that *‘this is a statistical exercise involving a range of relevant data for which there is no one set methodology, but which will involve elements of judgment about trends and the interpretation and application of the empirical material available’*.

Demographic Profile of NWL

- 3.11 The analysis below looks at the population profile in NWL, including past levels of population change, the components of this change (e.g. births, deaths and migration) and the age structure. Where relevant, comparisons are made with other areas (the Leicester & Leicestershire (L&L) Housing Market Area (HMA), the East Midlands region and England). The analysis uses 2014 as a base date, due to this being the date for which the most recent information was available at the time of writing (from ONS mid-year population estimates).

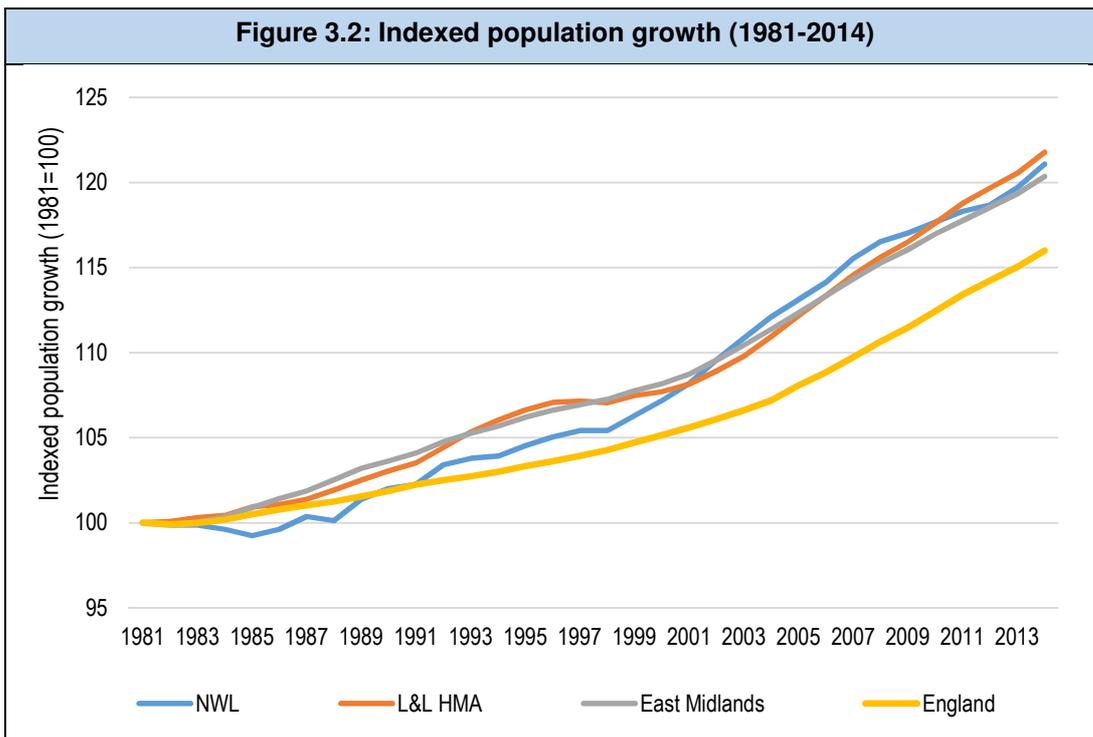
Overall population level and changes

- 3.12 The population of NWL in 2014 is estimated to be 95,900, this is an increase of 10,200 people since 2001 – an 11.9% increase over the 13-year period. This level of population growth is slightly below that seen across the L&L HMA but above equivalent figures for both the East Midlands (10.7%) and England (9.8%).

Figure 3.1: Population Growth (2001-14)				
Area	Population 2001	Population 2014	Change in Population	% change
NWL	85,678	95,882	10,204	11.9%
L&L HMA	893,036	1,005,558	112,522	12.6%
East Midlands	4,189,622	4,637,413	447,791	10.7%
England	49,449,746	54,316,618	4,866,872	9.8%

Source: ONS (mid-year population estimates)

- 3.13 Analysis can also be provided to consider longer-term trends in population growth with data being available back to 1981. The data shows variations in population change over time in all areas with stronger growth being seen in the period from about 2001. NWL saw weaker population growth than across the HMA or region until the late 1990s but since 2001 has seen a similar level of proportionate growth. Across the whole period studied, the level of population growth has been broadly similar in each of NWL, the HMA and the East Midlands; this level of growth is somewhat stronger than has been observed nationally.



Source: ONS (mid-year population estimates)

Components of past population change

- 3.14 The figure and table below consider the drivers of population change in the NWL area from 2001 to 2014 (2001 being the base date from which detailed figures are available). Population change is largely driven by net migration although there is also a positive level of natural change (births minus deaths). Within ONS data there is also a small other changes category (mainly related to armed forces and prison populations) and an unattributable population change (UPC) – this is an adjustment made by ONS to mid-year population estimates where Census data has suggested that population growth had either been over- or under-estimated in the inter-Census years. Because UPC links back to Census data a figure is only provided for 2001 to 2011.
- 3.15 The figure shows that net migration has been the key driver of population change (and in particular internal migration (i.e. moves from one part of the country to another)) – over the 2001-14 period net migration averaged 495 people per annum out of an average population growth of 785. About 85% of this migration was internal net migration and the remaining 15% a net movement of people from abroad. The average level of natural change over this period was 155 per annum (i.e. 155 more births than deaths). Other changes averaged just 3 people per annum (negative figure).
- 3.16 The data also shows a small (but not insignificant) level of UPC. The UPC (for 2001-11) is an average of 138 per annum (positive and when averaged for the whole 2001-14 period) and would suggest that ONS may have previously under-estimated migration and population growth in the NWL area – this could potentially have some impact on forward projections.

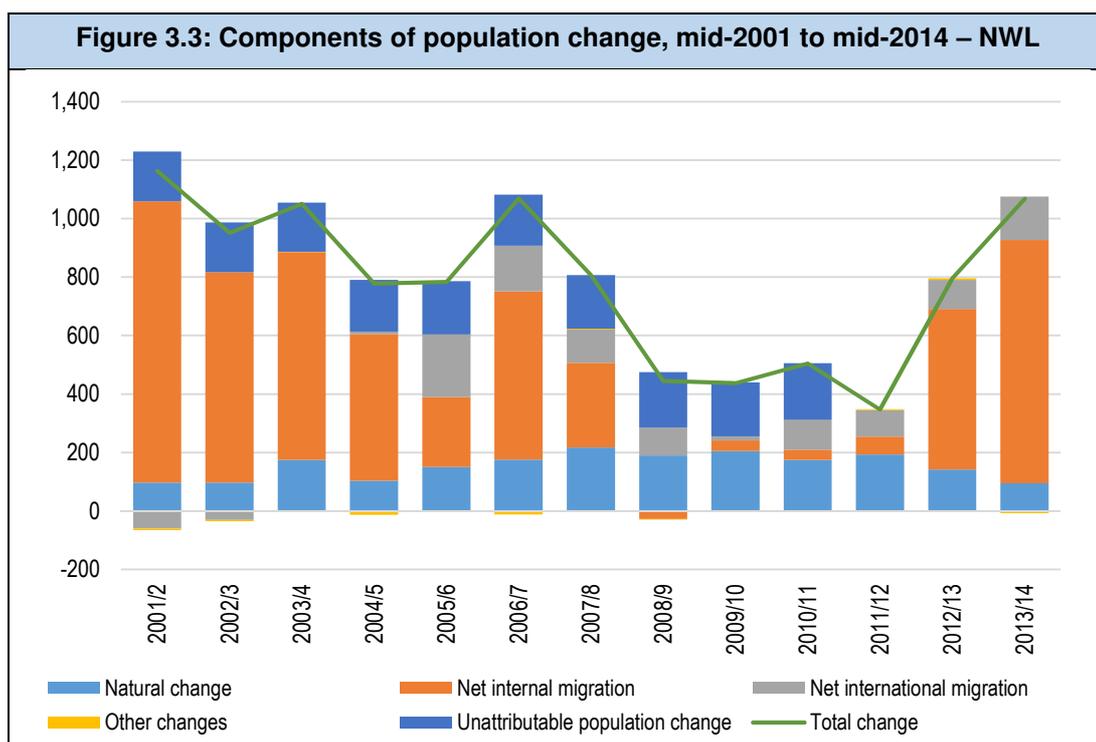


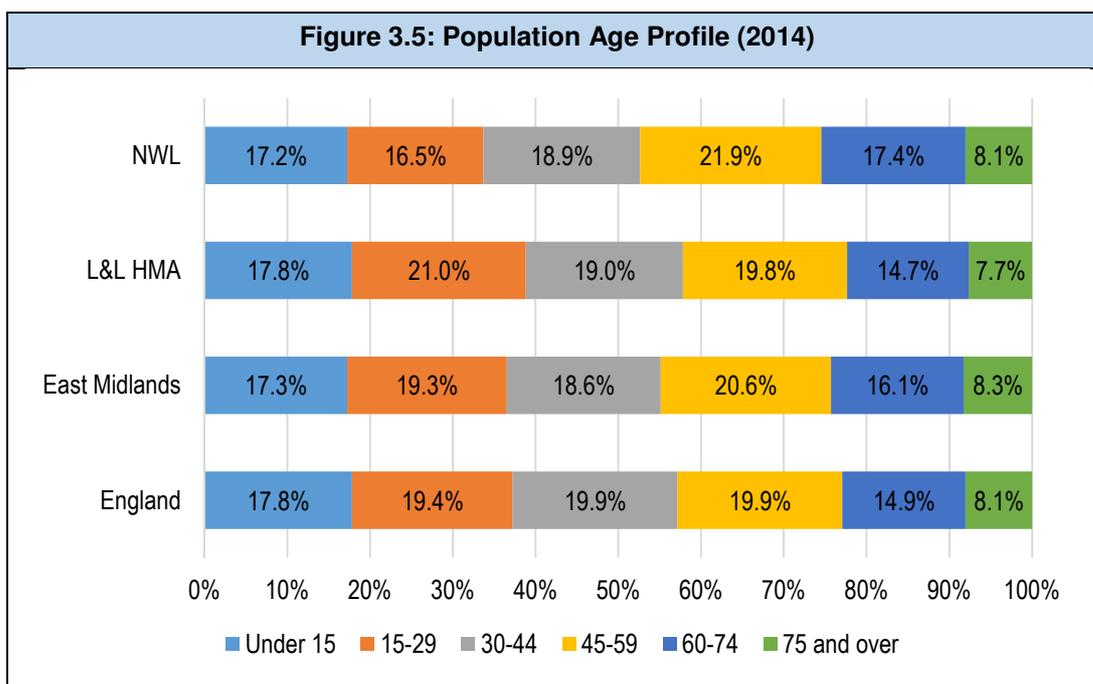
Figure 3.4: Components of population change, mid-2001 to mid-2014 – NWL

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2001/2	97	962	-60	-6	171	1,164
2002/3	97	720	-31	-4	170	952
2003/4	175	711	-4	1	168	1,051
2004/5	103	502	9	-13	177	778
2005/6	150	240	214	-3	182	783
2006/7	176	575	156	-12	175	1,070
2007/8	217	290	113	3	184	807
2008/9	190	-28	95	-2	190	445
2009/10	205	36	14	-3	185	437
2010/11	175	34	101	1	194	505
2011/12	193	61	91	3	0	348
2012/13	142	549	100	5	0	796
2013/14	95	832	149	-8	0	1,068

Source: ONS

Age Profile and Past Changes

3.17 When compared with other areas, NWL has a relatively old population structure with 25% of the population aged 60 and over (compared with 22% across the HMA, 24% in the East Midlands and 23% nationally). The proportion of people aged under 30 is relatively low (34% in NWL, compared with 39% in the HMA and 37% regionally and nationally). The age profile of the population of NWL more closely resembles that seen regionally than the HMA position (although the latter is influenced by the inclusion of Leicester and the impact students have on the population profile).



Source: ONS 2014 mid-year population estimates

3.18 The table below shows how the age structure of the population has changed over the 2001 to 2014 period. The data shows the most significant growth to have been in the 60-74 age group, with this group also showing the highest proportionate increase. Increases have also been seen in the 15-29 and 45-59 age groups (the latter increasing by 2,800 people). The population aged 75 and over has increased by around 1,200 people; a 19% increase. The analysis also indicates a decline in the population aged 30-44 and a modest increase in the number of children (population aged Under 15).

Figure 3.6: Change in Age Structure (2001-2014) – NWL

Age group	2001	2014	Change	% change
Under 15	15,863	16,532	669	4.2%
15-29	13,839	15,782	1,943	14.0%
30-44	19,772	18,157	-1,615	-8.2%
45-59	18,182	21,003	2,821	15.5%
60-74	11,544	16,685	5,141	44.5%
75 and over	6,478	7,723	1,245	19.2%
Total	85,678	95,882	10,204	11.9%

Source: ONS 2014 mid-year population estimates

- 3.19 The same analysis has been carried out for a range of comparator areas (in the table below). The data identifies that population profile changes in NWL are broadly similar to that seen in other areas – the main differences look to be stronger growth in the 60-74 age group and a higher decrease in the population aged 30-44.

Figure 3.7: Change in Age Structure (2001-2014)				
Age group	NWL	L&L HMA	East Midlands	England
Under 15	4.2%	5.5%	2.0%	4.2%
15-29	14.0%	19.5%	17.0%	12.9%
30-44	-8.2%	-4.8%	-8.0%	-4.0%
45-59	15.5%	17.0%	16.0%	16.0%
60-74	44.5%	31.1%	31.8%	24.1%
75 and over	19.2%	23.0%	21.0%	17.5%
Total	11.9%	12.6%	10.7%	9.8%

Source: Mid-Year Population Estimates

Demographic Evidence of Housing Need – Start Point

- 3.20 The PPG [2a-015] states that *‘household projections published by the Department for Communities and Local Government should provide the starting point estimate of overall housing need. The household projections are produced by applying projected household representative rates to the population projections published by the Office for National Statistics. Projected household representative rates are based on trends observed in Census and Labour Force Survey data’*.
- 3.21 The most up-to-date projections are the 2012-based CLG household projections published in February 2015 (i.e. post-dating the 2014 SHMA). These projections were underpinned by ONS (2012-based) subnational population projections (SNPP) – published in May 2014. In December 2015, CLG published a new set of ‘Stage 2’ projections which looked at household types – these projections did not alter estimates of household growth although some age specific estimates were changed; this is discussed later in this section.
- 3.22 The table below sets out levels of household growth expected by the CLG household projections in the 2011-31 period (noting that whilst the projections are 2012-based, information is provided back to 1991). Data is also provided for the L&L HMA, the East Midlands and England for comparative purposes. Across the whole NWL area, the CLG household projections show household growth of about 5,100 – this is a 13% increase; below equivalent figures for both the East Midlands (17%) and England (19%), the level of growth is also below that projected across the HMA (at 17%).

Figure 3.8: Household change 2011 to 2031 (2012-based CLG household projections)				
Area	Households 2011	Households 2031	Change in households	% change
NWL	39,230	44,297	5,067	12.9%
L&L HMA	390,865	459,055	68,190	17.4%
East Midlands	1,897,445	2,220,059	322,614	17.0%
England	22,103,878	26,406,679	4,302,801	19.5%

Source: CLG household projections (2012-based)

- 3.23 Whilst the 2012-based data is the latest ‘official’ population projection and therefore forms the start point for analysis in line with the PPG, it is worth testing the assumptions underpinning the projection to see if it broadly reasonable in the local context – this involves considering both the population projections (the SNPP from ONS) and also the way CLG have converted this data into households. The analysis below initially considers the validity of the population projections and their consistency with past trends, before moving on to consider past trend data in more detail, and also data released since the population projections were published (in particular, ONS has subsequently published new mid-year population estimates for 2013 and 2014).

2012-based Subnational Population Projections (SNPP)

- 3.24 The latest SNPP were published by ONS on the 29th May 2014. They replace the 2010- and 2011-based projections. Subnational population projections provide estimates of the future population of local authorities, assuming a continuation of recent local trends in fertility, mortality and migration which are constrained to the assumptions made for the 2012-based national population projections. The new SNPP are largely based on trends in the 2007-12 period (2006-12 for international migration trends). The SNPP are only population projections and do not contain headship rates (which are needed to convert into household estimates).
- 3.25 They are not forecasts and do not attempt to predict the impact that future government or local policies, changing economic circumstances or other factors might have on demographic behaviour. The primary purpose of the subnational projections is to provide an estimate of the future size and age structure of the population of local authorities in England. These are used as a common framework for informing local-level policy and planning in a number of different fields as they are produced in a consistent way.

Overall Population Growth

- 3.26 The table below shows projected population growth from 2011 to 2031 in each of NWL and a range of comparator areas. The figures for different areas are all taken from the most recent projections; in the case of data for England, this uses information from the 2014-based national population projections, whereas for other areas the data is taken from the 2012-based SNPP. The data shows that the population of the NWL area is projected to grow by around 8,600 people; this is a 9% increase – slightly below that projected across the HMA and East Midlands (10%) and also below the figure for England as a whole (12%).

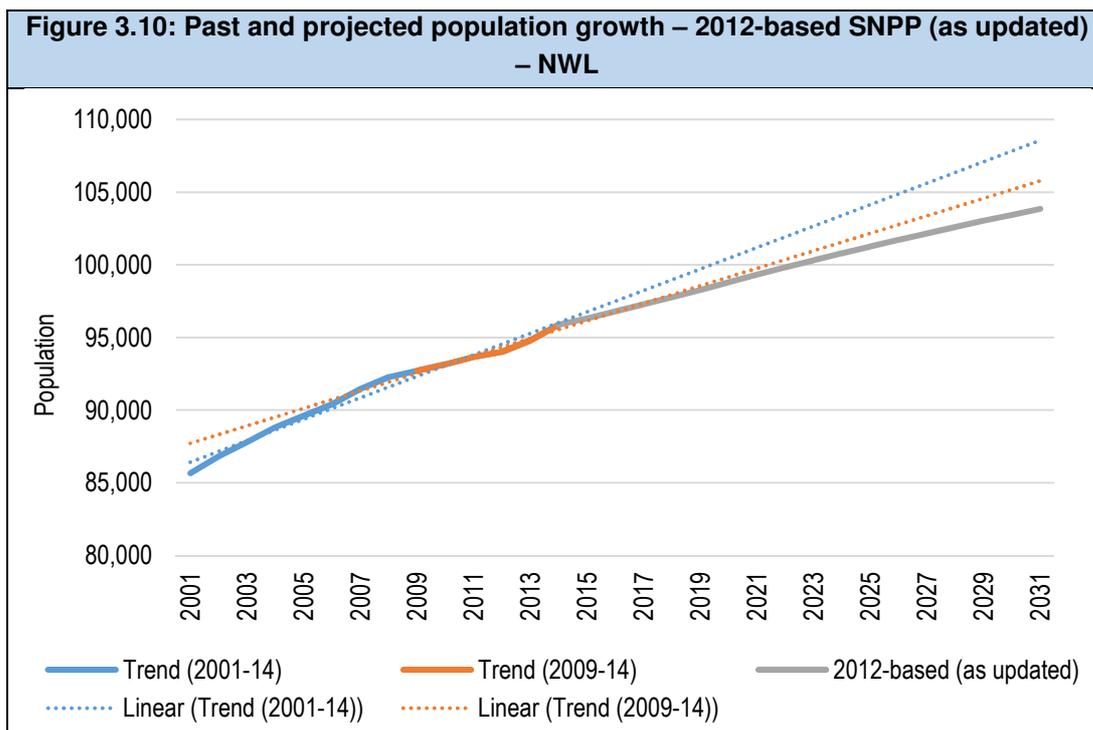
- 3.27 Since the 2012-based SNPP was published there have been two releases of mid-year population estimates (MYE) from ONS (for mid-2013 and mid-2014). It is the case in NWL that both of the MYE show stronger levels of population growth than was projected in the SNPP (this finding is the same as observed across the whole L&L HMA). It is possible in the demographic modelling to overwrite the projected figures for 2013 and 2014 for those in the MYE and then project forward from 2014. In doing this the analysis assumes the same birth and death rates as in the 2012-based SNPP and the same levels of migration (in absolute number terms). Once updated the projection shows a higher level of population growth, and one which is slightly higher than seen across the HMA and region, but still below the national projected change (10,200 people – 11%).

