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Planning. Design. Economics.

**Tamworth Housing Needs Study 2012-
based SNHP Update**

Tamworth Borough Council

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50450/MW

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1.0 Introduction

Background to the Study

- 1.1 Nathaniel Lichfield & Partners [NLP] produced a housing needs study and SHMA update in May 2012 on behalf of the three south-east Staffordshire Councils of Cannock Chase District [CCDC], Lichfield District [LDC] and Tamworth Borough [TBC] into the future population, household projections and housing needs of the area. The study set out the potential scale of future housing needs in the three districts, based upon a range of housing, economic and demographic factors, trends and forecasts. This sought to provide the Councils with evidence on the future housing needs of their districts to help them plan for future growth and make informed policy choices through the development plan preparation process.
- 1.2 Following the submission of the SHMA, in May 2012, the demographic data which underpinned NLP's modelling work was subsequently updated by ONS. In particular, new data became available following the partial release of the 2011 Census data; the 2010-based ONS Sub-National Population Projections [SNPP]; and the (interim) 2011-based SNPP.
- 1.3 The most recent update was produced in October 2014. This took account of the 2012 SNPP as well as looking at market signals to explore how the updated inputs might impact upon objectively assessed need for Tamworth Borough. As the 2012-based household projections were not released at this time, the 2011-based household projections were applied to the updated 2012 population base.
- 1.4 The 2012-based Sub-National Household Projections [SNHP] were released on 27th February 2015 and supersede the 2011-based (Interim) SNHP. The 2012-based SNHP incorporate the ONS 2012-based SNPP published on 28th May 2014 and further information from the Census 2011 where available.

Tamworth Local Plan

- 1.5 The Tamworth Borough Council Local Plan [TBCLP], submitted to the Secretary of State on the 6 February 2015, covers the period between 2006 and 2031. The objectively assessed housing need for Tamworth was identified as 6,250 dwellings (equivalent to 250 dwellings per annum [dpa] over the 25 year plan period)¹.
- 1.6 The housing need figure as set out in the Local Plan was informed by NLP's Southern Staffordshire Districts Housing Needs Study (May 2012) which concluded on a range between 240 dpa and 265 dpa as objectively assessed need. The October 2014 update produced to take into account the 2012-based SNPP also indicated a level of need between 240 and 265 dpa.

¹ Para. 2.36, Tamworth Borough Council – Pre-Submission Local Plan 2006-2031 for Public Consultation October 2014

- 1.7 This 2015 update takes into account the most recent government projections and most notably the CLG 2012-based SNHP (released in February 2015). These represent the first full (25-year) set of projections to be released since the results of the 2011 Census. Since these form the new starting point for full, objectively assessed, needs, this note considers the implications of these latest household projections when assessing housing need in Tamworth.
- 1.8 It should be noted that due to the availability of data, the evidence underpinning this report relates to a period (2012-2031) that is shorter than the Tamworth Local Plan period (2006-2031).

2.0 **Methodology behind the 2012-based SNHP**

The Methodology

- 2.1 The headline figures from the latest 2012 based SNHP were released by CLG on 27th February 2015 and supersede the 2011-based (Interim) SNHP. The 2012-based SNHP incorporate the ONS 2012-based SNPP and further information from the Census 2011.
- 2.2 The methodology for the 2012-based SNHP broadly follows that used for the 2011-based and 2008-based projections. The 2011-based SNHP included some changes that were required to incorporate valuable information from the 2011 Census. Since then further information from the 2011 Census has become available and has been incorporated into the 2012-based SNHP where possible, building on the approach used for the 2011-based SNHP.
- 2.3 The household projections are compiled using a two stage process. Stage One produces the national and local projections for the total number of households by age group and marital status group over the projection period. The total number of households in each local area forms the basis of the control totals for Stage Two of the projection methodology, which provides the detailed household type breakdown by age.
- 2.4 Stage One applies projected household membership rates to a projection of the private household population disaggregated by age, sex and marital status and summing the resulting projections of household representatives. The method uses a simplified three way relationship categorisation to represent marital/co-habitational status. The categories are 'in couples' (including married couples who are living together and cohabiting couples); 'separated marrieds', 'divorced and widowed not in couples'; and 'people not in couples' (not cohabiting, never married). This is an aggregation of the detailed categories in the previous CLG (Household Projection System, known as HOPS) model which captures the key household formation characteristics of the relationship status groups while retaining relative simplicity.
- 2.5 As in the 2011-based projections, the projection methodology for Stage One from the 2008-household projection has been maintained but adapted. The 2012-based projections includes information from the 2011 Census which, together with data from the Labour Force Survey [LFS], has been used to update the estimates for the 2011 point that are then used in the household projections methodology at a national level.
- 2.6 The updated national projections are then used to control a set of projections for regions and local authorities that have been derived by applying projections of the household representative rates by sex, age and status to the 2012-based household population by sex, age and status. The regional and local authority projection is then controlled to the 2011 Census aggregate household representative rate.

- 2.7 The projections methodology uses time-series modelling which weights together simple and dampened logistic trends. Cohort modelling is not used. The simplified time-series based projections are referred to as the Stage One projections to distinguish them from the detailed projections by household type described in Stage Two. The Stage Two data has yet to be released by CLG at the time of writing.
- 2.8 There are six key components to the household projections produced in Stage One each of which is given in detail below:
- 1 Population projections
 - 2 Marital status composition
 - 3 Institutional population
 - 4 Household representative rates
 - 5 LFS adjustments
 - 6 Regional and local household projections
- 2.9 The importance of the household projections to planning is emphasised in the Planning Practice Guidance which states that "*household projections produced by the Department for Communities and Local Government should provide the starting point estimate of overall housing need*".² Therefore, the new household projections represent an important milestone in providing evidence to inform objective assessments of housing need.
- 2.10 However, they do not represent the whole picture, because:
- a They are based upon applying headship rates (rates of household formation) to the already released ONS 2012-based SNPP. These underlying population projections are trend based, reflecting migration patterns seen over the recession and may not be reliable in all areas. Significantly, they are already becoming outdated, with the 2012-based SNPP at the national level under-estimating net in-migration to the UK by 170,000 persons over the past two years (2012/13 and 2013/14) compared with what ONS now know actually occurred.
 - b They reflect a long term and structural under-supply of housing, during periods of both recession and growth. Since 2001 an average of 135,000 dwellings in England have been completed each year, far short of what is needed, and there has been a 16% decline in the number of completions since the start of the millennium. Lack of dwellings constrains household formation and this historic and long term under-supply will have influenced what are firmly trend-based projections.
 - c They are influenced by recessionary trends since 2007, including mortgage rationing, financial instability and acute affordability constraints. Although the methodology for the household projections draw upon household formation trends over a 40 year period since 1971, they still contain a 'recency bias' reflecting trends over the last 10 years much

² National Planning Practice Guidance: 2a-015-20140306

more than trends over the longer term. The projected average household size shows that household formation rates are increasing at a rate somewhere between the pre-recession 2008-based projections at the 2011-based interim projections.

- 2.11 These factors impact both the underlying population base as well as the household formation rates, combining to present a level of household growth at a national level substantially below a level that would truly reflect need and demand.

What do the projections mean for planning?

- 2.12 The Government's population and household projections will continue to act as the starting point for considering evidence of housing need, and for all their problems, they are as good a starting point as any. However, caution should be exercised when applying them in evidence. They can, and should, be subject to adjustment where specific evidence justifies it. The advice contained in the Practice Guidance, that the projections may require adjustment to reflect household formation having been suppressed historically by housing undersupply and worsening affordability, has been widely considered.
- 2.13 Many Planning Inspectors have taken the view that the 2011-based projections represented a suppression of household formation, particularly amongst younger age groups. This has been supported by analysis into the underlying projections such as the 'Holman Paper'³, and whilst the 2012-based are more optimistic in household formation rates than their 2011-based predecessors, they remain lower than long term trends would indicate. Some commentators have suggested that the new projections represent a 'new normal', with reduced household formation, compared to longer term trends, likely to continue irrespective of recessionary impacts. NLP considers that applying this approach to planning would be wrong.
- 2.14 It is imperative to view the new projections through the prism of the Framework: this seeks to 'boost significantly' the supply of housing to meet housing demand (including demand arising from household formation) and address affordability. Were the planning system to treat the lower levels of household formation as a 'new normal' it would 'lock in' the implications of housing under-supply impacting most of all on younger age groups, particularly those starting families. With the English Housing Survey having recently shown home ownership for younger age groups falling markedly, there are profoundly negative implications for economic and social well-being.

³ New Estimates of Housing Demand and Need in England, 2011 to 2031, Town & Country Planning Tomorrow Series Paper 16, Alan Holmans, 2013

3.0

2012-based SNHP for Tamworth Borough

Introduction

3.1

This report incorporates the new 2012-based SNHP to assess the potential implications on objectively assessed housing need in Tamworth Borough. The 2012-based SNHP were the first full set of government projections (covering a full 25-year period) released since the 2008-based projections (December 2010), and are based on the 2012 SNPP. Over a 25-year period (2012-2037), the SNHP project average annual household growth in Tamworth of 189. This is lower than both the 2008-based and 2011-based household projections, as shown in Table 3.1.

Table 3.1 Projected Household Growth in Tamworth

	2012-based Household Projections				2012-2033 annual H'Hold Growth		2012-2021 annual H'hold Growth	
	2012	2037	2012-2037	Annual H'holds	2012-SNHP	2008-SNHP	2012-SNHP	2011-SNHP
Tamworth	31,843	36,563	4,720	189	201	213	233	248

Source: CLG 2008/2011/2012-based Household Projections

Note: The time periods have been adapted to align across the various SNHPs

Note: It is important to note that each of these household projections are based on their respective population projections. Hence applying household headship rates to different populations, (such as applying the 2011-based headship rates to the 2012-based population as in the previous update report) will result in a different household growth figure than those presented above.

3.2

The subsequent section analyses the underlying reasons behind the seemingly substantial change in the latest SNHP, in order to assess whether sensitivity tests on the demographic-led scenarios may be appropriate.

Household Formation

3.3

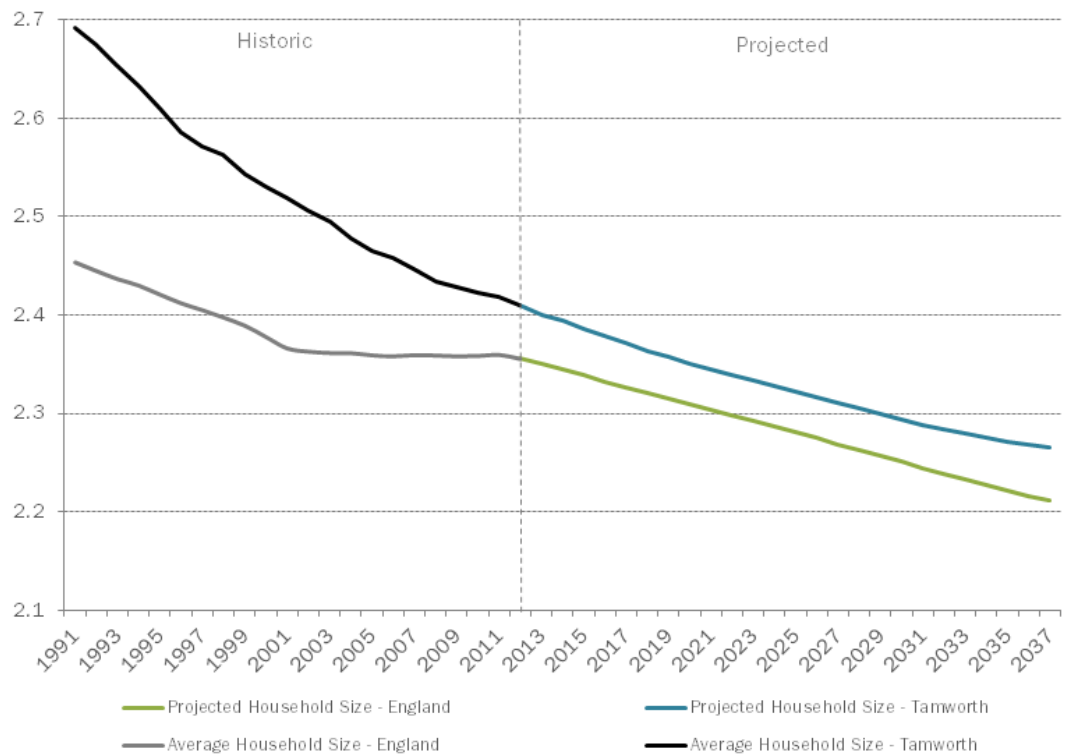
The 2012-based SNHP were, unlike their 2008-based counterparts, based on a period where household formation across England had slowed due to the impact of recessionary trends: namely a shortfall in supply and issues with affordability and mortgage availability. This meant that many households which would otherwise have formed (namely younger households), were not able to. Household projections (and household formation rates) are projections of recent trends. Therefore trending forward suppressed household formation might not be representative of the true need for housing within an area.

3.4

In terms of average household size, Figure 3.1 compares Tamworth Borough's change against the national average over time. Historically, average household size in Tamworth has been higher than nationally; however, this has declined steadily since 1991 whereas nationally there was a stall in the decline in average household size. Between 2001 and 2011, average household size in England remained at 2.36. In Tamworth this declined from 2.52 to 2.42. Both exhibit a clear downward trend from 2012 onwards with an almost parallel

rate of change. By 2031, average household size in Tamworth is projected to be 2.22 - slightly higher than the national projection of 2.24.

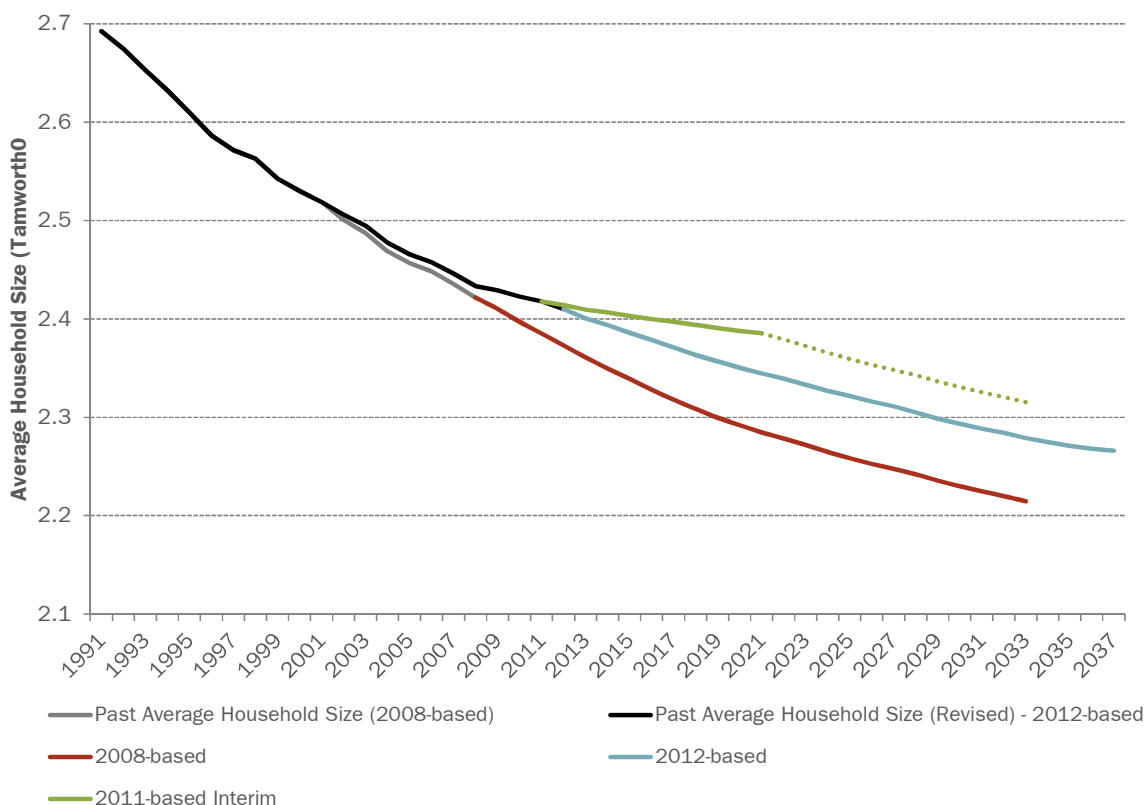
Figure 3.1 Average Household Size - National Average and Tamworth Average



Source: NLP Analysis / CLG 2012-based SNHP

- 3.5 The average household size as projected by the most recent household projections is shown for Tamworth in Figure 3.2.
- 3.6 Figure 3.2 shows that the 2008-based projections projected a continued decline in average household size in line with historic trends. However, these did not take into account the recession and its impacts upon household formation, which saw formation rates towards the end of the 2000s decline (indicated by a slowed decline in average household size). The average household size at 2012, which forms the basis of the 2012-based projection, is higher than projected in the 2008-based projections; however, falls in average household size projected does return to a rate of decline indicated in the 2008-based projections. The 2011-based (Interim) SNHP indicates the slowest decline in average household size of all the projections and are reflective of the recessionary period upon which they are based. Overall, the 2012-based household projections represent a middle ground between the pessimistic 2011-based rates and the pre-recession 2008-based rates.

Figure 3.2 Comparison of Changes to the Average Household Size in Tamworth



Source: CLG 2008/2011/2012-based Sub-National Household Projections

Note 1: The 2011-based Projections have been linked to the 2008-based projections post 2021. This is represented by the dashed line.

Note 2: On the 2008-based SNHP line, the projection between 2025 and 2029 has been smoothed to reduce anomalies

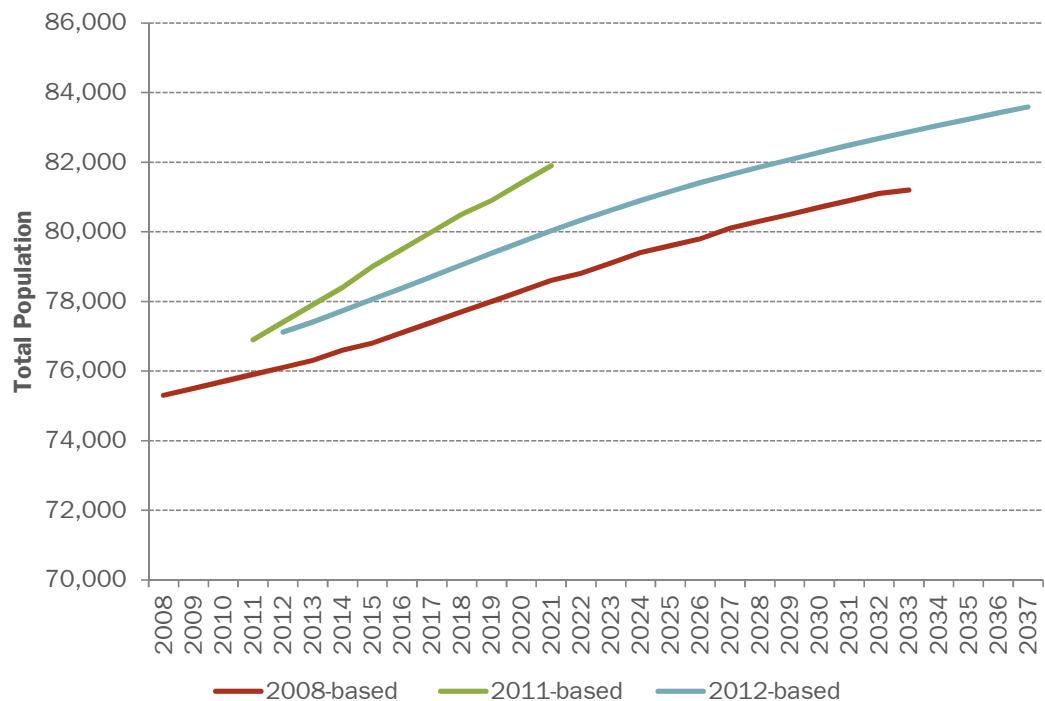
Population

- 3.7 The total population growth for Tamworth Borough as projected in the 2008, 2011 and 2012 SNPPs is shown in Figure 3.3. This helps to explain the differences between the most recent 2012-based SNHPs for Tamworth and previous versions.
- 3.8 The 2008-based SNPP indicates steady population growth across the Borough from 75,300 in 2008 to 81,200 in 2033, an annual average increase of 236 persons. Coupled with optimistic assumptions around household formation, this results in annual household growth of 217 over the period 2008-2033.
- 3.9 The 2011-based (Interim) SNPP started from a higher total population in 2011 (compared to both the 2008-based and 2012-based SNPPs), and grew at a significantly steeper rate (+500 p.a.). Hence despite lower household formation rates, the annual growth in households is 248 over the ten year period - the highest of any of the household projections.
- 3.10 The latest 2012-based SNPP represents a middle-ground in terms of population growth between the 2008-based and 2011-based equivalents. The

starting point in 2012 is a population of 77,118 and there is an annual growth of 259 persons over the period to 2037. This rate of change has a similar trajectory to the 2008-based SNPPs and is lower than the 2011-based SNPPs. The household growth over the total period in the 2012-based projections is 189 per annum.

3.11 In summary, it can be determined that although the 2011-based household projections are the most pessimistic in terms of headship rates, the underlying population growth is more substantial than the other population projections, resulting in higher levels of household growth (248 pa). The 2008-based projections, founded on a lower population and slower population growth, have higher headship rates, resulting in annual household growth of 217. The 2012-based SNPP exhibits a similar level of population growth to the 2008-based SNHP, but are based on assumptions of lower household formation, resulting in annual household growth of 189 pa.

Figure 3.3 Future Population Growth in Tamworth Borough



Source: ONS 2008/2011/2012 based SNPPs

3.12 The age structure of the population is also an important consideration when examining household projections. This is because populations which are projected to see an increase in the number of older people (even when there is no population growth or even decline) are likely to see a growth in households; household size tends to decline substantially as the head of the household ages.

