

Barton Willmore
On behalf of
Gladman Developments Ltd

Matter 1 Hearing Statement
Telford and Wrekin (2011 – 2031)

Housing Needs and Requirement

EXAMINATION OF THE TELFORD AND WREKIN LOCAL PLAN, NOVEMBER 2016

This statement has been prepared by Barton Willmore behalf of Gladman Developments and supplements the Telford and Wrekin OAN Report also prepared by Barton Willmore, dated September 2016 and appended to this Statement.

MATTER 1 – Housing – Needs, Requirement and Supply

Issue 1.1 (part) Is the Council's full objective assessment of housing need (totalling 9,940 homes for the plan period) sufficiently justified in line with the National Planning Policy Framework (the Framework) and Planning Practice Guidance (PPG)?

Has appropriate account been taken of demographic and economic information as well as market signals?

1.0 Overview of OAN assessment scope and methodology

- 1.1 The process that local planning authorities should follow in order to arrive at full objectively assessed housing need, as described by NPPF paragraph 159, is set out in Planning Practice Guidance (PPG) 2a, Housing and Economic Development Needs Assessment. The scope of the assessment should be the housing market area (HMA). On a best fit basis, we agree with the Council that the HMA comprises the district of Telford and Wrekin only. Nevertheless, it must be acknowledged, as the Council does, that a functional relationship (travel to work) links the district to Shropshire and the West Midlands conurbation, which together rely upon commuters from Telford and Wrekin (15% of employed residents in 2011) to fulfil job demand there.
- 1.2 The methodology for assessing overall housing need (2a 014 to 020) is summarised in figure 1. As can be seen, it is a three step process through which the household projection for all districts within the housing market area is transformed into or confirmed as the housing need estimate for an area after account is taken of; Step 1) demography (past population change and household formation which may be suppressed) (015 to 017), Step 2) future job growth (the need to accommodate it and not jeopardise it) (018), and; Step 3) market signals (of undersupply relative to demand) 019 to 020.
- 1.3 In **Barton Willmore's opinion**, step 1, establishing the demographic OAN, has not been adequately investigated and clear evidence of suppression has not been addressed. Further, at step 2 the Council fails to adequately assess the number of homes needed to support future jobs growth, and significantly underestimates the number of

homes required. Table 1 summarises the PPG housing need methodology alongside the methodological problems (household formation rates and future jobs) described above.

- 1.4 Note that the scope and methodology described above and illustrated is confirmed by the method overview of the latest PAS guidance (July 2015), specifically figure 4.1 on page 8 of that document, albeit that the potential adjustments (demographic, jobs, market signals) are dealt with in a slightly different order.