Figure 3.9: Projected population growth (2011-2031) – 2012-based SNPP (and 2014-based national population projections)

Area	Population 2011	Population 2031	Change in population	% change
NWL (2012-based)	93,670	102,271	8,601	9.2%
NWL (2012-based (as updated))	93,670	103,850	10,180	10.9%
L&L HMA	1,005,600	1,102,800	97,200	9.7%
East Midlands	4,637,400	5,099,500	462,100	10.0%
England	54,316,600	60,853,000	6,536,400	12.0%

Source: ONS and demographic projections

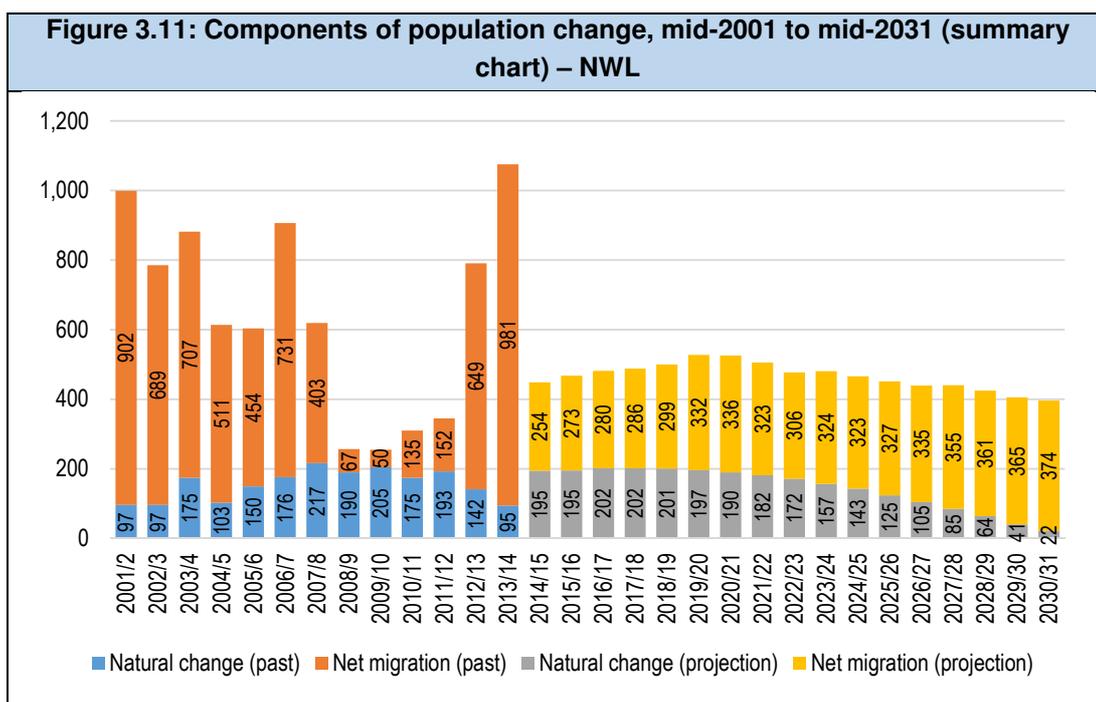
- 3.28 The figure below shows past and projected population growth in the period 2001 to 2031. The data also plots a linear trend line for the last five years for which data is available (2009-14) and also a longer-term period from 2001 to 2014 – this being the longest period for which reasonable data about the components of population change (e.g. migration) is available. The projection is based on the SNPP but takes account of more up-to-date MYE figures.
- 3.29 The data shows that the population is projected to grow at a rate which below both long- and short-term trends although more closely matching the short-term figures. This is an important finding given that ONS typically consider short-term trends when developing the SNPP (looking at the last 5-years for internal migration and the last 6-years for international migration).



Source: ONS and demographic projections

Components of population change

- 3.30 The figure below brings together data about migration (both past trends and the future projection) along with information about natural change. This shows that natural change is expected to decrease over time (a reduction in the excess of births over deaths). Expected levels of migration show the opposite pattern – generally increasing over time. When compared with the past trends in migration, the projected figures look to be slightly on the low side. For the whole of the projection period (2014-31) the average level of migration is expected to be around 321 people (net) per annum – this figure is lower than the level seen in short-term past trends (393 per annum over the past 5-years) and an average figure of 495 if the longer-term (2001 to 2014) figures are used.
- 3.31 The figure of 321 (net migration) per annum is however somewhat higher than would be suggested by the period feeding into the 2012-based SNPP (2007-12 data for internal migration and 2006-12 for international) – this would be an average of 174 people (net) per annum. On that basis the migration figures in the SNPP do not look unduly low.



Source: ONS and demographic projections

Alternative Demographic Scenarios

- 3.32 The SNPP looks to be a sound projection with regard migration and population growth in NWL (noting that the projected level of migration is above that which might be suggested by the past trend data being used; i.e. from 2006/7 to 2012). However, it is noted across the District that levels of migration and population growth have been variable over time and that the period which fed into the SNPP can be characterised as one where migration levels were quite low. On this basis it would be reasonable to consider alternative (sensitivity) scenarios – such an approach is set out in para 2a-017 of the PPG which states *‘plan makers may consider sensitivity testing, specific to their local circumstances, based on alternative assumptions in relation to the underlying demographic projections...’*.
- 3.33 There are a number of issues and alternatives which can be investigated. Firstly, it should be noted that the SNPP are 2012-based; with publication of new population data for 2013 and 2014 it is now possible to see if there have been any notable shifts in short-term migration patterns and hence use the more recent data to establish if the next SNPP (a 2014-based version expected to be published in May 2016) will differ substantially from that in the 2012-based version. Secondly, account can be taken of longer-term migration trends (noting that earlier analysis has suggested a lower level of migration in the recent past than over the longer-term (back to 2001 for example). Finally, earlier analysis did highlight some concerns in relation to the ‘unattributable’ component of population change within ONS population data for the 2001-11 period and it is possible to test alternative scenarios taking account of this component of change.

3.34 The analysis below therefore considers three potential sensitivities to the figures. These can be described as:

- Implications of 2013 and 2014 mid-year population data
- Implications of long-term migration trends
- Implications of Unattributable Population Change (UPC) and long-term migration trends

Implications of 2013 and 2014 mid-year population data

3.35 In seeking to understand how population projections might change as a result of more recent ONS data, it is important to understand how the projections work. The SNPP is not a simple roll forward of past migration numbers but also takes account of the age structure and how this will change over time – this has an impact on estimated future migration (which can go up as well as down). Additionally, international migration is linked back to the ONS national projections which use a longer-term time series for analysis (believed to date back to 1994). It also needs to be noted that when looking at past trends at a local level, ONS conventionally uses data from the past five years for internal/domestic migration and a period of six years when considering international migration trends.

3.36 The table below therefore shows average levels of migration in the periods which fed into the 2012-based SNPP and also that are expected to feed into the 2014-based SNPP. The analysis considers the difference between these periods to determine if the next set of SNPP are likely to show a higher or lower level of population growth. The analysis looks at internal and international migration separately.

3.37 The data shows across the District that migration has been stronger in the period to 2014 than the equivalent period to 2012 – overall, net migration is shown to be around 220 people per annum higher (entirely driven by an increase in net internal migration with international migration being largely unchanged). The increase in net migration is likely to some degree to be linked to increased housebuilding over the past couple of years.

Figure 3.12: Past trends in internal and international migration – data feeding into subnational population projections		
	Internal net migration	International net migration
2006/7		156
2007/8	290	113
2008/9	-28	95
2009/10	36	14
2010/11	34	101
2011/12	61	91
2012/13	549	100
2013/14	832	149
2012-SNPP	79	95
2014-SNPP	302	92
Difference	224	-3

Source: ONS

- 3.38 To model an alternative scenario, the levels of migration underpinning the 2012-based SNPP have been adjusted to reflect the difference between figures for the different periods shown in the table above. For example, the modelling assumes a level of internal migration that is 224 people higher for each year of the projection post-2014 (data to 2014 being fixed by reference to the ONS mid-year population estimates).

Implications of long-term migration levels

- 3.39 Previous analysis has identified that levels of population growth have been variable over time and this is at least in part due to a variable level of recorded migration. Analysis has therefore given consideration to migration trends over the longer-term (taken to be the 2001-14 period for the purposes of this analysis). A consideration of longer-term trends is suggested as an alternative scenario in the PAS technical advice note where trends over a 10-15-year period are suggested as a possible alternative way to look at demographic change – the analysis in this report uses a 13-year reference period.
- 3.40 The scenario developed takes the average level of migration seen over the 2001-14 period and treats this as ‘fixed’ within the projection. Arguably this approach is less robust than within the SNPP (where migration levels vary year on year depending on the age structure) – however, it is not possible from the data available to realistically develop a ‘dynamic’ projection. In any case, part of the purpose of looking at long-term trends is to provide a more ‘stable’ baseline of information for the purposes of modelling.
- 3.41 The table below provides a similar analysis to that above but with data going back to 2001. The level of net migration over this period is shown to be an internal net in-migration of 422 people per annum and net international in-migration of 73 people each year.

Figure 3.13: Past trends in internal and international migration and long-term average		
	Internal net migration	International net migration
2001/2	962	-60
2002/3	720	-31
2003/4	711	-4
2004/5	502	9
2005/6	240	214
2006/7	575	156
2007/8	290	113
2008/9	-28	95
2009/10	36	14
2010/11	34	101
2011/12	61	91
2012/13	549	100
2013/14	832	149
Average (2001-14)	422	73

Source: ONS

Combining long-term migration and UPC

- 3.42 As noted earlier there is a modest level of Unattributable Population Change (UPC) in the ONS data for 2001-11 in NWL. In this instance UPC is positive, this suggests that the components of change feeding into the SNPP may under-estimate migration and population growth. Whilst making an adjustment for UPC could be an alternative scenario it is not considered, on its own, to be a robust alternative to the SNPP. The main reasons for this are that it is unclear if UPC is related to migration and more importantly, due to changes in the methods used by ONS to measure migration it is most probable that any errors are focussed on earlier periods (notably 2001-6) and therefore a UPC adjustment for more recent data would not be appropriate. On this basis, whilst it is not considered that UPC should be included on its own as a projection to take forward into the modelling of objectively assessed need it is considered that there is merit in looking at UPC when also considering long-term trends.
- 3.43 The reason for this is due (as noted above) to the fact that any errors due to UPC are likely to impact more strongly on some of the early years of past trends (notably 2001-6). This is because post-2006, ONS has improved its collection of migration data. Therefore, if a projection is using data from the 2001-6 period (as it does when looking at long-term migration trends) then it is reasonable to also include an adjustment for UPC – i.e. some of the older long-term data is more likely to be affected by UPC issues.
- 3.44 Hence the final sensitivity projection takes the outputs from the long-term migration scenario and makes a further additional adjustment for UPC (based on the years in which this arises). For the purposes of analysis, it has been assumed that UPC is equally split between international and internal migration – this assumption is considered to be reasonable given that generally it is thought that UPC is more closely associated with international migration, but, in NWL international migration is a relatively small component of population change. In reality this assumption will not substantially impact on the figures given that the overall level of migration is the same regardless of which group it is placed in – there would however be some differences due to differing age/sex profiles of migrants in each of the international and internal migrant groups.
- 3.45 The table below therefore set out the assumptions modelled. Across the District, when compared with the long-term migration scenario it can be seen that net migration is assumed to be slightly higher – an overall net in-migration of about 633 people per annum (compared with 495 for long-term migration trends).

Figure 3.14: Past trends in internal and international migration (with a UPC adjustment) and long-term average		
	Internal net migration	International net migration
2001/2	1,048	26
2002/3	805	54
2003/4	795	80
2004/5	591	98
2005/6	331	305
2006/7	663	244
2007/8	382	205
2008/9	67	190
2009/10	129	107
2010/11	131	198
2011/12	61	91
2012/13	549	100
2013/14	832	149
Average (2001-14)	491	142

Source: ONS

Outputs from different demographic projections

3.46 The table below shows the estimated level of population growth in the SNPP and the alternative projections developed. Across the whole NWL area the SNPP shows population growth (2011-31) of 9.2% - this figure increases when more recent population and migration data is included in the modelling (due to 2012-14 having shown relatively high population change). Scenarios taking account of both long-term migration trends and UPC also show higher levels of population growth.

Figure 3.15: Projected population growth (2011-2031) – alternative scenarios – NWL				
	Population 2011	Population 2031	Change in population	% change
2012-based SNPP	93,670	102,271	8,601	9.2%
2012-based SNPP (as updated)	93,670	103,850	10,180	10.9%
2014-based (estimated)	93,670	108,154	14,484	15.5%
Long-term migration	93,670	107,290	13,620	14.5%
Long-term migration/UPC	93,670	110,012	16,342	17.4%

Source: Demographic projections

3.47 Overall, whilst there is merit in looking at alternative scenarios for demographic change, it is not considered that any of these is definitively better or more robust than another. It is however noted that all of the alternative scenarios are higher than is suggested by the SNPP (unadjusted) and therefore the evidence all points in an upwards direction when compared with the most recent official projections.

3.48 Standing back from the various analysis, it is considered that something in the range between long-term migration trends and long-term migration trends with a UPC adjustment is probably a reasonable view about future demographic change. This recognises that the reference period feeding into the 2012-based SNPP is one where migration levels were below more typical trends; it also recognises that there may have been some underestimation of migration in the 2001-11 period (but this this is not definitively known). Combining the levels of population growth from these two projections would suggest population growth of about 16%, a figure similar to (but slightly higher than) the attempt to estimate what the next round of SNPP might project.

Age Structure Changes

3.49 With growth in the population will also come age structure changes. The tables below summarise the findings for key (15-year) age groups under the 2012-based SNPP and also with long-term migration trends and a UPC adjustment (which shows the highest level of population growth of the projections developed).

3.50 Focussing on the SNPP, the data shows that largest growth will be in people aged 60 and over; it is estimated that there will be 34,200 people aged 60 and over in 2031 – this is an increase of 11,200 from 2011, representing growth of 49%. The population aged 75 and over is projected to increase by an even greater proportion, 90%. Looking at the other end of the age spectrum the data shows that there is projected to be little change in the population aged under 30 along with declines in the number of people aged 30-44 and 45-59.

3.51 With a higher level of population growth (as in with the scenario linked to long-term migration changes and UPC) there is still a notable ageing of the population (albeit this is consistent with expectations regionally and nationally). However, it is notable that younger age groups see somewhat higher growth than when linked to the SNPP – in particular, the 15-29 and 30-44 age groups see growth of 8% and 6% respectively, compared with population decline when using the SNPP. Older age groups (60-74 and 75+) see higher growth with the higher projection, but differences are less marked than for other age groups – the population aged 75 and over accounts for 76% of the population change under the SNPP, but only 42% with higher migration assumptions.

Figure 3.16: Population change 2011 to 2031 by fifteen-year age bands (2012-based SNPP) – NWL

Age group	Population 2011	Population 2031	Change in population	% change from 2011
Under 15	16,536	16,655	119	0.7%
15-29	15,116	15,085	-31	-0.2%
30-44	19,128	17,989	-1,139	-6.0%
45-59	19,918	18,368	-1,550	-7.8%
60-74	15,679	20,324	4,645	29.6%
75+	7,293	13,850	6,557	89.9%
Total	93,670	102,271	8,601	9.2%

Source: ONS and demographic projections

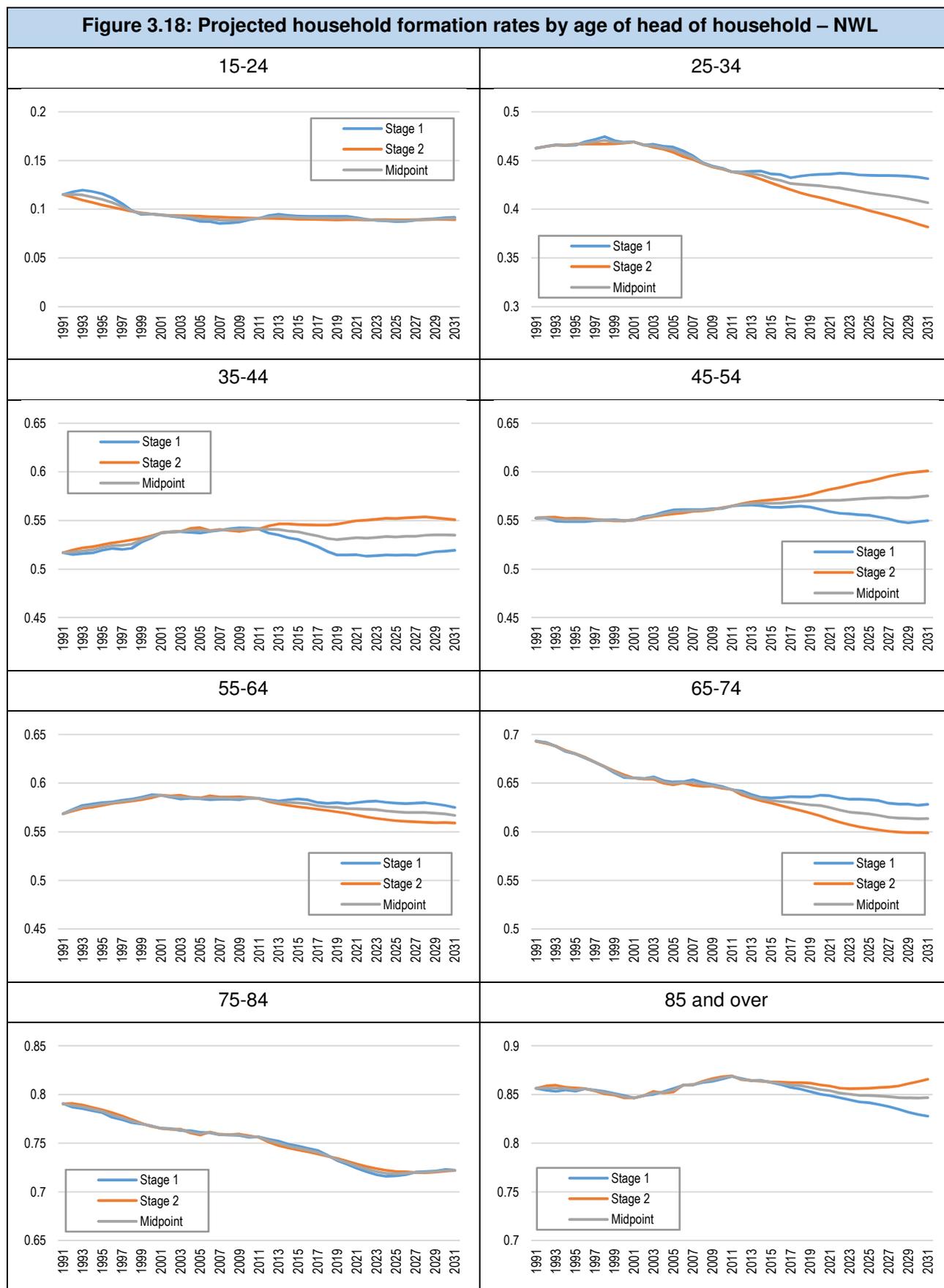
Figure 3.17: Population change 2011 to 2031 by fifteen-year age bands (long-term migration/UPC) – NWL				
Age group	Population 2011	Population 2031	Change in population	% change from 2011
Under 15	16,536	18,546	2,010	12.2%
15-29	15,116	16,396	1,280	8.5%
30-44	19,128	20,348	1,220	6.4%
45-59	19,918	19,562	-356	-1.8%
60-74	15,679	20,992	5,313	33.9%
75+	7,293	14,167	6,874	94.3%
Total	93,670	110,012	16,342	17.4%

Source: ONS and demographic projections

Household Growth (Household Formation (Headship) Rates)

- 3.52 Having examined the anticipated growth in the population of NWL and the age profile of the population, the next step in the process of determining housing need is to convert this information into estimates of the number of households in the area. To do this the concept of headship rates is used. Headship rates can be described in their most simple terms as the number of people who are counted as heads of households (or in this case the more widely used Household Reference Person (HRP)).
- 3.53 A new set of headship rates is now available following publication of 2012-based CLG Household Projections. The headship rates used in the 2012-based Household Projections are considered to be more reliable than the previous set (the 2011-based interim household projections which were the latest available at the time of the 2014 SHMA). The 2012-based Household Projections generate a higher level of anticipated household growth for a given population than the 2011-based Household Projections.
- 3.54 The CLG (2012-based) projections were published in two stages; Stage 1 in February 2015 and Stage 2 in December 2015. Both show the same level of overall household growth but some of the age specific assumptions differ – this means that alternative population scenarios can differ (in terms of household estimates). The overall level of anticipated household growth for NWL taken from the 2012-based CLG Household Projections was presented earlier in this chapter.
- 3.55 It is useful to understand how the different CLG projections impact on assumptions for different age groups (i.e. comparing Stage 1 and Stage 2 of the 2012-based projections). This analysis can be used to consider if the 2012-based projections are robust and the extent to which household formation rates may have been suppressed (an analysis required by 2a-015 of the PPG). Figure 3.18 below shows the headship rates used in each of the projections for NWL. It is notable that there are differences internally within the 2012-based projections; this occurs because CLG consolidate overall household growth but do not consolidate figures for individual age groups.