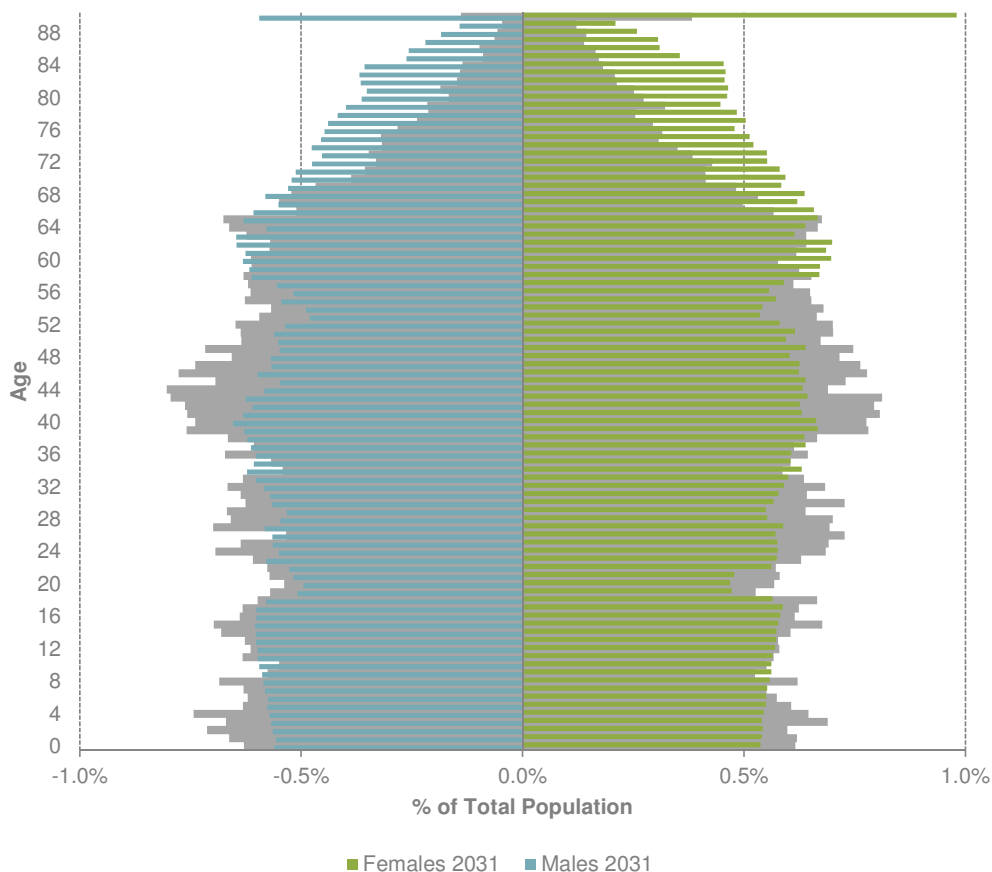
3.13 The population age/sex structure of Tamworth Borough is presented in Figure 3.4. It shows a decline in most of the age cohorts (both male and female) under the age of 55. The greatest change relates to the proportion of

Tamworth’s residents aged over 70 (both male and female) over the period to 2031. In particular, the percentage of local residents over the age of 90 is expected to grow substantially. The percentage of males aged over 90 more than quadruples between 2012 and 2031, whilst the percentage of females aged over 90 more than doubles over the same time period.

3.14

In direct contrast, the percentage of the population which is of working age (18-64) declines by over 2,000. In 2012, this age group represented 62% of the population in Tamworth; however, by 2031 it is projected that this proportion will fall to 55%. It is therefore unsurprising that, with a considerable growth in the number of older people and a significant reduction in the number of working age people and children, this results in average household size reducing significantly, as this translates into smaller family units and more people living alone, or in couples.

Figure 3.4 Population Age/Sex Structure in Tamworth, 2012-2031 (as projected in the 2012 SNPP)



Source: ONS 2012-based SNPP

Note: Grey bars indicate current (2012) age structure.

Components of Change

3.15

An analysis of the four most recent comparable SNPPs for Tamworth Borough (Table 3.2) illustrates the differences in the components of change underpinning the population projections. This is in addition to the considerable differences in the level of population growth illustrated in Figure 3.3.

Table 3.2 Tamworth Borough Population Projections: Components of Change

Annual Average Change	2008-Based SNPP	2010-Based SNPP	2011-Based SNPP (Interim)	2012-Based SNPP
Births	936	1,036	1,070	940
Deaths	656	676	600	688
Domestic Migration In	2,596	2,992	2,930	2,804
Domestic Migration Out	2,908	3,000	2,960	2,800
International Migration In	100	200	200	100
International Migration Out	100	100	160	100

Source: ONS 2008, 2010, 2011 and 2012-based SNPPs

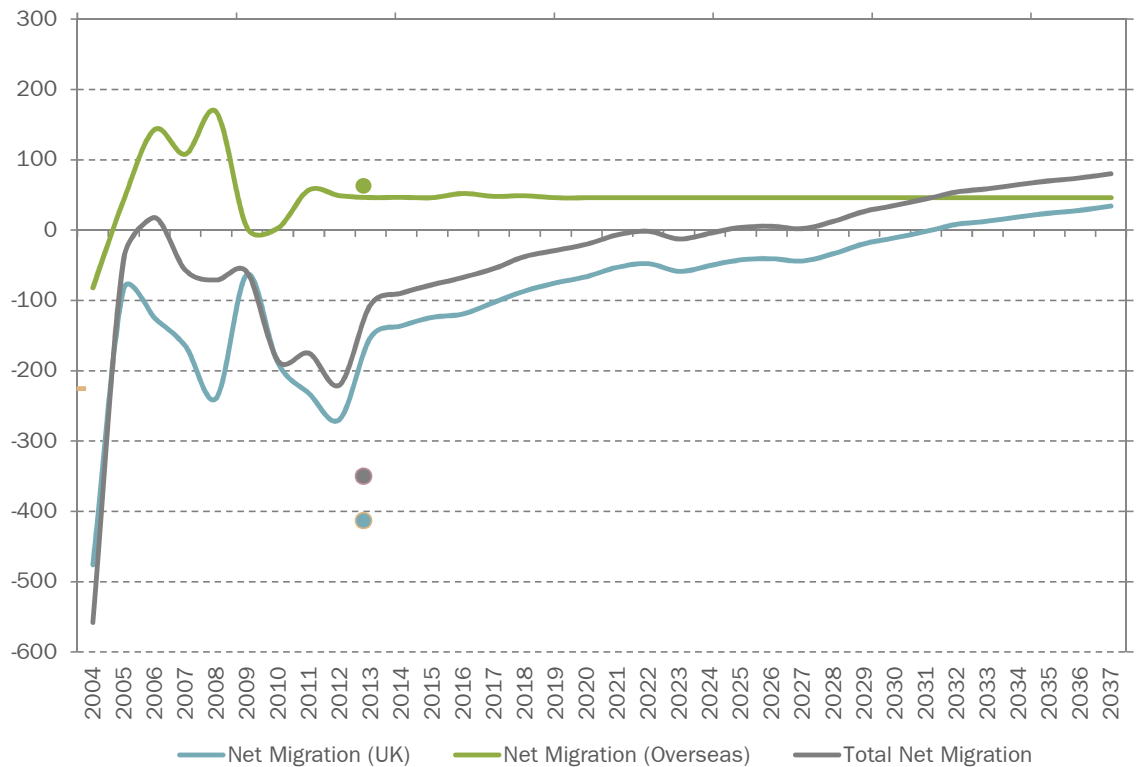
- 3.16 Natural change is relatively consistent across all four population projections with births staying consistent at c. 900-1,000 annually across all of the projections. Deaths per annum also remain at 650-700, except in the 2011-based SNPP which projected significantly lower numbers of deaths. This, combined with a higher number of births, results in a high level of annual natural change in the 2011-based projections which contributes to the higher level of population growth as shown in Figure 3.3.
- 3.17 Another key difference between the projections relates to net migration. Whilst international migration is almost neutral under the 2012-SNPP, net migration varies under the other projections from as low as -48 pa in the 2008-based to +84 pa in the 2010-based SNPP. The 2008-based SNPP projected net out-migration to the UK, whereas more recent projections have projected migration from Tamworth to the rest of the UK to be close to neutral. In the most recent population projections, both internal and international migration are almost neutral, with overall total migration of +4 pa. These projections highlight the impact that adopting different migration assumptions can have on population growth in the Borough.
- 3.18 Comparing the migration estimates from the historic SNPPs is highly problematic, as the methodology has altered significantly over time. For example:
- 1 The 2008-based SNPP used a different methodology for the distribution of internal and international migration than previous sets of projections as they incorporate further developments of the Migration Statistics Improvement Programme;
 - 2 The 2010-based SNPP used a different methodology for the distribution of international in-migrants, which in turn affected estimates of out-migrants, and also improvements to internal migration of students; and,
 - 3 The interim 2011-based SNPP used the mid-2011 population estimates rolled forward from the 2011 Census results as the base, but the assumptions made on future migration trends were the same as those used in the 2010-based SNPP.⁴

⁴ ONS SNPP Quality and Methodology Information 25th September 2012

3.19

Figure 3.5 presents historic net migration flows (internal and international) into and out of the authority as well as the projected scale of movement outlined in the 2012 SNPP. The figure illustrates that the recession may have impacted upon migration flows into and out of Tamworth, with internal migration sharply declining in 2008 and international migration falling in 2009/10. As a result, total net migration between 2009 and 2012 dipped in comparison to levels seen in 2005/06.

Figure 3.5 Historic and Projected Migration Flows – Tamworth



Source: ONS 2012-based SNPP (Components of Change) & 2013 Mid-Year Population Estimates

Note: Points indicate actual values for Tamworth taken from the 2012/13 MYEs.

3.20

In terms of migration projections for Tamworth, net international migration is projected to remain relatively stable at 50 per annum over the period; this is similar to the level recorded for 2012/13 in the 2013 MYEs. Although historically net internal migration has averaged -225 per annum, this is projected to steadily increase, reaching zero by 2031 before becoming positive in the final years of the projection period. The 2013 MYEs did, however, show that in 2012/13 net internal migration was overestimated by the projections, -410 compared to -150 as projected.

4.0

PopGroup Model Run Updates

Introduction

4.1

Taking forward the methodological approach outlined in detail in the previous Housing Needs Study documents for the Borough, the following scenarios were re-modelled to take into account the latest 2012-based SNHP data. The analysis covers the period 2012 to 2031 to align with the available data and does not seek to 'backfill' the projections to 2006, the start date of the Tamworth Local Plan.

Demographic-led Projections:

- a **Scenario A: 2012-based Population and Household Projections:** This scenario represents a projection of the population as in the 2012 SNPP, using the 2012-based household headship rates to re-create the model of household growth. It takes account of dwelling vacancy rates in order to derive a housing need figure from the projections in household growth.

Sensitivity Tests:

- i **Scenario Aa: Partial Catch-Up Headship Rates** – Using the 2012-based headship rates as a starting point, it is projected that by 2033 (starting after 2017 to allow for full economic recovery) headship rates for the younger adult age groups⁵ will have made up half of the difference between the 2012 and 2008-based SNHP headship rates. The underlying population upon which this scenario is based is the same as Scenario A, i.e. the 2012-based SNPP;
- b **Zero Net Migration**⁶ – Whereby the annual international and domestic migration flows under the baseline scenario are equalised to result in a net migration flow of zero (i.e. an identical number of people move into the area as leave the Borough);
- c **Short Term Migration Trends** - based on average gross flows of internal and international migration in Tamworth over the five year period 2008/09 to 2012/13 as taken from the ONS Mid-Year Estimate Series, assuming Tamworth will continue to see migration at a level in line with shorter term trends;
- d **Long Term Migration Trends** – as above, but using a ten year migration average, from 2003/04 to 2012/13, assuming Tamworth will continue to see migration in line with levels achieved on average over the last decade;

⁵ As defined by males and females in the age groups 15-19, 20-24, 25-29 and 30-34.

⁶ For all migration scenarios (C, D and E), the 2012/13 Mid-Year Estimates are taken into account in the modelling to re-create the known population of Tamworth in the year 2013. The migration assumptions are applied from 2013/14 onwards, i.e. zero net, five-year average or ten-year average.

Employment-led Projections

- e **Experian Job Growth** – A ‘policy-off’ trend scenario based upon Experian’s local area-based econometric model. This provides potential unconstrained employment growth in Tamworth (+4,100 jobs 2012-2031) over the assessment period;
- f **Job Stabilisation** – assuming there are no additional jobs created over the assessment period, i.e. the number of jobs remains at the level achieved in 2012;
- g **Past Trends Job Change** – based on past trends of job growth occurring within Tamworth (-77 per annum 2000-2013, based on ONS Job Density data).

Reality Checks

- **SHMA Need** – The Southern Staffordshire SHMA (2012) identified a critical need for 183 affordable homes annually for Tamworth Borough. At a typical rate of around 20% (based on current policy aspirations), this would lead to a requirement of around **915 dpa** for the Borough.
- **Average Past Delivery** – Using past delivery trends to illustrate what the market has previously delivered and project these forward over the assessment period (**189 dpa**).
- **Local Plan tests:** Testing the implications of **250 dpa** (TBC’s preferred housing requirement) and **170 dpa** (the level TBC considers can be accommodated in Tamworth Borough, allowing for development constraints).

Scenarios – Assumptions and Approach

4.2

There are a number of underlying assumptions which NLP has adopted that form the basis for most modelled scenarios. A number of these have been updated since the October 2014 HEaDROOM report and subsequently will impact upon the updated model outputs. These include:

- a Future change assumed in the Total **Fertility** Rates (TFR) and Standardised **Mortality** Rates (SMR) are based on the birth and death projections derived from the ONS 2012-based SNPP. This in turn is used to derive projected TFRs and SMRs under each scenario in PopGroup;
- b Projected **migration** under the 2012-SNPP based scenario is taken from the age-specific numbers of in and out internal and international migrants as projected. For the five and ten year trend scenarios, the total number of migrants is constrained to those figures, and the age-profile is based on the 2012-SNPP projections of migration. For the economic-led scenarios, migration is flexed (i.e. inflated or constrained) in order to produce a population and labour force sufficient to support the given level of job change.

- c Inputs on **headship rates** are based on the 2012-based SNHP which provide data by 5 year age group and sex for Tamworth. These cover a 25-year period to 2037 and the sensitivity scenario is as described, taking into account the 2008-based SNHP.
- d In Tamworth (as in any area), housing **vacancies and second homes** will result in the number of dwellings needed exceeding the total number of households under any given scenario. In establishing future projections, it is likewise expected that the dwelling need will exceed household projections. Hence a vacant and second home rate of 1.84% is applied in all scenarios and held constant over the projection period (this is the average rate for 2011, 2012, 2013 and 2014). This is slightly lower than the average used in the October 2014 report (since this did not take into account 2014 data) and would result in fewer homes needed, given more are occupied.
- e In order to calculate **unemployment** rates, the figures for 2012 (8.2%), 2013 (5.4%) and 2014 (4.3%) (taken from the Annual Population Survey model-based unemployment rates) were used. In projecting unemployment forward it is assumed that by 2020 the unemployment rate will have gradually returned to its pre-recession average (4.4%). This figure was then held constant to the end of the forecasting period (2031) on the grounds that it better reflects the long term trend (and a non-recession unemployment rate) than the unemployment rate seen throughout the recession. These unemployment figures represent the most up-to-date APS publication as of May 2015, and as a result of revisions the rates vary slightly from those used in the October 2014 report. In addition, the 2014 unemployment rate was not available at the time of the October 2014 report.
- f Age and gender-specific **Economic Activity Rates** are used. The bases for these are the 2011 Census⁷, and for age groups up to 65-69 the ONS 2006-based Labour Force Projections [LFP] have been applied. In addition, allowances have been made (for 65-69) for the increases in State Pension Age which will occur in 2018-2020 and 2026-2028; the latter was not take into account in the previous study (the equalisation of State Pension Age is already accounted for in the ONS LFP). In the oldest age groups (70+), the ONS LFP significantly underestimated the economic activity rate, projecting a slight decline in males over the period 2006-2020 and female rates to remain static. Therefore an alternative assumption has been adopted, whereby rates are projected to reach a mid-point between the ONS LFP and a linear trend based on growth between 2001 and 2011. These rates are then held constant.
- g It has been assumed that the **commuting rate (or labour force ratio)** remains static with no inferred increase or decrease in the ratio between in- and out- commuting (except in the sensitivity scenario for Experian).

⁷ Given the 2011 Census only provides rates for older age groups as a single '65 and over' age group, an estimate of older age economic activity (necessary in order to accurately project the labour force) has been calculated based on the decline in economic activity over the life course from the 2001 Census, which provided rates up to age 65-69 and 70-74.

The 2011 Census identified a labour force ratio for Tamworth Borough of 1.41 (i.e. Tamworth is an area of net out-commuting).

- 4.3 Where scenarios have been demographically modelled, a full schedule of the assumptions and inputs can be found in Appendix 1, and the modelling outputs can be found in Appendix 2.

Modelling Results

Demographic-led Scenarios

- 4.4 The demographic scenarios used the components of population change (births, deaths and migration) to project future population change. Under each scenario, the assumptions around household formation and headship rates are applied in order to derive the number of households within the population over time. This is converted into a dwelling need, and in addition the labour force/job change is derived based on the age profile of the projected population. The outputs are presented over the period 2012-2031.

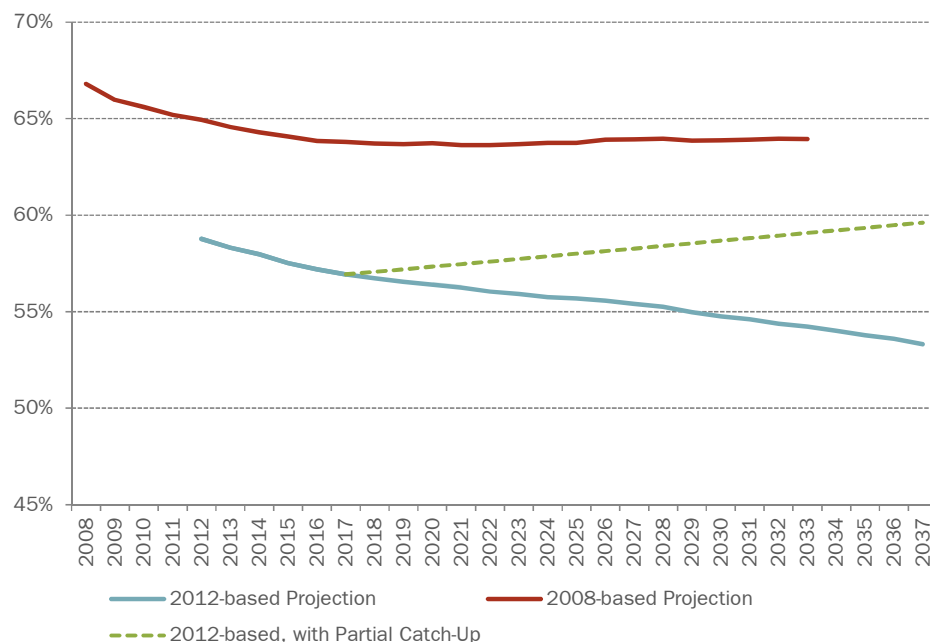
Scenario A: 2012 SNHP/2012 SNPP (2012 Baseline)

- 4.5 This scenario models the 2012-based SNHP and the 2012-based SNPP. This means that it produces the same projection (in terms of household growth) as the headline projections in the CLG Live Table. However, modelling the scenario through PopGroup allows the derivation of job-related outputs, and more specific levels of population change by age. Under this scenario, the population of Tamworth is projected to increase by 5,365 to 2031. The population growth arises primarily due to natural change in Tamworth which totals 5,724, however net migration is negative at -360 bringing total population growth down.
- 4.6 Using 2012-based SNHP headship rates, there will therefore be a total dwelling need of 3,995 between 2012 and 2031, equivalent to **210 dpa**. This is predominantly due to ageing of the local population, given that older people tend to form smaller households over time. It is projected that the number of people aged over 85 in Tamworth Borough will increase from 1,200 in 2012 to 3,400 by 2031; an increase of 283%.
- 4.7 Despite the population growth, the ageing profile of this population indicates a reduction in the size of the labour force, with the working age population declining by 800 by 2031. Although there is projected to be an increase in the economic activity of older people as a result of higher life expectancy and increases in State Pension Age, this increase is not sufficient to offset the decline in the 'typical' working age population where economic activity is high. However, despite the decline in the size of the labour force, the projected decline in unemployment helps balance this out as the labour force becomes more efficient (i.e. a greater proportion of residents are in employment), and an additional 565 jobs would be supported within Tamworth over the period 2012-2031.

Scenario Aa: Sensitivity for Partial Catch-Up Headship Rates

- 4.8 As described above, this sensitivity indicates the difference in housing need under the assumption of different household formation rates in younger age groups than those prescribed by CLG.
- 4.9 Whilst the 2012 household representative rates are more optimistic than their 2011-based (Interim) counterparts, they nevertheless remain more pessimistic compared to the 2008-based SNHP. These represented projections of headship rates in line with longer term trends and did not take into account impacts of the recession on both the supply of housing and the ability of households to form, given the lack of mortgage finance availability and supply of housing. NLP has tested a scenario which assumes that 'pent up' demand within the younger population (15-34 age group) will be released over time. This results in higher household formation rates for those age cohorts which over the long term, results in a partial return to longer term trends.
- 4.10 An example of this is shown in Figure 4.1. This illustrates the 2012-based household representative rates for Males in Tamworth age 25-29, and the sensitivities conducted as part of Scenario Aa. The 2008-based projections indicated that the percent of males in this age group forming a head of household would remain relatively steady from 2016 onwards at around 64%, the 2012-based projections indicated a continued decline.

Figure 4.1 Projected Headship Rates for Males 25-29 - 2012 Baseline, Partial Catch Up Sensitivity



Source: CLG 2008/2012-based Household Projections, NLP Analysis

- 4.11 The partial return to the 2008-based rates has been assumed to begin after a 5-year period (i.e. starting in 2017) to allow for the economy to begin to return to pre-recession trends. As a result of increased household formation in these age groups compared to Scenario A, there is a slightly increased dwelling need of **226 dpa**.

4.12 The key outputs for Scenarios A and Aa are summarised in Table 4.1.

Table 4.1 Summary of Population, Job and Dwelling Outputs - Scenarios A and Aa

	2012-2031	p.a.
Population Change	+5,365	+282
of which natural change	+5,724	+301
of which net migration	-360	-19
Labour Force	-800	-42
Jobs	+565	+30
Scenario A: 2012 Baseline	+3,995	+210
Scenario Aa: Partial Catch Up Headship Rates	+4,289	+226

Source: NLP using PopGroup

Partial Catch Up – Half of the difference between 2012-based and 2008-based projections is made up by 2033 (rates trended thereafter), with this change beginning in 2018

Scenario B: Zero Net Migration

4.13 The zero net migration scenario represents the population impacts of equalising migration (i.e. ensuring that the number of international and domestic migrants coming into the Borough equal the number moving out). Thus whilst in the short term the population is unchanged from the natural change scenario, the profile of the population changes over time due to the different demographic characteristics of in-migrants and out-migrants. This has an impact on the labour force change and household growth.

4.14 This scenario would lead to a population increase of 5,348 residents over the period 2012-2031. This equates to a need of 3,811 new dwellings in Tamworth Borough, or **201 dpa** and the key outputs are shown in Table 4.2.

4.15 Whilst typically, a zero net migration scenario is a hypothetical scenario to assess the housing need were there to be no population growth arising from net in-migration, this scenario actually represents an increase in the amount of in-migration assumed compared to both past trends and the 2012 SNPP. Given that the most recent iterations of population projections have indicated average annual net migration in Tamworth to fluctuate around zero, this scenario is not as unrealistic as might otherwise be the case.

Table 4.2 Summary of Scenario B

	2012-2031	p.a.
Population Change	+5,348	+281
of which natural change	+5,698	+300
of which net migration	-350* (0 from 2013 onwards)	-18
Labour Force	-852	-45
Jobs	+531	+28
Dwellings	+3,811	+201

Source: NLP using PopGroup

***Note:** Net Migration appears as -350 as this includes migration seen within Tamworth, as taken from the 2012/13 Mid-Year Estimates.