Figure 1: PPG OAN Methodology Guidance

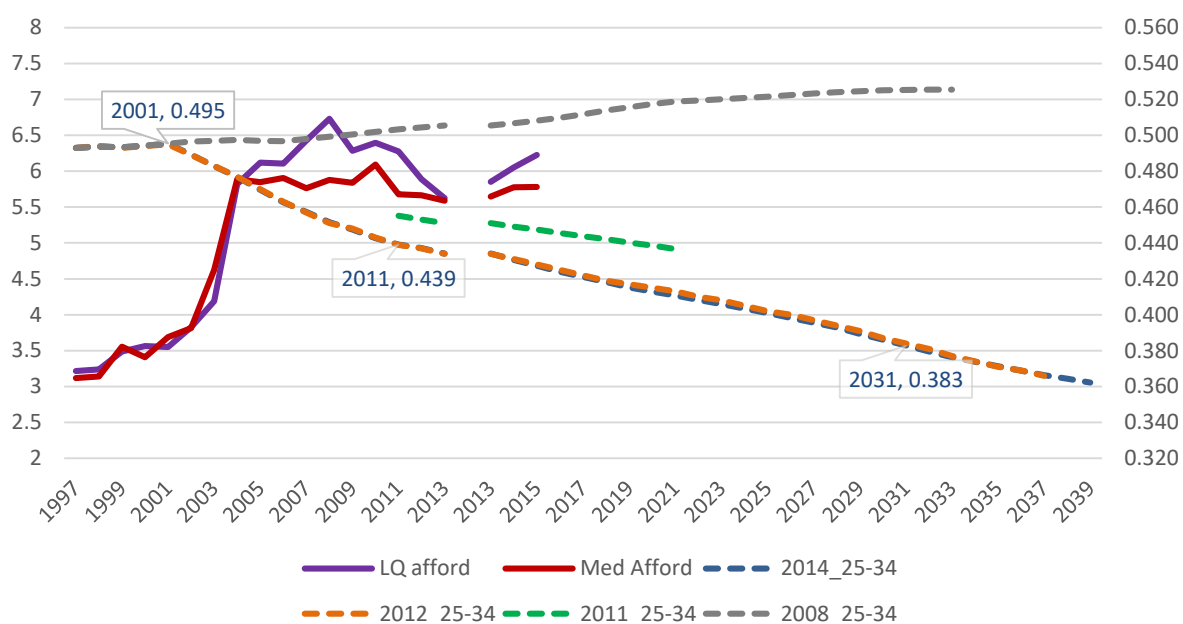
PPG ID 2a 015 to 020			Council's Assessment (PBA, 2015)
Latest CLG household projections starting point			2012-based, up to date at the time the assessment was carried out.
Adjustments to projections	1. Demography	A. Household formation (ID2a 015, 016) <i>may have been suppressed historically by undersupply and worsening affordability of housing. As a result, the CLG household formation rate projections may also be suppressed. If so they must be adjusted upwards so that the suppression is removed.</i>	Fails to fully investigate and acknowledge suppressed household formation
		B. Migration and population change (ID2a 016, 017). <i>Sensitivity testing of local migration and population change, taking account of the most recent demographic evidence from ONS.</i>	Alternative population projections presented, based on migration assumptions tested and presented, using the most up to date demographic evidence available at the time
		1. Gives rise to the ' demographic OAN '	Demographic projections underestimate demographic OAN, because no uplift for suppressed household formation is applied.
	2. Future job growth (ID2a 018) <i>based on past trends and or projections should be taken into account. The OAN must be capable of accommodating the supply of working age population that is economically active (labour force supply), if it does not them it should be adjusted upwards.</i>	2. Gives rise to the ' future jobs OAN '	Council's assessment underestimates the number of homes needed to support future jobs growth, because the economic activity rates used are unrealistic, nor can they be reconciled with the 2011 Census
	3. Market signals (ID2a 019, 020) <i>of undersupply relative to demand that are worsening trigger an upward adjustment to planned housing numbers that are based solely on household projections. The more significant the affordability constraints, the larger the additional supply response should be.</i>	3. Gives rise to the ' market signals uplift '	Not addressed by the Council, but not at issue here, because of overlaps with the future jobs uplift.
Full objectively assessed housing need (FOAN) (Overall housing need)			For the reasons identified above (1a and 2) the Council's OAN is not PPG/NPPF compliant

2.0 Stage 1a, household formation rates **and the 'demographic OAN'**

- 2.1 The household formation rate projections used by **CLG's** 2014-based household projection is largely the same to the formation rate projections used in the 2012-based projections (and the **Council's OAN**). Both take their bearing from household numbers and sizes by age and gender identified through 2011 Census data, collected at a time when household formation is widely regarded to have been constrained.
- 2.2 The **Council's evidence fails to acknowledge** the underlying relationship between household formation trends and affordability. In Telford and Wrekin, a sharp worsening in affordability between 2001 and 2011 coincided with household formation rates for the 25-34 age (first time buyer) group falling away from their projected path (2008-based), altering course from a shallow rise to a relatively steep decline.
- 2.3 Over the period 2011 to 2031, the 2014-based household formation rate projection continues the rate of decline observed between 2001 and 2011, a greater rate of decline than the interim 2011-based household formation rate projection, which was widely acknowledged to be suppressed.
- 2.4 The lower quartile affordability problem peaked in 2008 (x6.7 lower quartile incomes) and whilst it is clear that after 2007 affordability began to improve, falling to x5.9, it remained significantly (+2 points) above its pre 2001 level (x3.2 to x3.5) and represented an impassable barrier to home ownership for many young people.
- 2.5 We can now add to this picture as updated affordability ratios were published by CLG on 14th July 2016 which showed that lower quartile (and median) affordability ratios have risen sharply since 2013 to x6.2 (lower quartile), x5.8 (median) in 2015, up from a rebased x5.9 (lower quartile) and x5.6 (median) in 2013.
- 2.6 The 2014-based formation rate is evidently suppressed and projected to fall from 0.44 in 2011 to 0.38 in 2031 (-0.06, 2011 to 2031). The recent (2013 to 2015) worsening of the affordability problem, after a period (2008 to 2013) when the lower quartile ratio fell back to x5.6 lower quartile incomes (still prohibitively high) is indicative of undersupply relative to demand. The 2014-based rate projection is unchanged from the published 2012-based projection, but evidently more suppressed than the interim 2011-based projections (see figure 2).
- 2.7 As can be seen from figure 3, the situation for England as a whole is remarkably similar, albeit that the fall in the household formation rate, 2011 to 2031, is not so great at -0.05, 2011 to 2031. In conclusion, it is clear that household formation in Telford and Wrekin is suppressed in