- 3.56 Arguably the most notable difference is in the 45-54 age group (where the Stage 1 projections go down over time compared with Stage 2 showing a notable increase). There are also relatively substantial differences between Stage 1 and Stage 2 figures for the 25-34, 35-44, 65-74 and 85 and over age groups. It is also notable that the 25-34 shows a continuing reduction in headship rates regardless of the analysis being studied.
- 3.57 It is difficult to say which of Stage 1 or Stage 2 are the most reliable to take forward into demographic modelling and given the differences between the two sets of figures a pragmatic approach has been taken to initially use the mid-point between Stage 1 and Stage 2 figures (this is also shown on the chart below).
- 3.58 In focussing on this mid-point position, it is considered that these are generally sound and do not indicate any degree of suppressed household formation (either in the past or built into the future projections). The only exception to this is the 25-34 age group where the data shows a notable decrease in the headship rate from 2001 to 2011 – this would suggest that there may have been some degree of suppression of household formation in this period (although this is not clear cut as the headship rates can also be influenced by other factors such as international migration and growth in BME communities). Moving forward from 2011 the projections are expecting some further decrease in the headship rate; this suggests that there may be some additional suppression being built into the projections.
- 3.59 In looking at suppression amongst the 25-34 age group it is also useful to look at the 35-44 age group (noting that, for example, people aged 25-34 in 2011 will be aged 35-44 by 2021). The 35-44 age group shows little change in headship rates in the past and continuing in the future (albeit with some year-on-year variation). On this basis there is no significant evidence of suppression in this age group either in the past or projected forward. This analysis therefore suggests that the extent to which there is a suppression in the 25-34 age group, it is expected that this will not remain as a suppressed household formation – the analysis would suggest that all of the households who might be expected to form will do so, it's just that some of this formation might be delayed (i.e. households who might historically been expected to form when aged 25-34 will now form when aged 35-44). Overall, therefore levels of household growth will over a period of time (e.g. to 2031) fully reflect the needs of the local population with no suppression being evident in the long-term.



Source: Derived from CLG data

Housing Need (linked to 2012-based headship rates)

3.60 The table below brings together outputs in terms of household growth and housing need using the 2012-based headship rates and the full range of population growth scenarios developed. To convert households into dwellings the data includes an uplift to take account of vacant homes. Analysis of 2011 Census data about unoccupied household spaces (Table: QS417EW) suggests a vacancy rate of 3.4% which has been used in analysis. It is assumed that such a level of vacant homes will allow for movement within the housing stock and includes an allowance for second homes.

3.61 The analysis shows an overall housing need for 262 dwellings per annum across the NWL area when using the 2012-based SNPP as the underlying population projection. This figure also represents the ‘start point’ as defined in the PPG. This figure increases for all of the alternative scenario and with long-term migration and a UPC adjustment (the highest of the population projections developed) there is a need for 406 dwellings per annum to be provided. Taking a mid-point between long-term migration and long-term migration with a UPC adjustment would give a need for about 380 dwellings per annum.

Figure 3.19: Projected housing need – range of demographic based scenarios and 2012-based headship rates – NWL

	Households 2011	Households 2031	Change in households	Per annum	Dwellings (per annum)
2012-based SNPP	39,232	44,294	5,062	253	262
2012-based SNPP (as updated)	39,232	44,862	5,630	282	291
2014-based (estimated)	39,232	46,387	7,155	358	370
Long-term migration	39,232	46,078	6,846	342	354
Long-term migration/UPC	39,232	47,078	7,846	392	406

Source: Demographic projections

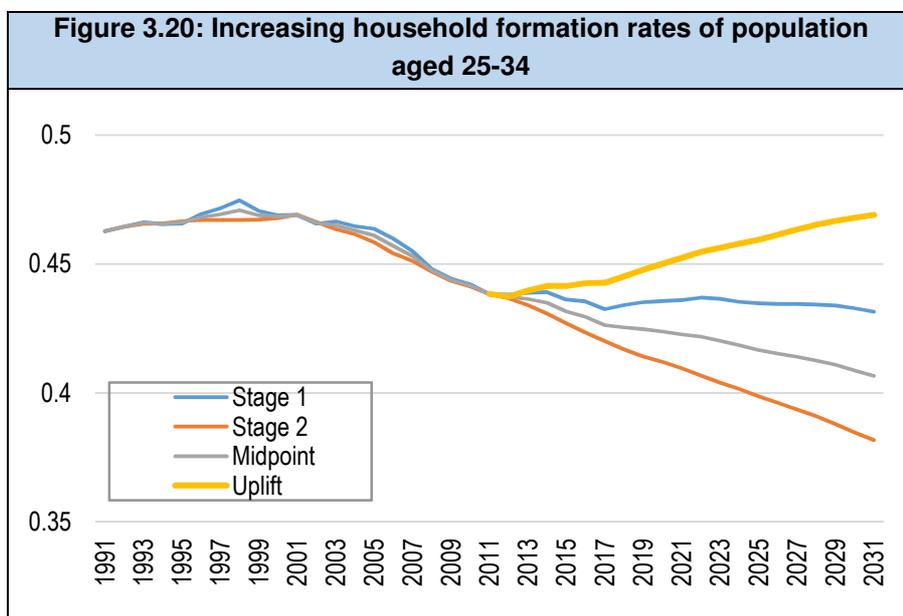
Alternative methods for looking at headship rates

3.62 Although it is considered that the 2012-based headship rates are sound, it is worthwhile looking at potential alternative ways of looking at the interpretation of these rates. A number of methods have been considered in the past and many of these put weight on the use of the 2008-based CLG projection headship rates. The sort of methods used include:

- Blended headship – where the rates are comprised of a combination of the 2012- and 2008-based rates. In some cases, this ‘blending’ is only carried out for specific age groups (generally with the aim of increasing the apparent housing need); an approach which is not considered to be robust as it is clear that patterns of formation vary across different age bands and any analysis should be viewed for the population as a whole.
- Full-return to trend – a second approach is to return all household formation rates back to those observed in the 2008-based projections. This is also not considered to be a robust approach given that the 2008-based figures were prepared at a point in time at which interest rates had been at a historical low point for some time; coupled with availability of a range of mortgage deals (including 100% mortgages) which in a historical context would be seen as somewhat exceptional.

- 3.63 Overall, it is not considered that there is any merit in using the 2008-based rates in the analysis (whether as a partial or full adjustment). Not taking account of these historic figures has some considerable support from academic analysts with Alan Holmans for example noting that part of the shift away from 2008-based household formation rates relates to international migration and different household structures within new migrant communities. He identifies that this *“will not be reversed.”*
- 3.64 More recent research by Ludi Simpson and Neil McDonald has also considered these issues and is clear that it is not appropriate to revert to the 2008-based household representative rates, setting out: *“it is no longer sensible to appeal to previous household projections including the 2008-based set as if they were evidence of an underlying trend in household formation. They were produced at a time when household formation had already changed, starting before the economic downturn of the mid-to-late 2000s, and are in themselves only evidence of the optimism of that period.”*
- 3.65 The PAS technical advice note also supports this position, noting that *‘The CLG 2008 HRRs are no longer helpful because they are based on very old evidence, and anyway may not reflect the true long-term trend’.*
- 3.66 There is however merit in considering if changes to the formation rates of the 25-34 age group could be brought forward to enable access to housing at the sort of ages seen typically in the past. As can be seen from the analysis above, there has been a notable decrease in the formation rates of the population aged 25-34 since about 2001 and this downward trend is projected to continue (at least when looking at the CLG Stage 2 projections).
- 3.67 A sensitivity analysis has therefore been run which considers and seeks to quantify the uplift of housing required in order to return the household formation rates of the 25-34 age group back to 2001 levels (i.e. before the rate started to decrease) by 2031 (the end of the projection period). If achieved, the effect would be to reduce the proportions of shared households and persons within this age group living with parents.
- 3.68 This sensitivity in effect seeks to consider a scenario in which affordability and access to housing for younger households improves, and quantifies what level of housing provision might be required to facilitate this, all other factors being equal.
- 3.69 In reality, other factors such as real growth in disposable income (allowing people to save), the availability of and access to mortgage finance, interest rates and economic confidence will all influence trends in household formation. There is a complex set of factors at play, and it is difficult to predict how these factors might interact in the future and the impact on household formation rates (in the absence of any supply-side constraints). Furthermore, as noted above, part of the changes in household formation rates for this age group may have been due to international migration.
- 3.70 Such an approach is however considered to be consistent with the PPG which says in 2a-015 that *‘the household projection-based estimate of housing need may require adjustment to reflect factors affecting local demography and household formation rates which are not captured in past trends. For example, formation rates may have been suppressed historically by under-supply and worsening affordability of housing’.*

3.71 The figure below shows how the household formation rates of the 25-34 age group are projected to change with this scenario. The assumed increase is quite substantial and takes the rate back to 0.47 by 2031 (which is some way above the rate projected in both the Stage 1 (0.43) and Stage 2 (0.38) projections).



Source: Derived from CLG data

3.72 The analysis with this uplift shows an overall housing need for 296 dwellings per annum across the NWL area when using the 2012-based SNPP as the underlying population projection. This figure increases for all of the alternative scenario and with long-term migration and a UPC adjustment (the highest of the population projections developed) there is a need for 444 dwellings per annum to be provided. This adjustment to household formation rates therefore increases the need by between 9% and 13% depending on the scenario studied – this is a substantial uplift.

3.73 Taking a mid-point between long-term migration and long-term migration with a UPC adjustment would give a need for about 417 dwellings per annum and on the basis of analysis carried out would represent a reasonable level of demographically-based need for NWL.

	Households 2011	Households 2031	Change in households	Per annum	Dwellings (per annum)
2012-based SNPP	39,232	44,948	5,716	286	296
2012-based SNPP (as updated)	39,232	45,528	6,296	315	326
2014-based (estimated)	39,232	47,103	7,871	394	407
Long-term migration	39,232	46,782	7,550	378	390
Long-term migration/UPC	39,232	47,818	8,586	429	444

Source: Demographic projections

Summary – Trend based Demographic Projections

The start point for assessing housing need in line with the PPG is the most recent official household projections; these are the 2012-based CLG projections which suggest a need for around 262 dwellings per annum to be provided (2011-31). These projections were underpinned by the most recent ONS subnational population projections (SNPP – also 2012-based).

Analysis of past trends in migration indicate that the reference period used in the 2012-based projections (largely the 2007-12 period) was one which saw low levels of migration in comparison with other periods (both before 2007 and since 2012). It was therefore concluded that the SNPP might be projecting a relatively low level of population growth and alternative scenarios were developed based on both long-term and more recent migration trends.

Whilst none of the alternative scenarios could definitively be described as the most robust it is viewed that the strongest consideration should be given to projections linked to long-term migration trends (either with or without an additional adjustment for Unattributable Population change (UPC)). Overall, these projections suggested a need for around 380 dwellings per annum (2011-31).

When looking at the data about headship rates underpinning the 2012-based CLG household projections it was observed that the 25-34 age group looked to have seen some suppression of household formation in the past (and that this trend was projected to continue into the future). The picture was however not entirely clear with Stage 1 and Stage 2 of the CLG projections showing a different pattern.

Given the difference between Stage 1 and Stage 2 figures a pragmatic approach was taken to model data on a midpoint between the two. Further analysis was carried out to model the returning of headship rates amongst the 25-34 population back to the levels seen in 2001 (which is the date at which they are shown to have started to drop). This increased the need by between 9% and 13% depending on the scenario chosen. Taking a mid-point between long-term migration and long-term migration with a UPC adjustment would give a need for about 417 dwellings per annum and on the basis of analysis carried out would represent a reasonable level of demographically-based need for NWL.

4. Economic-led Housing Requirements

Introduction

- 4.1 Planning Practice Guidance sets out that consideration should be given to future economic performance in drawing conclusions on the overall need for housing. Where the evidence suggests that higher migration might be needed than seen in past trends in order to support economic growth, consideration should be given to adjusting the spatial distribution of housing. Specifically, the Guidance outlines that:

'Plan makers should make an assessment of the likely growth in job numbers based on past trends and/or economic forecasts as appropriate and also having regard to the growth of the working age population'

And that:

'Where the supply of working age population that is economically active (labour force supply) is less than the projected job growth, this could result in unsustainable commuting patterns (depending on public transport accessibility or other sustainable options such as walking or cycling) and could reduce the resilience of local businesses. In such circumstances, plan makers will need to consider how the location of new housing or infrastructure development could help address these problems'

- 4.2 This section seeks to understand what level of population growth might be required to support the required growth in the resident workforce under a range of trend-based (policy-off) economic forecasts. It then builds on this analysis to specifically look at the additional implications of proposed job growth in relation to the East Midlands Gateway Rail Freight Interchange.

Economic Forecasts

- 4.3 A range of economic forecasts have been accessed which look at the number of additional jobs that might be created in the District based on a 'business as usual' approach. The forecasts all work slightly differently but essentially consider how the national and regional economy might perform before considering the local situation. At the local level these forecasts consider past job growth as well as an understanding of how different sectors have performed; this is used to predict what might happen in the future.
- 4.4 Economic forecasts need to be treated with some degree of caution; they often show widely different outputs depending on the time of the forecast and the forecasting house. Additionally, they can be influenced by past trend 'shocks' (e.g. where an area has seen strong growth in the past, it is generally assumed that this will continue in the future; in reality it may be that high past trends are influenced by individual schemes that are not likely to be repeated).

- 4.5 A total of five forecasts have been accessed for analysis: the first is an Experian forecast from 2013, which is the forecast used to underpin analysis in the 2014 SHMA; the second is a forecast produced by PACEC as part of the 2013 Employment Land Study; the final three have been taken from a recent proof of evidence submitted to the Council by Gladman (January 2016 – Appeal Ref: APP/G2435/W/15/3005052; Land South of Greenhill Road, Coalville) – although it is not stated it is assumed that all of these forecasts were produced in 2015. These final three forecasts cover all of the main three forecasting houses active in providing such information at a local authority level.
- 4.6 The table below shows the estimated number of jobs forecast to be provided on average each year in the 2011-31 period. The data is contrasted with similar figures for the whole L&L HMA. Figures are also provided for the percentage annual growth this represents from the number of jobs in 2011, with the 2011 baseline being taken from the PACEC analysis (in the absence of this being readily available from other sources).
- 4.7 The analysis shows a range of job growth in NWL from 340 to 596 per annum and from 2,046 to 3,374 across the L&L HMA – these are both quote wide ranges and do help to emphasise the difficulty in pinning down a robust view about future job growth. It is however notable in all cases that the forecast level of job growth in NWL is higher (in proportionate terms) than is seen for the whole HMA.

Figure 4.1: Job growth per annum (2011-31) – a range of economic forecasts				
	NWL		L&L HMA	
	Additional jobs per annum	% per annum increase from 2011	Additional jobs per annum	% per annum increase from 2011
Experian (2013) – SHMA	515	0.9%	2,680	0.6%
PACEC (2013)	475	0.8%	3,230	0.7%
Experian (2015)	596	1.1%	3,374	0.7%
Cambridge Econometrics (2015)	340	0.6%	2,329	0.5%
Oxford Economics (2015)	430	0.8%	2,046	0.4%
Average	471	0.8%	2,732	0.6%

Source: 2014 SHMA, PACEC ELR, Gladman proof of evidence (2015)

- 4.8 For the purposes of this assessment however, the focus is on the figures for NWL. Later in this section, an estimate of the likely housing requirement linked to each of the forecasts is provided. It is however worth briefly considering which is likely to be the most robust. When looking at the average of all the forecasts (for NWL) it is clear that the PACEC figures are most closely aligned and on that basis it is concluded that it is this forecast which should be given the greatest weight. Although the PACEC forecast dates from 2013, it is not substantially different from the range of other forecasts accessed.

- 4.9 Whilst this is just a view based on looking at the range of forecasts, it is noted that the Council themselves are continuing to use the PACEC information within the emerging Local Plan (although this is in part due to the absence of another source that contains data for all local authorities in the HMA). Additionally, the inspector in the case referred to above supports the use of PACEC, noting in paragraph 25 that *'PACEC is a robust economic forecast, which should inform the FOAN; that the FOAN must include an allowance for EMG on top of PACEC'*. The impact of EMG is considered later in this section, with initial analysis looking at the need associated with baseline forecasts (as shown in the table above).

Linking Job Growth and Changes to Resident Labour Force

- 4.10 The analysis above has set out a range of potential scenarios for changes in the number of jobs in the District. However, for the purposes of analysis linked to demographic data it is necessary to convert this into estimates of the required change to the economically active population. The number of jobs and resident workers required to support these jobs will differ depending on two main factors:
- Commuting patterns – where an area sees more people out-commute for work than in-commute it may be the case that a higher level of increase in the economically active population would be required to provide a sufficient workforce for a given number of jobs (and vice versa where there is net in-commuting);
 - Double jobbing – some people hold down more than one job and therefore the number of workers required will be slightly lower than the number of jobs.

Commuting patterns

- 4.11 Commuting patterns in relation to EMGRFI were discussed in Section 2; however, when looking at baseline forecasts a different approach is used (which recognises both in- and out-commuting). The table below shows summary data about commuting to and from the District and the HMA (for comparative purposes) from the 2011 Census. Overall the data shows that NWL sees a notable level of net in-commuting for work with the number of people resident in the District who are working being about 86% of the total number who work in the area. This number is shown as the commuting ratio in the final row of the table and is calculated as the number of people living in an area (and working) divided by the number of people working in the area (regardless of where they live). Across the HMA, the analysis suggests that commuting is broadly in balance.

Figure 4.2: Commuting patterns in NWL and the L&L HMA (2011)		
	NWL	L&L HMA
Live and work in LA/HMA	18,880	326,133
Home workers	5,069	45,789
No fixed workplace	3,327	31,180
Out-commute	19,246	61,323
In-commute	26,699	64,110
Total working in LA/HMA	53,975	467,212
Total living in LA/HMA (and working)	46,522	464,425
Commuting ratio	0.86	0.99

Source: 2011 Census

4.12 In translating the commuting pattern data into growth in the labour-force for the District it is assumed that the commuting ratio remains at the same level as shown by the 2011 Census (i.e. assumes that the growth in the number of residents who are economically active will need to be 14% lower than the increase in the number of jobs).

Double jobbing

4.13 Double jobbing was also discussed in Section 2 where analysis of Annual Population Survey data showed that around 3.3% of workers have a second job. This gave a double jobbing ratio of 0.967 (i.e. the number of jobs can be discounted by 3.3% to estimate the required change in the workforce).