Scenario C: Short Term Migration Trends

- 4.16 Implicit within the 2012 SNPP is the assumption that net migration to Tamworth will increase steadily over time, largely as a result of increased net in-migration from within the UK. This is a significant increase on recent trends, which show net migration to Tamworth to be consistently (and in some years significantly), negative. Therefore this scenario adopts an alternative assumption that migration in the future in Tamworth will be in line with recent trends, taken from a five year period 2008/09 to 2012/13. Over this period there was net in-migration from overseas; however, high levels of out-migration elsewhere in the UK has resulted in total net-migration becoming negative.
- 4.17 Under this scenario, there is a high level of natural increase of 5,165. However, net out-migration results in population growth of just 1,307. This scenario represents the lowest level of population growth of all the demographic-led scenarios and is reflective of the high levels of net out-migration in recent years. As a result this generates a decline in the size of the labour force of 3,008, and a decline in the number of jobs by 927. The dwelling need under this scenario is **124 dpa**. Key outputs are summarised in Table 4.3.

Table 4.3 Summary of Tamworth Model Outputs - Scenario C: Short Term Migration

	2012-2031	p.a.
Population Change	+1,307	+69
of which natural change	+5,165	+272
of which net migration	-3,857	-203
Labour Force	-3,008	-158
Jobs	-927	-49
Dwellings	+2,349	+124

Source: NLP using PopGroup

Scenario D: Long Term Migration Trend

- 4.18 This scenario is based upon the same assumptions as Scenario C, albeit a longer term (10-year), migration trend is used. Migration over the past 10 years in Tamworth has again been consistently negative, although between 2004/05 and 2007/08 net migration was close to 0 as a result of an increase in net international migration and a reduction in net internal out-migration. Because of this, the longer term trend in migration does not dampen growth to the same extent as the five year trend, and projecting this forward results in a higher level of population growth as a result.
- 4.19 Under this scenario (as with Scenario C), natural change and overall population growth are positive, although net out-migration remains. Over the period to 2031, the population would increase by 1,916. The key outputs from the longer term migration trend-based scenarios are presented in Table 4.4. This results in a housing need of **136 dpa**; slightly higher than under the five year migration scenario.

Table 4.4 Summary of Tamworth Model Outputs - Scenario D: Long Term Migration

	2012-2031	p.a.
Population Change	+1,916	+101
of which natural change	+5,296	+279
of which net migration	-3,380	-178
Labour Force	-2,639	-139
Jobs	-678	-36
Dwellings	+2,575	+136

Source: NLP using PopGroup

Employment-led Scenarios

- 4.20 A series of employment-led scenarios have been assessed to identify how much additional housing may be needed to take account of employment growth over and above demographic needs.
- 4.21 Whilst there are a complex set of issues involved matching labour markets with housing markets (with different occupational groups having a greater or lesser propensity to travel to work), there are some simple metrics which can explore the basic alignment of employment, demographic and housing change, notably the amount of housing needed to sustain a labour force (and therefore number of jobs) assuming certain characteristics around commuting and unemployment.
- 4.22 Ensuring a sufficient supply of homes within easy access of employment represents a central facet of an efficiently functioning economy and can help to minimise housing market pressures and unsustainable levels of commuting (and therefore congestion and carbon emissions). If the objective of employment growth is to be realised then it will generally need to be supported by an adequate supply of suitable housing.

Scenario E: Experian Forecasts Job Growth

- 4.23 This represents a 'policy-off' scenario using Experian (2014) projections of future employment growth in Tamworth. This represents the 'unconstrained' potential of the area taking account of macro-economic factors and based on its existing business base, mix of sectors and inherent economic qualities. At a local level, past growth trends (and in particular the performance of individual sectors in the local area relative to the regional performance) represent the key driver of determining future growth. For Tamworth, the projected job growth over the period 2012-2031 in the Experian model is 4,100.
- 4.24 In order to support this increase, the population would need to increase by 14,502, increasing the labour force by 4,427 (sufficient to support 4,100 jobs). This population growth would predominantly arise from an increase in in-migration, which would total 7,685 across the assessment period (an average of 404 per annum); this is a higher level of in-migration than would occur under all of the demographic-led scenarios indicated in Scenarios A to D.

4.25 Under this scenario, there would be a need for 7,308 dwellings, equivalent to **385 dpa**.

Table 4.5 Summary of Scenario E

	2012-2031	p.a.
Population Change	+14,502	+763
of which natural change	+6,817	+359
of which net migration	+7,685	+404
Labour Force	+4,427	+233
Jobs	+4,100	+216
Dwellings	+7,308	+385

Source: NLP using PopGroup

Scenario F: Job Stabilisation

4.26 This scenario assesses the need for housing were there to be no additional net job growth in Tamworth over the period 2012-2031. The overall population growth which would need to occur in order to achieve the necessary labour force is +3,599. After taking account of the natural change within the population, this equates to total net out-migration of 1,408, or 78 per annum. The housing need associated with this scenario is **168 dpa**.

Table 4.6 Summary of Scenario F

	2012-2031	p.a.
Population Change	+3,599	+189
of which natural change	+5,079	+267
of which net migration	-1,480	-189
Labour Force	-1,637	-86
Jobs	0	0
Dwellings	+3,198	+168

Source: NLP Using PopGroup

Scenario G: Past Job Trends

4.27 Between 2000 and 2013, Tamworth saw average net decline in the number of jobs of 77, or 1,000 in total (based on the total workplace-based jobs recorded by ONS in its Job Density calculations). This scenario looks at the implications of assuming that in the future, the number of jobs in Tamworth will change in line with these past trends. Trending this forward would result in total job decline over the period 2012-31 of 1,463. As a result of a decline in the number of jobs to be supported by the Tamworth population, the overall population growth and housing need is lower than under Scenario F. Net out-migration would be 4,803, which combined with natural increase of 4,529, results in an overall population decline of 274. The resultant dwelling need under this scenario would equate to just **91 dpa**.

Table 4.7 Summary of Scenario G

	2012-2031	p.a.
Population Change	-274	-14
of which natural change	+4,529	+238
of which net migration	-4,803	-252
Labour Force	-3,800	-200
Jobs	-1,463	-77
Dwellings	1,738	+91

Source: NLP using PopGroup

Policy/Supply-Led Scenarios

4.28 These scenarios examine the implications (in terms of population growth, migration and job growth) of constraining additional housing over the period 2012-2031 to a range of specified levels; the bases for which are set out under the relevant headings. Although these are not considered to form part of the scenarios which would underpin and objective assessment of housing need, they are nevertheless useful indicators as to the impacts of providing housing based on a range of assumptions.

Affordable Housing Need

4.29 As noted above, the Southern Staffordshire SHMA (2012) identified a critical need for 183 dpa (net) affordable housing dpa over the next five years in Tamworth. At a typical delivery rate of 20% of all housing, including market, and aligned with TBC's policy aspirations, which would lead to a requirement of around 916 dpa in total.

4.30 The provision of 915 dpa would result in population growth of 41,260 in Tamworth, of which 10,919 would result from natural change and 30,341 from net in-migration. The labour force would increase by 19,296, and support job growth of 14,155, or 745 per annum.

Average Past Delivery

4.31 Over the period 2001/02 to 2013/14, 2,454 dwellings were delivered in Tamworth Borough at a rate of 189 dpa (although since 2007/08 this rate has fallen to 141 dpa – just 48 dwellings were completed in 2013/14). Were this level of development to continue across the projection period, there would be net out-migration of 893 and total population growth of 4,640. The labour force would decline by 1,103, although there would be a small level of job growth of 361 (19 per annum).

Local Plan Test – 250 dpa

4.32 The Tamworth Local Plan identifies that the housing OAN for the Borough equates to 250 dpa. The provision of 250 dpa over the period 2012-31 would result in population growth of 7,717 of which 1,732 is a result of in-migration.

There would be an increase in the size of the labour force as a result of this level of population growth, whilst job growth of 1,521 would be supported.

Local Plan Test – 170 dpa

4.33 Although TBC identify in their draft Local Plan that the OAN for the Borough totals 250 dpa, Policy SS1 states that this cannot be fully met within the Borough boundaries. Provision has been made for 170 dpa to be physically located in Tamworth Borough to meet its needs. As a result of this level of housing provision there would remain a high degree of net out-migration; however population growth would still be positive at 3,682 as a result of natural change. Although there would be a decline in the size of the labour force of 1,637 over the period, there would be zero job growth over the plan period.

4.34 A summary of the outcomes under the Policy/Supply-led scenarios is presented in Table 4.8.

Table 4.8 Key Model Outputs - Policy/Supply-led Scenarios

	SHMA Requirement		Past Delivery		Local Plan - 250 dpa		Local Plan - 170 dpa	
	2012-2031	p.a.	2012-2031	p.a.	2012-2031	p.a.	2012-2031	p.a.
Dwellings	17,385	915	3,591	189	4,750	250	3,230	170
Population Change	41,260	2,172	4,640	244	7,717	406	3,682	194
of which natural change	10,919	575	5,533	291	5,985	315	5,392	284
of which net migration	30,341	1,597	-893	-47	1,732	91	-1,710	-90
Labour Force	19,296	1,016	-1,103	-58	612	32	-1,637	-86
Jobs	14,155	745	361	19	1,521	80	0	0

Source: NLP using PopGroup

Summary

4.35 The Scenarios present a wide range of housing need for the period 2012 to 2031 based upon different indicators of what the need for housing in Tamworth could be. These are summarised in Table 4.9.

4.36 They indicate a need for between 91 dpa (Scenario G – past job trends) and 385 dpa (Scenario E – Experian). In addition, the dwelling needs under each scenario as in the October 2014 Update is shown and indicates that the dwelling need has declined (with the exception of Scenario G). As well as the use of more optimistic headship rates have been used in this update (2012-based headship rates), a number of other data inputs have also been updated which have had the impact of reducing the overall number of dwellings needed under certain scenarios.

Table 4.9 Summary of Updated Tamworth Scenarios 2012-2031

	2012-based SNHP Update				Dwellings p.a. in Previous Modelling (October 2014 Report)
	Population Change	Job Growth 2012-31	Dwellings 2012-2031	Dwelling Change p.a.	
Scenario A: 2012 SNPP, Baseline Headship Rates	5,365	+565	3,995	+210	236
Scenario Aa: 2012 SNPP Sensitivity			4,289	+226	~
Scenario B: Zero Net Migration	5,348	531	3,811	+201	232
Scenario C: Short Term Migration	1,307	-927	2,349	+124	186
Scenario D: Long Term Migration	1,916	-678	2,575	+136	177
Scenario E: Experian	14,502	+4,100	7,308	+385	465
Scenario F: Job Stabilisation	3,599	+0	3,198	+168	241
Scenario G: Past Job Trends	-274	-1,463	1,738	+91	-17

Source: NLP based on PopGroup Outputs

Market Signals

4.37 The Planning Practise Guidance indicates that once an assessment of need based upon the household projections is established, this should be adjust to reflect appropriate market signals and indicators of the balance between the demand for and supply of housing. The guidance explicitly sets out six market signals:

- 1 Land prices;
- 2 House prices;
- 3 Rents;
- 4 Affordability;
- 5 Rate of development; and,
- 6 Overcrowding.

4.38 It goes on to indicate that an appropriate comparison of these should be made with upward adjustment made where any of the indicators suggest imbalance between supply and demand, and the need to increase housing supply to meet demand and tackle affordability issues.

4.39 The October 2014 HEaDROOM update provided an in-depth analysis of the market signals in Tamworth Borough as required by the Practice Guidance. Since then, some of the data for these signals has been updated and this section provides an update based on new data and more in-depth analysis (which takes account of the absolute change in the indicators as well as relative change).

Land Prices

4.40 As in 2014, the most readily available and nationally consistent data on unequipped agricultural values or residential building land prices for Tamworth is not available from the VOA. This is because the VOA only covers major centres or areas which generate sufficient activity to determine a market pattern.

House Prices

4.41 Since the previous report, house price data for the full calendar year for 2014 has been made available. It shows that the median house price in Tamworth is currently £145,000 compared to £154,000 in Staffordshire and £195,000 in England. This represents an increase over the last 15 years of 142%, equivalent to £85,005. As shown in Table 4.10, this is a lower increase in both absolute and relative terms compared to both Staffordshire County and national levels.

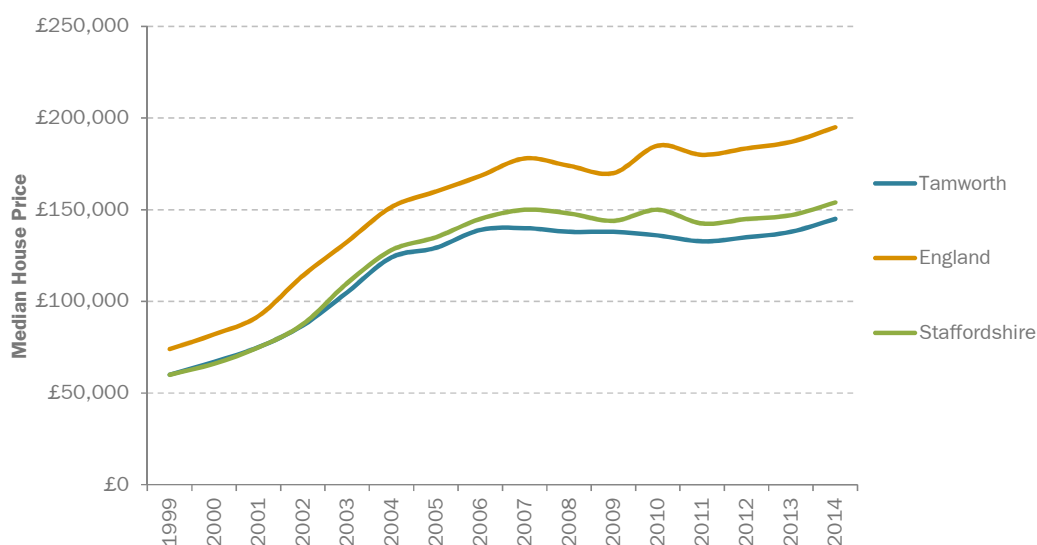
Table 4.10 Median House Price Data

	1999	2014	% Change	Absolute Change
Tamworth	£59,995	£145,000	+142%	+£85,005
Staffordshire	£60,000	£154,000	+157%	+£94,000
England	£73,000	£195,000	+164%	+£121,000

Source: CLG Live Table 586/Land Registry

4.42 As illustrated in Figure 4.2, house prices in Tamworth over the last 15 years have been consistently below the national rate, and since c.2006, the County rate too. As of 2014, Tamworth is the 82nd (out of 326) cheapest district in England in terms of median house prices.

Figure 4.2 Median House Prices 1999-2014



Source: CLG Live Table 586/Land Registry

Rents

- 4.43 Similarly, high and increasing rents in an area can also indicate stress in the housing market as a result of imbalanced demand and supply. Series data from VOA statistics on private market rents are only available from 2011 up to Q3 2014, however trends are still apparent.
- 4.44 As of Q3 2014, the median monthly rent in Tamworth was £550, ranging from £450 for a 1-bed dwelling and up to £885 for a 4+bed dwelling. This means that in terms of median monthly rents, Tamworth is the 56th cheapest Local Authority in England. By comparison, median monthly rents in England were £595 and in Staffordshire £510; this is shown in Table 4.11.
- 4.45 The median monthly rent in Tamworth is the same as in Q2 2011, indicating rents have remained relatively static in recent years. This suggests that affordability within the private rental sector has remained relatively stable over the last few years, particularly when nationally rents have increased by 4.4% (£25) over the same period. Rents in Staffordshire have also seen an increase, however due to the cost of rent being higher in 2011, rents in 2014 were still lower than in Tamworth (at £510).

Table 4.11 Median Monthly Rent Data

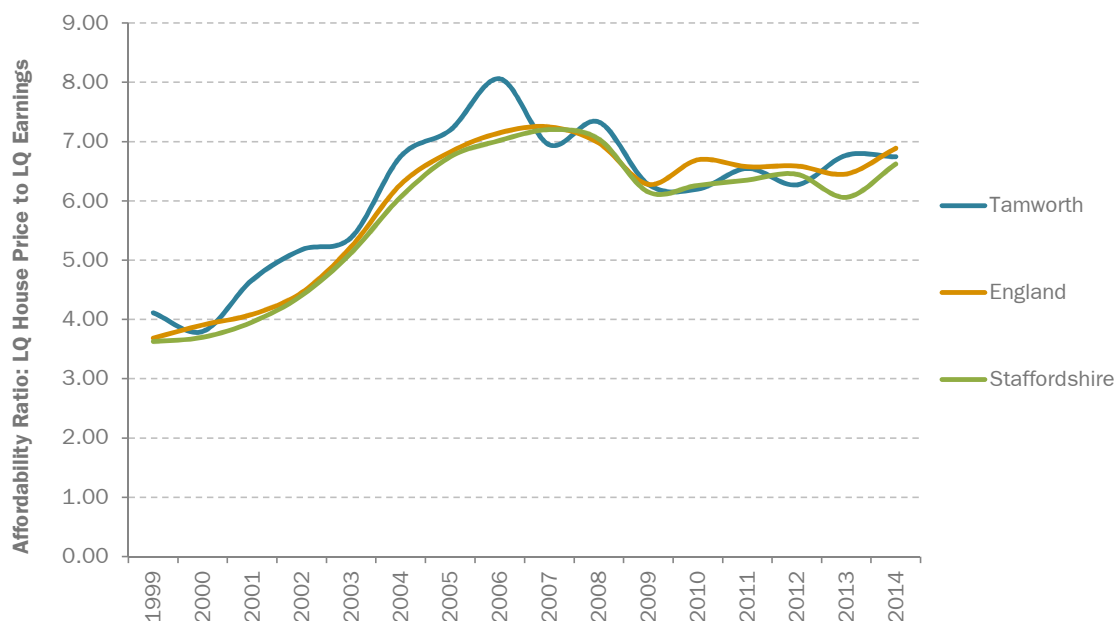
	Q2 2011	Q3 2014	% Change	Absolute Change
Tamworth	£550	£550	0.0%	£0
Staffordshire	£500	£510	+2.0%	+£10
England	£570	£595	+4.4%	+£25

Source: VOA Private Rental Market Statistics

Affordability

- 4.46 The Practice Guidance indicates that assessing affordability includes comparing the cost of housing with the ability to pay; the relevant indicators for this being lower quartile earnings and lower quartile house prices, which together form an affordability ratio which can be tracked over time.
- 4.47 The lower quartile affordability ratio is illustrated in Figure 4.3 for Tamworth, Staffordshire and England. It shows that over the last 15 years the ratio of lower quartile house price to lower quartile earnings has fluctuated significantly in Tamworth, and more than across Staffordshire or England. In 2006 LQ house prices in Tamworth were more than 8 times LQ earnings. As of 2014, the affordability ratio in Tamworth was 6.74, compared to 6.62 in Staffordshire and 6.88 in England. This highlights that although Tamworth sees much lower house prices than nationally, the impact of lower wages means that this housing is no more affordable, and has in some years been even less affordable than elsewhere in the country.

Figure 4.3 Lower Quartile Affordability Ratio - 1999-2014



Source: CLG Live Table 576/Land Registry/ASHE

4.48

The affordability ratio and change in each of the areas is shown in Table 4.12. Although the increase in Tamworth has not been as high as Staffordshire or England overall in both absolute and relative terms, the ratio was higher in 1999 (at 4.11) and as of 2014, is at a similar level to the national rate.

Table 4.12 Lower Quartile Affordability Ratio Data

	1999	2014	% Change	Absolute Change
Tamworth	4.11	6.74	+64%	+2.63
Staffordshire	3.36	6.62	+83%	+3.00
England	3.68	6.88	+87%	+3.20

Source: CLG Live Table 576/Land Registry/ASHE

Rate of Development

4.49

The rate of development is intended to be a supply-side indicator of past under-delivery. One way to assess this is to compare past completions against the relevant housing requirement for that period, assuming that the housing requirement was a reasonable and fully tested basis for that period in order to meet development needs. This should be used as an indicator only and not the definitive quantity which housing need should be uplifted to account for unmet need.

4.50

In Tamworth the relevant 'planned supply' is dictated by the requirement within the West Midlands RS. The RS identified an allocation of 2,900 dwellings (145 dpa) within the Borough's boundaries; although a further 1,000 dwellings were identified in Lichfield's District to meet Tamworth's needs. Between 2006/2007

and 2013/14, against the RS target of 145 dpa in the RS, there is an overall surplus of 255 dwellings. This is attributable to high levels of over-provision in the earlier years, with net completions in recent years falling to as low as 48.

Overcrowding

- 4.51 The Practice Guidance states that indicators on:
“overcrowding, concealed and sharing households, homelessness and the numbers in temporary accommodation demonstrate unmet need for housing. Longer term increases in the number of such households may be a signal to consider increased planned housing number...” [ID 2a-019-20140306].
- 4.52 The 2011 Census suggested that a lower percentage of households in Tamworth were overcrowded compared to nationally (4.6% compared to 8.7%); however, this is higher than across Staffordshire (4.1%). Although overcrowding is relatively low, the levels of overcrowding increased between 2001 and 2011 and this may be associated with the changes in affordability over this time. Worsening affordability means that people are either willing to accept sub-optimal living conditions (e.g. living in dwellings too small for their needs) or are forced into accepting such housing outcomes (e.g. due to being priced out of the market). Notwithstanding, the increases in overcrowding in Tamworth have not been to the extent seen in Staffordshire and England having increased by 5.4% between 2001 and 2011. By comparison there was a 22.7% increase in England in overcrowded households and 12.8% in Staffordshire.
- 4.53 The 2011 Census also showed a similar pattern for concealed families which represented 1.4% of families in Tamworth, compared to 1.3% in Staffordshire and 1.9% in England. However, this represents a 71% increase in the Borough, compared to 58% in Staffordshire and 59% in England, suggesting that the rate of increase in these types of families has been worse in Tamworth. In fact, this increase places Tamworth within the worst 25% of all Local Authorities in terms of the rate of increase in concealed families. Again, this is likely to be related to affordability, meaning families are either willing to share dwellings with other families (e.g. a couple with children living in the parents' home) or are forced to share by necessity.
- 4.54 Updated data on homelessness shows that in 2013/2014, 2.09 households per 1,000 in Tamworth were homeless and in priority need. This is lower than the 2.32 national rate; however, it is substantially higher than in Staffordshire (which is 1.14). In addition, whilst England and Staffordshire have seen high levels of decline in both absolute and relative terms (as shown in Table 4.13), levels in Tamworth have failed to keep pace with this decline and have seen comparatively little levels of change. The decline in Tamworth is within the worst 25% of Local Authorities in terms of both absolute and relative change in households in priority need.

Table 4.13 Homelessness data (2013/14) - Homeless Households in Priority Need

	Households in Priority Need (per 1,000 households)		Absolute Change	Change in %
	2004/05	2013/14		
Tamworth	3.00	2.09	-0.91	-30.2%
Staffordshire	4.51	1.14	-3.37	-74.8%
England	5.73	2.32	-3.41	-59.5%

Source: CLG Live Table 784/P1e Returns

4.55 As of 2013/14, Tamworth had fewer households (0.22 per 1,000) in temporary accommodation compared to England (2.59); however, this is higher than in Staffordshire (0.18). It is not possible to compare changes over time due to a lack of data for Tamworth.

Synthesis of Market Signals

4.56 Drawing together the updated data for Tamworth and further analysis of the relevant market signals allows us to build a picture of the current housing market in Tamworth, the extent to which housing demand is not being met and the outcomes occurring.

The Tamworth Housing Market

4.57 The updated analysis indicates that, to some extent, the housing market is failing to match demand with supply. Although house prices are lower than nationally, the impact of low wages in the Borough means that housing is no more affordable than elsewhere in England and has in fact been much worse in recent years.