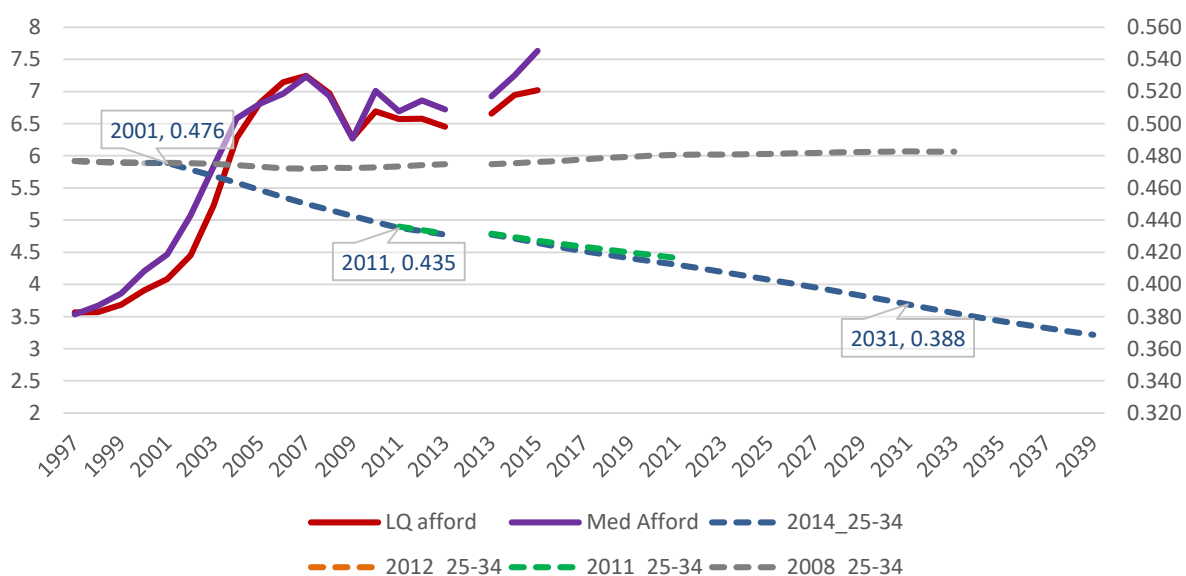
the context of rapidly deteriorating affordability between 2001 and 2011, two points in time **that directly influence CLG's** 2014-based (and 2012-based) household formation rate projection. In absolute and relative terms (compared to the same projections for England as a whole) suppression is evident in the CLG household formation rate projection for Telford and Wrekin.

Figure 2: Household formation (25-34) and affordability, Telford and Wrekin



Sources: ONS live tables 576 and 577, CLG Stage 2 household formation rates.

Figure 3: Household formation (25-34) and affordability, England



Sources: ONS live tables 576 and 577, CLG Stage 2 household formation rates.