Labour-force growth

4.14 To work out the change in the resident workforce required to match the forecast number of jobs, the commuting ratio is multiplied by the amount of double jobbing (to give an adjustment factor) and in turn multiply this by the number of jobs – this is shown in the table below. Overall, the range of forecasts expect an increase of between 340 and 596 jobs per annum across the District; if commuting patterns and levels of double jobbing remain the same then this would require a slightly lower level of growth in the resident workforce (of about 283-497 people per annum). Looking at the PACEC forecast the estimated workforce change is just under 400 per annum, giving a total change of about 7,900 over the full 2011-31 period.

4.15 To be clear on the calculations in the table below; the commuting ratio is 0.86 (i.e. there are 0.86 residents in employment for every 1 person who works in the District) and the double jobbing figure is 0.967 (i.e. 100 jobs would need 96.7 workers). The adjustment factor applied is therefore 0.83 (0.86×0.967) – so for every additional job in the District there would need to be 0.83 additional residents who are working. The figures below may not exactly match this calculation due to rounding.

Figure 4.3: Jobs growth and change in resident workforce			
Forecast	Additional jobs (pa)	Change in resident workforce (pa)	Change in resident workforce (2011-31)
Experian (2013) – SHMA	515	429	8,585
PACEC (2013)	475	396	7,918
Experian (2015)	596	497	9,935
Cambridge Econometrics (2015)	340	283	5,667
Oxford Economics (2015)	430	358	7,168

Source: Range of economic forecasts, NOMIS and 2011 Census

Linking resident workforce change to demographic projections

- 4.16 Having estimated the likely required change to the workforce under a range of scenarios the next stage is to estimate how much growth is implied by demographic projections (and hence if levels of population growth would need to change so that a sufficient workforce is available). This is a very thorny issue with no set methodology and a range of different methods and views being used. It is considered, having studied this for many years is that it is impossible to robustly project how economic activity or employment rates will change in the future and hence such an approach is not sufficiently rigorous when looking at the link between jobs and housing.
- 4.17 For example, all of the main forecasting houses (Experian, Oxford Economics and Cambridge Econometrics) use population data as an input to their forecasts and each will estimate different levels of job growth. Inherently, each of the forecasting houses are therefore suggesting that whatever level of job growth they expect, this will be met by the population (and the population as it is projected to change). Given the different levels of job growth it is therefore implicit that there will be an assumption about how employment rates are likely to change, and this assumption will be different depending on the forecasting house. There could also be changes such as double jobbing within the modelling although this is difficult to determine.
- 4.18 Whilst it is possible to estimate what the implied employment rates are, this is difficult to do with any confidence at a smaller area level (such as a local authority) and attempts to estimate these have at times been criticised by planning inspectors (particularly where modelling attempts to look at individual age and sex groups) – one example can be seen in an appeal in Farnsfield (Newark & Sherwood – APP/B3030/W/15/3006252).
- 4.19 Some consultancies (both for public and private sector clients) have looked for other sources of employment or economic activity rate data; the most commonly used being a set of figures published by the Office for Budget Responsibility (OBR). These however are at a national level and are not robustly applicable to smaller areas. Perhaps more significantly, the level of job growth (growth in residents in employment) estimated by OBR is significantly lower than from any of the main forecasting houses (a growth in residents in employment of about 2,500,000 from 2014-35 compared with a figure in excess of 4,000,000 in the most recent Experian forecast for the United Kingdom). This means that the OBR employment/activity rate figures cannot realistically be used when testing job growth levels from forecasts, as they relate to a completely different set of national assumptions.
- 4.20 One final set of rate data that is utilised is that published by Kent County Council (KCC) in November 2014. This is specific to Kent and so not applicable in other areas, however, more importantly many of the rates used in the model draw from a 2006 ONS publication (about projecting economic activity rates); this publication can (by 2014) be seen to have been substantially wrong for all age groups where a reasonable comparison can be made with more up-to-date information.
- 4.21 Hence, there is no clear and agreed set of figures which can be used to estimate how economic activity rates might change in the future. At best, any rates will be informed guesswork and at worse they can simply be unrealistic when set against the forecasts being used (either being too positive or too negative).

4.22 For these reasons this report has sought to look at changes to economic activity rates using as much data as possible for which there is relative certainty, whilst some level of assumption is required, the method used is designed to limit the amount of speculation and therefore provide some certainty that the outputs properly reflect what might be expected to happen. The method used considers two key groups of the population:

- The population of working age who are economically active;
- The population who have reached retirement age who are economically active.

4.23 Below is a discussion of these two groups and how the number of economically active people is projected to change. When modelling data against job-growth forecasts it is assumed that the increase in the number of residents in employment would need to be matched by the increase in the number of people who are economically active.

4.24 In reality this assumption over-estimate the need for housing; if for example unemployment were to fall then an additional workforce is provided from the current population without the need for additional population growth (or housing). In NWL there is some evidence of this with data from the Annual Population Survey showing a decrease in the number of unemployed residents of about 200 from 2011 to 2014 (a decrease from 5.3% to 5.0%). This is not factored into the analysis which essentially assumes that unemployment will be at the same level in 2031 as it was in 2011.

Working-age population

4.25 The first part of the analysis looks at the working-age population. Such an analysis is uncontentious, with working age being fixed by Central Government through the setting of pensionable age (most recently in the Pensions Act of 2014). The use of working-age is also consistent with wording in the PPG [2a-018] which states that:

'plan makers should make an assessment of the likely change in job numbers based on past trends and/or economic forecasts as appropriate and also having regard to growth of the working age population in the housing market area' [emphasis added]

4.26 Estimating the working age population and how this will change over time is not as straightforward as it has been in the past where conventionally the working age population has been defined as the population aged 16-64 (and previously 16-64 for males and 16-59 for females). The situation currently is one where there are incremental changes to pensionable age for both sexes which means that gradually people will be able to draw a state pension later in life.

4.27 The tables below are taken from supporting information from the 2014-based national population projections from ONS and show for both males and females the proportion of an age group who are considered to be of pensionable age. For example, the first table shows in 2019 that an estimated 60% of males aged 65 will be of pensionable age and in 2020 about 10% will have reached that threshold. The data is cut off from 2027 and age 66 as there are currently no future proposals for changes to pensionable age until 2044 (which is some way beyond the date of projections developed in this report).

Figure 4.4: Proportion of males of pensionable age by age and date							
	Age group						
	60	61	62	63	64	65	66
2011	0	0	0	0	0	1	1
2012	0	0	0	0	0	1	1
2013	0	0	0	0	0	1	1
2014	0	0	0	0	0	1	1
2015	0	0	0	0	0	1	1
2016	0	0	0	0	0	1	1
2017	0	0	0	0	0	1	1
2018	0	0	0	0	0	1	1
2019	0	0	0	0	0	0.60274	1
2020	0	0	0	0	0	0.09863	1
2021	0	0	0	0	0	0	1
2022	0	0	0	0	0	0	1
2023	0	0	0	0	0	0	1
2024	0	0	0	0	0	0	1
2025	0	0	0	0	0	0	1
2026	0	0	0	0	0	0	0.84700
2027	0	0	0	0	0	0	0.35069

Source: (ONS – table: pensioncalcsfor2014npps_tcm77-421363.xls)

Figure 4.5: Proportion of females of pensionable age by age and date							
	Age group						
	60	61	62	63	64	65	66
2011	0.35069	1	1	1	1	1	1
2012	0	0.84658	1	1	1	1	1
2013	0	0.34973	1	1	1	1	1
2014	0	0	0.84700	1	1	1	1
2015	0	0	0.35069	1	1	1	1
2016	0	0	0	0.76438	1	1	1
2017	0	0	0	0.01370	1	1	1
2018	0	0	0	0	0.26575	1	1
2019	0	0	0	0	0	0.60274	1
2020	0	0	0	0	0	0.09863	1
2021	0	0	0	0	0	0	1
2022	0	0	0	0	0	0	1
2023	0	0	0	0	0	0	1
2024	0	0	0	0	0	0	1
2025	0	0	0	0	0	0	1
2026	0	0	0	0	0	0	0.84700
2027	0	0	0	0	0	0	0.35069

Source: (ONS – table: pensioncalcsfor2014npps_tcm77-421363.xls)

4.28 Using the various demographic projections developed it is possible to apply the rates above to see how the working-age population might change and this is shown in the table below. Over the 2011-31 period the working-age population is projected to increase by between 4,000 and 9,100 people – a 7% to 16% increase.

Figure 4.6: Projected change in working-age population				
	Working-age population (2011)	Working-age population (2031)	Change in working-age population	% change
2012-based SNPP	56,654	60,611	3,957	7.0%
2012-based SNPP (as updated)	56,654	61,548	4,893	8.6%
2014-based (estimated)	56,654	64,439	7,784	13.7%
Long-term migration	56,654	63,815	7,161	12.6%
Long-term migration/UPC	56,654	65,774	9,120	16.1%

Source: Derived from demographic projections

4.29 However, looking at the working-age population does not directly indicate how many are economically active; some people of working age will not be in work or actively seeking employment. To look at the proportion who are economically active, Census data (from 2011) has been analysed. This looks at the population aged 16-64 for males and 16-59 for females – the different age band for females reflects the fact that at the time of the Census changes to pensionable age were only just starting and so the vast majority of females in the 60-64 age band would have reached pensionable age.

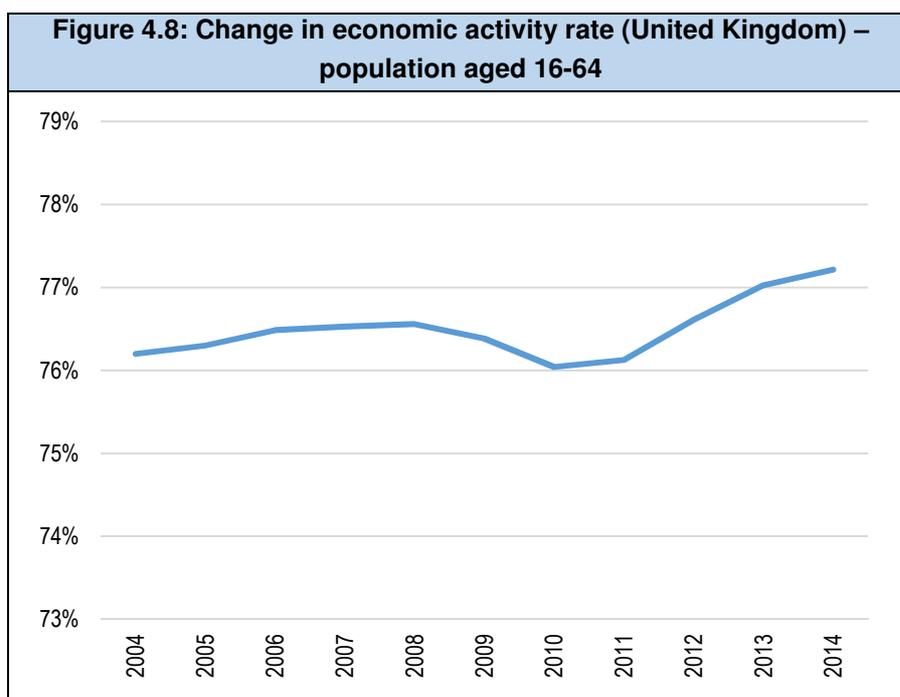
4.30 The table below shows the proportion of the working age population who are economically active – across the District this is a figure of 83%; slightly higher than seen in the HMA (although this is largely driven by a low rate in Leicester).

Figure 4.7: Proportion of working-age population who are economically active			
	Working-age population (2011)	Economically active working-age population (2011)	% economically active
NWL	56,269	46,507	82.7%
L&L HMA	611,817	475,365	77.7%

Source: Census 2011

4.31 This proportion (83%) can be applied to the change in the working age population to estimate how the number of economically active residents would change. It is however worth briefly assessing if this figure is likely to increase (or decrease) over time.

- 4.32 To study this a time series analysis has been carried out using Annual Population Survey data looking at the 16-64 age group. This age group does not exactly match ‘working-age’ due to changes to pensionable age but is the closest match available to the age groups which need to be studied. The core analysis looks at how rates have changed across the whole United Kingdom – this is due to there being relatively high error margins associated with the data at a smaller are level. The time period covered is from 2004 to 2014 which is the longest consistent time series available from this source.
- 4.33 The analysis shows that if anything the proportion of the working-age population who are economically active has increased slightly over the past decade – however, it should be stressed that the changes are pretty modest and only start from about 2010 (which does coincide with the start of pension reforms).
- 4.34 On this basis it is considered that there is no evidence to suggest that the economic activity rates of the working-age population will increase in the future (and likewise no evidence of a decline). Hence for the purposes of modelling the percent of people economically active (as shown by the Census) is applied to the growth in the working age population to derive an estimate of the change in the economically active population.



Source: Annual Population Survey (from nomis)

Economically active population of pensionable age

- 4.35 The analysis above has looked at the working age population and the likely proportion who will be economically active. To complete the analysis of how the economically active population might change it is also necessary to consider people who have reached pensionable age who are still working (or possibly seeking work).

4.36 A similar process has been undertaken and this begins by considering the pensionable age population and how this will change in the future; the table below shows that the number of people of pensionable age is projected to increase by between 4,500 and 5,100 (depending on the projection being run). There is less variation than when looking at the working-age population, this is because the demographic scenarios consider increases to migration, and migration tends to be more strongly concentrated amongst working-age people (and their children).

Figure 4.9: Projected change in pensionable-age population				
	Pensionable-age population (2011)	Pensionable-age population (2031)	Change in pensionable-age population	% change
2012-based SNPP	19,357	23,860	4,503	23.3%
2012-based SNPP (as updated)	19,357	23,995	4,638	24.0%
2014-based (estimated)	19,357	24,358	5,001	25.8%
Long-term migration	19,357	24,298	4,941	25.5%
Long-term migration/UPC	19,357	24,459	5,102	26.4%

Source: Derived from demographic projections

4.37 Again, the change in the number of people of pensionable age does not directly show how many are economically active. To look at the proportion who are economically active, Census data (from 2011) has again been utilised. This looks at the population aged 65+ for males and 60+ for females – consistent with the analysis undertaken for the working-age population.

4.38 The table below shows the proportion of the pensionable age population who are economically active – across the District this is a figure of 14%; the same as can be observed for the HMA.

Figure 4.10: Proportion of pensionable-age population who are economically active			
	Pensionable-age population (2011)	Economically active pensionable-age population (2011)	% economically active
NWL	19,522	2,727	14.0%
L&L HMA	181,851	25,586	14.1%

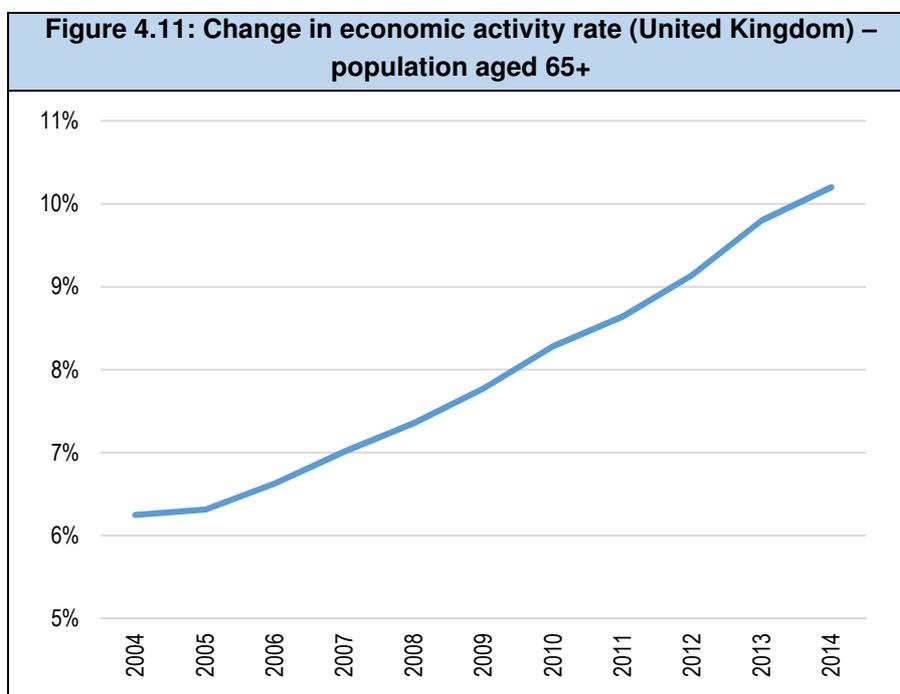
Source: Census 2011

4.39 Again, this proportion could be applied to the change in the pensionable age population to estimate how the number of economically active residents would change. It is however again worth assessing if this figure is likely to increase (or decrease) over time.

4.40 To study this a time series analysis has again been carried out using Annual Population Survey data looking at the 65+ age group. This age group does not exactly match 'pensionable-age' but is the closest match available from this source. The core analysis looks at how rates have changed across the whole United Kingdom – this again is due to there being relatively high error margins associated with the data at a smaller are level. The time period covered is from 2004 to 2014 which is the longest consistent time series available from this source.

4.41 The analysis shows that the proportion of the pensionable-age population who are economically active has increased notably over the past decade (increasing from about 6% in 2004 to 10% in 2014) – this would suggest that further potential increase in activity rates of the older population might reasonably be expected. It is difficult to know by how much the economic activity rate of this cohort of the population might change in the future and the analysis takes the pragmatic view that further increases will be at half of the rate seen in the 2004-14 decade (this is a 0.2% increase per annum).

4.42 Whilst there is no precedent in the use of a ‘half’ increase, it is arguably a reasonable assumption for modelling given that the data clearly shows an upward trend with no evidence of this slowing down. However, it is noted that such a trend could not continue indefinitely on a linear pattern (to do so would mean that eventually everyone aged 65+ would be assumed to be economically active (which is not realistic)). Additionally, the use of a ‘half’ recognises that much of the ageing of the population is in older age groups (e.g. those aged 85+) where activity rates are likely to be very low; that said an ageing of the population will also be underpinning the APS analysis.



Source: Annual Population Survey (from nomis)

4.43 Hence, on the basis of the analysis and discussion above the following economic activity rates have been applied to the pensionable age population in each of 2011 and 2031.

Figure 4.12: Estimated economic activity rates 2011 and 2031 – population on pensionable age

	% economically active (2011)	% economically active (2031)
NWL	14.0%	18.0%

Source: Census 2011

What is the change to the economically-active population?

- 4.44 Having run through an analysis of the two groups from which economically active people will arise (those of working age and those who have reached pensionable age) it is possible to estimate the overall change in the number of economically active people in the District. This is set out in the table below and uses the proportions of each group who are economically active (and changes as appropriate) applied to the relevant population.
- 4.45 The analysis shows that linked to the 2012-based SNPP there would be an increase in the economically active population of about 4,900 people. This figure is lower than the growth in the resident workforce suggested as being required by even the lowest of the economic forecasts (5,700). The highest of the demographic projections (linked to long-term migration and a UPC adjustment) would provide sufficient workforce for all of the economic forecasts apart from the highest of the Experian figures (which required a change in the resident workforce of 9,900 people).

Figure 4.13: Estimated change to the economically active population (2011-31)

	Change in working-age economically active	Change in pensionable age economically active	Total change in economically active	Per annum change
2012-based SNPP	3,271	1,583	4,854	243
2012-based SNPP (as updated)	4,044	1,608	5,652	283
2014-based (estimated)	6,434	1,673	8,107	405
Long-term migration	5,919	1,662	7,581	379
Long-term migration/UPC	7,538	1,691	9,229	461

Source: Derived from demographic projections

Housing Need linked to job-growth forecasts

- 4.46 Given that the level of growth in the economically active population is typically (but not universally) lower than required to meet job growth forecasts it is necessary to consider an uplift to the population such that the economically active population also increases. Within the modelling, migration assumptions have been changed so that across the District the increase in the economically active population matches the increase in the resident workforce required.
- 4.47 The changes to migration have been applied on a proportionate basis; the methodology assumes that the age/sex profile of both in- and out-migrants is the same as underpins the SNPP with adjustments being consistently applied to both internal (domestic) and international migration. Adjustments are made to both in- and out-migration (e.g. if in-migration is increase by 1% then out-migration is reduced by 1%).
- 4.48 Once the level of economically active population matches the job growth forecast the population (and its age structure) is modelled against CLG headship rates (with an uplift for the 25-34 age group) to see what level of housing provision that might imply.