4.58 Overall there has been a surplus of supply against the relevant targets overall since 2006/07 however in recent years supply has dropped significantly. This decline is likely to have impacted on other market indicators in Tamworth.

4.59 In order to draw meaningful conclusions regarding the extent to which such market signals indicate housing market stress in Tamworth, the Practice Guidance suggests that a comparison of both absolute levels and change in such indicators should be made with similar areas and/or areas within the housing market area and nationally. In this respect, Tamworth has been compared and ranked against other nearby Local Authorities and the overall indicators for England. Staffordshire (County) has also been included for illustrative purposes.

4.60 The Local Authority comparator areas have been chosen as they constitute districts which border Tamworth and are within the same wider HMA, and/or have some connection through migration and commuting:

- 1 Lichfield;
- 2 Cannock Chase;
- 3 North Warwickshire;
- 4 Birmingham
- 5 South Staffordshire;
- 6 East Staffordshire;
- 7 Walsall; and,
- 8 Stafford.

4.61 Table 4.14 demonstrates how Tamworth ranks in terms of house prices, affordability and rental costs, whilst Table 4.15 shows overcrowding and homelessness indicators. A higher ranking in these tables indicates a worse performing market signal, and vice versa.

Table 4.14 Market Signals Comparator Table - House Prices and Affordability

Rank	House Prices			Affordability			Rents		
	Median (2014)	% Change (1999-2014)	Absolute Change (1999-2014)	Ratio (2014)	% Change (1999-2014)	Absolute Change (1999-2014)	Median (Q3 2014)	% Change (Q2 2011-Q3 2014)	Absolute Change (Q2 2011-Q3 2014)
1	England	England	England	Lichfield	East Staffordshire	Lichfield	England	Birmingham	Birmingham
2	Lichfield	Stafford	Lichfield	South Staffordshire	Birmingham	England	South Staffordshire	South Staffordshire	South Staffordshire
3	South Staffordshire	Staffordshire	South Staffordshire	North Warwickshire	Lichfield	North Warwickshire	Lichfield	Stafford	Stafford
4	Stafford	East Staffordshire	Stafford	England	England	Staffordshire	Birmingham	North Warwickshire	England
5	North Warwickshire	Birmingham	Staffordshire	Tamworth	North Warwickshire	South Staffordshire	Tamworth	England	North Warwickshire
6	Staffordshire	Lichfield	North Warwickshire	Stafford	Walsall	East Staffordshire	North Warwickshire	East Staffordshire	East Staffordshire
7	East Staffordshire	Walsall	East Staffordshire	Staffordshire	Staffordshire	Stafford	Stafford	Walsall	Walsall
8	Tamworth	Tamworth	Tamworth	Cannock Chase	Cannock Chase	Cannock Chase	Staffordshire	Lichfield	Lichfield
9	Birmingham	North Warwickshire	Birmingham	East Staffordshire	Stafford	Birmingham	Cannock Chase	Staffordshire	Staffordshire
10	Walsall	South Staffordshire	Walsall	Walsall	South Staffordshire	Tamworth	East Staffordshire	Cannock Chase	Cannock Chase
11	Cannock Chase	Cannock Chase	Cannock Chase	Birmingham	Tamworth	Walsall	Walsall	Tamworth	Tamworth
Source:	CLG Live Table 586/Land Registry	CLG Live Table 586/Land Registry	CLG Live Table 586/Land Registry	CLG Live Table 576/Land Registry/ASHE	CLG Live Table 576/Land Registry/ASHE	CLG Live Table 576/Land Registry/ASHE	VOA Private Rental Market Statistics	VOA Private Rental Market Statistics	VOA Private Rental Market Statistics

Table 4.15 Market Signals Comparator Table - Overcrowding and Homelessness indicators

Rank	Overcrowded Households			Concealed Families			Households in Priority Need			Households in Temporary Accommodation*		
	Overcrowded Households, % (2011)	Change (%) (2001-2011)	Change (percentage points) (2001-2011)	Concealed Families, % (2011)	Change (%) (2001-2011)	Change (percentage points) (2001-2011)	per 1,000 Households (2013/14)	% Change (2004/05-2013/14)	Absolute Change (2004/05-2013/14)	per 1,000 Households (2013/14)	% Change (2004/05-2013/14)	Absolute Change (2004/05-2013/14)
1	Birmingham	East Staffordshire	Birmingham	Birmingham	East Staffordshire	Birmingham	Birmingham	Walsall	Walsall	England	East Staffordshire	East Staffordshire
2	England	Birmingham	England	Walsall	Tamworth	Walsall	Walsall	North Warwickshire	North Warwickshire	Birmingham	Lichfield	North Warwickshire
3	Walsall	Stafford	East Staffordshire	England	Cannock Chase	East Staffordshire	England	Tamworth	Tamworth	Lichfield	Birmingham	Lichfield
4	East Staffordshire	England	Walsall	East Staffordshire	South Staffordshire	England	Tamworth	Birmingham	East Staffordshire	Walsall	Walsall	Walsall
5	Cannock Chase	Lichfield	Stafford	North Warwickshire	Stafford	South Staffordshire	East Staffordshire	East Staffordshire	Lichfield	Tamworth	England	Staffordshire
6	Tamworth	Walsall	Lichfield	South Staffordshire	England	Tamworth	Lichfield	England	South Staffordshire	East Staffordshire	Staffordshire	South Staffordshire
7	Staffordshire	Staffordshire	Staffordshire	Tamworth	Staffordshire	Cannock Chase	North Warwickshire	Lichfield	Staffordshire	Staffordshire	Cannock Chase	Birmingham
8	Stafford	North Warwickshire	North Warwickshire	Staffordshire	Lichfield	North Warwickshire	Staffordshire	Staffordshire	England	Cannock Chase	South Staffordshire	Cannock Chase
9	North Warwickshire	Tamworth	Tamworth	Lichfield	Birmingham	Staffordshire	Cannock Chase	Stafford	Stafford	South Staffordshire	North Warwickshire	England
10	Lichfield	Cannock Chase	Cannock Chase	Cannock Chase	Walsall	Stafford	Stafford	South Staffordshire	Birmingham	North Warwickshire		
11	South Staffordshire	South Staffordshire	South Staffordshire	Stafford	North Warwickshire	Lichfield	South Staffordshire	Cannock Chase	Cannock Chase			
Source:	Census 2011	Census 2001, Census 2011	Census 2001, Census 2011	Census 2011	Census 2001, Census 2011	Census 2001, Census 2011	CLG Live Table 784 (P1e Returns)	CLG Live Table 784 (P1e Returns)	CLG Live Table 784 (P1e Returns)	CLG Live Table 784 (P1e Returns)	CLG Live Table 784 (P1e Returns)	CLG Live Table 784 (P1e Returns)

*Some data missing for this indicator.

- 4.62 The updated assessment of market signals provides an indication of the scale of housing market stress within Tamworth Borough. Although absolute house prices are not particularly high in Tamworth, other indicators would suggest some imbalance between demand and supply compared to other neighbouring areas and the County overall.
- 4.63 Across many indicators, Tamworth has performed worse compared to the Staffordshire County average, indicative of where Tamworth is positioned within the wider area. Compared to the County indicators, Tamworth has worse affordability (as of 2014), higher median monthly rents (as of Q3 2014), a higher percentage of overcrowded households and concealed families (as of 2011) and more households in priority need and temporary accommodation (2013/14). This highlights that, although Tamworth has amongst the lowest house prices in the Country, the area still faces worsening market signals when considering these prices in the context of local factors such as wages and housing supply which will have had a knock on effect on indicators of overcrowding and homelessness.
- 4.64 Compared to the neighbouring Authorities, Tamworth has relatively low house prices but poor affordability and slightly higher rents. In addition, the number of households who are homeless and in priority need has been amongst the highest compared to other areas and has seen some of the strongest changes in recent years. Although Tamworth has seen a relatively small increase in the number of overcrowded households between the 2001 and 2011 Censuses, it has seen some of the highest increases in concealed families, highlighting issues with a potential shortfall in supply which has forced families to share housing.
- 4.65 The extent to which the demographic 'starting point' for identifying OAN needs to be boosted to address market signals is necessarily an area of judgement. The Practice Guidance is clear that the more significant the affordability constraints and the stronger the other indicators of high demand, the larger the improvement in affordability needed and, therefore the larger the additional supply response should be. Hence whilst it is considered that an upward adjustment is likely to be necessary, particularly given that the Practice Guidance highlights that *"a worsening trend in **any** of these indicators will require upward adjustment to planned housing number based solely on household projections..."*⁸ [NLP emphasis], the scale will need to be carefully considered.
- 4.66 It is NLP's judgement that, balancing the various updated key market indicators, a modest upward adjustment would be necessary. This should broadly equal a **10% increase** from the demographic starting point. Such an uplift aligns with recent Inspector's interpretations of what might constitute a

⁸ §2a-020-20140306

'modest' uplift to a demographic starting point (see for example the Uttlesford⁹ and Eastleigh¹⁰ Local Plan Inspector's reports).

SHMA/Affordable Housing Need

- 4.67 The Southern Staffordshire SHMA (2012) identified a critical need for 183 affordable dwellings per annum over the next five years in Tamworth. At a typical rate of around 20% affordable homes (as part of mixed affordable-market schemes) based on current policy aspirations which would equate to a total need of around **915 dpa**.
- 4.68 The Framework suggests that having identified the OAN for affordable housing, the Local Plan should meet this need subject to the constraints referred to in paragraphs 14 and 47. Both paragraphs refer to the need to be consistent with other policies set out in the Framework, with paragraph 14 stating that:
- "Local Plans should meet OAN with sufficient flexibility to adapt 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, taken as a whole; or*
 - *Specific policies in this Framework indicate development should be restricted."*
- 4.69 Furthermore, the Framework requires that Local Plans should be "*aspirational, but realistic*" [§154]. Delivering the affordable housing needs at the target delivery rate results in a total need for housing which is around 10-times higher than the delivery level that has been achieved in recent years.
- 4.70 TBC will be obliged to take into account affordable housing needs, recognising that these were identified on a different evidential basis, with the data focussing on household's ability to pay, rather than demographic change and economic growth.
- 4.71 TBC will be required to exercise their policy choice to test whether the provision of such a level of housing would be economically realistic, based upon a variety of considerations including deliverability and viability. As set out in the Practice Guidance: "*Assessing development needs should be proportionate and does not require local councils to consider purely hypothetical scenarios, only future scenarios that could be reasonably expected to occur.*"¹¹
- 4.72 It is highly doubtful whether the delivery of 915 dpa could be considered a realistic outcome for Tamworth Borough, given that it has been demonstrated that this would require a level of population growth equal to 41,260, of which

⁹Examination of the Uttlesford Local Plan: Summarised conclusions of the Inspector after the Hearing Session on 03/12/14

¹⁰Examination of the Eastleigh Local Plan: Preliminary conclusions on Housing Needs and Supply and Economic Growth (Post Hearing Note 2) 28/11/14

¹¹Practice Guidance 2a-003-20140306

30,341 would result from net in-migration. Such a level of population growth would be more than 7-times higher than the 2012-based SNPP indicates.

5.0 Discussion

Introduction

5.1 The Government's Practice Guidance states that '*household projections published by the Department for Communities and Local Government should provide the starting point estimate of overall housing need*'. It also states that the household projections may require adjustment to reflect factors affecting local demography and household formation rates which are not necessarily captured in past trends.¹²

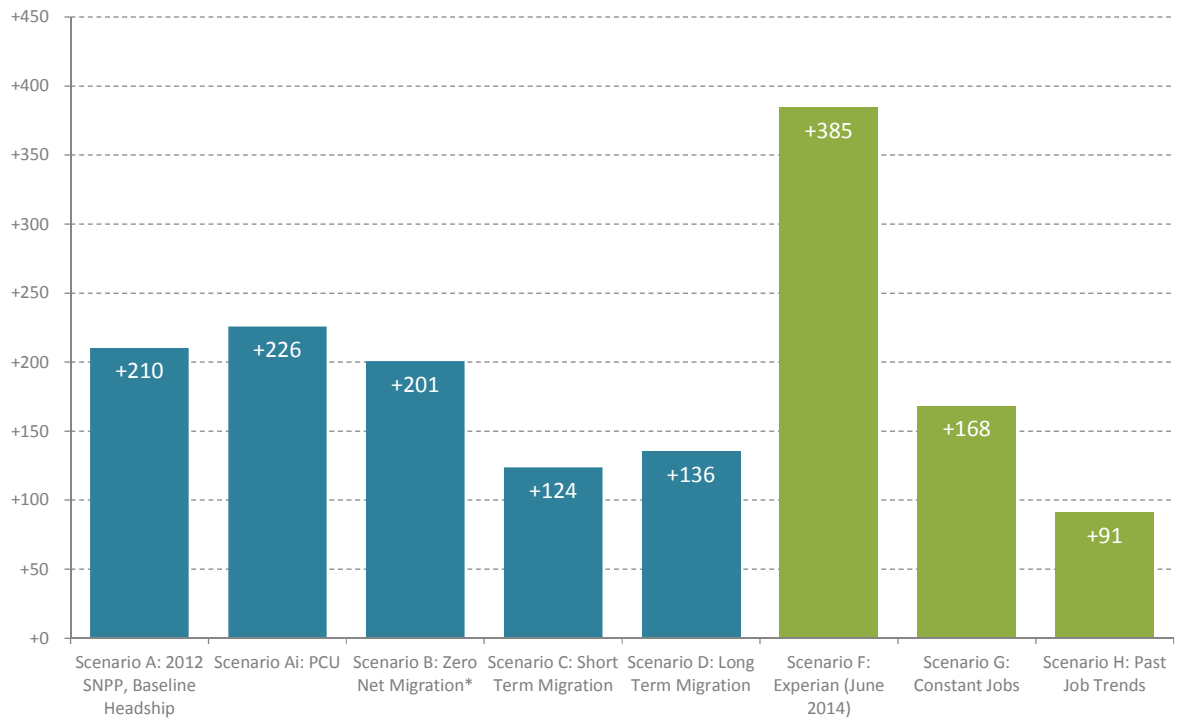
5.2 To comply with the Practice Guidance, this 2015 Update used the latest household projections to derive the baseline demographic need, which acts as the 'starting point' when determining the most appropriate housing OAN. Thereafter, various assumptions, adjustments and sensitivities have been applied to take account of local factors and economic aspirations.

Implications of the 2012-based SNHP on Tamworth's OAN

5.3 Figure 5.1 illustrates the outcomes of the full range of updated scenarios (see also Table 4.9). Although the total number of households projected by the 2012-based SNHP is lower than both the 2011-based Interim and 2008-based projections, the rates of household formation underpinning the 2012-based SNHP fall between these earlier projections, whilst the changes to the total number of household are also a result of significant changes to the underlying SNPPs. Whilst in isolation the expected result would be a decrease in housing need based on household growth alone, given the rates of household formation are lower than in the previous report, there are other inputs which interact and result in differences to the overall housing need.

¹² Practice Guidance, Ref 2a-015-20140306

Figure 5.1 Tamworth Outputs - Dwellings per Annum



Source: NLP using PopGroup

Appropriateness of Scenarios

Demographic Scenarios

- 5.4 Scenario A indicates the dwelling need as derived from the 2012-based household projections. Taking into account a dwelling vacancy rate of 1.84%, the demographic baseline for considering housing need based on the CLG 2012-based household projections is **210 dpa**. This represents the demographic starting point upon which any housing OAN for Tamworth Borough should be derived.
- 5.5 The 2012-based SNPP (upon which these household projections are based) projects that net migration to Tamworth will gradually increase over the period to 2037, from -220 p.a. in 2012 to +80 p.a. by 2030. This increase is steady over the 25-year projection period of the 2012 SNPP and is attributable to a projected increase in net internal migration compared with past trends. Although there would be a small decline in the size of the labour force, it is projected that this level of population growth would support 565 net additional jobs over the period. This is predominantly concentrated around the earlier years of the assessment period.
- 5.6 A sensitivity test (Scenario Ai) which considers the implications of adopting more optimistic headship rates in younger age groups would result in a slightly higher annual housing need of 226 dpa (an increase of 7.6%) and is illustrative of the increased level of housing need that would arise should the assumptions towards higher household formation in these age groups be adopted.

- 5.7 Given that over the last 10 years net migration to Tamworth has been negative, projecting the population and housing need based on short and long term migration trends results in significant out-migration (c. 3,000-4,000 people) and a lower housing need than projected under the 2012-based SNPP. Based on a 5-year trend the housing need would be 124 dpa, whilst based on a 10-year trend the need would be 136 dpa. Both of these scenarios would result in a more significant decline in the labour force and a decline in the number of jobs. Under the five year migration scenario, the labour force would decline by 3,008 workers and there would be job loss of 927; under the ten year scenario, the labour force would decline by 2,639 and there would be (net) job losses of 678.
- 5.8 The migration-led scenarios provide a clear indication of housing need under the assumption that past trends will continue (be that five or ten years trends). However, these should be considered alongside other assumptions, for example given Tamworth's location the potential for increased migration flows out of Birmingham, which might reasonably be expected to occur in the future.
- 5.9 Although a 'zero net migration' scenario is usually seen as being unrealistic given the limited ability of an Authority to actively control and limit migration to/from the area; in the case of Tamworth this scenario actually represents a middle ground (at least in terms of migration) between the 2012-based SNPP and past migration trends scenarios. This scenario assumes that over time the number of people moving into and out of Tamworth will balance. However the age profile of in- and out-migrants will vary and as a result will create a 'churn', impacting on housing and job related outcomes. Under this scenario there would be a need for **201 dpa** whilst an additional 531 jobs would be supported over the assessment period.

Demographic Conclusions

- 5.10 In summary, based on the evidence brought together through the scenarios, the new starting point for considering full objectively assessed needs is 210 dpa, based on the most up-to-date ONS and CLG projections, in line with the Practice Guidance. Whilst previously, NLP has placed weight on an 'index' based approach to extending the 2011-based (Interim) household projections, the new 2012-based household projections have taken a more optimistic approach to household formation than these 2011-based rates and hence are considered an appropriate starting point. Nonetheless, these rates, particularly for younger age groups, still represent lower headship rates compared to the 2008-based projections. A sensitivity which assumes that in these age groups there is some return to a longer term trend indicates that there would be additional need to cater for this demand, of 226 dpa.
- 5.11 The market signals analysis and update indicates that some upward adjustment to levels of housing above purely demographic-led needs in Tamworth. Although the picture is not clear cut across all indicators (for example with Tamworth having amongst the lowest house prices in the Country), the Practice Guidance is clear that worsening trends in any of the indicators will require upward adjustment. In particular, despite having low

house prices, affordability is similar to the national rate, with lower quartile house prices almost seven times as high as wages. A decline in the rate of delivery is likely to have had knock on effects in Tamworth, despite having a slight overall surplus against previous RS targets (these targets may not however be representative of full needs in Tamworth). Between the Censuses there has been a relatively high increase in the number of concealed households in Tamworth compared to neighbouring areas, with a similar pattern seen for the number of households homeless and in priority need.

- 5.12 Therefore, it is considered that an upwards adjustment to the demographic scenarios (2012 SNPP based) would be appropriate, in the order of **10%**. Applied to the baseline headship rates scenario, this equates to **231 dpa**, whilst under the partial catch up sensitivity (Scenario Ai), this would equate to **249 dpa**.

Employment-led Projections

- 5.13 The Practice Guidance requires plan-makers to assess likely employment growth based on past trends and/or employment forecast. Where the labour force supply is to be less than the projected job growth, the guidance states that this could result in unsustainable commuting patterns which would reduce the resilience of local businesses. In such circumstances, plan-makers should consider how the location of new housing or infrastructure development could help address these problems.
- 5.14 Recognising the importance of achieving a strategy which is internally consistent, it is evident that objectively assessed housing needs should seek to consider both demographic and economic implications. It should be noted that whilst there is not a direct causal relationship between job growth and housing needs, the two are nevertheless fundamentally related.
- 5.15 The model updates re-created previous scenarios of Experian job growth, past trends job growth (net annual decline in jobs) and job stabilisation (zero additional jobs). As a result of updating a number of inputs to reflect more up-to-date data the housing needs under each of these scenarios has changed. The most significant change has arisen through the updating of unemployment rates, as well as (to a lesser extent) increasing economic activity in older age groups to take into account increases in state pension age which will occur over the period 2012-2031.
- 5.16 Were past trends in job change (-77 annually) to continue, there would be housing need of just 91 dpa. In order to maintain the current number of jobs in Tamworth, assuming no increase or decline over the assessment period, and that the commuting ratio remains constant, there is a need for 168 dpa. These are both substantially lower than the dwellings needed to support population growth as forecast by the 2012 SNPP, and indicates that the provision of housing in order to support future population growth (210 dpa) will more than likely support the creation of addition jobs above the current number (and past trends). The 2012 SNPP scenario indicated that an additional 565 jobs could be supported across the period 2012-31, highlighting that, were demographic-

led needs met, the job outlook for the Borough remains positive. This is despite an overall decline in the size of the labour force (-800) for the reasons explored previously.

- 5.17 The Experian forecasts represent the ‘unconstrained’ potential of the area taking account of macro-economic factors and based on its existing business base, mix of sectors and inherent economic qualities. This forecasts 4,100 additional jobs over the period 2012-2031 in Tamworth. This is more than seven-times higher than the number of jobs which would be supported by the projected 2012-based SNHP scenario in the Borough. In order to support this level of job growth, there would need to be significant net in-migration which would generate demand for housing. This level of housing would result in a need for 385 dpa – an 83% increase on the 2012 SNPP baseline scenario of 210 dpa. Therefore the suitability of this scenario in assessing housing needs should be carefully considered given the extent to which it represents an outlier.
- 5.18 Helping to stem the decline of working age residents in the Borough would achieve a more balanced population structure and reduce potential future economic difficulties and the demands of services associated with an ageing population and a more limited supply of labour.
- 5.19 The Experian scenario is based on a continuation of the commuting ratio of 1.41, reflecting Tamworth’s position as a town of net out-commuting given its position within the wider area and in particular it’s commuting relationship with Birmingham. Any attempt to reduce out-commuting would be a policy-on approach (which should not form a consideration in objectively assessed housing need).
- 5.20 Figure 5.2 illustrates the population change under the baseline population projections (2012-based SNHP, 210 dpa) and the Experian forecast. The 2012 SNPP projects a total population at the end of the projection period of 82,500. As discussed this would support an additional 565 jobs in the Borough. In order to achieve the Experian forecasts for job growth, the total population would need to increase by a further 9,000 people, equivalent to an 11% increase.

Figure 5.2 Projections for total population



Source: NLP using PopGroup

- 5.21 Crucially, the OAN must be reasonable. On the basis of the above, and taking into account that future growth scenarios should be realistic, it is considered that the past trends job growth, zero job growth and Experian Scenarios are outliers. The first two scenarios indicate housing need far below the demographic-led needs; to adopt these scenarios would not only be against the Framework’s requirement for housing to ‘do everything it can’ to support economic growth, but would also fail to meet the needs arising from population growth altogether.
- 5.22 Alternatively, the level of population growth in the Experian Scenario would be so high as to represent an outlier in terms of both the housing needed to support the job growth, and the job forecasts in the context of past trends. A similar conclusion for the equivalent Experian Scenario was reached by the Inspector at the Lichfield District Local Plan EIP¹³.
- 5.23 Furthermore, at the Cannock Chase Local Plan examination, the Council argued that increasing the relatively low job density of the District would not necessarily require a commensurate uplift in the housing figure to match the higher employment-led projections.