- 2.8 Other evidence also points to undersupply relative to demand, specifically the number of concealed households, which doubled between 2001 and 2011, a rate of increase significantly greater than experienced across the region (+61%) and England (+70%). Accordingly an upward adjustment to the published 2014-based household formation rate projection (now the PPG starting point estimate of housing need), and any alternative demographic projections, should be made to address locally evident formation rate suppression.
- 2.9 Whilst the need to make some form of adjustment for suppressed household formation is widely accepted, the precise nature of the headship rate adjustment is the subject of debate and disagreement.
- 2.10 Table 4 shows the effect of making an upward adjustment to the 25-44 year age group formation rates only upon 1) the 2014-based household projections, 2) a ten year migration trend (as preferred by the Council) based projection, taking account of migration flow data over the period 2005 to 2015.
- 2.11 The headship rate adjustment presented is made by applying a partial (50%) return to the 2008-based rates, consistent with the approach advocated by the Local Plan Expert Group (Appendix 6 to their report), giving rise to a demographic OAN of at least 621 dwellings per annum.
- 2.12 Alternatively, as presented in the Barton Willmore OAN Report, September 2016, the adjustment could be made via a full return to the 2008-based rate, in which case the demographic OAN is 680 dwellings per annum; or a return to the rate observed in 2001, in which case the demographic OAN is 647 dwellings per annum.

Table 1, Updated Demographic OAN

Demographic OAN Calculation	Change 2011 to 2032 per annum			Dwellings per annum	
	Population	Migration	Jobs	2014-based	2014-based LPEG adjustment
2014-based household projection (starting point)	702	52	307	502	557
10yr migration trend (2005 -2015)	835	156	406	564	621
<i>Minimum demographic OAN</i>					<i>621</i>

Source: Barton Willmore OAN Report, September 2016

3.0 **Stage 2, 'future jobs OAN'**

- 3.1 The problems **with the Council's attempt to** assess whether the projected number of future jobs will be accommodated by the demographic OAN are as follows.
- 3.2 The assumptions used to link population and workplace jobs (economic activity rates, unemployment rate and commuting ratio) are incorrectly calibrated in 2011 and cannot be reconciled with the 2011-Census. Simply put the values used in 2011 are wrong and as a result, the forward projections, to 2031, are questionable.
- 3.3 The realism of the economic activity rates used cannot be established because they are not published below the level of a 16-64 rate for all persons and a 65+ rate for all persons. To understand how economic activity is likely to change, an understanding of how male and female activity, by age group (5 year bands) is likely to change is essential.
- 3.4 It is essential because PPG (ID2a 018, second paragraph) requires that the demographic OAN be tested, to establish whether it will supply (i.e. projects) growth in the economically active population that at the very least **matches projected job growth. Whether it will or won't is** greatly influenced by age structure. Change in the projected number of each working age group is crucial to understanding long run capacity to support job growth.
- 3.5 The reliance on a single jobs forecast (from Experian), that was originally constrained to the 2012-based SNPP and is now out of date, is also questionable. Our opinion is that it is preferable to look across a range of more up to date job growth forecasts (Experian, Cambridge Econometrics and Oxford Economics) and take the average level of projected job growth, which our latest assessment reveals to be 693 jobs per annum.
- 3.6 Having looked across a range of forecasts, it is then necessary to make plausible assumptions about the factors that link population and job growth. In our opinion and that of the Longbank Farm Inspector¹ (and North Tyneside Council whose Local Plan is also being examined at this time; and Local Plans Expert Group for the purpose of setting housing requirements), plan period change in economic activity rates, by age group and gender, should be based on the rates of change published by the Office for Budget Responsibility (OBR).
- 3.7 The OBR rates are acknowledged to represent a well thought through assessment of likely behaviour, taking into account not only trends towards working into old age and changes to the State Pension Age, but also the likelihood of people that were previously economically

¹ Appeal ref: APP/V0728/W/15/3018546

inactive, becoming active in the future. To create a plausible Telford and Wrekin economic activity rate projection, changes in the OBR rates from 2011, by gender and 5 year age group, are applied to the economic activity rates for Telford and Wrekin in 2011 according to the 2011 Census, also by gender and the same 5 year age groups as used by OBR (see figures 6.4 and 6.5 of the Barton Willmore OAN Report, September 2016).