- 4.49 The table below shows estimates of housing need set against each of the job growth scenarios. The analysis shows a range of housing need between 326 dwellings per annum (linked to the lowest (Cambridge Econometrics) forecast and 467 when consideration is given to the highest forecast (Experian (2015)). The number of dwellings required to meet the PACEC forecast is estimated to be around 401 per annum – this is broadly similar to the upper end of the range suggested by demographic projections. For example, projections linked to long-term migration trends (with or without a UPC adjustment) averaged 417 dwellings per annum.

Figure 4.14: Projected housing need – range of job-led scenarios and 2012-based headship rates (with uplift for population aged 25-34) – NWL

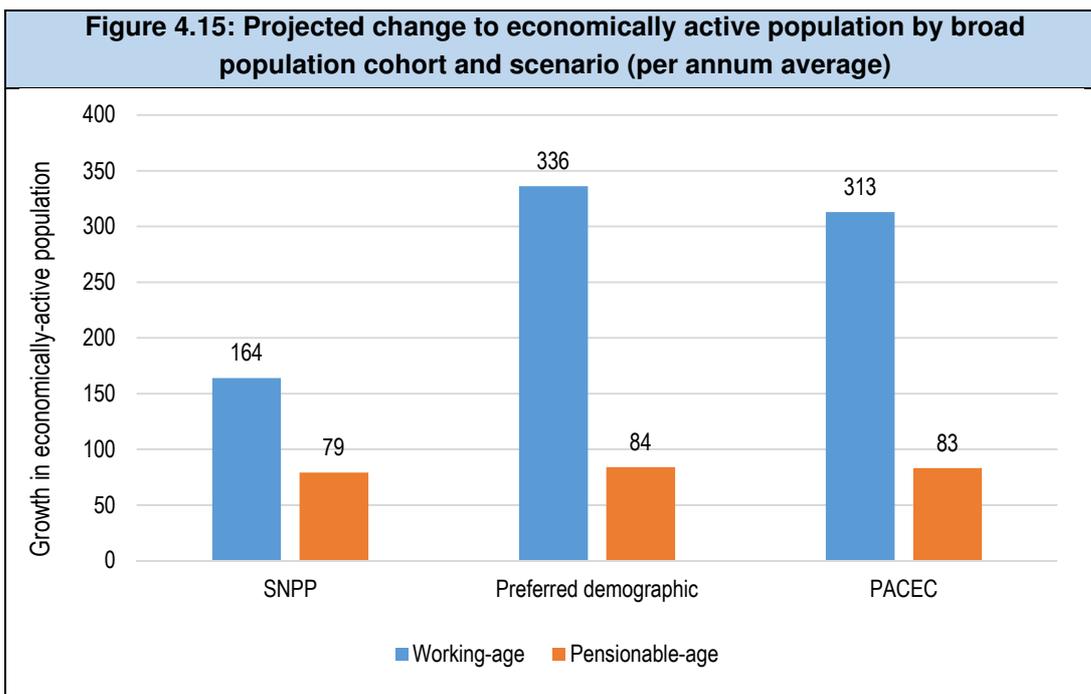
	Households 2011	Households 2031	Change in households	Per annum	Dwellings (per annum)
Experian (2013) – SHMA	39,232	47,404	8,172	409	423
PACEC (2013)	39,232	46,978	7,746	387	401
Experian (2015)	39,232	48,268	9,036	452	467
Cambridge Econometrics (2015)	39,232	45,538	6,306	315	326
Oxford Economics (2015)	39,232	46,498	7,266	363	376

Source: Demographic projections

- 4.50 Excluding the impact of EMGRFI (which is discussed below) this analysis would suggest housing need in the range of 401-417 dwellings per annum based on demographic and economic trends (the figure of 401 being based on the PACEC forecast and 417 being based on the conclusions from the demographic-based analysis in Section 3).

Understanding categories of the economically active population

- 4.51 It will be noted from earlier that a notable amount of the growth in the economically active population was projected to be from people who had reached retirement age (although this varied depending on the demographic scenario being studied). This is reasonable given that the evidence shows that there are a significant number of such people in NWL and that this is likely to increase in the future (partly as a result of population increases and also due to the trend being for higher proportions to be active). However, it is also noteworthy that as the estimate of population growth increases, so does the proportion of the total economically active who are of working age (this is due to additional migration expected to be more strongly within younger (working-age) age groups).
- 4.52 The figure below shows the growth in the economically active population split by those of working age and those of pensionable age for the SNPP (start point) projection and also the preferred demographic and economic scenario (based on a mid-point between long-term migration with and without UPC and the PACEC forecast). This shows with the SNPP that around a third of the expected increase in the economically active population comes from people who have reached retirement age; when looking at the other scenarios this proportion falls to about a fifth.



Source: Demographic projections

4.53 Generally, the higher level of population growth therefore leads to a younger age structure. However, when considering the higher growth scenarios, it should be borne in mind that these are implying an increase in migration – this migration would be expected to come from other areas which in turn would see lower population growth. Hence there are clearly cross boundary issues related to the higher (jobs-led) scenarios which will need to be considered as part of duty-to-cooperate discussions. This will also be an issue to be dealt with in the forthcoming HEDNA.

Impact of East Midlands Gateway Rail Freight Interchange

4.54 Section 2 of this report provided some information about the East Midlands Gateway Strategic Rail Freight Interchange (EMGRFI). The analysis noted a forecast increase in jobs of about 7,300 and furthermore (once account was taken of commuting and double jobbing) that there would be an increase in the resident workforce of about 3,600 people. This increase was modelled in Section 2 on the basis of the assumptions used in the SHMA. Below a similar analysis has been undertaken in relation to the methodology in this report (i.e. to link to changes within the working- and pensionable-age populations).

4.55 For the purposes of the modelling the additional change to the resident workforce (3,576) has been added to the baseline forecasts to estimate the required change to the number of economically active residents in the period to 2031 – this is shown in the table below. Overall, the analysis suggests a need for the number of economically active residence (the resident workforce) to increase by between 9,200 and 13,500 people – the figure when viewed as an uplift to PACEC is about 11,500.

Figure 4.16: Jobs growth and change in resident workforce			
Forecast	Change in resident workforce (2011-31) – baseline	Change in resident workforce (2011-31) – EMG	Total change in resident workforce (2011-31)
Experian (2013) – SHMA	8,585	3,576	12,161
PACEC (2013)	7,918	3,576	11,494
Experian (2015)	9,935	3,576	13,511
Cambridge Econometrics (2015)	5,667	3,576	9,243
Oxford Economics (2015)	7,168	3,576	10,744

Source: Range of economic forecasts, EMGRFI, NOMIS and 2011 Census

- 4.56 The modelling of these adjusted scenarios to include EMGRFI through to estimates of housing requirements can be seen in the table below. This shows a range of dwellings required of between 444 and 586 per annum. A figure of 519 per annum can be seen when set against the PACEC forecast. It is considered that this figure (519) is the best estimate of the requirement for housing once the additional job growth at EMGRFI is factored in to the calculations – this figure sits in the middle of the range of outputs from the modelling.

Figure 4.17: Projected housing requirements – range of job-led scenarios plus EMGRFI uplift and 2012-based headship rates (with uplift for population aged 25-34) – NWL					
	Households 2011	Households 2031	Change in households	Per annum	Dwellings (per annum)
Experian (2013) – SHMA	39,232	49,692	10,460	523	541
PACEC (2013)	39,232	49,265	10,033	502	519
Experian (2015)	39,232	50,556	11,324	566	586
Cambridge Econometrics (2015)	39,232	47,825	8,593	430	444
Oxford Economics (2015)	39,232	48,786	9,554	478	494

Source: Demographic projections

- 4.57 The uplift to the assessed need of including EMGRFI is around 120 dwellings per annum. This is based on the modelling which looks at understanding the changes to both the working and pensionable age population (along with an estimate of the proportion who will be economically active). This uplift is virtually identical to that shown in Section 2 of this report (which was based on a slightly different method as used in the SHMA). The analysis taken as a whole is however clear – the EMGRFI will require about 120 additional dwellings per annum over and above whatever baseline position is taken by the Council.

Summary – Economic-led Housing Requirements

Analysis has sought to estimate the likely level of housing needed to be delivered if the resident workforce is to increase sufficiently to meet a range of job-growth forecasts. Job growth forecasts range from 340 to 596 additional jobs per annum (across the District) – taking account of commuting patterns and double jobbing, the resident workforce would need to increase by 5,700 to 9,900 people over the 2011-31 period.

A key difficulty in matching job-growth to population growth (and ultimately housing need/requirements) is what assumptions to make about how employment or economic activity rates might change in the future. A range of potential sources are available to undertake this step, but none can be considered as robust given the wide range of assumptions (either implicit or explicit assumptions).

The approach in this report is to draw on known data about changes to the working-age population (and the proportion who will be economically active) along with changes to the pensionable age population (again who are economically active). Such an approach reduces the number of assumptions needing to be made.

In running the modelling, it is estimated that to meet the job growth forecasts there will need to be provision of between 326 and 467 dwellings per annum across the District. The figure when set against the PACEC forecast (which is in the middle of the range) is for 401 dwellings per annum; consistent with the sort of figures coming out of the demographic modelling.

An uplift to these figures was provided to take account of the impact of an additional 7,317 jobs at East Midlands Gateway. Taking account of the locations from which people might be expected to commute (along with an adjustment for double jobbing) it was estimated that a further 3,576 economically active residents would be required to fulfil this level of additional employment.

The housing requirement when set against the uplifted forecast is for between 444 and 586 dwellings per annum, with the figure linked to PACEC being for 519 dwellings per annum. This latter figure is considered to be the best estimate of the requirement for housing taking account of East Midlands Gateway.

5. Market Signals and Affordable Housing Need

Introduction

5.1 The PPG [2a-019 and 2a-020] sets out that housing numbers suggested by household projections should be adjusted if necessary to reflect appropriate market signals, as well as other market indicators of the balance between demand for and supply of dwellings. It indicates that prices or rents rising faster than the national/local average may indicate particular market undersupply relative to demand. It identifies a number of relevant market signals.

- Land Prices – where price premiums indicate a shortage of land in a locality;
- House Prices and Rents – where longer-term changes in prices may indicate a supply-demand imbalance;
- Affordability – using the ratio of lower quartile house prices to lower quartile incomes to assess relative affordability of market housing;
- Rates of Development – through comparison of rates of permissions and completions relative to planned numbers over a meaningful period;
- Overcrowding – whereby long-term increases in overcrowded, concealed and sharing households, homelessness and numbers in temporary accommodation should be considered.

5.2 The focus is on considering indicators relating to price and quantity. Guidance states these issues should be assessed by comparing long-term trends in the housing market area, similar demographic/economic areas, and nationally. For the purposes of analysis, the situation in NWL is compared with all areas having a boundary with the District as well as wider areas. Additionally, account has been taken of ONS (2011) area classifications which identifies ‘most similar’ local authorities. Interestingly, the three most similar areas to NWL are also adjoining authorities and these are marked with an asterisk (*) in the list below which shows the full range of areas against which the market signals in NWL are compared:

- South Derbyshire*
- Erewash
- Rushcliffe
- Charnwood
- Hinckley & Bosworth*
- North Warwickshire*
- Lichfield
- Leicester
- Leicestershire (excluding Leicester)
- East Midlands
- England (or England & Wales)

Land Prices

5.3 The table below provides an estimate of the per hectare land value for residential sites with planning permission for a range of areas. The data is taken from a 2015 CLG publication and is estimated as of the 1st January 2014. The analysis shows that land values sit somewhere in the bottom/middle of the range when compared with adjoining areas; land values are however substantially below those seen nationally (even when excluding London). Overall the analysis does not point towards a particular shortage of development land within the District.

Figure 5.1: Post permission residential land value estimates, per hectare (as of 1st January 2014)	
	Estimated value of a typical residential site
North West Leicestershire	£1,160,000
South Derbyshire	£485,000
Erewash	£790,000
Rushcliffe	£1,450,000
Charnwood	£1,180,000
Hinckley & Bosworth	£1,550,000
North Warwickshire	£1,435,000
Lichfield	£2,825,000
Leicester	£2,060,000
England (including London)	£6,017,000
England (excluding London)	£1,958,000

Source: CLG Land value estimates for policy appraisal (February 2015)

House Prices

5.4 A range of sources can be used to look at house prices and how these have changed over time (including directly from Land Registry and analysis from ONS/CLG). Unfortunately, different sources cover different geographies and are not calculated in the same way (for example ONS data on 'House Price Statistics for Small Areas' are not consistent with Land Registry House Price Index (HPI) data).

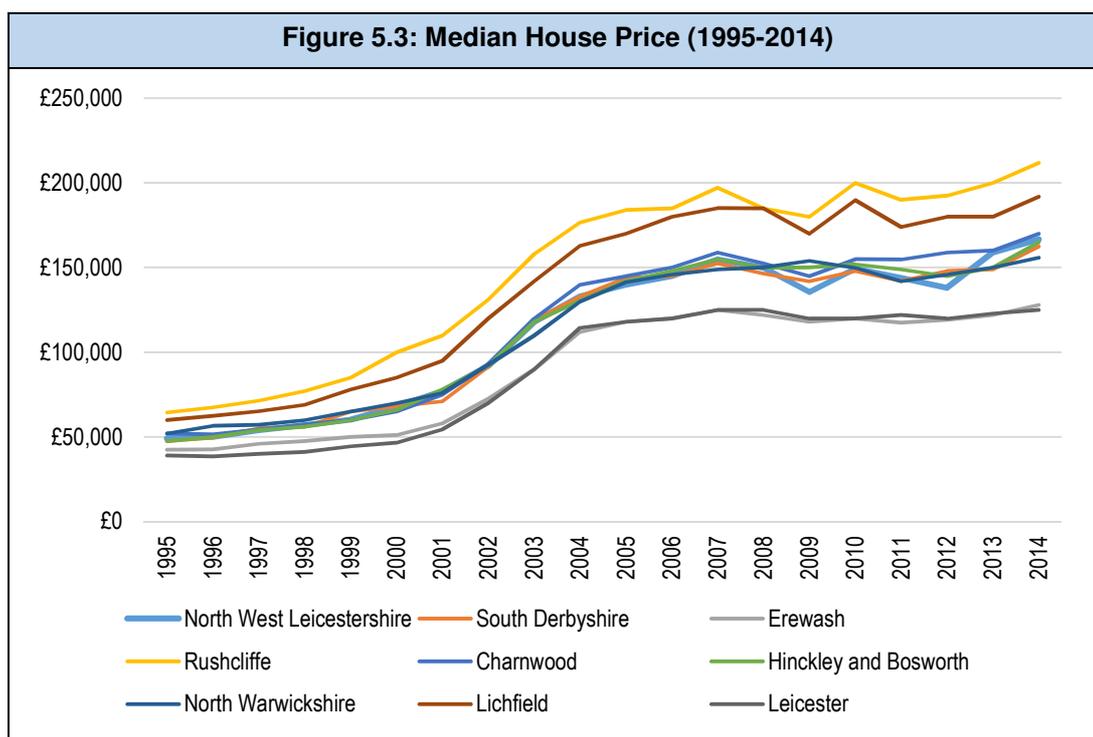
5.5 The table below shows average (median) sale prices for different dwelling types and overall in the year to September 2015. The analysis shows that whilst house prices are higher than in some adjoining areas, they are quite low in a national context. The average sale price in the period covered was £170,000; this is slightly lower than the County average and some 15% lower than the equivalent figure for England & Wales.

Figure 5.2: Median house price by type of dwelling (year to September 2015)

	Flat	Terraced	Semi-detached	Detached	All dwellings
North West Leicestershire	£110,000	£123,250	£149,988	£240,750	£169,999
South Derbyshire	£94,475	£122,333	£139,992	£227,600	£165,250
Erewash	£84,996	£102,167	£126,583	£199,957	£130,800
Rushcliffe	£124,300	£168,333	£195,727	£300,000	£225,200
Charnwood	£106,000	£133,833	£160,129	£265,176	£174,930
Hinckley & Bosworth	£84,500	£125,040	£149,999	£243,814	£167,857
North Warwickshire	£132,662	£125,029	£159,950	£255,000	£163,001
Lichfield	£127,225	£158,950	£165,571	£305,500	£194,250
Leicester	£94,500	£119,982	£148,900	£235,993	£130,041
Leicestershire	£107,800	£134,300	£159,997	£257,973	£176,600
England & Wales	£185,000	£161,011	£177,997	£288,004	£199,995

Source: Land Registry

5.6 The figure below shows how median house prices (for all dwellings) have changed from 1995 to 2014. The data clearly shows a rapidly increasing average price from about 2000 until 2007; since then house prices have remained fairly stable (albeit with some year-on-year variation). The pattern of price change in NWL is virtually identical to that observed in other areas.



Source: ONS House Price Statistics for Small Areas

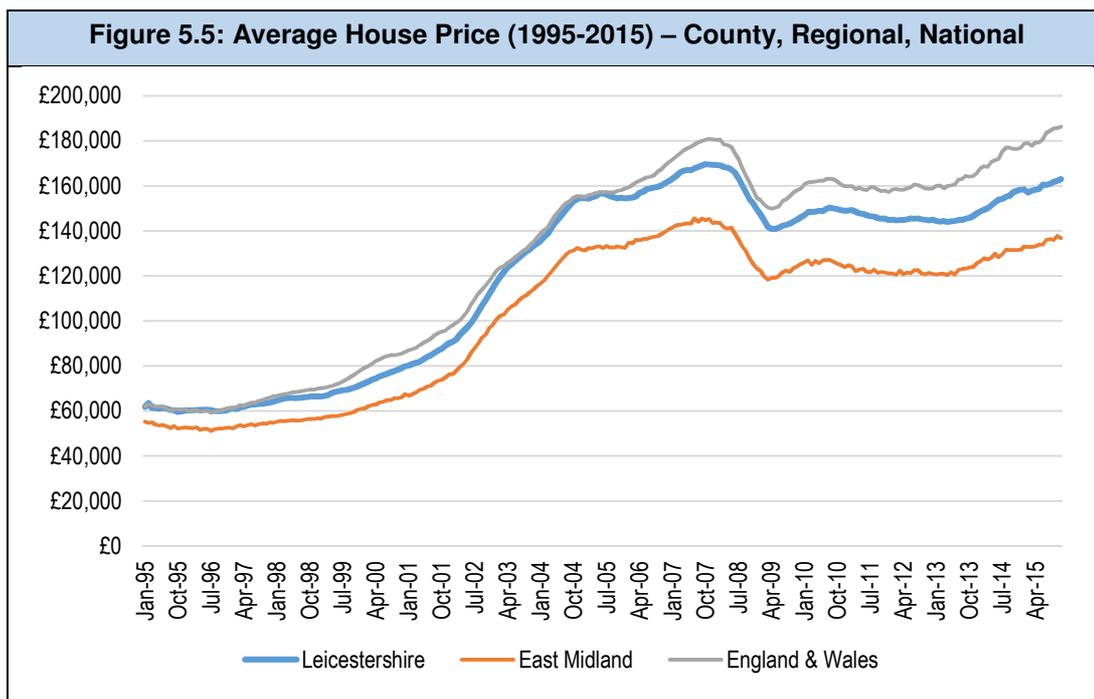
5.7 The table below summarises some of the data from above by looking at house price change from 1995 to 2014 in terms of both the percentage increase and the actual increase. The analysis shows in proportionate terms that NWL has one of the highest increases in prices (at 241%) although the actual increase (of about £118,000) is lower than seen in a number of areas. Overall, as with the chart above the data does not suggest any substantial differences in NWL when compared with other locations.