¹³ Lichfield District Council Local Plan: Strategy Examination, Inspector’s Letter dated 3rd September 2013

5.24 This was generally accepted by the Inspector, who commented as follows:
“Some argue that the housing target should be increased to avoid a reduction in economic activity, jobs and labour force, but this could cause further in-migration and upset the balance between homes and jobs, particularly given the other proposals to achieve job growth without affecting housing requirements, including new employment sites and improving the skills of the existing population... Overall I conclude that the CCLP provides a reasonable and realistic balance between homes and jobs” [Cannock Chase Local Plan (Part 12) DPD – Inspector’s Report, February 2014, §40]

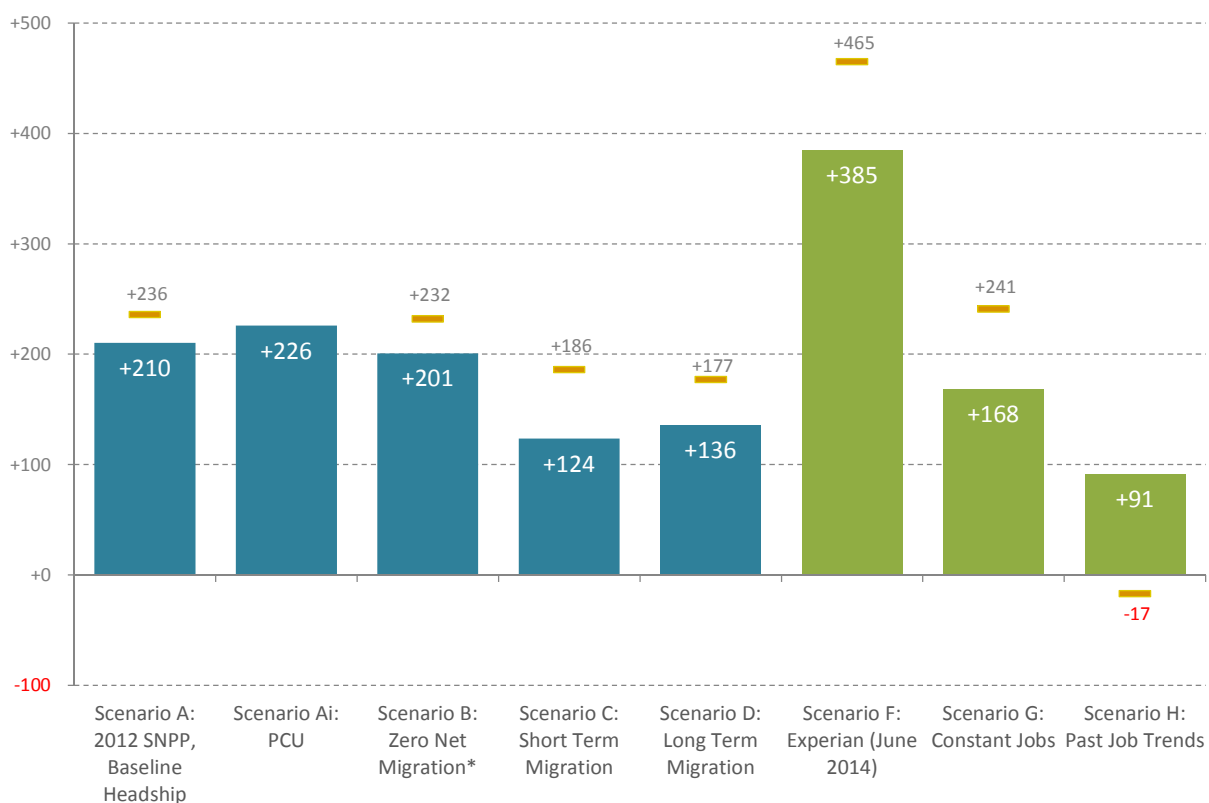
5.25 As illustrated in Figure 5.2, the level of population growth required to sustain the growth in jobs projected by Experian would be around 11% greater than the level projected in the 2012-based SNHP for Tamworth. Furthermore, as this population growth would be primarily achieved by inward migration as opposed to natural change, it would require a step change in migration that is unlikely to be achieved in Tamworth.

5.26 For Tamworth, which currently has a negative contribution from migration to 2031 (consistent with trends over both the long and short term), this would require a dramatic reversal in past trends and would need over 8,000 net additional in-migrants to achieve the required population level to accommodate Experian’s job growth (all other assumptions remaining constant). This is at odds with what may reasonably be expected to occur in the Borough.

Comparison to Previous Report

5.27 Figure 5.3 presents the comparable scenarios from the October 2014 Report compared to the updated scenarios. It indicates that the demographic starting point based on the 2012 SNPP and equivalent SNHP projections is slightly lower than before as a result of the 2012-based household projections projecting slightly less optimistic rates of household formation compared to the 2011-based ‘index’ approach. The 2012-based partial catch-up scenario indicates a level of need more in line with the previous starting point; however, this is still 10 dpa lower. There is also a difference in the migration-led scenarios due to the number and age profile of migrants, and how this translates into housing need using the updated 2012-based headship rates.

Figure 5.3 Tamworth Model Outputs - Comparison to October 2014 Report



Source: NLP using PopGroup

Note: Comparison for Scenario A is taken from 2012 SNPP with 2011-based headship rates with 'index' approach as this was considered the appropriate starting point.

5.28 This 2015 Housing Needs Update has interrogated Tamworth’s objectively assessed housing need, taking into account the most recent government projections (in terms of both households and population) as well as updated modelling inputs to take account of recent data. Whilst it concludes on the level of housing need in Tamworth, the housing requirement (i.e. the amount of housing which will actually be provided) is a matter for the LPA to decide, taking into account a wider range of factors not considered here, such as capacity constraints.

5.29 The definition of an OAN is ‘not an exact science’ and an element of judgement is necessary based on reasonable assumptions. These scenarios should be balanced alongside what is realistic and likely to happen in the future, as well as aligning with other elements of TBC’s evidence based. Nevertheless, the following principles have been applied in determining the OAN, in line with the requirements of the Framework and Practice Guidance;

- 1 Household projections published by CLG form the ‘starting point’ estimate of overall housing need. In the case of Tamworth, this equates to a need (taking account of vacant dwellings and second homes) of **210 dpa**. A sensitivity for local demographic factors using alternative assumptions, primarily the assumption of more optimistic rates of household formation in younger age groups would see this need increase to **226 dpa**;

- 2 Although with mixed outcomes, the market signals analysis for Tamworth highlights a number of issues relating to overcrowding and homelessness within the area and the relatively poor affordability, despite the fact that house prices are generally low. Nevertheless, taking into account how Tamworth compares to neighbouring authorities and changes seen in recent years, a **modest 10% uplift would be reasonable** given the pressures faced by Tamworth related to the supply of housing. Based on the demographic starting point[s] this would indicate uplift to between 231 dpa and **249 dpa** (both incorporating a 10% uplift).
- 3 With regards to the employment-led scenarios, whilst there is a need to demonstrate an ambition to plan for growth and support economic development, these scenarios must also be realistic. The past trends and zero job growth scenarios suggests rates of growth that are well below the levels likely to be generated by the preferred demographic scenarios. The Experian scenario represents an outlier at the other end of the scale and indicates a housing need figure over 83% higher than the 2012-based SNHP scenario. Although the Experian scenario does illustrate that additional housing would help support additional job growth, the extent to which 385 dpa represents a realistic assessment of need given the population growth required and the substantial reversal in migratory trends necessary - in the context of what has been achieved in the Borough historically and how this is projected to change in the 2012 SNPP - is doubtful. For this reason this scenario has also been excluded as an outlier in line with conclusions reached at the recent Local Plan Examinations in both Lichfield District and Cannock Chase District.
- 4 In line with the Practice Guidance, an increase in the total housing requirement figure included in Tamworth's Local Plan should be considered where it could help deliver the required number of affordable homes, identified at 183 dpa in the 2012 SHMA¹⁴.

Conclusions

- 5.30 Having assessed all the scenarios tested it is NLP's recommendation that an objective assessment of housing need and demand for **Tamworth Borough falls within the range of 230 dpa – 250 dpa**.
- 5.31 The ranges takes the CLG's most recent 2012-based household projections as the starting point for identifying need, accelerating household formation post 2021 to allow for the return to growth and increased headship rates. A judgement was then taken to increase the demographic starting point to allow for (moderately) worsening housing market signals, by around 10%.
- 5.32 This range provides a realistic level of housing delivery which will support economic growth and address potentially worsening housing market signals, whilst meeting the full demographically-assessed need for housing in the Borough.

¹⁴ §2a-029-20140306

- 5.33 In terms of how these revised OAN ranges compare with the recommendations set within the previous HEaDROOM report and subsequent Updates, Tamworth's revised OAN range, of 230-250 dpa, is slightly lower than the range recommended in the most recent October 2014 Update (240-265 dpa), and encompasses the 250 dpa figure recognised by the Council as comprising their OAN housing requirement in their emerging Local Plan.
- 5.34 If TBC was to pursue a figure significantly lower than the top end of the range whilst also planning for substantial job growth despite an ageing population, it would need to justify how it would mitigate or avoid the adverse housing, economic and other outcomes that a lower-growth approach would give rise to. It would also need to evidence how the adverse impacts of meeting housing need would '*significantly and demonstrably outweigh the benefits*' [The Framework, §14] as well as make provision, through the duty-to-cooperate, for those needs to be met in full elsewhere within the wider HMA.
- 5.35 Supply-side factors, such as development constraints, policy constraints, infrastructure and environmental capacity, land supply and development viability amongst other considerations, are beyond the remit of this Housing Needs Study Update, but may give an indication as to where the requirement target may sit within the OAN ranges defined above. Similarly, such factors may provide TBC with the rationale to deliver more or less than an objective assessment of need, based upon the range of evidence supporting its Local Plan.
- 5.36 TBC will also be obliged to take into account affordable housing needs, recognising that these were identified on a different evidential basis, with the data focussing on household's ability to pay, rather than demographic change and economic growth. TBC will need to exercise their policy choice to test whether the delivery of 183 affordable dpa would require an uplift to the Local Plan housing requirement on the basis of whether this would be economically realistic, based upon a variety of considerations including deliverability and viability.

Appendix 1 – Inputs and Assumptions

DEMOGRAPHIC	Scenario A: Baseline (Scenario Ai: Age Specific Partial Catch Up)	Scenario B – Zero Net Migration	Scenario C: Short Term Migration Trend / Scenario D: Long Term Migration Trend
Population			
Baseline Population	A 2012 baseline population is taken from the 2012 Mid-year population estimates for Tamworth, split by age cohort and gender. The population for 2012-2031 is constrained to the 2012-based SNPP for the Borough, by age and sex.	A 2012 baseline population is taken from the 2012 Mid-year population estimates for Tamworth, split by age cohort and gender. In 2013, the total population is constrained to the 2013 Mid-Year Estimates, in order that the components of change (births, deaths, migration) reflect the most up-to-date data for the Borough.	
Births	Future change assumed in the Total Fertility Rate [TFR] uses the birth projections from the ONS 2012-based Interim SNPP. This in turn is used to derive future projected TFRs through PopGroup.	For 2012-13, the number of births recorded in the Borough in the Mid-Year Estimates is used. This is to reflect the latest data and to align with the number of migrants (and final population) in 2013. From 2013/14 onwards, the TFR as projected in the 2012 SNPP applies.	
Deaths	Future change assumed in the SMR uses the death projections from the ONS 2012-based Interim SNPP. This in turn is used to derive future projected SMRs through PopGroup.	For 2012-13, the number of deaths recorded in the Borough in the Mid-Year Estimates is used. This is to the latest data and to align with the number of migrants (and final population) in 2013. From 2013/14 onwards, the SMR as projected in the 2012 SNPP applies.	
Internal Migration	Gross domestic in and out migration flows are adopted based on forecast migration into the Borough from the ONS 2012-based SNPP for the actual internal migration flows 2012-2031. This is the sum of internal migration (elsewhere in England) and cross-border migration (elsewhere in the UK) (SNPP Table 5).	Gross flows are based on the 2012 SNPP and are neutralised to create zero net migration flows. For 2012/13, the mid-year estimates of migration were used, with the 'zero net' flows applying from 2013/14 onwards.	Gross domestic internal migration flows are adopted based on average gross past trends for the past 5/10 years. In 2012/13, the mid-year estimates of migration were used with the trend applied 2013/14 onwards.
International Migration	Gross international in and out migration flows are adopted based on forecast migration in the Borough from the ONS 2012-based SNPP for the actual internal migration flows 2012-2031.	As above, but for international rather than internal migration.	As above, but for international rather than internal migration.

DEMOGRAPHIC	Scenario A: Baseline (Scenario Ai: Age Specific Partial Catch Up)	Scenario B – Zero Net Migration	Scenario C: Short Term Migration Trend / Scenario D: Long Term Migration Trend
Propensity to Migrate (Age Specific Migration Rates)	Age Specific Migration Rates (ASMiGR) for both in and out migration is based upon the age profile of migrants to and from the Borough projected in the 2012-based SNPP. These identify a migration rate for each age cohort within the Borough (for both in and out flows separately) which is applied to each individual age providing an Age Specific Migration Rate. This then drives the demographic profile of those people moving into and out of the Borough (but not the total numbers of migrants).		
Housing			
Headship Rates	Headship rates that are specific to Tamworth are applied in the modelling. These are taken from the 2012-based Sub-National Household Projections, and as of May 2015 'Stage 1' outputs were available. These provided headship rates by age, sex and relationship status. The relationship statuses have been amalgamated so that headship rates by sex and five year age group only are inputted into the modelling. Applied to the population, these determine the percent of people in a given age/sex group who will form a head of household. For all scenarios except Ai, the rates as taken directly from CLG are applied. For the 'partial catch-up' scenario, the rates for young people in the age groups 15-19 to 30-34 are projected to reach, by 2033, half way between then 2008-based and 2012-based projections.		
Population not in households	The number of population not in households (e.g. those in institutional care) is similarly taken from the 2012-based household projections. CLG provide these by the number of people in each sex/five year age groups/relationship status in institutional care. Above age 75, these numbers have been converted into a rate; therefore under scenarios which project a different population size and/or age structure to the 2012 SNPP (which the CLG household projections are based on) this is taken into account when considering the number of elderly people likely to be in care home or other non-household accommodation.		
Vacancy / 2nd Home Rate	A vacancy and second homes rate is applied to the number of households, representing the natural vacancies/not permanently occupied homes which occur within the housing market. This means that more dwellings than households are required to meet needs. The average vacancy/second home rate in Tamworth Borough is 1.84% based on the average second home/vacancy rates in CLG Council Tax Base data for 2011-2014.		
Economic			
Economic Activity Rate	Age and gender specific economic activity rates are used. The bases for these are the 2011 Census, and before the rates are projected an estimate for older age economic activity is derived using the decline in economic activity with age from the 2001 Census (the 2011 Census provides rates for age 65 and over as a single group, so this method allows for the breakdown of rates up to age 85+ which will project the labour force more accurately in ageing populations). For age groups 16-24, rates are projected to reach the ONS Labour Force Projections (LFP) by 2020, and then held constant. For ages 25-69, the ONS LFP growth rates are applied, and held constant post 2020. In older age groups, an adjustment has been made to take account of higher economic activity than projected in the LFP. Rates for 70-74 year olds are projected to reach a mid-point between the ONS LFP and a linear trend based on 2001-2011 growth, then held constant. Above this age, the 70-74 growth rate is applied. Further adjustments have been made for males and females age 65-69 to take into account increases in Statutory Pension Age in 2018-2020 and 2026-2028.		
Commuting Rate	A standard net commuting rate is inferred through the modelling using a Labour Force Ratio which is worked out using the formula: (A) Number of employed workers living in area ÷ (B) Number of workers who work in the area (number of jobs). For Tamworth, data from the 2011 Census and BRES indicated a labour force ratio of 1.41.		

DEMOGRAPHIC	Scenario A: Baseline (Scenario Ai: Age Specific Partial Catch Up)	Scenario B – Zero Net Migration	Scenario C: Short Term Migration Trend / Scenario D: Long Term Migration Trend
Unemployment	<p>In order to calculate unemployment rates, the figures for 2012 (8.2%), 2013 (5.4%) and 2014 (4.3%) (taken from the Annual Population Survey model-based unemployment rates) were used. In projecting unemployment forward it is assumed that by 2020 the unemployment rate will have gradually returned to its pre-recession average (4.4%). This figure was then held constant to the end of the forecasting period (2031) on the grounds that it better reflects the long term trend (and a non-recession unemployment rate) than the unemployment rate seen throughout the recession.</p>		

EMPLOYMENT FACTORS	Scenario E: Experian Job Forecast	Scenario F: Job Stabilisation	Scenario G: Past Job Trends
Population			
Baseline Population	A 2012 baseline population is taken from the 2012 Mid-year population estimates for Tamworth, split by age cohort and gender. For Scenario A and the sensitivities, the population for 2012-2031 are constrained to the 2012-based SNPP for the Borough, by age and sex		
Births	The TFR derived from the 2012 SNPP is applied. This drives the number of births in each year based on the population.		
Deaths	The SMRs derived from the 2012 SNPP is applied. This drives the number of deaths in each year based on the population.		
Internal Migration	Internal in-migration and outmigration is flexed (inflated or deflated) to achieve the necessary number of economically active people to underpin the economy in the Borough for this employment scenario. This was based on taking forward forecast job growth based on Experian forecasts (+4,100 jobs 2013-2031 for Tamworth)	Internal in-migration and outmigration is flexed (inflated or deflated) to achieve the necessary number of economically active people to underpin the economy in the Borough for this employment scenario. This was based on constraining the annual number of additional jobs in Tamworth to 0.	Internal in-migration and outmigration is flexed (inflated or deflated) to achieve the necessary number of economically active people to underpin the economy in the Borough in this employment scenario. This was based on annual job decline of 77 throughout the projection period.
International Migration	As above, but for international rather than internal migration.		
Propensity to Migrate (Age Specific Migration Rates)	Age Specific Migration Rates (ASMigR) for both in and out domestic migration are based upon the age profile of migrants to and from Tamworth Borough in the 2010-based SNPP. These identify a migration rate for each age cohort within the Borough (for both in and out flows separately) which is applied to each individual age providing an Age Specific Migration Rate. This then drives the demographic profile of those people moving into and out of the Borough (but not the total numbers of migrants).		
Housing			
Headship Rates	Headship rates that are specific to Tamworth Borough and forecast over the period to 2037 were taken from the CLG 2012-based household projections. These headship rates were split by age cohort and by household typology. No change has been assumed from the rates published by CLG.		
Population not in Households	The number of population not in households (e.g. those in institutional care) is similarly taken from the 2012-based household projections. CLG provide these by the number of people in each sex/five year age groups/relationship status in institutional care. Above age 75, these numbers have been converted into a rate; therefore under scenarios which project a different population size and/or age structure to the 2012 SNPP (which the CLG household projections are based on) this is taken into account when considering the number of elderly people likely to be in care home or other non-household accommodation.		

EMPLOYMENT FACTORS	Scenario E: Experian Job Forecast	Scenario F: Job Stabilisation	Scenario G: Past Job Trends
Vacancy / 2nd Home Rate	A vacancy and second homes rate is applied to the number of households, representing the natural vacancies/not permanently occupied homes which occur within the housing market. This means that more dwellings than households are required to meet needs. The average vacancy/second home rate in Tamworth Borough is 1.84% based on the average second home/vacancy rates in CLG Council Tax Base data for 2011-2014.		
Economic			
Economic Activity Rate	Age and gender specific economic activity rates are used. The bases for these are the 2011 Census, and before the rates are projected an estimate for older age economic activity is derived using the decline in economic activity with age from the 2001 Census (the 2011 Census provides rates for age 65 and over as a single group, so this method allows for the breakdown of rates up to age 85+ which will project the labour force more accurately in ageing populations). For age groups 16-24, rates are projected to reach the ONS Labour Force Projections (LFP) by 2020, and then held constant. For ages 25-69, the ONS LFP growth rates are applied, and held constant post 2020. In older age groups, an adjustment has been made to take account of higher economic activity than projected in the LFP. Rates for 70-74 year olds are projected to reach a mid-point between the ONS LFP and a linear trend based on 2001-2011 growth, then held constant. Above this age, the 70-74 growth rate is applied. Further adjustments have been made for males and females age 65-69 to take into account increases in Statutory Pension Age in 2018-2020 and 2026-2028.		
Commuting Rate	A standard net commuting rate is inferred through the modelling using a Labour Force Ratio which is worked out using the formula: (A) Number of employed workers living in area ÷ (B) Number of workers who work in the area (number of jobs). For Tamworth, data from the 2011 Census and BRES indicated a labour force ratio of 1.41.		
Unemployment	In order to calculate unemployment rates, the figures for 2012 (8.2%), 2013 (5.4%) and 2014 (4.3%) (taken from the Annual Population Survey model-based unemployment rates) were used. In projecting unemployment forward it is assumed that by 2020 the unemployment rate will have gradually returned to its pre-recession average (4.4%). This figure was then held constant to the end of the forecasting period (2031) on the grounds that it better reflects the long term trend (and a non-recession unemployment rate) than the unemployment rate seen throughout the recession.		