- 3.8 As discussed above, the plausibility of the economic activity rate change projection employed by Experian cannot be examined in any detail because only the headline rates are published. However, in the context of the OBR rates they look overly optimistic, most especially the over 65 rate, which increases by 11% over the period 2011 to 2031 and ensures that 73% (5,425 out of 7,402) of the growth in Telford and Wrekin's **plan period labour supply** originates from persons aged 65 and over (See Table 2).
- 3.9 The full list of linking assumptions used and their implications are highlighted in table 1, which **compares the Council's OAN (PBA's 03-13 demographic scenario) with Barton Willmore's full OAN**. Note that Barton Willmore has used Census 2011 based estimates of economic activity and commuting in 2011, which are considerably at odds with the PBA/Experian estimates, which are clearly not Census 2011-based.
- 3.10 Note also that economic activity in 2031 is closely aligned, the implication of which is that both PBA and Barton Willmore (using the OBR rates) have a similar view about the capacity of Telford and Wrekin's **population to support** job growth in 2031. The problem with the PBA economic activity rate projection is therefore not where it ends, but where it begins.
- 3.11 As was the case for the demographic OAN, the formation rate adjustment presented in Table 2 is based on the LPEG approach (50% to the 25-44 age group rate from the 2008-based projections), giving rise to a future jobs OAN of 826 dwellings per annum. As presented in the Barton Willmore OAN Report, September 2016, the adjustment could also be made via a full return to the 2008-based rate, in which case the future jobs OAN is 891 dwellings per annum; or a return to the rate observed in 2001, in which case the future jobs OAN is 855 dwellings per annum.

Table 2, Comparison of Key Assumptions Linking People and Jobs, in OAN contexts

Indicators		PBA 03_13 Scenario			Barton Willmore 693 jobs scenario			Difference
		2011	2011-2031	2031	2011	2011-2031	2031	2011-2031
Population	All	166,778	16,678	183,456	166,831	27,229	194,060	10,551
	0-15	34,244	2,983	37,227	34,252	3,423	37,675	440
	16-64	108,115	-438	107,677	108,236	6,683	114,919	7,121
	65+	24,420	14,132	38,552	24,343	17,123	41,466	2,991
Economic Activity Rate	16+	61.5%	-0.7%	60.8%	64.2%	-3.6%	60.6%	-2.9%
	16-64	73.5%	2.1%	75.7%	76.5%	1.0%	77.5%	-1.1%
	65+	8.1%	11.1%	19.2%	9.6%	4.2%	13.8%	-6.9%
Labour force	16+	81,465	7,402	88,867	85,111	9,657	94,769	2,256
	16-64	79,492	1,976	81,468	82,786	6,273	89,058	4,296
	65+	1,973	5,425	7,398	2,326	3,385	5,710	-2,041
Unemployment rate		9.7%	-4.9%	4.8%	9.1%	-4.5%	4.6%	0.4%
Residence based employment		73,597	11,022	84,618	77,366	13,028	90,395	2,007
Commuting ratio		88.2%	-0.2%	87.9%	94.0%	0.0%	94.0%	0.2%
Workplace based Employment		83,468	12,762	96,230	82,305	13,860	96,165	1,098
		638			693			55
Workers to jobs ratio		96.9%	-3.7%	93.3%	100.0%	0.0%	100.0%	3.7%
Workforce jobs		86,111	17,066	103,177	82,305	13,860	96,165	-3,206
		853			693			-160
Households		66,659	9,634	76,293	66,666	14,792	81,459	5,158
		482			740			258
Dwellings		68,783	9,941	78,724	68,748	15,254	84,003	5,313
		497			763			266
ADJUST Households (LPEG method)		not applicable			66,666	16,022	82,688	16,022
					801			801
ADJUST Dwellings (LPEG method)					68,748	16,522	85,270	16,522
					826			826

Source: PBA OAN Report 2015, Appendix B and D; Barton Willmore OAN Report, September 2016

4.0 Conclusions on Telford and Wrekin's 'future jobs' and full OAN

4.1 As detailed in Table 2 and summarised in Table 3, after applying transparent and realistic assumptions to link population and jobs growth, followed by an adjustment for suppressed household formation, a future jobs OAN of at least 826 is arrived at (using the LPEG approach to adjusting household formation rates), an uplift of at least 205 dwellings per annum on the demographic OAN (see table 3).