Figure 5.4: Median House Price Change (1995-2014)

	Median price (1995)	Median price (2014)	% change	Actual change
North West Leicestershire	£49,000	£166,850	241%	£117,850
South Derbyshire	£47,500	£162,500	242%	£115,000
Erewash	£42,375	£128,000	202%	£85,625
Rushcliffe	£64,500	£212,000	229%	£147,500
Charnwood	£51,950	£170,000	227%	£118,050
Hinckley and Bosworth	£47,550	£165,000	247%	£117,450
North Warwickshire	£52,000	£156,000	200%	£104,000
Lichfield	£59,950	£192,000	220%	£132,050
Leicester	£39,000	£125,000	221%	£86,000

Source: ONS House Price Statistics for Small Areas

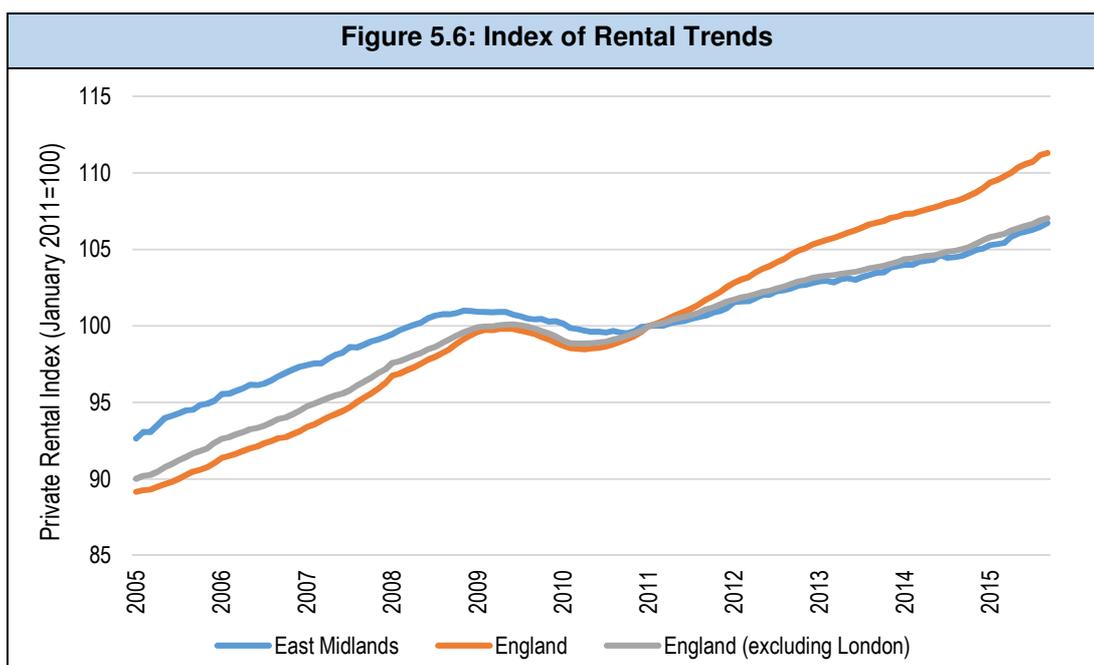
5.8 The final analysis of house price change looks at Land Registry HPI data for the County, region and England & Wales (data from this source if not available for non-Unitary local authorities). The analysis shows that house prices in Leicestershire are consistently above the regional average but below national figures. The analysis also shows that the gap between Leicestershire and England & Wales has been growing (higher increases in prices nationally than across the County) whilst the difference in prices between the county and the region has remained broadly constant. This suggests (at least at the County level) that pressures seen on the housing market are less pronounced than seen nationally.



Source: Land Registry House Price Index

Private rental trends

5.9 The figure below shows rental trends. The ONS Monthly Private Rental Index indicates that across the region, rental values have grown fairly modestly when compared with the national average. Since 2011 they have increased by around 7% compared with 11% across England – however, removing London from the England figure does show a similar level of increase in rents across the region. The level of growth in rents (particularly when inflation over this period is considered); does not point to a substantial supply-demand imbalance in the rental sector.



Source: ONS Monthly Private Rental Index

5.10 Turning to consider rental values at a more local level, the figure below draws on published data from the Valuation Office Agency (VOA). This shows that NWL has relatively high private rent levels in a regional context and also arguably at a more local level. When compared with the national position, it is however clear that rent levels are relatively low.

Figure 5.7: Rental Values (Per Calendar Month) – All Properties – year to September 2015					
	No. Rentals	Average	Lower quartile	Median	Upper quartile
North West Leicestershire	536	£617	£475	£550	£675
South Derbyshire	469	£586	£475	£550	£625
Erewash	299	£512	£425	£475	£575
Rushcliffe	1,013	£619	£425	£550	£695
Charnwood	1,221	£538	£400	£500	£595
Hinckley and Bosworth	845	£555	£450	£525	£625
North Warwickshire	419	£590	£495	£550	£650
Lichfield	590	£667	£507	£600	£735
Leicester	3,587	£496	£345	£475	£595
Leicestershire	4,430	£591	£460	£550	£650
East Midlands	51,292	£555	£430	£525	£625
England	486,403	£788	£494	£625	£850

Source: VOA

5.11 Rental values are influenced by property size. The figure below provides a comparison of rental levels for 2-bed properties across a range of areas (a 2-bedroom home has been used given that in many areas this size represents the access point to the market; in addition, nationally (and also in NWL) it is this size of stock that sees the most lettings annually). In NWL this data points to similar rent levels to the region (generally slightly lower) and again confirms low rents in a national context.

Figure 5.8: Rental Values (Per Calendar Month) – two bedroom properties – year to September 2014					
	No. Rentals	Average	Lower quartile	Median	Upper quartile
North West Leicestershire	208	£513	£450	£500	£550
South Derbyshire	205	£510	£465	£499	£550
Erewash	140	£497	£440	£475	£535
Rushcliffe	322	£576	£525	£575	£600
Charnwood	443	£526	£475	£525	£550
Hinckley and Bosworth	388	£521	£475	£500	£550
North Warwickshire	167	£553	£495	£550	£595
Lichfield	237	£596	£525	£585	£650
Leicester	1,277	£513	£350	£525	£590
Leicestershire	1,741	£535	£490	£525	£575
East Midlands	19,798	£527	£455	£525	£575
England	198,449	£727	£495	£595	£795

Source: VOA

- 5.12 The data above can also be used along with historic data to see how rent levels have changed. The table below shows rents for the year to September 2011 (the oldest date for which this information is available for a comparable 12-month period). Data for a two-bedroom property is used so that any changes in the profile of lettings does not unduly impact on the figures and a comparison is made for the median rent in each case (it should however be noted that changes to dwelling types (e.g. detached, terraced) could have some influence on the figures). The data shows in comparison with national data that private sector rents in NWL have increased at a slower rate (1% over the 4-years compared with 8%). The rate of change in the District is lower than observed in any of the comparator areas.

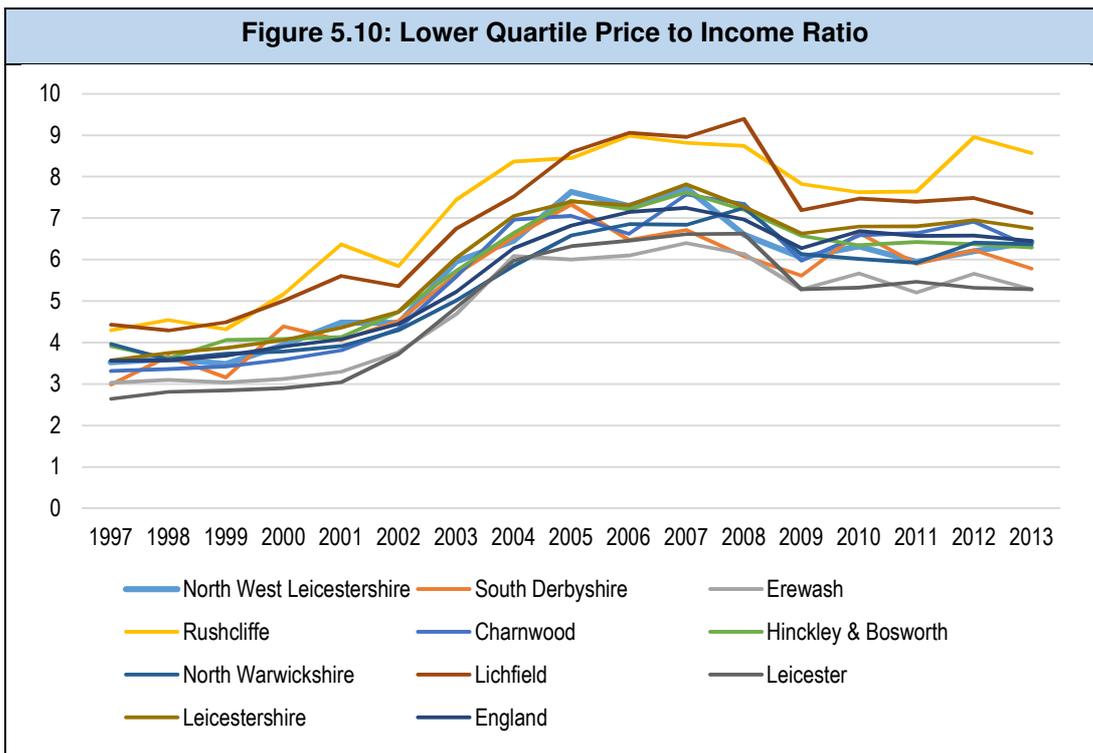
Figure 5.9: Changes to Rental Values (Per Calendar Month) – two bedroom properties – 2011 to 2015 (median figures)			
	Year to September 2011	Year to September 2015	% change
North West Leicestershire	£495	£500	1%
South Derbyshire	£475	£499	5%
Erewash	£450	£475	6%
Rushcliffe	£550	£575	5%
Charnwood	£495	£525	6%
Hinckley and Bosworth	£485	£500	3%
North Warwickshire	£500	£550	10%
Lichfield	£575	£585	2%
Leicester	£500	£525	5%
Leicestershire	£495	£525	6%
East Midlands	£475	£525	11%
England	£550	£595	8%

Source: VOA

- 5.13 Overall, the rental data, as with the price and sales data does not provide any strong evidence of significant market pressures in the District relative to other areas (costs are relatively low and have not grown significantly in the past).

Affordability of Market Housing

- 5.14 Lower quartile price to income ratios are identified by Government as a measure of the affordability of housing. They consider the affordability of entry-level market housing to younger prospective buyers. The figure below compares performance on this measure within NWL with key neighbouring authorities, the County and England more widely. Affordability trends using this measure have tracked the trajectory seen in other areas.



Source: DCLG Table 576

5.15 The table below studies this information for 1997 and 2013. It can be seen that the price:income ratio in NWL is virtually identical to that for England in terms of both its level and the change seen over the 16-year period studied. The increase in the ratio (of 2.9) over the period studied is higher than in a number of neighbouring areas although it is a lower increase than seen across the County. As an absolute measure (in 2013) the price:income ratio in NWL was lower than across Leicestershire, indicating that housing is relatively affordable. There is little doubt however that affordability (at least on this measure) has worsened over time (albeit improving since about 2007).

Figure 5.11: Lower Quartile Price to Income Ratio (1997 and 2013)			
	Price:income ratio (1997)	Price:income ratio (2013)	Change 1997-2013
North West Leicestershire	3.53	6.43	2.90
South Derbyshire	3.00	5.79	2.79
Erewash	3.03	5.29	2.26
Rushcliffe	4.30	8.58	4.28
Charnwood	3.31	6.31	2.99
Hinckley & Bosworth	3.92	6.29	2.37
North Warwickshire	3.97	6.37	2.40
Lichfield	4.44	7.13	2.69
Leicester	2.65	5.29	2.64
Leicestershire	3.58	6.76	3.18
England	3.57	6.45	2.89

Source: DCLG Table 576

Rates of Development

- 5.16 Completions over time can be benchmarked using the Council's monitoring data with housing delivery measured against targets in the East Midlands Plan and previously the Structure Plan. The East Midlands Plan was only in force from its adoption in 2009 to 2013 and so get a meaningful period, data has been provided back to 2001.
- 5.17 The analysis clearly identifies a shortfall in provision in the past, although this has only occurred since 2008. Overall, the analysis identifies a shortfall in provision of 1,125 dwellings by 2013 (and this figure would be higher if the Regional Plan were used for benchmarking from 2006). There has however been a notable uplift in provision over the last two years, with an average of 553 completions per annum in the 2013-15 period.

Figure 5.12: Completions compared with Structure Plan and East Midlands Regional Plan targets

Year	Completions	Cumulative completions	Target	Cumulative target	Balance	Source of target
2001/2	493	493	368	368	125	Structure Plan
2002/3	395	888	368	736	152	Structure Plan
2003/4	315	1,203	368	1,104	99	Structure Plan
2004/5	306	1,509	368	1,472	37	Structure Plan
2005/6	410	1,919	368	1,840	79	Structure Plan
2006/7	336	2,255	368	2,208	47	Structure Plan
2007/8	353	2,608	368	2,576	32	Structure Plan
2008/9	237	2,845	368	2,944	-99	Structure Plan
2009/10	228	3,073	510	3,454	-381	Regional Plan
2010/11	186	3,259	510	3,964	-705	Regional Plan
2011/12	234	3,493	510	4,474	-981	Regional Plan
2012/13	366	3,859	510	4,984	-1,125	Regional Plan
2013/14	431	4,290	n/a	-	-	-
2014/15	675	4,965	n/a	-	-	-

Source: Annual Monitoring Reports

Overcrowding and Houses in Multiple Occupation

- 5.18 The final market signal highlighted in guidance is overcrowding where it is noted that an *'increase in the number of such households may be a signal to consider increasing planned housing numbers'*. The analysis below firstly looks at levels of overcrowding in NWL compared with other areas (based on the bedroom standard) before moving on to consider how overcrowding has changed over time (in this case using the room standard as historical bedroom standard data is not available from the Census source used).
- 5.19 The figure below shows in 2011 that some 1.9% of households in NWL were overcrowded. This is below the average for many of the other areas studied and is less than half the level observed nationally.

Figure 5.13: Overcrowding (2011) – bedroom standard		
	Overcrowded (no.)	Overcrowded (%)
North West Leicestershire	746	1.9%
South Derbyshire	684	1.8%
Erewash	1,067	2.2%
Rushcliffe	755	1.6%
Charnwood	1,671	2.5%
Hinckley & Bosworth	787	1.7%
North Warwickshire	650	2.5%
Lichfield	976	2.4%
Leicester	12,052	9.8%
Leicestershire	5,417	2.0%
East Midlands	59,298	3.1%
England	1,024,473	4.6%

Source: Census (2011)

- 5.20 The figure below shows overcrowding (as measured through the room standard) in 2001 and 2011. The data confirms that levels of overcrowding in NWL are lower than in many other locations and that the increase has also been quite moderate.

Figure 5.14: Changes in overcrowding (2001-2011) – room standard			
	2001	2011	Change
North West Leicestershire	2.8%	2.9%	0.2%
South Derbyshire	2.5%	3.2%	0.8%
Erewash	3.2%	3.7%	0.5%
Rushcliffe	3.1%	3.1%	0.0%
Charnwood	4.5%	5.0%	0.5%
Hinckley & Bosworth	3.2%	3.2%	0.0%
North Warwickshire	3.3%	3.6%	0.3%
Lichfield	3.0%	3.6%	0.5%
Leicester	10.6%	15.2%	4.6%
Leicestershire	3.4%	3.7%	0.3%
East Midlands	4.5%	5.5%	1.1%
England	7.1%	8.7%	1.6%

Source: Census (2001 and 2011)

- 5.21 As well as studying overcrowding the table below looks at the number of Houses in Multiple Occupation (HMOs). For the purposes of this analysis, data has been taken from the Census about the number of households in the 'Other' household composition category – this category is largely made up of multi-adult households where residents are unrelated. This therefore provides an indication of the number of sharing households.
- 5.22 The table below shows that the proportion of households sharing accommodation is generally below that seen in other areas with the increase also being quite modest in comparison with other locations (the increase in overcrowding has been less than half of that seen regionally or nationally).

Figure 5.15: Changes in sharing households (2001-2011)			
	2001	2011	Change
North West Leicestershire	2.1%	2.5%	0.4%
South Derbyshire	1.9%	2.6%	0.7%
Erewash	2.2%	2.6%	0.4%
Rushcliffe	2.9%	3.1%	0.1%
Charnwood	2.6%	3.3%	0.7%
Hinckley & Bosworth	2.2%	2.5%	0.3%
North Warwickshire	2.5%	2.7%	0.3%
Lichfield	2.2%	2.7%	0.5%
Leicester	4.3%	6.2%	1.9%
Leicestershire	2.3%	2.8%	0.5%
East Midlands	2.7%	3.5%	0.8%
England	3.7%	4.5%	0.8%

Source: Census (2001 and 2011)

- 5.23 A final analysis looks at the number of concealed families in the District and other areas. The Census definition of a concealed family is 'A *concealed family is one living in a multi-family household in addition to the primary family, such as a young couple living with parents*'. NWL, like other areas has seen some increase in the number of concealed families over time – the increase has been higher than seen in other locations although the level of concealed households in 2011 is below that seen both regionally and nationally (and indeed slightly below the figure for Leicestershire).

Figure 5.16: Concealed families (2001-2011)					
	2001	2011	Change	% change	Concealed as % of all households (2011)
North West Leicestershire	185	334	149	81%	0.9%
South Derbyshire	190	335	145	76%	0.9%
Erewash	232	347	115	50%	0.7%
Rushcliffe	218	336	118	54%	0.7%
Charnwood	459	740	281	61%	1.1%
Hinckley & Bosworth	267	358	91	34%	0.8%
North Warwickshire	198	292	94	47%	1.1%
Lichfield	241	400	159	66%	1.0%
Leicester	2,084	3,734	1,650	79%	3.0%
Leicestershire	1,745	2,801	1,056	61%	1.0%
East Midlands	11,708	20,403	8,695	74%	1.1%
England	161,254	275,954	114,700	71%	1.3%

Source: Census (2001 and 2011)

- 5.24 Overall, the analysis of overcrowding, HMOs and concealed families does not point to a particular imbalance in the District. However, it is recognised that all of the measures show a worsening over time.

Conclusions on market signals

- 5.25 Drawing together the individual market signals above allows a picture of the current housing market in NWL to be built, and how the area sits in comparison with local, regional and national data. Below a brief summary of the key market signals (as set out in the PPG) is provided.

Land Prices – the evidence does not point to any supply/demand imbalance. Residential land values are generally low (particularly in comparison with national data) and so there is no evidence of a particular pressure.

House prices – house prices in the District are generally average in comparison with other 'local' areas but are low national context. Over the long-term there has been a notable increase in prices, although this is consistent with that seen in other locations.

Rent levels – in a local context, NWL has relatively average private sector rents. Rent levels are however some way below the national comparative position. Further analysis indicates that the growth in rents has been less pronounced than in other areas and overall the evidence does not point to any supply/demand imbalance.

Affordability – the affordability of housing (measured using a price:income ratio) shows a significant deterioration from 1997 to about 2005. Over the past decade, this measure does however suggest an improvement in the ratio in NWL; additionally, the ratio sits somewhere in the middle of that in other 'local' areas and in line with the national position. Overall, it is considered that this measure indicates some supply/demand imbalance when looked at over the period back to 1997.

Rates of development – when compared with plan targets, NWL under-supplied new housing. As a market signal this arguably provides some basis for uplifting housing numbers from the 'start point' identified in the PPG.

Overcrowding – levels of overcrowding, HMOs and concealed families in NWL are relatively low when compared with other areas. All of these indicators did however rise over the 2001-11 decade. Overall, it is considered that this provides some limited evidence of a need to consider an uplift in housing numbers.