Appendix 2 – PopGroup Modelling Outputs

Population Estimates and Forecasts

Nathaniel Lichfield & Partners

Components of Population Change

Tamworth Scenario A: 2012-based SNPP/SNHP

	Year beginning July 1st																			
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
Births																				
Male	510	511	506	502	500	500	497	494	490	487	484	481	478	476	474	472	470	469	469	
Female	486	487	482	478	477	477	473	470	467	464	461	458	456	454	452	450	448	447	446	
All Births	996	998	988	981	977	977	971	964	957	951	945	940	934	930	926	922	919	916	915	
TFR	1.96	1.97	1.95	1.94	1.93	1.93	1.92	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	
Births input																				
Deaths																				
Male	294	286	288	296	293	300	305	310	316	321	327	334	340	347	355	361	368	376	383	
Female	316	295	291	295	300	303	306	309	314	320	325	329	334	339	346	354	361	369	377	
All deaths	610	581	579	591	594	604	610	619	630	640	653	663	674	686	701	714	729	744	760	
SMR: males	110.7	103.6	100.3	99.2	94.8	93.3	91.0	89.1	87.4	85.5	84.0	82.5	80.9	79.7	78.7	77.1	76.0	75.1	74.3	
SMR: females	115.7	105.3	100.7	98.7	97.4	95.4	93.0	91.0	89.4	87.7	86.2	84.0	82.5	80.9	79.6	78.5	77.4	76.3	75.3	
SMR: persons	113.2	104.5	100.5	99.0	96.1	94.4	92.0	90.0	88.4	86.6	85.1	83.2	81.7	80.3	79.1	77.8	76.7	75.7	74.6	
Expectation of life: males	78.2	79.2	79.5	79.6	80.2	80.3	80.7	80.9	81.2	81.5	81.7	82.0	82.3	82.4	82.6	82.9	83.0	83.2	83.4	
Expectation of life: females	81.9	82.9	83.3	83.4	83.5	83.8	84.1	84.3	84.5	84.7	84.9	85.2	85.3	85.6	85.8	86.1	86.3	86.4	86.4	
Expectation of life: persons	80.2	81.1	81.5	81.7	82.0	82.2	82.5	82.7	82.9	83.2	83.4	83.7	83.9	84.1	84.3	84.5	84.6	84.8	85.0	
Deaths input																				
In-migration from the UK																				
Male	1,309	1,314	1,321	1,327	1,332	1,337	1,341	1,344	1,347	1,349	1,351	1,353	1,356	1,360	1,365	1,371	1,376	1,382	1,387	
Female	1,390	1,394	1,398	1,401	1,404	1,406	1,408	1,408	1,407	1,407	1,406	1,407	1,410	1,414	1,419	1,424	1,430	1,437	1,443	
All	2,699	2,708	2,719	2,728	2,736	2,743	2,749	2,752	2,754	2,756	2,757	2,760	2,766	2,774	2,783	2,795	2,807	2,819	2,830	
SMiGR: males	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: females	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants input																				
Out-migration to the UK																				
Male	1,426	1,426	1,425	1,426	1,424	1,419	1,415	1,413	1,405	1,405	1,410	1,410	1,408	1,409	1,415	1,413	1,414	1,413	1,413	
Female	1,426	1,418	1,418	1,422	1,415	1,410	1,409	1,405	1,402	1,398	1,405	1,400	1,400	1,400	1,412	1,416	1,412	1,416	1,419	
All	2,851	2,844	2,842	2,847	2,839	2,829	2,824	2,818	2,807	2,803	2,815	2,810	2,808	2,815	2,827	2,829	2,826	2,830	2,832	
SMoGR: males	35.8	35.9	35.9	35.9	35.8	35.8	35.8	35.8	35.7	35.8	35.9	36.0	35.9	36.0	35.9	36.0	35.9	35.8	35.7	
SMoGR: females	34.8	34.7	34.7	34.8	34.7	34.7	34.8	34.8	34.8	34.8	35.0	34.9	34.9	34.9	35.0	35.0	34.8	34.8	34.7	
Migrants input																				
In-migration from Overseas																				
Male	166	166	167	171	165	165	164	164	163	163	166	168	169	169	172	173	172	173	173	
Female	162	161	163	165	162	160	158	157	157	158	159	158	160	163	164	165	165	166	167	
All	327	327	330	336	328	325	321	321	319	321	324	326	329	331	336	338	338	339	340	
SMiGR: males	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: females	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants input																				
Out-migration to Overseas																				
Male	141	142	143	144	141	140	140	141	139	140	142	145	146	145	149	150	149	150	150	
Female	138	137	140	139	138	135	134	134	133	134	135	134	136	139	140	141	141	141	143	
All	280	280	283	283	279	275	275	274	273	274	277	279	282	284	289	291	291	292	293	
SMoGR: males	62.9	63.6	64.2	64.8	63.6	63.5	63.8	64.0	63.8	64.2	65.5	66.9	67.4	67.5	69.3	69.7	69.3	69.4	69.3	
SMoGR: females	75.2	75.0	76.5	76.6	75.9	74.5	74.5	74.5	74.8	75.6	76.7	76.7	78.2	79.9	80.8	81.6	81.5	82.3	82.4	
Migrants input																				
Migration - Net Flows																				
UK	-152	-136	-124	-119	-103	-86	-75	-66	-53	-48	-59	-51	-42	-41	-44	-34	-19	-11	-2	
Overseas	+48	+48	+47	+53	+49	+50	+47	+47	+47	+47	+47	+47	+47	+47	+47	+47	+47	+47	+47	
Summary of population change																				
Natural change	-355	+417	+409	+390	-353	+373	+360	+345	+327	+310	+290	+277	+260	+244	+225	+207	+190	+172	+155	
Net migration	-105	86	77	96	-54	37	-26	-19	-6	-1	-12	-4	-5	-6	+3	+13	-28	36	+46	
Net change	-291	+329	+322	+324	-320	+337	+332	+326	+321	+310	+291	+291	+255	+238	+222	+221	+218	+208	+201	
Crude Birth Rate /000	12.89	12.87	12.68	12.54	12.44	12.39	12.25	12.12	11.99	11.86	11.75	11.63	11.53	11.44	11.36	11.28	11.21	11.15	11.11	
Crude Death Rate /000	7.90	7.49	7.43	7.55	7.56	7.65	7.70	7.78	7.89	7.99	8.11	8.21	8.32	8.44	8.60	8.74	8.89	9.06	9.22	
Crude Net Migration Rate /000	-1.36	-1.14	-0.98	-0.85	-0.68	-0.46	-0.36	-0.24	-0.08	-0.01	-0.15	-0.04	0.06	0.08	0.04	0.16	0.34	0.44	0.55	
Summary of Population estimates/forecasts																				
<i>Population at mid-year</i>																				
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	5,079	4,979	4,910	4,875	4,850	4,849	4,837	4,815	4,796	4,777	4,754	4,727	4,700	4,674	4,650	4,628	4,607	4,587	4,571	4,558
5-10	5,493	5,707	5,892	5,888	5,959	5,989	6,006	5,929	5,869	5,839	5,815	5,803	5,783	5,763	5,742	5,720	5,692	5,665	5,638	5,638
11-15	4,827	4,615	4,473	4,540	4,527	4,530	4,632	4,827	4,866	4,950	5,009	5,019	4,949	4,905	4,885	4,867	4,866	4,863	4,850	4,838
16-17	1,936	2,021	2,042	1,917	1,850	1,839	1,767	1,702	1,839	1,894	1,881	1,895	2,061	2,015	2,015	1,985	1,963	1,948	1,956	1,957
18-59Female, 64Male	45,410	45,187	45,011	45,007	44,929	44,783	44,627	44,478	44,260	44,062	44,007	43,858	43,736	43,588	43,518	43,452	43,352	43,225	43,062	42,890
60/65-74	9,526	9,882	10,182	10,395	10,625	10,855	11,098	11,208	11,303	11,203	11,145	11,142	11,243	11,370	11,510	11,677	11,879	12,100	12,344	12,604
75-84	3,600	3,709	3,856	4,024	4,151	4,305	4,505	4,807	5,062	5,300	5,706	6,058	6,324	6,533	6,717	6,867	6,976	7,059	7,109	7,163
85+	1,247	1,298	1,360	1,413	1,493	1,564	1,669	1,726	1,806	1,905	2,007	2,117	2,243	2,371	2,489	2,615	2,793	3,000	3,185	3,365
Total	77,118	77,399	77,728	78,060	78,384	78,714	79,050	79,382	79,708	80,029	80,339	80,620	80,893	81,158	81,408	81,636	81,856	82,074	82,282	82,483
Dependency ratios, mean age and sex ratio																				
0:15 / 16-65	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
65+ / 16-65	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.42
0:15 and 65+ / 16-65	0.55	0.56	0.57	0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.71	0.72	0.73	0.73
Median age males	37.9	38.1	38.3	38.5	38.7	38.8	38.8	39.0	39.2	39.4	39.5	39.6	39.8	40.0	40.1	40.2	40.4	40.5	40.7	40.9
Median age females	39.5	39.8	40.2	40.5	40.8	40.9	41.2	41.3	41.5	41.6	41.8	42.0	42.2	42.5	42.7	42.9	43.1	43.3	43.5	43.7
Sex ratio males /100 females	96.2	96.2	96.1	95.9	95.8	95.7	95.6	95.5	95.4	95.3	95.2	95.2	95.1	95.0	94.9	94.8	94.7	94.7	94.6	94.5
Population impact of constraint																				
Number of persons		+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1
Households																				
Number of Households	31,842																			

Population Estimates and Forecasts

Nathaniel Lichfield & Partners

Components of Population Change

Tamworth Scenario Aa: Partial Catch Up Rates Sensitivity

	Year beginning July 1st																			
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
Births																				
Male	510	511	506	502	500	500	497	494	490	487	484	481	478	476	474	472	470	469	469	
Female	486	487	482	478	477	477	473	470	467	464	461	458	456	454	452	450	448	447	446	
All Births	996	998	988	981	977	977	971	964	957	951	945	940	934	930	926	922	919	916	915	
TFR	1.96	1.97	1.95	1.94	1.93	1.93	1.92	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	
Births input																				
Deaths																				
Male	294	286	288	296	293	300	305	310	316	321	327	334	340	347	355	361	368	376	383	
Female	316	295	291	295	300	303	306	309	314	320	325	329	334	339	346	354	361	369	377	
All deaths	610	581	579	591	594	604	610	619	630	640	653	663	674	686	701	714	729	744	760	
SMR: males	110.7	103.6	100.3	99.2	94.8	93.3	91.0	89.1	87.4	85.5	84.0	82.5	80.9	79.7	78.7	77.1	76.0	75.1	74.3	
SMR: females	115.7	105.3	100.7	98.7	97.4	95.4	93.0	91.0	89.4	87.7	86.2	84.0	82.6	80.9	79.6	78.5	77.4	76.3	75.3	
SMR: persons	113.2	104.5	100.5	99.0	96.1	94.4	92.0	90.0	88.4	86.6	85.1	83.2	81.7	80.3	79.1	77.8	76.7	75.7	74.8	
Expectation of life: males	78.2	79.2	79.5	79.6	80.2	80.3	80.7	80.9	81.2	81.5	81.7	82.0	82.3	82.4	82.6	82.9	83.0	83.2	83.4	
Expectation of life: females	81.9	82.9	83.3	83.4	83.5	83.8	84.1	84.3	84.5	84.7	84.9	85.2	85.3	85.6	85.8	86.1	86.3	86.4	86.4	
Expectation of life: persons	80.2	81.1	81.5	81.7	82.0	82.2	82.5	82.7	82.9	83.2	83.4	83.7	83.9	84.1	84.3	84.5	84.6	84.8	85.0	
Deaths input																				
In-migration from the UK																				
Male	1,309	1,314	1,321	1,327	1,332	1,337	1,341	1,344	1,347	1,349	1,351	1,353	1,356	1,360	1,365	1,371	1,376	1,382	1,387	
Female	1,390	1,394	1,398	1,401	1,404	1,406	1,408	1,408	1,407	1,406	1,407	1,408	1,410	1,414	1,419	1,424	1,430	1,437	1,443	
All	2,699	2,708	2,719	2,728	2,736	2,743	2,749	2,752	2,754	2,755	2,757	2,760	2,766	2,774	2,783	2,795	2,807	2,819	2,830	
SMiGR: males	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: females	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants input																				
Out-migration to the UK																				
Male	1,426	1,426	1,425	1,426	1,424	1,419	1,415	1,413	1,405	1,405	1,410	1,410	1,408	1,409	1,415	1,413	1,414	1,413	1,413	
Female	1,426	1,418	1,418	1,422	1,415	1,410	1,409	1,405	1,402	1,398	1,405	1,400	1,406	1,406	1,412	1,416	1,412	1,416	1,419	
All	2,851	2,844	2,842	2,847	2,839	2,829	2,824	2,818	2,807	2,803	2,815	2,810	2,808	2,815	2,827	2,829	2,826	2,830	2,832	
SMoGR: males	35.8	35.9	35.9	35.9	35.9	35.8	35.8	35.8	35.7	35.8	35.9	36.0	35.9	36.0	35.9	36.0	35.9	35.8	35.8	
SMoGR: females	34.8	34.7	34.7	34.8	34.7	34.7	34.8	34.8	34.8	34.8	35.0	34.9	34.9	34.9	35.0	35.0	34.8	34.8	34.7	
Migrants input																				
In-migration from Overseas																				
Male	166	166	167	171	165	165	164	164	163	163	166	168	169	169	172	173	172	173	173	
Female	162	161	163	165	162	160	158	157	157	158	159	158	160	163	164	165	165	166	167	
All	327	327	330	336	328	325	321	321	319	321	324	326	329	331	336	338	338	339	340	
SMiGR: males	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: females	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants input																				
Out-migration to Overseas																				
Male	141	142	143	144	141	140	140	141	139	140	142	145	146	145	149	150	149	150	150	
Female	138	137	140	139	138	135	134	134	133	134	135	134	136	139	140	141	141	143	143	
All	280	280	283	283	279	275	275	274	273	274	277	279	282	284	289	291	291	292	293	
SMoGR: males	62.9	63.6	64.2	64.8	63.6	63.5	63.8	64.0	63.8	64.2	65.5	66.9	67.4	67.5	69.3	69.7	69.3	69.4	69.3	
SMoGR: females	75.2	75.0	76.5	76.6	75.9	74.5	74.5	74.8	75.6	76.7	76.7	78.2	79.9	80.8	81.6	81.5	82.3	82.4	82.4	
Migrants input																				
Migration - Net Flows																				
UK	-152	-136	-124	-119	-103	-86	-75	-66	-53	-48	-59	-51	-42	-41	-44	-34	-19	-11	-2	
Overseas	+48	+48	+47	+53	+49	+50	+47	+47	+47	+47	+47	+47	+47	+47	+47	+47	+47	+47	+47	
Summary of population change																				
Natural change	-385	+417	+409	+390	+383	+373	+360	+345	+327	+310	+293	+277	+260	+244	+225	+207	+190	+172	+155	
Net migration	-105	-88	-77	-66	-54	-37	-28	-19	-6	-1	-12	-4	-5	-6	-3	+13	+28	+36	+46	
Net change	-291	+329	+332	+324	+330	+337	+332	+326	+321	+310	+281	+273	+255	+238	+222	+214	+218	+208	+201	
Crude Birth Rate /000	12.89	12.87	12.68	12.54	12.44	12.39	12.25	12.12	11.99	11.86	11.75	11.63	11.53	11.44	11.36	11.28	11.21	11.15	11.11	
Crude Death Rate /000	7.90	7.49	7.43	7.55	7.56	7.65	7.70	7.78	7.89	7.99	8.11	8.21	8.32	8.44	8.60	8.74	8.89	9.06	9.22	
Crude Net Migration Rate /000	-1.36	-1.14	-0.98	-0.85	-0.68	-0.46	-0.36	-0.24	-0.08	-0.01	-0.15	-0.04	0.06	0.08	0.04	0.16	0.34	0.44	0.55	
Summary of Population estimates/forecasts																				
Population at mid-year																				
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	5,079	4,979	4,910	4,875	4,850	4,849	4,837	4,815	4,796	4,777	4,754	4,727	4,700	4,674	4,650	4,628	4,607	4,587	4,571	4,558
5-10	5,493	5,707	5,892	5,888	5,959	5,989	6,006	5,929	5,869	5,839	5,815	5,815	5,803	5,783	5,763	5,742	5,720	5,692	5,665	5,638
11-15	4,827	4,615	4,473	4,540	4,527	4,530	4,632	4,827	4,866	4,950	5,009	5,019	4,949	4,905	4,885	4,867	4,866	4,863	4,850	4,838
16-17	1,936	2,021	2,042	1,917	1,850	1,839	1,767	1,702	1,839	1,894	1,838	1,881	1,995	2,061	2,015	1,985	1,963	1,943	1,956	1,957
18-59Female, 64Male	45,410	45,187	45,011	45,007	44,929	44,783	44,627	44,478	44,260	44,062	44,007	43,858	43,736	43,588	43,518	43,452	43,352	43,225	43,062	42,890
60/65 -74	9,526	9,882	10,182	10,395	10,625	10,855	11,008	11,098	11,203	11,303	11,405	11,514	11,623	11,730	11,837	11,949	12,066	12,188	12,315	12,447
75-84	3,600	3,709	3,856	4,024	4,151	4,305	4,505	4,807	5,062	5,300	5,706	6,058	6,324	6,533	6,717	6,867	6,976	7,059	7,109	7,163
85+	1,247	1,298	1,360	1,413	1,493	1,564	1,669	1,726	1,806	1,905	2,007	2,117	2,243	2,371	2,489	2,615	2,793	3,000	3,185	3,365
Total	77,118	77,399	77,728	78,060	78,384	78,714	79,050	79,382	79,708	80,029	80,339	80,620	80,893	81,158	81,408	81,636	81,856	82,074	82,282	82,483
Dependency ratios, mean age and sex ratio																				
0:15 / 16-65	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
65+ / 16-65	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.42
0:15 and 65+ / 16-65	0.55	0.56	0.57	0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.71	0.71	0.71	0.73
Median age males	37.9	38.1	38.3	38.5	38.7	38.8	38.8	39.0	39.2	39.4	39.5	39.6	39.8	40.0	40.1	40.2	40.4	40.5	40.7	40.9
Median age females	39.5	39.8	40.2	40.5	40.8	40.9	41.2	41.3	41.5	41.6	41.8	42.0	42.2	42.5	42.7	42.9	43.1	43.3	43.5	43.7
Sex ratio males /100 females	96.2	96.2	96.1	95.9	95.8	95.7	95.6	95.5	95.4	95.3	95.2	95.2	95.1	95.0	94.9	94.8	94.7	94.7	94.6	94.5
Population impact of constraint																				
Number of persons		+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1
Households																				
Number of Households	31,842	32,084</																		

Population Estimates and Forecasts

Nathaniel Lichfield & Partners

Components of Population Change

Tamworth Scenario B: Zero Net Migration

	Year beginning July 1st																			
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
Births																				
Male	499	509	505	502	501	502	499	495	492	489	486	483	481	479	477	475	473	471	470	
Female	475	485	481	478	477	478	475	472	469	466	463	460	458	456	454	452	450	449	448	
All Births	974	994	986	980	978	979	973	967	961	954	949	943	938	934	930	926	923	920	918	
TFR	1.93	1.97	1.96	1.94	1.93	1.93	1.92	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	
Births input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Deaths																				
Male	290	285	287	296	294	302	306	312	318	323	329	335	341	348	356	362	368	376	383	
Female	297	297	294	296	304	308	310	314	319	324	329	333	338	342	348	356	362	369	377	
All deaths	587	582	581	594	599	609	616	625	636	647	659	668	679	691	705	717	731	746	760	
SMR: males	108.9	103.6	100.3	99.2	94.8	93.3	91.0	89.1	87.4	85.5	84.0	82.5	80.9	79.7	78.7	77.1	76.0	75.1	74.3	
SMR: females	108.9	105.3	100.7	98.7	97.4	95.4	93.0	91.0	89.4	87.7	86.2	84.0	82.6	80.9	79.6	78.5	77.4	76.3	75.3	
SMR: persons	108.9	104.5	100.5	99.0	95.1	94.4	92.0	90.0	88.4	86.6	85.1	83.2	81.7	80.3	79.1	77.8	76.7	75.7	74.8	
Expectation of life: males	78.6	79.2	79.6	79.7	80.3	80.5	80.8	81.1	81.3	81.5	81.8	82.0	82.2	82.4	82.6	82.8	83.0	83.2	83.3	
Expectation of life: females	82.5	82.9	83.4	83.6	83.8	84.0	84.3	84.5	84.7	85.0	85.2	85.4	85.6	85.9	86.0	86.2	86.4	86.5	86.7	
Expectation of life: persons	80.7	81.2	81.6	81.8	82.1	82.4	82.6	82.9	83.1	83.4	83.6	83.8	84.0	84.2	84.4	84.6	84.8	84.9	85.1	
Deaths input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
In-migration from the UK																				
Male	1,306	1,347	1,351	1,356	1,357	1,358	1,359	1,360	1,360	1,360	1,365	1,365	1,366	1,370	1,376	1,379	1,381	1,384	1,387	
Female	1,386	1,429	1,430	1,432	1,430	1,428	1,427	1,425	1,421	1,419	1,421	1,420	1,421	1,425	1,430	1,433	1,435	1,440	1,443	
All	2,692	2,776	2,780	2,788	2,787	2,786	2,786	2,785	2,780	2,779	2,786	2,785	2,787	2,795	2,805	2,812	2,816	2,824	2,831	
SMiGR: males	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: females	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Out-migration to the UK																				
Male	1,553	1,392	1,394	1,396	1,398	1,397	1,396	1,396	1,392	1,393	1,396	1,398	1,398	1,399	1,404	1,404	1,409	1,411	1,413	
Female	1,552	1,384	1,387	1,392	1,389	1,390	1,389	1,390	1,389	1,386	1,390	1,387	1,389	1,396	1,401	1,408	1,407	1,414	1,418	
All	3,105	2,776	2,780	2,788	2,787	2,786	2,786	2,785	2,780	2,779	2,786	2,785	2,787	2,795	2,805	2,812	2,816	2,824	2,831	
SMiGR: males	39.0	35.2	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.2	35.3	35.3	35.3	35.4	35.4	35.4	35.4	35.4	35.4	
SMiGR: females	37.9	33.9	33.9	34.0	33.9	34.0	34.1	34.1	34.3	34.3	34.4	34.4	34.4	34.5	34.5	34.6	34.5	34.6	34.6	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
In-migration from Overseas																				
Male	71	65	65	67	65	66	65	65	65	65	65	65	65	65	65	65	65	65	65	
Female	59	54	54	55	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	
All	130	119	119	122	120	120	119	119	119	119	119	119	119	119	119	119	119	119	119	
SMiGR: males	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: females	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Out-migration to Overseas																				
Male	38	68	68	69	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	
Female	29	51	51	52	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	
All	67	119	119	122	120	120	119	119	119	119	119	119	119	119	119	119	119	119	119	
SMiGR: males	17.0	30.4	30.4	31.2	30.7	30.8	30.5	30.6	30.6	30.8	30.8	30.8	31.0	31.0	31.1	31.1	31.1	31.1	31.0	
SMiGR: females	15.7	28.0	28.0	28.7	28.3	28.4	28.1	28.2	28.4	28.5	28.7	28.8	29.0	29.1	29.2	29.3	29.2	29.3	29.2	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Migration - Net Flows																				
UK	-413	-0	-0	-0	+0	-0	+0	+0	-0	+0	-0	-0	-0	-0	+0	-0	+0	+0	-0	
Overseas	+83	-0	-0	-0	-0	+0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	
Summary of population change																				
Natural change	-387	+412	+405	+387	-380	+370	-357	+342	+324	+308	+290	+275	+260	+244	+226	+209	+192	+174	+157	
Net migration	-350	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	
Net change	-737	+412	+405	+387	-380	+370	-357	+342	+324	+308	+290	+275	+260	+244	+226	+209	+192	+174	+157	
Crude Birth Rate /1000	12.63	12.85	12.68	12.54	12.45	12.41	12.28	12.15	12.01	11.89	11.78	11.67	11.56	11.48	11.40	11.32	11.25	11.19	11.14	
Crude Death Rate /1000	7.61	7.53	7.48	7.60	7.62	7.72	7.77	7.85	7.96	8.05	8.17	8.26	8.36	8.49	8.63	8.76	8.91	9.07	9.23	
Crude Net Migration Rate /1000	-4.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Summary of Population estimates/forecasts																				
Population at mid-year																				
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	5,079	4,937	4,885	4,865	4,860	4,876	4,886	4,869	4,852	4,833	4,810	4,784	4,757	4,730	4,706	4,684	4,662	4,641	4,622	4,604
5-10	5,493	5,692	5,879	5,879	5,949	5,982	5,990	5,920	5,872	5,852	5,844	5,856	5,863	5,845	5,827	5,808	5,783	5,753	5,723	5,693
11-15	4,827	4,586	4,449	4,520	4,509	4,514	4,619	4,819	4,859	4,944	4,999	5,006	4,926	4,891	4,879	4,875	4,885	4,896	4,886	4,874
16-17	1,936	1,977	1,967	1,830	1,763	1,752	1,683	1,621	1,754	1,805	1,793	1,796	1,912	1,973	1,925	1,891	1,865	1,850	1,864	1,877
18-59Female, 64Male	45,410	45,071	44,973	45,025	44,977	44,855	44,712	44,577	44,367	44,169	44,103	43,956	43,829	43,673	43,597	43,522	43,406	43,247	43,055	42,843
60/65 -74	9,526	9,870	10,173	10,387	10,623	10,864	11,019	11,109	11,223	11,317	11,224	11,173	11,178	11,176	11,172	11,145	11,120	11,142	11,921	12,102
75-84	3,600	3,714	3,865	4,030	4,152	4,295	4,488	4,783	5,030	5,261	5,657	6,001	6,263	6,472	6,657	6,812	6,923	7,009	7,067	7,127
85+	1,247	1,307	1,376	1,437	1,525	1,601	1,710	1,768	1,850	1,949	2,049	2,156	2,278	2,401	2,512	2,629	2,798	2,996	3,172	3,348
Total	77,118	77,155	77,567	77,971	78,358	78,738	79,107	79,464	79,806	80,131	80,438	80,729	81,004	81,263	81,507	81,733	81,942	82,135	82,309	82,466
Dependency ratios, mean age and sex ratio																				
0-15 / 16-65	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
65+ / 16-65	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42
0-15 and 65+ / 16-65	0.55	0.56	0.57	0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.68	0.68	0.69	0.70	0.71	0.72	0.73	0.74
Median age males	37.9	38.2	38.3	38.5	38.7	38.7	38.8	38.9	39.1	39.2	39.4	39.5	39.6	39.8	40.0	40.0	40.2	40.3	40.5	40.6
Median age females	39.5	39.9	40.3	40.6	40.8	41.0	41.1	41.3	41.4	41.6	41.8	42.0	42.2	42.4	42.6	42.8	43.1	43.3	43.5	43.7
Sex ratio males /100 females	96.2	96.1	96.0	95.9	95.8	95.6	95.5	95.4	95.3	95.2	95.1	95.0	94.9	94.8	94.7	94.7	94.6	94.5	94.4	94.3
Population impact of constraint																				
Number of persons																				
Households																				
Number of Households	31,842	32,004	32,259	32,511	32,736	32,982	33,227	33,460	33,674	33,891	34,086	34,283	34,477	34,64						