4.2 The third and final step taken to arrive at full OAN is the assessment of market signals. Adverse market signals can be identified in Telford and Wrekin including a worsening of affordability, which has been influenced by increasing house prices/ rents. In addition the number of concealed households increased markedly (a 100% increase) between the 2001 and 2011 Census. Although largely less severe than the national average, market signals issues in

Telford and Wrekin are evident, however, no further uplift above the future jobs OAN is recommended, which depending upon the household formation rate adjustment used, ranges from 826 dwellings per annum to 891 dwellings per annum.

- 4.3 Based on an assessment of up to date demographic, economic and market signals evidence, full OAN for Telford and Wrekin is assessed to be 826 to 891 dwellings per annum (2011-2031). This OAN would:

- Accommodate the housing need number implied by the latest demographic evidence;
- Meet projected job demand; and
- On reasonable assumptions, improve affordability.

- 4.4 As such, it is considered that 826 to 891 dwellings per annum represents the full, objectively assessed level of housing need for Telford and Wrekin as currently required by PPG.

Table 3, Conclusions on Telford and Wrekin's **full** OAN, 2011 to 2031 (dwellings per annum)

PPG ID 2a 015 to 020			Dwellings per Annum
Latest CLG household projections starting point			502
Adjustments to projections	1. Demography	A. Household formation	+55 to +113
		B. Migration and population change (based on migration flow rates, 05-15)	+64 to +65
		Demographic OAN	621 to 680
	2. Future job growth	Additional homes to support 693 jobs per annum	+210 to +211
		Future jobs OAN	826 to 891
	3. Market signals	Further uplift to future jobs OAN?	No
		Market signals uplift (applied to future jobs OAN)	0
Full objectively assessed housing need (FOAN)			826 to 891

OBJECTIVE ASSESSMENT OF HOUSING
NEED (OAHN)
TELFORD AND WREKIN

SEPTEMBER 2016

OBJECTIVE ASSESSMENT OF HOUSING NEED
TELFORD AND WREKIN

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Authorised by:	JD	JD

Barton Willmore LLP
The Observatory
Southfleet Road
Ebbsfleet
Dartford
DA10 0DF

Tel: (01322) 374660
Fax: (01322) 374661
E-mail: research@bartonwillmore.co.uk

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ECONOMICS REGARDING THE BASIS OF THEIR ECONOMIC FORECASTS

EXECUTIVE SUMMARY

- i. This Objective Assessment of Housing Need (OAHN) for Telford and Wrekin has been prepared by Barton Willmore LLP on behalf of Gladman Developments Limited. The study complies with the National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG) requirements regarding the full Objective Assessment of Overall Housing Need (OAHN).
- ii. The assessment contained within this report provides an update to a previous Barton Willmore OAHN assessment published in March 2016. This September 2016 update has been produced to take account of:
 - the ONS 2014-based SNPP (published 25 May 2016);
 - the accompanying CLG 2014-based household projections (published 12 July 2016);
 - the ONS 2014 and 2015 Mid-Year Population Estimates which also allow for an updated 10-year migration trend;
 - new approaches to sensitivity testing an adjustment to household formation rates;
 - a new approach to projecting economic activity;
 - an update to market signals, in particular affordability;
 - the Council's March 2016 affordable housing needs assessment; and
 - to consider OAHN for Telford and Wrekin under the proposed Local Plans Expert (LPEG) recommendation for assessing housing need.

Local Plan Housing Policy and Housing Need Evidence Base

- iii. Telford and Wrekin Council submitted the Local Plan for examination in June 2016. The submitted Plan contains a dwelling requirement for 15,555 dwellings over the plan period (2011-2031) which equates to 778 dwellings per annum. This level of growth is above the objectively assessed housing need (OAHN) for 9,940 dwellings (497 dwellings per annum) over the same period as identified in the Telford & Wrekin Objectively Assessed Housing Need report (March 2015) undertaken by Peter Brett and Associates (PBA).
- iv. The March 2015 OAHN report seeks to follow the guidance outlined in NPPF and PPG for assessing overall housing need. The report takes account of the 2012-based Sub National Population Projections (SNPP) published by the Office for National Statistics (ONS) and the accompanying 2012-based household projections published by the Department for Communities and Local Government (CLG) as the starting point estimate, which were the latest available at the time of the assessment. However, since the publication of the March 2015 OAHN report the 2014-based SNPP and accompanying household projections have been published, which provide a new starting point estimate of housing need.