- 5.26 Overall the analysis of market signals points towards some affordability pressures although the analysis suggests this is pretty modest when compared with other locations. The PPG sets out [2a-020] that:

“In areas where an upward adjustment [to the assessment of housing need] is required, plan makers should set this adjustment at a level that is reasonable. The more significant the affordability constraints (as reflected in rising prices and rents, and worsening affordability ratio) and the stronger other indicators of high demand (e.g. the differential between land prices), the larger the improvement in affordability needed and, therefore, the larger the additional supply response should be.”

- 5.27 The Guidance does not however set out how such an adjustment should be quantified. It simply sets out that it should be ‘reasonable.’ Indeed, inspectors at various Local Plan Inquiries have taken a range of different views, even when faced with similar evidence.

- 5.28 Probably the most cited inspectors reports where market signals have been considered are in Eastleigh and Uttlesford, where different inspectors suggested that the local authorities should consider increasing housing need by 10% as a result of the evidence. Key quotes from these reports are provided below.

Eastleigh (February 2015) – *‘It is very difficult to judge the appropriate scale of such an uplift. I consider a cautious approach is reasonable bearing in mind that any practical benefit is likely to be very limited because Eastleigh is only part of a much larger HMA. Exploration of an uplift of, say, 10% would be compatible with the “modest” pressure of market signals recognised in the SHMA itself’*

Uttlesford (December 2014) – *‘I conclude that it would be reasonable and proportionate, in Uttlesford’s circumstances, to make an upward adjustment to the OAN, thereby increasing provision with a view to relieving some of the pressures. In my view it would be appropriate to examine an overall increase of around 10%...’*

- 5.29 To be balanced it should however be noted that there are a number of inspectors who have not suggested any need for an uplift due to market signals and these would include:

Mendip (October 2014) – *‘these findings indicate that trends in Mendip sit fairly comfortably alongside county, regional and national trends and do not, therefore, justify an upward adjustment of the housing numbers that came out of the housing projection’*

Crawley (May 2015) – *‘I am not convinced that the market signals uplift is justified by the evidence, for the various indicators reveal a situation in Crawley which is not as severe as in other North West Sussex authorities, and one that has not worsened in recent years’* (this is an interesting case given that the Council themselves had suggested an uplift for market signals)

Stratford-on-Avon (March 2015) – *‘On balance I conclude, despite the SHMA’s finding that there is a case for an uplift, that an upward adjustment in housing numbers has not been justified in terms of market signals in the District’.*

Cornwall (June 2015) – ‘National guidance is that a worsening trend in any relevant market signal should result in an uplift. But for the reasons given below I do not consider that I should require such an uplift to be made for Cornwall at this time’ (this one is also interesting given that it was the same inspector as Eastleigh)

5.30 To consider this issue in NWL, it is worthwhile returning to the requirements of the PPG. Para 2a-019 states that the ‘housing need number suggested by household projections (the starting point) should be adjusted to reflect appropriate market signals’ [emphasis added]. It is clear from this that any uplift should be considered in relationship to the ‘starting point’ estimate of housing need. In NWL the start point (as informed by CLG household projections) is for 262 dwellings per annum. If the Council were to set the need at a level consistent with demographic and economic projections (401-417 dwellings per annum) then the uplift would be up to 59%; if the Council planned for 519 dwellings per annum (as suggested once EMG is included) the uplift is nearly 100%. These are considered to be significant uplifts and therefore it is difficult to suggest on the basis of the market signals evidence than any additional uplift is required. It should also be noted that the housing need figures already include an uplift for apparent suppression in the 25-34 population age group.

Affordable Housing Need

5.31 This report has not revisited the need for affordable housing and draws on information from the 2014 SHMA to provide an indication of the need. The table below has been adapted from information in Tables 40 and 45 of the SHMA to look at the affordable housing need over the 2011-31 period. This shows an annual need for 212 affordable homes (4,240 over the 20-year period).

Figure 5.17: Estimated Level of Affordable Housing Need (2011-31)		
	Per annum	20-years
Current need	17	340
Newly forming households	327	6,540
Existing households falling into need	190	3,800
Total Gross Need	534	10,680
Supply	322	6,440
Net Affordable Need	212	4,240

Source: Derived from 2014 SHMA

5.32 In considering the level of affordable housing need, it is worth reflecting on the wording of the PPG, which says in 2a-029 that an ‘increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes’ [emphasis added]. This consideration is reflected on below.

Relating Affordable Housing Need and OAN – legal judgments and guidance

5.33 The analysis above clearly indicates a need for affordable housing across the District. However, the link between affordable need and the OAN is complex and has been subject to a number of recent High Court decisions. The Planning Advisory Service’s Technical Advice Note on *Objectively-Assessed Need and Housing Targets* (2nd Edition, July 2015) also deals with this issue. Below are summarised some of the key judgements and guidance in Chronological Order.

Satnam Millennium Limited v Warrington Borough Council (February 2015)

- 5.34 In this case, a challenge to the adoption of the Warrington Local Plan Core Strategy succeeded, resulting in the quashing of the Plan's housing provision policies. With regard to affordable housing the judge found that the assessment of full, objectively assessed needs for housing had not taken account of the (substantial) need for affordable housing.
- 5.35 In paragraph 43 of the judgement it is concluded that *'the Local Plan should then meet the OAN for affordable housing, subject only to the constraints referred to in the NPPF, paragraphs 14 and 47'*. This quote has been taken by some parties to imply that the need for affordable housing (as shown in modelling such as within the section) needs to be met in full – for example, if the affordable need is 200 per annum and delivery is likely to be 20% then an OAN for 1,000 homes would be appropriate.
- 5.36 It is not clear if this is exactly what the judge in this case had in mind. What is clear that such an approach in many areas would be impractical as it would require huge increases to have any significant impact.

Oadby and Wigston v Bloor Homes (July 2015)

- 5.37 In this case, a challenge by Oadby & Wigston Borough Council to the granting of planning permission through a Section 78 inquiry was dismissed.
- 5.38 The key issue in front of the Judge was whether or not the original inspector's adoption of a figure of 147 dwellings per annum as the full objectively assessed need for housing (FOAN) was sound. In essence the Council's position was that the need was in the range of 80-100 dwellings per annum and that this was a policy-off figure based on the most up-to-date population and household projections. The appellant suggested a need in the range of 147-161 based on long-term migration trends and the needs of the local economy (in terms of matching job growth and housing need).
- 5.39 The Judge's initial conclusion was that he considered the SHMA position (of 80-100 dwellings per annum) to be policy-on. He based this on a recognition that other analysis in the SHMA had indicated a need for 173 dpa to meet economic growth and a slightly lower figure (of 160 per annum) as the affordable housing need.
- 5.40 The uncertainty in this decision is whether or not the FOAN must include all of the affordable housing need. Some of the wording of the judgment would suggest that this was the case with Judge Hickinbottom stating that the assessment of need *'becomes policy on as soon as the Council takes a course of not providing sufficient affordable housing to satisfy the FOAN'*. This however is inconsistent with the more recent judgement in Kings Lynn (below) and also contrasts with the approach recommended in the PAS Technical Advice Note.

Planning Advisory Service – Technical Advice note (July 2015)

- 5.41 At about the same time as the Oadby & Wigston judgement, the Planning Advisory Service (PAS) published the second edition of their technical advice note on Objectively Assessed Need and Housing Targets – this replaced/updated a version from June 2014.
- 5.42 The consideration of affordable housing need and its relationship to overall housing need is covered in some detail within Section 9 of the document. PAS set out a suggested approach for looking at the relationship between OAN and affordable housing (which is broadly in line with the approach in this report) before going on to consider their own view about the relationship.
- 5.43 They initially suggest that affordable housing is “a policy consideration” that bears on housing targets rather than OAN and note that they are not comparable because they relate to different meanings of the term “need.” They also highlight that the OAN relates to new dwellings whereas much of the affordable need relates to existing households, who, when moving, would free up dwellings to be occupied by other households.
- 5.44 PAS conclude that there is no arithmetical way of combining the OAN (calculated through demographic projections) and the affordable need before concluding that the affordable need cannot be a component part of the OAN. PAS do however note that their views ‘may be’ contradicted by the Satnam judgement referred to above.

Kings Lynn v Elm Park Holdings (July 2015)

- 5.45 The final case of reference is Kings Lynn and West Norfolk Council vs. SSCLG and Elm Park Holdings. The case involved the Council's challenge to an inspector's granting of permission for 40 dwellings in a village. Although much of the case was about the approach to take with regards to vacant and second homes, the issue of affordable housing was also a key part of the final judgment.
- 5.46 Focussing on affordable housing, Justice Dove considered the "ingredients" involved in making a FOAN and noted that the FOAN is the product of the Strategic Housing Market Assessment (SHMA) required by paragraph 159 of the NPPF. It is noted that the SHMA must identify the scale and mix of housing to meet household and population projections, taking account of migration and demographic change, and then address the need for all housing types, including affordable homes.

- 5.47 He continued by noting that the scale and mix of housing is ‘a statistical exercise involving a range of relevant data for which there is no one set methodology, but which will involve elements of judgement’. Crucially, in paragraph 35 of the judgment he says that the ‘Framework makes clear that these needs [affordable housing needs] should be addressed in determining the FOAN, but neither the Framework nor the PPG suggest that they have to be met in full when determining that FOAN. This is no doubt because in practice very often the calculation of unmet affordable housing need will produce a figure which the planning authority has little or no prospect of delivering in practice’. This is an important point, given the previous judgements in Satnam and Oadby & Wigston. And indeed in relation to Oadby and Wigston he notes that ‘Insofar as *Hickinbottom J* in the case of *Oadby and Wigston Borough Council v Secretary of State* [2015] EWHC 1879 might be taken in paragraph 34(ii) of his judgment to be suggesting that in determining the FOAN, the total need for affordable housing must be met in full by its inclusion in the FOAN I would respectfully disagree. Such a suggestion is not warranted by the Framework or the PPG’.
- 5.48 Therefore, this most recent judgement is clear that an assessment of affordable housing need should be carried out, but that the level of affordable need shown by analysis does not have to be met in full within the assessment of the FOAN.
- 5.49 The approach in Kings Lynn is also similar to that taken by the inspector (Simon Emerson) to the Cornwall Local Plan. His preliminary findings in June 2015 noted in paragraph 3.20 that ‘National guidance requires consideration of an uplift; it does not automatically require a mechanistic increase in the overall housing requirement to achieve all affordable housing needs based on the proportions required from market sites.’

Relating Affordable Housing Need and Housing Need/Requirements

- 5.50 The analysis above indicates a clear need for affordable housing in the District. Using a baseline (start point) demographic need (for all tenures) linked to the 2012-based SNPP and household projections (a need for 262 dwellings per annum) the analysis is suggesting that some 81% of the need is for affordable housing. This percentage drops to about 50% with the preferred demographic and economic-based assessments, and further still (to 41%) when including an uplift for EMGRFI. These figures are however calculated in different ways and are not strictly comparable.

Figure 5.18: Affordable Need as % of Housing Need/Requirement Projections			
	Demographic-based Need/Requirement	Affordable Housing Need	Affordable as % of Demographic-based Need/Requirement
Start point (2012-based projections)	262	212	81%
Preferred demographic scenario	417	212	51%
Preferred economic baseline	401	212	53%
Preferred economic baseline + EMG	519	212	41%

5.51 The Planning Practice Guidance sets out how it expects the affordable housing need to be considered as part of the plan-making process. It outlines in Paragraph 029 that:

“The total affordable housing need should be considered in the context of its likely delivery as a proportion of mixed market and affordable housing developments, given the probable percentage of affordable housing to be delivered by market housing led developments. An increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes.”

5.52 The likely delivery of affordable housing on mixed market housing-led developments will be influenced both by affordable housing policies (themselves influenced by development viability evidence), the mix of homes which are delivered and the viability of individual development schemes. Some schemes will not be able to viably deliver policy-compliant levels of affordable housing.

5.53 This study has not considered residential development viability, but it is noted that the emerging local plan sets targets of 20%-30% depending on location (at thresholds of 11+ or 15+ dwellings). Evidence from Annual Monitoring Reports suggests that about 16% of dwellings were delivered as affordable housing in the 2004-13 period.

5.54 It should be borne in mind that besides delivery of affordable housing on mixed-tenure development schemes, there are a number of other mechanisms which deliver affordable housing. These include:

- National Affordable Housing Programme – this (adminsted by the HCA) provides funding to support Registered Providers in delivering new housing including on sites owned by RPs;
- Building Council Homes – following reform of the HRA funding system, Councils can bring forward affordable housing themselves.
- Empty Homes Programmes – where local authorities can bring properties back into use as affordable housing. These are existing properties, and thus represent a change in tenure within the current housing stock;
- Rural Exception Site Development – where the empasis is on delivering affordable housing to meet local needs.

5.55 Funding for specialist forms of affordable housing, such as extra care provision, may also be available from other sources; whilst other niche agents, such as Community Land Trusts, may deliver new affordable housing. Net changes in affordable housing stock may also be influenced by estate regeneration schemes, as well as potentially by factors such as the planned extension of the Right to Buy to housing association properties. Affordable housing can be met by changes in the ownership of existing housing stock, not just by new-build development.

- 5.56 In interpreting the relationship between affordable need and total housing provision, it is important to understand the basis of the affordable housing needs model. As the Planning Practice Guidance sets out, the calculation of affordable need involves *“adding together the current unmet housing need and the projected future housing need and then subtracting this from the current supply of affordable stock.”* The affordable housing need does therefore not represent an assessment of what proportion of additional households might require affordable housing. Instead the model considers:
- What need can be expected to arise from both existing and newly-forming household who require financial support to access suitable housing;
 - This is then compared with the projected supply of affordable housing expected to arise from the turnover of existing stock.
- 5.57 The affordable housing model thus includes supply-side factors. The net affordable need figures derived are influenced by the current stock of affordable housing and turnover of this. This has been influenced by past policies and investment decisions (at both the national and local levels). Funding mechanisms for affordable housing have influenced past delivery, which in turn influence the affordable need today.
- 5.58 Given that there has been little change in affordable housing stock over the last 15 years, the Private Rented Sector has in effect taken on an increasing role in providing housing for households who require financial support in meeting their housing needs, supported by Local Housing Allowance.
- 5.59 Whilst the Private Rented Sector (PRS) does not fall within the definition of “affordable housing,” it has evidently been playing a role in meeting the needs of households who require financial support in meeting their housing need. Government recognises this, and indeed legislated through the 2011 Localism Act to allow Councils to discharge their “homelessness duty” through providing an offer of a suitable property in the PRS.
- 5.60 It is also worth reflecting on the NPPF (Annex 2) definition of affordable housing. This says: *‘Affordable housing: Social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market’* [emphasis added]. Clearly where a household is able to access suitable housing in the private rented sector (with or without Housing Benefit) it is the case that these needs are being met by the market (as within the NPPF definition). This does not mean that such households do not have a ‘need’ but it reflects the solutions potentially available. As such the role played by the private rented sector should be recognised – it is evidently part of the functioning of housing markets.
- 5.61 Data from the Department of Work and Pensions (DWP) has been used to look at the number of LHA supported private rented homes. As of August 2015 it is estimated that there were around 1,300 benefit claimants in the Private Rented Sector.
- 5.62 From English Housing Survey it is estimated that the proportion of households within the private sector who are “new lettings” each year (i.e. stripping out the effect of households moving from one private rented property to another) is around 13% (nationally). Applying this to the number of LHA claimants in the Private Rented Sector gives an estimate of around 160-170 private sector lettings per annum to new LHA claimants in the District. This serves to illustrate that there is some flexibility within the wider housing market.

- 5.63 However, national planning policy does not specifically seek to meet the needs identified through the Basic Needs Assessment Model through the Private Rented Sector. Government's benefit caps may reduce the contribution which this sector plays in providing a housing supply which meets the needs of households identified in the affordable housing needs model herein. In particular future growth in households living within the PRS and claiming LHA cannot be guaranteed.
- 5.64 Secondly, and perhaps more critically, it is important to recognise that the model includes needs arising from both new households and existing households. Part of the needs included are from households who might require an additional home, such as:
- Newly-forming households;
 - Those in temporary accommodation;
 - Concealed households; and
 - Homeless households.
- 5.65 But the figures also include needs arising from households who will require a different form of home, but who – by moving to another property – would release an existing property for another household. These households do not necessarily generate a need for more dwellings overall (subject to there being housing within the existing dwelling stock that is sufficient to meet their housing requirements). They include households who need to move as they are:
- Overcrowded;
 - Coming to the end of a tenancy;
 - Living in unsuitable housing; and
 - Cannot afford to remain in their current home.
- 5.66 Such households do not necessarily generate a net need for additional homes, as by moving they would release a home for other households. On this basis, these elements of the affordable housing need are not directly relevant to considering overall housing need and housing targets (which are typically measured in terms of net dwellings). In considering the overall need for housing, only those who are concealed or homeless would be likely to result in an additional need for housing. Numbers of newly-forming households in the modelling are established specifically from the demographic projections.

Summary – Market Signals and Affordable Housing

The extent to which the demographic 'starting point' for identifying the need for housing (i.e. the CLG's household projections) needs to be boosted to address market signals is necessarily an area of judgement. The PPG is clear that the more significant the affordability constraints and the stronger other indicators of high demand, the larger the improvement in affordability needed and therefore the larger the additional supply response should be.

Overall the analysis of market signals points to modest affordability pressures in the District, although it is recognised that house prices and the affordability ratio have increased over the longer-term, along with increases in the number of overcrowded and concealed households. None of these indicators can however be considered as any worse than seen in other locations. The analysis does also identify a historic under-delivery of housing (against planned targets).

In terms of the PPG, any uplift for market signals is from the start point projections; in NWL the start point (as informed by CLG household projections) is for 262 dwellings per annum. If the Council were to set the need at a level consistent with demographic and economic projections (401-417 dwellings per annum) then the uplift would be up to 59%; if the Council planned for 519 dwellings per annum (as suggested once EMG is included) the uplift is nearly 100%. These are considered to be significant uplifts and therefore it is difficult to suggest on the basis of the market signals evidence that any further additional uplift is required. It should also be noted that the housing need/requirement figures already include an uplift for apparent suppression in the 25-34 population age group.

A reworking of the affordable housing needs assessment in the 2014 SHMA suggests a net deficit of 212 affordable homes per annum in the 2011-31 period. There is thus a requirement for new affordable housing in the District and the Council is justified in seeking to secure additional affordable housing.

The identified affordable housing need represents 41%-81% of the need arising through the demographic projections. However, in considering this relationship, it is important to bear in mind that the affordable housing needs model includes existing households who require a different size or tenure of accommodation rather than new accommodation per se. Furthermore, many households secure suitable housing within the Private Rented Sector, supported by housing benefit. On this basis, the analysis does not suggest that there is any strong evidence of a need to consider additional housing over and above that suggested by demographic and economic-based projections to help meet the affordable need.

6. Impact of EMGRFI on Other Areas

Introduction

- 6.1 The analysis in this report identifies of an expected 7,317 additional jobs at EMGRFI that some 3,698 would potentially be filled by workers who will be resident in the District – this being based on an analysis of commuting patterns for the whole of the District. This implies that some 3,619 jobs would be filled by people commuting in from other areas.
- 6.2 It is therefore of use to consider the locations from which people might be expected to travel to the site for work and the potential implications for additional homes in each of these locations.

Commuting Patterns to NWL and EMGRFI

- 6.3 The table below shows the locations of residence of people who work in NWL but live outside the Borough. All local authorities are included where the number of workers is in excess of 200 (the choice of 200 is arbitrary but has been used to limit the number of areas to a manageable number – recognising that areas with lower levels of commuting will not have particularly strong links with NWL). The table also shows the implied number of additional workers who might be expected to come from different areas if commuting patterns were to remain the same (as in 2011). The analysis identifies particularly strong links with South Derbyshire, Charnwood and Derby and relatively weak links with some parts of Leicestershire (including Melton and Oadby & Wigston).