Population Estimates and Forecasts

Nathaniel Lichfield & Partners

Components of Population Change

Tamworth Scenario C: Short term Migration Trends

	Year beginning July 1st																			
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
Births																				
Male	499	508	502	497	493	491	486	481	475	470	465	460	455	452	448	444	441	438	435	
Female	475	484	478	473	470	468	463	458	453	447	443	438	434	430	426	423	420	417	414	
All Births	974	992	980	970	963	959	949	939	928	917	908	898	889	882	874	867	861	854	849	
TFR	1.93	1.97	1.95	1.94	1.93	1.93	1.92	1.91	1.91	1.90	1.90	1.89	1.89	1.89	1.90	1.90	1.91	1.91	1.91	
Births input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Deaths																				
Male	290	285	287	295	293	300	304	309	315	320	326	331	336	343	350	355	361	369	375	
Female	297	297	293	297	303	306	308	311	315	320	325	328	332	336	342	349	355	361	368	
All deaths	587	582	580	592	596	606	612	620	630	639	650	659	669	680	693	704	716	730	744	
SMR: males	108.9	103.6	100.3	99.2	94.8	93.3	91.0	89.1	87.4	85.5	84.0	82.5	80.9	79.7	78.7	77.1	76.0	75.1	74.3	
SMR: females	108.9	105.3	100.7	98.7	97.4	95.4	93.0	91.0	89.4	87.7	86.2	84.0	82.6	80.9	79.6	78.5	77.4	76.3	75.3	
SMR: persons	108.9	104.5	100.5	99.0	96.1	94.4	92.0	90.0	88.4	86.6	85.1	83.2	81.7	80.3	79.1	77.8	76.7	75.7	74.6	
Expectation of life: males	78.6	79.2	79.6	79.7	80.3	80.5	80.8	81.1	81.3	81.6	81.8	82.0	82.2	82.4	82.6	82.8	83.0	83.2	83.3	
Expectation of life: females	82.5	82.9	83.4	83.6	83.8	84.0	84.3	84.5	84.7	85.0	85.2	85.4	85.6	85.9	86.2	86.4	86.6	86.8	86.7	
Expectation of life: persons	80.7	81.2	81.6	81.8	82.1	82.4	82.6	82.9	83.1	83.4	83.6	83.8	84.0	84.2	84.4	84.6	84.8	84.9	85.1	
Deaths input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
In-migration from the UK																				
Male	1,306	1,284	1,285	1,287	1,288	1,289	1,291	1,292	1,294	1,295	1,296	1,297	1,297	1,297	1,297	1,297	1,297	1,297	1,297	
Female	1,386	1,362	1,360	1,359	1,358	1,356	1,355	1,354	1,352	1,351	1,350	1,349	1,349	1,348	1,348	1,348	1,348	1,349	1,349	
All	2,692	2,646	2,646	2,646	2,646	2,646	2,646	2,646	2,646	2,646	2,646	2,646	2,646	2,646	2,646	2,646	2,646	2,646	2,646	
SMiGR: males	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: females	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Out-migration to the UK																				
Male	1,553	1,444	1,443	1,442	1,444	1,444	1,442	1,443	1,441	1,443	1,442	1,445	1,444	1,441	1,441	1,438	1,440	1,438	1,437	
Female	1,552	1,435	1,436	1,437	1,435	1,436	1,436	1,438	1,438	1,436	1,437	1,434	1,435	1,438	1,438	1,441	1,438	1,441	1,442	
All	3,105	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	
SMiGR: males	39.0	36.5	36.5	36.5	36.5	36.8	36.8	37.0	37.2	37.4	37.5	37.7	37.8	37.9	37.9	38.0	38.0	38.1	38.1	
SMiGR: females	37.9	35.2	35.3	35.4	35.5	35.7	35.9	36.1	36.4	36.6	36.8	36.9	37.0	37.1	37.1	37.2	37.2	37.3	37.4	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
In-migration from Overseas																				
Male	71	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	
Female	59	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	
All	130	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	
SMiGR: males	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: females	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Out-migration to Overseas																				
Male	38	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	
Female	29	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	
All	67	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	
SMiGR: males	17.0	25.7	25.9	26.0	26.1	26.2	26.3	26.5	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.8	27.8	27.9	27.9	
SMiGR: females	15.7	23.7	23.9	24.0	24.1	24.3	24.4	24.6	24.8	25.0	25.3	25.5	25.8	25.9	26.1	26.3	26.3	26.4	26.5	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Migration - Net Flows																				
UK	-413	-233	-233	-233	-233	-233	-233	-233	-233	-233	-233	-233	-233	-233	-233	-233	-233	-233	-233	
Overseas	+63	+38	+38	+38	+38	+38	+38	+38	+38	+38	+38	+38	+38	+38	+38	+38	+38	+38	+38	
Summary of population change																				
Natural change	+367	+410	+399	+378	+367	+354	+337	+319	+298	+278	+257	+239	+221	+202	+182	+163	+144	+124	+106	
Net migration	-350	-195	-195	-195	-195	-195	-195	-195	-195	-195	-195	-195	-195	-195	-195	-195	-195	-195	-195	
Net change	+17	+215	+204	+183	+172	+159	+143	+124	+103	+83	+62	+44	+26	+7	-13	-32	-51	-70	-89	
Crude Birth Rate /1000	12.63	12.84	12.65	12.48	12.37	12.30	12.14	11.99	11.83	11.68	11.55	11.42	11.30	11.21	11.11	11.02	10.95	10.86	10.82	
Crude Death Rate /1000	7.61	7.54	7.49	7.62	7.65	7.76	7.83	7.92	8.03	8.14	8.28	8.38	8.50	8.64	8.80	8.95	9.11	9.29	9.48	
Crude Net Migration Rate /1000	-4.54	-2.52	-2.52	-2.51	-2.50	-2.50	-2.49	-2.49	-2.48	-2.48	-2.48	-2.48	-2.48	-2.48	-2.48	-2.48	-2.48	-2.48	-2.48	
Summary of Population estimates/forecasts																				
Population at mid-year																				
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	5,079	4,937	4,884	4,822	4,795	4,788	4,775	4,736	4,698	4,656	4,611	4,564	4,516	4,469	4,426	4,385	4,346	4,308	4,273	4,240
5-10	5,493	5,692	5,884	5,848	5,900	5,914	5,900	5,734	5,688	5,639	5,618	5,574	5,529	5,483	5,438	5,393	5,349	5,306	5,265	5,223
11-15	4,827	4,586	4,440	4,502	4,482	4,475	4,569	4,755	4,781	4,852	4,890	4,880	4,782	4,727	4,693	4,667	4,655	4,644	4,611	4,578
16-17	1,938	1,977	1,963	1,823	1,752	1,738	1,666	1,601	1,729	1,775	1,718	1,756	1,865	1,919	1,865	1,825	1,792	1,768	1,774	1,777
18-59Female, 64Male	45,410	45,071	44,842	44,762	44,582	44,327	44,053	43,786	43,446	43,118	42,920	42,842	42,385	42,098	41,888	41,679	41,429	41,135	40,806	40,456
60/65 -74	9,526	9,870	10,163	10,367	10,592	10,821	10,965	11,042	11,142	11,223	11,116	11,051	11,038	11,123	11,231	11,321	11,406	11,507	11,662	11,819
75-84	3,800	3,714	3,861	4,021	4,139	4,279	4,467	4,757	4,999	5,224	5,613	5,951	6,205	6,406	6,583	6,731	6,834	6,911	6,961	7,012
85+	1,247	1,307	1,373	1,430	1,515	1,587	1,693	1,748	1,826	1,921	2,017	2,120	2,238	2,357	2,464	2,576	2,740	2,932	3,102	3,271
Total	77,118	77,155	77,370	77,574	77,757	77,929	78,088	78,231	78,355	78,457	78,540	78,603	78,647	78,673	78,680	78,667	78,636	78,585	78,515	78,425
Dependency ratios, mean age and sex ratio																				
0-15 / 16-65	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.31	0.31
65+ / 16-65	0.24	0.25	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43
0-15 and 65+ / 16-65	0.55	0.56	0.57	0.59	0.60	0.61	0.62	0.64	0.65	0.66	0.67	0.68	0.68	0.69	0.70	0.71	0.72	0.73	0.75	0.75
Median age males	37.9	38.2	38.4	38.6	38.8	38.9	39.0	39.2	39.4	39.5	39.7	39.9	40.1	40.3	40.5	40.6	40.8	40.9	41.1	41.3
Median age females	39.5	39.9	40.3	40.7	40.9	41.2	41.4	41.6	41.8	42.0	42.3	42.5	42.8	43.0	43.3	43.6	43.9	44.1	44.4	44.6
Sex ratio males /100 females	96.2	96.1	96.0	95.9	95.8	95.7	95.6	95.5	95.4	95.3	95.2	95.1	95.0	94.9	94.8	94.7	94.6	94.5	94.4	94.3
Population impact of constraint																				
Number of persons																				
Households																				
Number of Households	31,842	32,004	32,192	32,374	32,529	32,701	32,87													

Population Estimates and Forecasts

Nathaniel Lichfield & Partners

Components of Population Change

Tamworth Scenario D: Long Term Migration Trends

	Year beginning July 1st.....																			
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
Births																				
Male	499	508	502	498	495	494	489	484	479	474	469	465	461	457	454	450	447	444	442	
Female	475	484	479	474	471	470	466	461	456	451	447	443	439	436	432	429	426	423	421	
All Births	974	993	981	972	966	964	954	945	935	925	917	908	900	893	886	879	873	868	863	
TFR	1.93	1.97	1.95	1.94	1.93	1.93	1.92	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	
Births input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Deaths																				
Male	290	285	287	295	293	300	304	309	315	320	326	332	337	343	351	356	362	369	376	
Female	297	297	293	297	303	306	308	311	316	320	325	328	333	337	343	349	355	362	369	
All deaths	587	582	581	592	596	606	612	620	630	640	651	660	669	680	693	705	717	731	745	
SMR: males	108.9	103.6	100.3	99.2	98.8	93.3	91.0	89.1	87.4	85.5	84.0	82.5	80.9	79.7	78.7	77.1	76.0	75.1	74.3	
SMR: females	108.9	105.3	100.7	98.7	97.4	95.4	93.0	91.0	89.4	87.7	86.2	84.0	82.6	80.9	79.6	78.5	77.4	76.3	75.3	
SMR: persons	108.9	104.5	100.5	99.0	96.1	94.4	92.0	90.0	88.4	86.6	85.1	83.2	81.7	80.3	78.1	77.7	76.7	75.7	74.8	
Expectation of life: males	78.6	79.2	79.6	79.7	80.3	80.5	80.8	81.1	81.3	81.6	81.8	82.0	82.2	82.4	82.6	82.8	83.0	83.2	83.3	
Expectation of life: females	82.5	82.9	83.4	83.6	83.8	84.0	84.3	84.5	84.7	85.0	85.2	85.4	85.6	85.9	86.0	86.2	86.4	86.5	86.7	
Expectation of life: persons	80.7	81.2	81.6	81.8	82.1	82.4	82.6	82.9	83.1	83.4	83.6	83.8	84.0	84.2	84.4	84.6	84.8	84.9	85.1	
Deaths input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
In-migration from the UK																				
Male	1,306	1,305	1,307	1,308	1,309	1,311	1,312	1,314	1,315	1,316	1,318	1,318	1,318	1,318	1,319	1,319	1,319	1,318	1,318	
Female	1,386	1,384	1,383	1,381	1,380	1,379	1,377	1,376	1,374	1,373	1,372	1,371	1,371	1,371	1,371	1,371	1,371	1,371	1,371	
All	2,692	2,690	2,690	2,689	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	
SMiGR: males	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: females	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Out-migration to the UK																				
Male	1,553	1,462	1,461	1,460	1,462	1,462	1,461	1,461	1,459	1,461	1,460	1,463	1,462	1,459	1,459	1,456	1,458	1,456	1,455	
Female	1,552	1,453	1,454	1,455	1,453	1,453	1,454	1,454	1,456	1,454	1,455	1,452	1,453	1,456	1,459	1,457	1,459	1,459	1,460	
All	3,105	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	
SMiGR: males	39.0	36.9	36.9	36.9	37.0	37.1	37.2	37.4	37.5	37.7	37.8	38.0	38.1	38.1	38.1	38.1	38.1	38.1	38.2	
SMiGR: females	37.9	35.6	35.7	35.8	35.9	36.0	36.2	36.4	36.7	36.9	37.0	37.1	37.2	37.3	37.3	37.4	37.4	37.4	37.5	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
In-migration from Overseas																				
Male	71	92	92	93	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	
Female	59	77	77	76	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	
All	130	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	
SMiGR: males	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: females	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Out-migration to Overseas																				
Male	38	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	
Female	29	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	
All	67	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	
SMiGR: males	17.0	28.6	28.7	28.8	28.9	29.1	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.3	30.4	30.5	30.6	30.6	
SMiGR: females	15.7	26.4	26.5	26.6	26.7	26.9	27.0	27.2	27.4	27.6	27.9	28.1	28.4	28.6	28.8	28.9	29.0	29.1	29.1	
Migrants input	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Migration - Net Flows																				
UK	-413	-225	-226	-225	-225	-226	-225	-225	-225	-225	-225	-225	-226	-225	-225	-226	-226	-225	-225	
Overseas	+63	+57	+57	+57	+57	+57	+57	+57	+57	+57	+57	+57	+57	+57	+57	+57	+57	+57	+57	
Summary of population change																				
Natural change	+387	+410	+400	+380	+370	+358	+342	+324	+304	+285	+266	+249	+230	+213	+193	+174	+156	+136	+118	
Net migration	-350	-168	-168	-168	-168	-168	-168	-168	-168	-168	-168	-168	-168	-168	-168	-168	-168	-168	-168	
Net change	+37	+242	+232	+212	+202	+189	+174	+156	+136	+117	+97	+80	+62	+44	+24	+6	-12	-32	-50	
Crude Birth Rate /000	12.63	12.84	12.66	12.50	12.40	12.33	12.19	12.04	11.89	11.75	11.62	11.50	11.38	11.29	11.20	11.11	11.04	10.97	10.91	
Crude Death Rate /000	7.61	7.54	7.49	7.62	7.65	7.75	7.82	7.91	8.02	8.13	8.26	8.36	8.47	8.60	8.76	8.91	9.06	9.24	9.42	
Crude Net Migration Rate /000	-4.54	-2.18	-2.17	-2.16	-2.16	-2.15	-2.15	-2.14	-2.14	-2.14	-2.13	-2.13	-2.13	-2.13	-2.13	-2.13	-2.13	-2.13	-2.13	
Summary of Population estimates/forecasts																				
<i>Population at mid-year</i>																				
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	5,079	4,937	4,866	4,827	4,804	4,800	4,792	4,758	4,724	4,688	4,647	4,604	4,561	4,519	4,479	4,442	4,406	4,371	4,339	4,307
5-10	5,493	5,692	5,864	5,849	5,903	5,917	5,905	5,814	5,745	5,702	5,673	5,643	5,609	5,570	5,530	5,486	5,437	5,388	5,340	5,300
11-15	4,827	4,586	4,441	4,502	4,482	4,476	4,570	4,756	4,784	4,855	4,894	4,885	4,789	4,736	4,705	4,683	4,674	4,668	4,640	4,611
16-17	1,936	1,977	1,963	1,823	1,752	1,667	1,601	1,729	1,775	1,719	1,757	1,866	1,920	1,867	1,827	1,795	1,773	1,779	1,779	1,784
18-59Female, 64Male	45,410	45,071	44,865	44,808	44,651	44,419	44,167	43,924	43,607	43,302	43,127	42,872	42,637	42,373	42,186	41,999	41,773	41,501	41,197	40,871
60/65-74	9,526	9,670	10,164	10,368	10,593	10,823	10,967	11,044	11,145	11,226	11,280	11,055	11,042	11,127	11,236	11,327	11,413	11,514	11,671	11,829
75-84	3,600	3,714	3,861	4,022	4,140	4,280	4,469	4,759	5,001	5,227	5,616	5,954	6,209	6,410	6,587	6,735	6,838	6,916	6,966	7,016
85+	1,247	1,307	1,373	1,431	1,516	1,588	1,694	1,750	1,828	1,924	2,020	2,123	2,242	2,361	2,468	2,580	2,744	2,936	3,106	3,276
Total	77,118	77,155	77,397	77,629	77,841	78,043	78,232	78,406	78,562	78,698	78,815	78,912	78,992	79,054	79,098	79,123	79,129	79,116	79,084	79,034
Dependency ratios, mean age and sex ratio																				
0-15 / 16-65	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31
65+ / 16-65	0.24	0.25	0.27	0.28	0.29	0.30	0.31	0.32	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43
0-15 and 65+ / 16-65	0.55	0.56	0.57	0.59	0.60	0.61	0.62	0.64	0.64	0.65	0.67	0.68	0.69	0.69	0.69	0.70	0.71	0.72	0.73	0.74
Median age males	37.9	38.2	38.4	38.6	38.8	38.8	38.9	39.1	39.3	39.5	39.6	39.8	39.9	40.1	40.3	40.4	40.6	40.7	40.9	41.1
Median age females	39.5	39.9	40.3	40.6	40.9	41.1	41.4	41.6	41.7	41.9	42.1	42.4	42.7	42.9	43.2	43.4	43.7	43.9	44.1	44.4
Sex ratio males /100 females	96.2	96.1	96.0	95.9	95.8	95.7	95.6	95.5	95.4	95.3	95.2	95.1	95.0	94.9	94.8	94.7	94.6	94.5	94.4	94.4
Population impact of constraint																				
Number of persons																				
Households																				
Number of Households	31,842	32,004	32,202	32,394	32,559	32,743	32,													