- v. The March 2015 OAHN report identifies that the 2012-based SNPP are not a prudent population projection on which to plan given they are based on migration trends captured over a recessionary period. For this reason alternative demographic-led scenarios are presented and an OAHN for Telford and Wrekin of 9,940 dwellings (497 dwellings per annum) over the period 2011-2031 is proposed based on the PBA Trends long-term (2003-2013) scenario with CLG 2012-based household representative rates applied.
- vi. Barton Willmore agree with the use of an alternative long-term migration trend in Telford and Wrekin. However, Barton Willmore has concerns with the PBA trend 2003-2013 because Barton Willmore's equivalent trend produces lower population growth than that projected by the PBA 2003-2013 trend. Barton Willmore's 2003-2013 trend projects comparable population growth to the recently published 2014-based SNPP (25 May 2016) which is not surprising given average net migration from the period 2009-2014 which underpins the 2014-based SNPP is also comparable to average net migration from the period 2003-2013.
- vii. Nonetheless, a 2003-2013 trend is considered to provide an underestimate of population growth for Telford and Wrekin in light of more recent demographic evidence published after the March 2015 OAHN assessment, namely the 2014 and 2015 Mid-Year Population Estimates which estimate a higher population than projected for these years by the 2003-2013 trend. On this basis Barton Willmore believes account should be taken of the most recent 10-year migration trend (2005-2015).
- viii. The Council's OAHN of 497 dwellings per annum is derived by applying unadjusted 2012-based household formation rates. Barton Willmore do not consider it appropriate to use the 2012-based household formation rates without any adjustment due to the level of suppression inherent in the rates particularly for 25-44 year olds. This view has recently been supported by the Inspector for the Cornwall Local Plan Examination who acknowledged that the 2012 household formation rates still embed some recessionary effect and that it would be inconsistent with the national policy for growth to project such effect across the plan period¹. The more recently published 2014-based household formation rates project a similar level of household suppression for 25-44 year olds and therefore Barton Willmore also consider an adjustment to the 2014-based household formation rates is required.
- ix. The PBA OAHN report considered the level of economic growth that could be supported by the proposed demographic-led OAHN and found that 497 dwellings per annum could support 852 jobs per annum. In this context the Council's evidence suggests that the demographic-led OAHN will support a healthy economic future and no further upward revision was proposed.

¹ Paragraph 3.8, page 7, Inspector's preliminary findings, Cornwall Local Plan Strategic Policies – Examination, June 2015

- x. Barton Willmore consider growth of 852 jobs per annum high in light of past employment trends and economic forecasts. Growth of 693 jobs per annum is considered more realistic based on an average of growth projected by Experian Economics (710 jobs per annum – Sept 2016), Oxford Economics (418 jobs per annum – July 2016) and Cambridge Econometrics (951 jobs per annum – Nov 2015) over the period 2011-2031.
- xi. Barton Willmore have modelled the housing need associated with 693 jobs per annum and the result is between 826 and 891 dwellings per annum. This is a significantly higher housing need than that indicated by the PBA assessment for a lower job growth target. Even if the lower end of the projected job growth range is taken (418 jobs per annum as projected by Oxford Economics) the associated dwelling need is 565 dwellings per annum if 2014-based household formation rates are applied, which again is still higher than the housing need projected by PBA for a much lower job growth target.
- xii. Based on this analysis it is considered that the housing and job growth figures presented in the March 2015 OAHN report are not in balance and that if economic growth is to be supported in line with economic forecasts then an upward revision is required to the demographic-led assessment of need.
- xiii. All market signals set out in the PPG have been considered in the OAHN report and it concludes that no upward adjustment is required to alleviate any worsening trends. Barton Willmore disagree with the conclusion that there are no market signals issues within Telford and Wrekin. Barton Willmore's analysis has identified that there is a worsening trend with regards to overcrowding, concealed households, affordability and past housing delivery. PPG states that a worsening trend in any of the market signals indicators requires an upward adjustment to planned housing numbers compared to ones based solely on household projections (ID2a-020).
- xiv. This view is further supported by the LPEG methodology, which under the current recommendation proposes a 10% uplift to the demographic OAHN in Telford and Wrekin on the basis of the three-year average of the median affordability ratio
- xv. In conclusion, it is evident that PBA have sought to follow the prescribed methodological steps for assessing OAHN as set out in PPG. However PBA's assessment of need for 497 dwellings per annum falls is considered to fall short of FOAHN. Barton Willmore's assessment of FOAHN for Telford and Wrekin is outlined below.