Figure 6.1: Commuting patterns to NWL and implied number working at EMGRFI			
Commute from...	Number commuting	% of commuters	Implied number working at EMGRFI
Amber Valley	405	1.5%	55
Ashfield	252	0.9%	34
Blaby	747	2.8%	101
Broxtowe	683	2.6%	93
Charnwood	3,263	12.2%	442
Derby	2,616	9.8%	355
Erewash	1,891	7.1%	256
Gedling	283	1.1%	38
Harborough	293	1.1%	40
Hinckley & Bosworth	1,870	7.0%	253
Leicester	1,620	6.1%	220
Melton	274	1.0%	37
Nottingham	1,016	3.8%	138
Oadby & Wigston	262	1.0%	36
Rushcliffe	766	2.9%	104
South Derbyshire	3,995	15.0%	542
Rest of East Midlands	1,075	4.0%	146
Birmingham	359	1.3%	49
East Staffordshire	940	3.5%	127
Lichfield	209	0.8%	28
North Warwickshire	273	1.0%	37
Nuneaton and Bedworth	221	0.8%	30
Tamworth	338	1.3%	46
Rest of West Midlands	1,147	4.3%	155
Elsewhere	1,901	7.1%	258
TOTAL	26,699	100.0%	3,619

Source: 2011 Census (and as calculated)

- 6.4 To some extent this is a slightly false analysis of where people might be drawn from to work at EMGRFI; this is because the proposed development is at the very North of the District (between Kegworth and Castle Donington) and is therefore more likely to draw a workforce from those areas immediately adjacent to the site rather than from local authorities to the South.

6.5 Hence a further analysis has been carried out to look at the locations from which workers commute to the broad area in which EMGRFI is to be located. From Census data it is possible to look at Mid-Layer Super Output (MSOA) areas with the EMGRFI site broadly corresponding with areas 001 and 002 (these two areas cover Kegworth and Castle Donington). The table below shows the current residence of people commuting to the relevant MSOAs; in this case any inflow of in excess of 50 has been included in the table (again an arbitrary cut-off, but chosen to limit the number of areas to a manageable number – recognising that areas with lower levels of commuting will not have particularly strong links with the relevant MSOAs. The lower figure of 50 used in this analysis (as opposed to a cut-off of 200 when looking at District-wide analysis) reflects a lower number of workers in the two relevant MSOAs when compared with the numbers commuting in across the whole District)).

Figure 6.2: Commuting patterns to NWL and implied number working at EMGRFI (based on workers in relevant MSOA)			
Commute from...	Number commuting	% of commuters	Implied number working at EMGRFI
Amber Valley	318	2.8%	100
Ashfield	195	1.7%	61
Blaby	105	0.9%	33
Bolsover	66	0.6%	21
Broxtowe	553	4.8%	174
Charnwood	1,192	10.3%	374
Chesterfield	52	0.5%	16
Derby	2,021	17.5%	634
Derbyshire Dales	66	0.6%	21
Erewash	1,673	14.5%	525
Gedling	199	1.7%	62
Harborough	56	0.5%	18
Hinckley & Bosworth	153	1.3%	48
Leicester	194	1.7%	61
Mansfield	98	0.9%	31
Melton	81	0.7%	25
Newark & Sherwood	72	0.6%	23
North East Derbyshire	63	0.5%	20
Nottingham	837	7.3%	263
Rushcliffe	571	5.0%	179
South Derbyshire	1,028	8.9%	323
Rest of East Midlands	230	2.0%	72
Birmingham	66	0.6%	21
East Staffordshire	234	2.0%	73
Tamworth	63	0.5%	20
Rest of West Midlands	455	3.9%	143
Elsewhere	888	7.7%	279
TOTAL	11,529	100.0%	3,619

Source: 2011 Census (and as calculated)

6.6 The number of areas highlighted by this analysis is similar to the analysis based on the whole of NWL although some of the areas are different. The following areas appear in both lists and are therefore worthy of consideration in terms of the likely influence of EMGRFI:

- Amber Valley
- Ashfield
- Blaby
- Broxtowe
- Charnwood
- Derby
- Erewash
- Gedling
- Harborough
- Hinckley & Bosworth
- Leicester
- Melton
- Nottingham
- Rushcliffe
- South Derbyshire
- Birmingham
- East Staffordshire
- Tamworth

6.7 The analysis proceeds by considering the number of jobs at EMGRFI likely to be taken up by people resident in each of the main other local authority areas. To provide a broad indication an average has been taken from the two analyses above (i.e. based on the whole of NWL and with a secondary focus on MSOAs). Whilst taking an average is arbitrary it does reflect a) the location of EMGRFI and b) that the influence of such a major level of job creation could well be wider than is seen in current (localised) commuting patterns.

6.8 The table below shows the number of additional workers assumed to be resident in each of the areas identified. In total, 2,962 (82%) of workers from outside of NWL are assumed to live in one of these areas. Whilst this leaves some 657 workers, the number of locations in which they are expected to live are too numerous to realistically undertake a modelling process (and in any case, for any individual area the impact in housing terms is likely to be quite limited).

6.9 The table shows that the main areas from which workers might be expected to be drawn are Derby (494 workers), South Derbyshire (432), Charnwood (408) and Erewash (391).

Figure 6.3: Estimated number of EMGRFI workers' resident in each local authority			
	Based on LA commuting	Based on MSOA commuting	Average
Amber Valley	55	100	77
Ashfield	34	61	48
Blaby	101	33	67
Broxtowe	93	174	133
Charnwood	442	374	408
Derby	355	634	494
Erewash	256	525	391
Gedling	38	62	50
Harborough	40	18	29
Hinckley & Bosworth	253	48	151
Leicester	220	61	140
Melton	37	25	31
Nottingham	138	263	200
Rushcliffe	104	179	142
South Derbyshire	542	323	432
Birmingham	49	21	35
East Staffordshire	127	73	100
Tamworth	46	20	33
TOTAL	2,929	2,994	2,962
Other areas	690	625	657
TOTAL	3,619	3,619	3,619

Source: Derived from 2011 Census (and as calculated)

Housing Requirement Impact of EMGRFI in Other Areas

6.10 To model the impact of the EMGRFI on other areas a similar process has been undertaken as for the modelling for NWL in this report. All data used is specific to the local authority being analysed and a broad summary is provided below:

1. Set up a demographic model populated by data from the 2012-based SNPP (and including MYE data for 2013 and 2014);
2. Apply headship rates from the 2012-based CLG household projections with an uplift to the 25-34 age group;
3. Apply vacancy rate from the 2011 Census to establish housing need/requirement;
4. Apply economic activity rates from the 2011 Census (split by those of working and pensionable-age);
5. Estimate number of people who are economically active;
6. Estimate proportion of people with more than one job (double jobbing) and hence the uplift to this population required to meet the resident workforce figures (as shown in the table above);
7. Iterate the model to increase the resident workforce (as required); and
8. Establish the uplift to housing requirement implied by this uplift (for the 2011-31 period and also expressed annually)

- 6.11 The outputs of the modelling are shown in the table below. This identifies a potential uplift to housing requirements of 2,008 dwellings over the 2011-31 period in those areas identified as being likely to have some connection with EMGRFI. A further 446 dwellings are estimated as required in other areas (this has been estimated on the basis of the relationship between the number of people commuting from a wider area and the number of homes estimated as being required within the ‘area of influence’ – calculated as $657/2,962 \times 2,008$).
- 6.12 Annually the figures represent a requirement for 123 dwellings per annum in areas outside NWL to provide a workforce for the EMGRFI; this is particularly focussed in Derby, South Derbyshire, Erewash and Charnwood.

Figure 6.4: Estimated Housing Requirement Arising due to EMGRFI		
	2011-31	Per annum
Amber Valley	51	3
Ashfield	34	2
Blaby	41	2
Broxtowe	87	4
Charnwood	258	13
Derby	349	17
Erewash	263	13
Gedling	34	2
Harborough	18	1
Hinckley & Bosworth	97	5
Leicester	102	5
Melton	19	1
Nottingham	172	9
Rushcliffe	89	4
South Derbyshire	276	14
Birmingham	27	1
East Staffordshire	69	3
Tamworth	22	1
TOTAL	2,008	100
Other areas (estimated)	446	22
TOTAL	2,453	123

Source: Demographic modelling

Summary – Impact of EMGRFI on Other Areas

With EMGRFI expected to generate in excess of 7,000 additional jobs in NWL, it is clear that only a proportion of the workforce would be expected to be resident in NWL (and therefore requiring housing in the local authority area). An analysis has been carried out to establish those areas (outside of NWL) from which people might commute and the potential additional housing requirements in these locations.

A total of 18 local authority areas were identified as potentially having an 'influence' on the EMGRFI site – these being the areas which on the basis of current (2011) commuting patterns provide a workforce to both NWL and also the general location where EMGRFI is to be sited. The key areas were identified as Derby, South Derbyshire, Erewash and Charnwood.

A demographic modelling process was undertaken in each of the 18 areas using the same broad assumptions as that carried out for NWL (e.g. in terms of household formation and economic activity rates). This estimated that the EMGRFI would generate a requirement for around 2,450 homes to be provided in other locations for the EMGRFI workforce (in the 2011-31 period). Around half of this requirement (47%) was identified as being in the four key areas; including an estimated requirement for 349 homes in Derby, 276 in South Derbyshire, 263 in Erewash and 258 in Charnwood.

7. Conclusions – Overall Housing Requirements

Introduction

- 7.1 As can be seen from the information above there has been a significant amount of work undertaken to understand the objectively assessed need for NWL; this includes looking at demographic trends, economic needs, market signals and affordable housing. The analysis in this report has considered the evidence and analysis in the 2014 SHMA as well as a full updating to take account of more up-to-date information. This final section brings together the evidence to form a view about the objective level of need for NWL and housing requirements taking account of EMGRFI.
- 7.2 The analysis starts by considering the requirements of the NPPF and PPG (on housing and economic development needs assessments). The Guidance effectively describes a process whereby the latest population and household projections are a starting point and that these can be scrutinised on the basis of more recent evidence.
- 7.3 A number of “tests” then need to be considered to examine whether it is appropriate to consider an adjustment to housing provision. These are:
- Is there evidence that the official population projections need adjustment due to specific local evidence about migration and population growth?
 - Is there evidence that household formation rates in the projections have been constrained?
 - What do economic forecasts say about job growth? Is there evidence that a different spatial distribution of housing would be needed to support this?
 - Do market signals point to a need to increase housing supply?
 - How do the demographic projections ‘sit’ with the affordable housing needs evidence, and should an increase in housing supply be considered to support delivery of affordable housing?

The Starting Point

- 7.4 The analysis started with consideration of the 2012-based CLG household projections. Over the 2011-31 period (consistent with the emerging Local Plan) this projection shows household growth of 253 per annum – including an allowance for vacant homes (based on 2011 Census data) it is concluded that the ‘start point’ need for housing is for 262 dwellings per annum. This figure is slightly lower than the ‘start point’ projections in the 2014 SHMA (for 290 dwellings per annum) although the SHMA did also identify a lower figure (of 252 dwellings per annum) once more up-to-date demographic data available at that time was taken into account.

Test 1: Is there evidence that the official population projections need adjustment due to specific local evidence about migration and population growth?

- 7.5 Analysis of underlying demographic trends and up-to-date information about migration and population growth was undertaken which suggested that the reference period feeding into the household projections (and the associated population projections) was one in which migration and population growth was quite modest (lower than had been seen earlier in the period back to 2001 and also since 2012).

- 7.6 Alternative scenarios were therefore developed to look at both longer-term trends and also more recent information. These scenarios all suggested a potentially higher need for housing than set out in the CLG projections and it was concluded on the basis of the evidence available that a figure of about 380 dwelling per annum was a reasonable level of demographic based need.
- 7.7 The 2014 SHMA did not consider long-term trends and focussed on the data feeding into, and outputs of the 2011-based 'interim' population and household projections. Given a fairly low level of migration in the 2011/12 period (which was the only new data available at the time of the SHMA) the adjustments made to demographic projections were in a slight downwards direction.

Test 2: Is there evidence that household formation rates in the projections have been constrained?

- 7.8 The analysis studied the detail behind the CLG household projections and this did suggest that there had been some suppression of household formation over the decade to 2011, and that this was projected to continue in the future. The evidence was not clear-cut with different releases of the CLG household projections showing different future 'trends' for different age groups.
- 7.9 The clearest trend was a reduction in the household formation rates of the population aged 25-34 and analysis was carried out to look at the level of housing need if the rates of this group were to return to the levels seen in 2001 (which is the date from which the decrease (and potential suppression)) began. On the basis of the preferred demographic scenario (which took a mid-point between a projection based on long-term migration trends and long-term migration trends with a further adjustment for Unattributable Population change (UPC)) it was concluded that the demographic need for housing is of the order of 417 dwelling per annum (2011-31).
- 7.10 The approach of including an uplift for household formation rates amongst the 25-34 population was then applied consistently across of other projections (e.g. those linked to job growth).
- 7.11 In the 2014 SHMA an uplift was applied to data (from the 2011-based CLG household projections) to take account of suppressed household formation; this was based on consideration of 2008-based data (information which is no longer thought to be of much assistance in the analysis of housing need). This uplift increased the demographic based need in NWL by about 13%, a similar uplift to that being suggested when using more up-to-date household projections (albeit it should be recognised that there are notable differences between the 2012- and 2011-based projections).

Test 3: What do economic forecasts say about job growth? Is there evidence that a different spatial distribution of housing would be needed to support this?

- 7.12 A key part of the analysis was to consider what level of housing might be required to support a growing resident workforce; this was in terms of meeting both trend-based job growth and also the impact of additional jobs expected at the East Midlands Gateway Rail Freight Interchange.

- 7.13 A range of baseline forecast were accessed and it was concluded that the most robust to use in analysis was that provided by PACEC – this suggested an increase in jobs across the District of about 9,500 over the 2011-31 period. The EMGRFI is expected to provide a further 7,317 jobs and it has been assumed that these will be in addition to those from the baseline forecast (although in reality it is possible that the net effect is either higher or lower due to displacement and additionality).
- 7.14 When looking at the baseline forecast, adjustments were made based on current (2011) commuting patterns and the extent to which people have more than one job (double jobbing). On this basis it was estimated that the resident workforce would need to grow by about 7,900 people for there to be sufficient labour for 9,500 additional jobs. This level of labour-force growth was modelled by taking account of changes to both the working-age and pensionable-age population who are economically active. Undertaking this modelling suggested a housing need of about 416 dwellings per annum.
- 7.15 In the 2014 SHMA, two economic based projections were carried out and these suggested a need for between 372 and 478 dwellings per annum. The lower of the figures was considered as most robust given that it was based on economic growth across the whole L&L HMA (and recognising that economic forecasts at a smaller area level (such as individual Districts) are likely to be less reliable than those across a wider area). Taking account of both demographic projections and economic forecasts the SHMA concluded a need for 350 dwellings per annum (this figure being at the top end of the range developed).
- 7.16 The approach taken to an additional uplift for EMGRFI was slightly different, and predominantly focussed on where people who work in NWL live. Based on Census data it was estimated that around half of jobs in the District are taken up by people who live elsewhere and this factor was applied to the 7,317 jobs to work out the required growth in the resident workforce (along with a small adjustment for double jobbing). It was estimated that the District could expect an additional 3,600 economically active residents as a result of EMGRFI.
- 7.17 Taken together, the baseline and EMG forecasts would lead to a projected growth in the resident workforce of about 11,500 people. This was modelled through the demographic analysis which showed a requirement for 519 dwellings per annum to be provided in the 2011-31 period.
- 7.18 Undertaking a similar analysis on the basis of the assumptions underpinning the 2014 SHMA, it was estimated that the impact of EMG would be to increase housing requirement by about 120 dwellings per annum. With an OAN of 350 in the SHMA, this analysis therefore concluded that had EMGRFI been factored into the SHMA then a requirement of around 472 dwellings per annum would have been suggested. This could potentially increase to about 495 dwellings per annum if the preferred economic-based forecast were used.

Test 4: Do market signals point to a need to increase housing supply?

- 7.19 Overall, the analysis of market signals points to modest affordability pressures in the District; although it is recognised that house prices and the affordability ratio have increased over the longer-term, along with increases in the number of overcrowded and concealed households. None of these indicators can however be considered as any worse than seen in other locations. The analysis does also identify a historic under-delivery of housing (against planned targets).

- 7.20 In terms of the PPG, any uplift for market signals is from the start point projections; in NWL the start point (as informed by CLG household projections) is for 262 dwellings per annum. If the Council were to set the need at a level consistent with demographic and economic projections (401-417 dwellings per annum) then the uplift would be up to 59%; if the Council planned for 519 dwellings per annum (as suggested once EMG is included) the uplift is nearly 100%. These are considered to be significant uplifts and therefore it is difficult to suggest on the basis of the market signals evidence than any additional uplift is required. It should also be noted that the housing need/requirement figures already include an uplift for apparent suppression in the 25-34 population age group.
- 7.21 The 2014 SHMA also considered market signals and did not highlight these as being particularly strong in NWL.

Test 5: How do the demographic projections ‘sit’ with the affordable housing needs evidence, and should housing supply be increased to meet affordable needs?

- 7.22 The analysis of affordable housing need identifies a significant requirement for affordable housing. However, in considering this relationship, it is important to bear in mind that the affordable housing needs model includes existing households who require a different size or tenure of accommodation rather than new accommodation per se. Furthermore, many households secure suitable housing within the Private Rented Sector, supported by housing benefit. On this basis, the analysis does not suggest that there is any strong evidence of a need to consider additional housing over and above that suggested by demographic projections to help meet the affordable need.
- 7.23 The 2014 SHMA did highlight affordable housing need as being a factor in considering the OAN. For this reason, (as well as a recognition of potential job growth) a range of need from 285 to 350 dwellings per annum was identified – the upper end being the level used as the OAN by the Council prior to consideration of the impact of EMGRFI.

Overall Conclusions on Housing Requirements

- 7.24 The analysis of housing need carried out in line with the NPPF and PPG suggests a start point need for housing of around 262 dwellings per annum, this figure increases to 380 per annum based on recent and longer-term demographic trends. The figure is increased further (to 417 dwellings per annum) once account is taken of constrained household formation.
- 7.25 The baseline economic forecasts confirm this as a reasonable level of provision (suggesting a need for around 401 dwellings per annum) although including development at EMGRFI increases the requirement to 519 dwellings per annum. Given that the EMGRFI has now been granted development consent, it would be prudent for the Council to plan for this higher figure. It is therefore concluded that the housing requirement, taking account of all the factors discussed in the report is for 520 dwellings per annum (2011-31) – this is 10,400 homes over the emerging plan period.
- 7.26 The reanalysis of SHMA data suggests a slightly lower housing requirement with the inclusion of EMGRFI (for 472 dwellings per annum when EMG is considered as an uplift to the SHMA housing need position (of a need for 350 dwellings per annum)).

- 7.27 Given the range of new data available and analysed in this report, it is considered that the higher of the figures calculated should be used to inform housing targets and the 5-year housing land supply position moving forward (i.e. a requirement for about 520 dwellings per annum). Given that this is only about 10% higher than an equivalent figure if SHMA data is used it is also concluded that the SHMA (when taken as a whole across the L&L HMA) remains sound, although housing need figures will be reviewed as part of the ongoing HEDNA process which is expected to be completed by the end of 2016.
- 7.28 Additional analysis identified a requirement for around 2,450 homes to be provided outside of NWL (this analysis being based on an understanding of the likely residential location of people who would commute to work at the site). Around half of this requirement was concentrated in four areas (Derby, South Derbyshire, Erewash and Charnwood).
- 7.29 To summarise, the analysis which updated the SHMA to take account of EMGRFI and also the analysis which updated all elements of the projections both show that the impact of EMGRFI would be to increase the housing requirements by around 120 dwellings per annum. Hence this report concludes an overall requirement for between 472 (SHMA based) and 519 (updated position) dwellings per annum in the 2011-31 period in NWL. There are additional requirements likely to be generated outside the local authority boundary which will need to be considered as part of duty-to-cooperate discussions.