Population Estimates and Forecasts

Nathaniel Lichfield & Partners

Components of Population Change

Tamworth Scenario E: Experian Job Growth

	Year beginning July 1st																			
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
Births																				
Male	510	498	513	512	514	517	517	516	518	520	523	527	530	535	539	543	546	549	553	
Female	486	475	488	487	489	492	492	491	493	495	498	502	505	509	514	517	520	523	527	
All Births	996	973	1,001	999	1,003	1,009	1,009	1,007	1,012	1,016	1,022	1,029	1,035	1,044	1,053	1,059	1,065	1,072	1,080	
TFR	1.96	1.97	1.95	1.94	1.93	1.93	1.92	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	
Births input																				
Deaths																				
Male	294	284	288	297	296	303	308	314	321	327	335	342	349	357	367	373	381	390	399	
Female	316	293	294	298	305	309	312	316	322	328	335	339	345	351	359	367	375	384	393	
All deaths	610	577	583	595	601	612	620	630	643	655	669	681	694	708	725	740	756	774	791	
SMR: males	110.7	103.6	100.3	99.2	94.8	93.3	91.0	89.1	87.4	85.5	84.0	82.5	80.9	79.7	78.7	77.1	76.0	75.1	74.3	
SMR: female	115.7	105.3	100.7	98.7	97.4	95.4	93.0	91.0	89.4	87.7	86.2	84.0	82.6	80.9	79.6	78.5	77.4	76.3	75.3	
SMR: person	113.2	104.5	100.5	99.0	96.1	94.4	92.0	90.0	88.4	86.6	85.1	83.2	81.7	80.3	79.1	77.8	76.7	75.7	74.8	
Expectation	78.4	79.2	79.6	79.7	80.3	80.5	80.8	81.1	81.3	81.6	81.8	82.0	82.2	82.4	82.6	82.8	83.0	83.2	83.3	
Expectation	81.9	82.9	83.4	83.6	83.8	84.0	84.3	84.5	84.7	85.0	85.2	85.4	85.6	85.9	86.0	86.2	86.4	86.5	86.7	
Expectation	80.2	81.2	81.6	81.8	82.1	82.4	82.6	82.9	83.1	83.4	83.6	83.8	84.0	84.2	84.4	84.6	84.8	84.9	85.1	
Deaths input																				
In-migration from the UK																				
Male	1,046	1,710	1,362	1,402	1,379	1,405	1,378	1,468	1,458	1,474	1,492	1,478	1,509	1,513	1,495	1,486	1,506	1,514	1,516	
Female	1,111	1,814	1,442	1,481	1,454	1,478	1,446	1,538	1,523	1,537	1,553	1,537	1,569	1,574	1,554	1,545	1,565	1,575	1,577	
All	2,156	3,523	2,804	2,883	2,833	2,882	2,824	3,006	2,981	3,011	3,045	3,015	3,078	3,087	3,049	3,031	3,072	3,089	3,093	
SMigR: male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMigR: female	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants inp																				
Out-migration to the UK																				
Male	1,697	1,018	1,382	1,348	1,375	1,349	1,377	1,286	1,291	1,277	1,266	1,282	1,251	1,253	1,283	1,295	1,281	1,278	1,282	
Female	1,697	1,012	1,375	1,344	1,367	1,340	1,372	1,279	1,288	1,270	1,261	1,273	1,244	1,250	1,279	1,298	1,280	1,281	1,287	
All	3,394	2,030	2,757	2,692	2,741	2,689	2,749	2,565	2,579	2,547	2,527	2,554	2,495	2,502	2,562	2,592	2,561	2,559	2,568	
SMigR: male	42.6	26.1	34.4	33.4	33.8	33.1	33.7	31.4	31.3	30.8	30.3	30.4	29.5	29.2	29.5	29.5	29.0	28.6	28.4	
SMigR: female	41.4	25.3	33.1	32.3	32.7	32.0	32.7	30.5	30.6	30.0	29.5	29.6	28.7	28.4	28.8	28.9	28.2	27.9	27.8	
Migrants inp																				
In-migration from Overseas																				
Male	77	77	77	81	78	79	77	77	77	77	77	77	77	77	77	77	77	77	77	
Female	64	65	64	67	65	66	64	64	64	64	64	64	64	64	64	64	64	64	64	
All	142	142	142	148	144	145	142	142	142	142	142	142	142	142	142	142	142	142	142	
SMigR: male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMigR: female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants inp																				
Out-migration to Overseas																				
Male	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	
Female	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	
All	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	
SMigR: male	24.1	24.8	24.1	24.1	24.0	23.9	23.8	23.8	23.7	23.5	23.4	23.2	23.0	22.8	22.6	22.4	22.3	22.1	21.9	
SMigR: female	22.3	23.0	22.2	22.1	22.0	22.0	21.9	22.0	21.8	21.8	21.7	21.6	21.5	21.3	21.2	21.0	20.8	20.7	20.5	
Migrants inp																				
Migration - Net Flows																				
UK	-1,238	+1,494	+48	+190	+92	+193	+74	+441	+401	+464	+518	+461	+583	+585	+487	+439	+511	+530	+525	
Overseas	+46	+47	+46	+52	+48	+49	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	
Summary of population change																				
Natural chan	+385	+396	+419	+403	+402	+396	+389	+377	+369	+361	+353	+348	+341	+336	+328	+319	+309	+298	+288	
Net migrator	-1,191	+1,540	+94	+242	+140	+242	+120	+487	+448	+510	+564	+507	+629	+631	+533	+485	+557	+576	+571	
Net change	-806	+1,936	+512	+646	+542	+638	+509	+864	+816	+871	+917	+855	+970	+967	+860	+804	+866	+875	+859	
Crude Birth I	12.98	12.59	12.75	12.63	12.59	12.57	12.49	12.35	12.28	12.20	12.15	12.11	12.04	12.02	12.00	11.96	11.91	11.87	11.84	
Crude Death	7.96	7.47	7.42	7.53	7.54	7.63	7.67	7.73	7.80	7.87	7.96	8.01	8.08	8.16	8.26	8.35	8.45	8.57	8.68	
Crude Net M	-15.53	19.93	1.19	3.06	1.75	3.01	1.49	5.98	5.43	6.13	6.71	5.97	7.32	7.27	6.07	5.47	6.22	6.38	6.26	
Summary of Population estimates/forecasts																				
Population at mid-year																				
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	5,079	4,887	4,957	4,948	4,968	5,002	5,015	5,029	5,063	5,094	5,126	5,160	5,188	5,228	5,270	5,305	5,336	5,370	5,406	5,442
5-10	5,493	5,639	5,918	5,926	6,014	6,060	6,116	6,050	6,046	6,067	6,110	6,179	6,224	6,283	6,337	6,385	6,427	6,469	6,509	6,551
11-15	4,827	4,552	4,475	4,549	4,547	4,557	4,674	4,881	4,943	5,054	5,137	5,179	5,151	5,148	5,178	5,215	5,267	5,309	5,360	5,403
16-17	1,936	1,961	1,986	1,845	1,780	1,770	1,705	1,643	1,786	1,846	1,801	1,857	1,985	2,060	2,025	2,003	1,990	2,008	2,031	2,045
18-59Female	45,410	44,465	45,467	45,602	45,741	45,731	45,772	45,735	45,879	46,006	46,311	46,571	46,812	47,107	47,488	47,803	48,046	48,295	48,525	48,750
60/65-74	9,526	9,828	10,197	10,416	10,662	10,911	11,079	11,174	11,313	11,432	11,365	11,346	11,379	11,521	11,689	11,837	11,981	12,148	12,375	12,608
75-84	3,600	3,693	3,871	4,037	4,163	4,309	4,506	4,804	5,061	5,303	5,713	6,073	6,349	6,575	6,779	6,951	7,077	7,180	7,256	7,334
85+	1,247	1,287	1,377	1,439	1,530	1,607	1,720	1,780	1,869	1,975	2,083	2,200	2,331	2,466	2,589	2,716	2,896	3,107	3,297	3,488
Total	77,118	76,312	78,249	78,761	79,407	79,948	80,587	81,096	81,960	82,776	83,647	84,564	85,419	86,389	87,355	88,216	89,020	89,886	90,761	91,620
Dependency ratios, mean age and sex ratio																				
0-15 / 16-65	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
65+ / 16-65	0.24	0.26	0.26	0.27	0.28	0.29	0.30	0.31	0.31	0.32	0.33	0.33	0.34	0.34	0.35	0.36	0.36	0.37	0.38	0.38
0-15 and 65-	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.63	0.63	0.64	0.65	0.66	0.66	0.67	0.67	0.68	0.68	0.69	0.70	0.71
Median age	37.9	38.3	38.2	38.3	38.4	38.4	38.4	38.6	38.6	38.7	38.7	38.7	38.8	38.8	38.8	38.9	39.0	39.1	39.1	39.2
Median age	39.5	40.1	40.1	40.3	40.5	40.6	40.7	40.8	40.8	40.8	40.9	41.0	41.1	41.1	41.2	41.3	41.4	41.5	41.6	41.7
Sex ratio ma	96.2	96.2	96.1	96.0	95.8	95.8	95.7	95.6	95.5	95.5	95.4	95.4	95.3	95.2	95.2	95.1	95.1	95.0	95.0	95.0
Population impact of constraint																				
Number of persons	-1,085	+1,630	+171	+309	+194	+279	+149	+507	+454	+512	+577	+511	+625	+626	+531	+473	+530	+541	+527	
Labour Force																				
Number of L	41,177	40,496	41,493	41,635	41,876	42,018	42,174	42,356	42,587	42,794	43,016	43,297	43,578	43,873	44,169	44,480	44,775	45,056	45,337	45,604
Change in Labour Force c	-881	+997	+142	+241	+142	+157	+182	+231	+207	+222	+281	+281	+296	+296	+296	+311	+296	+281	+281	+266
Number of su	26,737	27,097	28,087	28,177	28,337	28,427														

Population Estimates and Forecasts

Nathaniel Lichfield & Partners

Components of Population Change

Tamworth Scenario F: Job Stabilisation

Year beginning July 1st

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
Births																				
Male	510	488	474	470	467	467	465	461	460	459	459	459	459	461	462	463	463	465	467	
Female	486	465	451	447	445	445	443	439	438	437	438	437	438	440	441	441	441	443	445	
All Births	996	952	925	917	912	912	908	900	898	896	897	897	897	900	903	904	905	908	911	
TFR	1.96	1.97	1.95	1.94	1.93	1.93	1.92	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	
Births input																				

Deaths																				
Male	294	282	282	291	289	296	301	306	312	317	324	330	336	343	351	357	363	371	378	
Female	316	291	287	291	297	301	303	307	312	317	324	327	332	337	344	351	358	365	373	
All deaths	610	573	569	581	586	597	604	612	624	635	647	657	668	681	695	708	721	736	751	
SMR: males	110.7	103.6	100.3	99.2	94.8	93.3	91.0	89.1	87.4	85.5	84.0	82.5	80.9	79.7	78.7	77.1	76.0	75.1	74.3	
SMR: female	115.7	105.3	100.7	98.7	97.4	95.4	93.0	91.0	89.4	87.7	86.2	84.0	82.6	80.9	79.6	78.5	77.4	76.3	75.3	
SMR: person	113.2	104.5	100.5	99.0	96.1	94.4	92.0	90.0	88.4	86.6	85.1	83.2	81.7	80.3	79.1	77.8	76.7	75.7	74.8	
Expectation	78.4	79.2	79.6	79.7	80.3	80.5	80.8	81.1	81.3	81.6	81.8	82.0	82.2	82.4	82.6	82.8	83.0	83.2	83.3	
Expectation	81.9	82.9	83.4	83.6	83.8	84.0	84.3	84.5	84.7	85.0	85.2	85.4	85.6	85.9	86.0	86.2	86.4	86.5	86.7	
Expectation	80.2	81.2	81.6	81.8	82.1	82.4	82.6	82.9	83.1	83.4	83.6	83.8	84.0	84.2	84.4	84.6	84.8	84.9	85.1	
Deaths input																				

In-migration from the UK																				
Male	833	1,139	1,326	1,318	1,334	1,352	1,314	1,383	1,381	1,391	1,385	1,374	1,399	1,405	1,383	1,383	1,407	1,419	1,428	
Female	885	1,209	1,404	1,392	1,407	1,422	1,379	1,449	1,443	1,451	1,442	1,429	1,455	1,461	1,437	1,437	1,463	1,476	1,485	
All	1,718	2,348	2,730	2,709	2,741	2,774	2,693	2,832	2,825	2,842	2,828	2,803	2,854	2,866	2,820	2,820	2,870	2,895	2,913	
SMiGR: male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants inp																				

Out-migration to the UK																				
Male	1,916	1,607	1,419	1,435	1,421	1,403	1,443	1,373	1,369	1,362	1,375	1,389	1,364	1,364	1,397	1,400	1,382	1,375	1,371	
Female	1,916	1,598	1,412	1,431	1,413	1,394	1,436	1,366	1,366	1,355	1,370	1,378	1,356	1,360	1,393	1,404	1,380	1,378	1,377	
All	3,832	3,205	2,831	2,866	2,834	2,797	2,879	2,738	2,736	2,716	2,744	2,767	2,720	2,724	2,790	2,804	2,763	2,754	2,748	
SMiGR: male	48.1	41.9	37.5	37.9	37.5	37.0	38.0	36.3	36.1	35.9	36.1	36.3	35.6	35.5	36.1	36.1	35.5	35.2	35.0	
SMiGR: female	46.8	40.6	36.5	36.8	36.4	36.0	37.1	35.4	35.4	35.1	35.3	35.3	34.8	34.7	35.3	35.4	34.7	34.5	34.3	
Migrants inp																				

In-migration from Overseas																				
Male	77	77	77	81	78	79	77	77	77	77	77	77	77	77	77	77	77	77	77	
Female	64	65	64	67	65	66	64	64	64	64	64	64	64	64	64	64	64	64	64	
All	142	142	142	148	144	145	142	142	142	142	142	142	142	142	142	142	142	142	142	
SMiGR: male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants inp																				

Out-migration to Overseas																				
Male	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	
Female	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	
All	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	
SMiGR: male	24.1	25.3	25.8	25.8	25.9	25.9	25.9	25.9	25.9	25.9	25.8	25.8	25.7	25.7	25.6	25.5	25.5	25.4	25.3	
SMiGR: female	22.3	23.4	24.0	24.0	24.1	24.1	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.1	24.1	24.1	24.0	23.9	
Migrants inp																				

Migration - Net Flows																				
UK	-2,114	-857	-101	-157	-93	-23	-186	+94	+89	+125	+83	+36	+134	+142	+30	+16	+107	+142	+165	
Overseas	+46	+47	+46	+52	+48	+49	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	

Summary of population change																				
Natural chan	+385	+379	+355	+336	+326	+316	+304	+287	+274	+261	+249	+240	+229	+219	+208	+196	+184	+171	+160	
Net migration	-2,067	-810	-55	-105	-45	+26	-140	+140	+135	+171	+130	+82	+180	+188	+76	+62	+153	+188	+211	
Net change	-1,682	-431	+300	+231	+282	+341	+164	+427	+409	+433	+379	+322	+409	+407	+284	+258	+337	+359	+371	
Crude Birth	13.05	12.66	12.30	12.16	12.06	12.00	11.91	11.75	11.67	11.58	11.53	11.48	11.42	11.40	11.39	11.37	11.33	11.32	11.32	
Crude Death	8.00	7.62	7.58	7.71	7.74	7.85	7.92	8.00	8.11	8.20	8.32	8.41	8.51	8.63	8.77	8.90	9.03	9.18	9.33	
Crude Net M	-27.10	-10.77	-0.73	-1.39	-0.59	0.34	-1.83	1.83	1.75	2.21	1.66	1.05	2.30	2.38	0.96	0.78	1.92	2.34	2.62	

	Population at mid-year																			
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	5,079	4,811	4,671	4,624	4,592	4,591	4,564	4,526	4,519	4,512	4,509	4,503	4,494	4,496	4,504	4,506	4,508	4,517	4,532	4,549
5-10	5,493	5,563	5,704	5,681	5,720	5,722	5,730	5,627	5,661	5,627	5,512	5,519	5,502	5,490	5,468	5,481	5,474	5,472	5,472	5,478
11-15	4,827	4,517	4,345	4,408	4,387	4,381	4,477	4,656	4,667	4,759	4,800	4,790	4,714	4,670	4,646	4,629	4,629	4,619	4,612	4,611
16-17	1,936	1,943	1,919	1,796	1,717	1,706	1,637	1,571	1,702	1,752	1,699	1,740	1,849	1,905	1,852	1,810	1,776	1,775	1,788	1,780
18-59Female	45,410	43,840	43,167	43,177	43,058	42,908	42,788	42,580	42,455	42,358	42,416	42,365	42,299	42,271	42,325	42,300	42,222	42,160	42,086	42,025
60/65-74	9,526	9,789	10,051	10,257	10,481	10,713	10,862	10,937	11,048	11,139	11,047	10,994	10,992	11,094	11,220	11,324	11,423	11,543	11,720	11,900
75-84	3,600	3,677	3,814	3,977	4,098	4,240	4,433	4,722	4,969	5,200	5,594	5,936	6,195	6,402	6,567	6,738	6,845	6,929	6,988	7,048
85+	1,247	1,276	1,334	1,395	1,482	1,558	1,668	1,725	1,809	1,911	2,014	2,123	2,247	2,373	2,487	2,604	2,722	2,972	3,150	3,328
Total	77,118	75,436	75,005	75,395	75,536	75,816	76,159	76,323	76,750	77,159	77,591	77,970	78,292	78,701	79,106	79,392	79,650	79,987	80,346	80,717

Dependency ratios, mean age and sex ratio																				
0-15 / 16-65	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.31	0.31	0.31	
65+ / 16-65	0.24	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35									

Population Estimates and Forecasts

Nathaniel Lichfield & Partners

Components of Population Change

Tamworth Scenario G: Past Trends Job Growth

	Year beginning July 1st																			
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
Births																				
Male	510	485	469	463	458	456	452	445	442	439	438	436	434	434	435	434	433	433	434	
Female	486	462	447	441	437	434	430	424	421	419	417	415	414	414	414	413	413	412	413	
All Births	996	948	916	904	895	890	882	869	863	858	855	852	848	848	848	847	845	846	848	
TFR	1.96	1.97	1.95	1.94	1.93	1.93	1.92	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	
Births input																				
Deaths																				
Male	294	282	282	290	288	294	299	303	309	314	320	326	331	338	346	351	357	364	371	
Female	316	291	286	290	295	299	301	304	309	314	320	323	328	332	339	345	352	359	366	
All deaths	610	573	568	579	583	593	599	607	618	628	640	649	659	671	685	696	709	723	737	
SMR: males	110.7	103.6	100.3	99.2	94.8	93.3	91.0	89.1	87.4	85.5	84.0	82.5	80.9	79.7	78.7	77.1	76.0	75.1	74.3	
SMR: female	115.7	105.3	100.7	98.7	97.4	95.4	93.0	91.0	89.4	87.7	86.2	84.0	82.6	80.9	79.6	78.5	77.4	76.3	75.3	
SMR: persor	113.2	104.5	100.5	99.0	96.1	94.4	92.0	90.0	88.4	86.6	85.1	83.2	81.7	80.3	79.1	77.8	76.7	75.7	74.8	
Expectation	78.4	79.2	79.6	79.7	80.3	80.5	80.8	81.1	81.3	81.6	81.8	82.0	82.2	82.4	82.6	82.8	83.0	83.2	83.3	
Expectation	81.9	82.9	83.4	83.6	83.8	84.0	84.3	84.5	84.7	85.0	85.2	85.4	85.6	85.9	86.0	86.2	86.4	86.5	86.7	
Expectation	80.2	81.2	81.6	81.8	82.1	82.4	82.6	82.9	83.1	83.4	83.6	83.8	84.0	84.2	84.4	84.6	84.8	84.9	85.1	
Deaths input																				
In-migration from the UK																				
Male	788	1,096	1,283	1,274	1,291	1,309	1,271	1,339	1,338	1,347	1,342	1,331	1,356	1,362	1,341	1,341	1,366	1,378	1,388	
Female	837	1,163	1,358	1,346	1,361	1,377	1,335	1,403	1,398	1,406	1,397	1,385	1,410	1,416	1,394	1,394	1,420	1,434	1,444	
All	1,625	2,259	2,640	2,620	2,653	2,686	2,606	2,742	2,736	2,753	2,739	2,716	2,766	2,779	2,735	2,736	2,786	2,812	2,831	
SMigR: male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMigR: female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants inp																				
Out-migration to the UK																				
Male	1,963	1,652	1,464	1,480	1,465	1,448	1,487	1,418	1,414	1,406	1,419	1,432	1,408	1,407	1,440	1,442	1,424	1,417	1,412	
Female	1,963	1,642	1,457	1,475	1,457	1,438	1,480	1,411	1,410	1,399	1,414	1,422	1,399	1,404	1,436	1,446	1,422	1,420	1,418	
All	3,926	3,294	2,921	2,955	2,922	2,886	2,967	2,829	2,824	2,805	2,833	2,854	2,807	2,811	2,876	2,888	2,847	2,837	2,830	
SMigR: male	49.3	43.2	39.0	39.5	39.2	38.8	40.0	38.4	38.3	38.2	38.5	38.9	38.2	38.2	38.9	39.0	38.5	38.3	38.1	
SMigR: female	47.9	41.9	37.9	38.4	38.2	37.9	39.1	37.6	37.6	37.4	37.8	38.0	37.4	37.4	38.1	38.3	37.7	37.6	37.4	
Migrants inp																				
In-migration from Overseas																				
Male	77	77	77	81	78	79	77	77	77	77	77	77	77	77	77	77	77	77	77	
Female	64	65	64	67	65	66	64	64	64	64	64	64	64	64	64	64	64	64	64	
All	142	142	142	148	144	145	142	142	142	142	142	142	142	142	142	142	142	142	142	
SMigR: male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMigR: female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants inp																				
Out-migration to Overseas																				
Male	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	
Female	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	
All	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	
SMigR: male	24.1	25.4	26.0	26.1	26.3	26.4	26.5	26.6	26.7	26.7	26.8	26.8	26.8	26.8	26.8	26.9	26.9	26.9	26.8	
SMigR: female	22.3	23.5	24.2	24.3	24.5	24.6	24.7	25.0	25.0	25.1	25.2	25.3	25.4	25.4	25.5	25.5	25.5	25.5	25.5	
Migrants inp																				
Migration - Net Flows																				
UK	-2,301	-1,035	-280	-335	-269	-200	-361	-87	-88	-52	-93	-138	-41	-32	-141	-152	-60	-25	+1	
Overseas	+46	+47	+46	+52	+48	+49	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	+46	
Summary of population change																				
Natural chan	+385	+375	+348	+325	+312	+297	+282	+262	+245	+230	+215	+202	+189	+177	+164	+150	+137	+123	+110	
Net migrator	-2,255	-988	-234	-283	-221	-151	-315	-41	-42	-6	-47	-92	+5	+14	-95	-106	-14	-22	+47	
Net change	-1,869	-613	+114	+42	+90	+146	+33	+221	+204	+224	+168	+110	+194	+191	+69	+44	+122	+144	+157	
Crude Birth I	13.07	12.65	12.26	12.09	11.96	11.88	11.75	11.57	11.46	11.36	11.29	11.22	11.15	11.13	11.11	11.08	11.05	11.04	11.04	
Crude Death	8.01	7.64	7.60	7.75	7.79	7.91	7.99	8.09	8.21	8.32	8.45	8.56	8.67	8.80	8.97	9.11	9.27	9.44	9.60	
Crude Net M	-29.60	-13.19	-3.13	-3.78	-2.96	-2.01	-4.20	-0.54	-0.55	-0.08	-0.62	-1.22	0.07	0.18	-1.25	-1.39	-0.19	0.28	0.61	
Summary of Population estimates/forecasts																				
Population at mid-year																				
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	5,079	4,795	4,638	4,573	4,522	4,501	4,454	4,394	4,365	4,338	4,314	4,289	4,260	4,245	4,235	4,222	4,209	4,205	4,206	4,212
5-10	5,493	5,571	5,679	5,642	5,665	5,649	5,640	5,517	5,431	5,375	5,337	5,320	5,278	5,241	5,215	5,184	5,154	5,129	5,108	5,094
11-15	4,827	4,509	4,330	4,385	4,356	4,342	4,428	4,555	4,614	4,674	4,700	4,674	4,585	4,524	4,482	4,447	4,428	4,398	4,370	4,350
16-17	1,936	1,939	1,912	1,776	1,704	1,690	1,619	1,551	1,677	1,723	1,667	1,702	1,806	1,855	1,797	1,750	1,710	1,702	1,708	1,692
18-59Female	45,410	43,706	42,906	42,787	42,539	42,262	42,014	41,660	41,427	41,204	41,135	40,958	40,768	40,615	40,541	40,391	40,189	40,004	39,806	39,621
60/65-74	9,526	9,781	10,035	10,232	10,447	10,668	10,808	10,872	10,972	11,051	10,948	10,883	10,868	10,955	11,066	11,154	11,236	11,339	11,496	11,656
75-84	3,600	3,674	3,807	3,967	4,085	4,224	4,413	4,698	4,940	5,167	5,555	5,891	6,143	6,344	6,522	6,667	6,767	6,845	6,897	6,950
85+	1,247	1,273	1,329	1,388	1,473	1,546	1,653	1,708	1,790	1,889	1,989	2,095	2,215	2,338	2,449	2,562	2,726	2,921	3,095	3,268
Total	77,118	75,249	74,635	74,749	74,791	74,882	75,028	74,995	75,216	75,420	75,644	75,812	75,922	76,116	76,307	76,376	76,420	76,542	76,686	76,844
Dependency ratios, mean age and sex ratio																				
0-15 / 16-65	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.31	0.31	0.31	0.31	
65+ / 16-65	0.24	0.26	0.27	0.28	0.29	0.30	0.32	0.33	0.34	0.35	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44
0-15 and 65-	0.55	0.57	0.58	0.60	0.61	0.62	0.63	0.65	0.65	0.66	0.67	0.68	0.68	0.69	0.70	0.71	0.72	0.73	0.74	0.75
Median age	37.9	38.5	38.9	39.1	39.4	39.6	39.7	39.8	39.9	40.1	40.2	40.3	40.4	40.5	40.7	40.8	40.9	40.9	41.1	41.1
Median age	39.5	40.3	40.9	41.3	41.7	42.0	42.3	42.5	42.7	42.9	43.0	43.2	43.4	43.6	43.8	44.1	4			