Barton Willmore Assessment of Overall Housing Need

- xvi. Barton Willmore's assessment makes use of the PopGroup demographic forecasting model to estimate future housing need within Telford and Wrekin, taking into account key demographic

and economic data inputs including (but not limited to) headship rates, migration trends, employment forecasts and economic activity rates.

- xvii. The narrative below, which should be read alongside the results presented in Table 1 summarises the resulting assessment of housing need.

Demographic Evidence Based Housing Need

- xviii. The current starting point estimate of housing need is the 2014-based household projections published by CLG (12 July 2016). These project growth of 487 households per annum (2011-2031) which equates to 502 dwellings per annum once an allowance of 3.03% has been applied to take account of vacancy and second homes.
- xix. PPG permits adjustments to the starting point estimate in relation to the underlying demographic projections and household formation rates (ID2a-015 and 017) to address for example, suppressed household formation and migration trends.
- xx. Analysis of Household Formation Rates (HFRs) underpinning the 2014-based household projections provides clear evidence of suppression in household formation particularly for those aged 25-44 years of age – when compared against the more positive pre-recessionary 2008-based rates. Barton Willmore therefore consider it necessary to make an adjustment to the 2014-based HFRs to address the issue of suppressed household formation for 25-44 year olds.
- xxi. In the absence of any specific guidance, Barton Willmore has sensitivity tested the application of three different HFR adjustments. The effect of which is to increase the starting point estimate to between 557 and 615 dwellings per annum (2011-2031).
- xxii. The most recent ONS SNPP series (2014-based) shows population growth of 702 persons per annum over the plan period which is higher than the previous 2012-based SNPP (590 persons per annum).
- xxiii. However, further analysis of historic migration trends for Telford and Wrekin provides evidence that net migration to Telford and Wrekin significantly decreased during the recession. Whilst the 2014-based SNPP are less affected by the recession than the previous 2012-based SNPP, the period which underpins the 2014-based SNPP (2009-2014) remains characterised by a net outflow of migration (-58 people per annum).
- xxiv. Furthermore, the 2014-based SNPP are constrained to the 2014-based National Population Projections which assume net international migration of 185,000 people per annum across England. However, the latest quarterly net international migration estimates suggest that net

international migration totalled 327,000 people per annum in the year ending March 2016 – significantly higher than the assumption underpinning the 2014-based SNPP.

- xxv. On this basis it seems appropriate to consider a longer 10-year trend for Telford and Wrekin which incorporates a period of both economic recession and buoyancy. The 10-year period 2003-2013 estimated average net outward migration of -50 people per annum. A 10-year migration trend drawn from the most recent 10-year period (2005-2015) indicates positive inward migration of 46 net migrants per annum and therefore Barton Willmore consider this to provide the most appropriate population projection on which to assess demographic OAHN for Telford and Wrekin.
- xxvi. The demographic evidence therefore signals that two adjustments to the starting point estimate of need are necessary (household formation assumptions and alternative migration trends). The result of making the required adjustments is to increase demographic OAHN for Telford and Wrekin to between 621 and 680 dwellings per annum between 2011 and 2031. This reflects an increase of between 24% and 35% above the OAHN starting point.

Employment Change Evidence Based Housing Need

- xxvii. The Council's evidence considers whether the proposed level of OAHN would support economic growth by commissioning Experian to produce an employment forecast using the population projection based on their preferred demographic scenario (PBA trends 2003-13). The Council's evidence suggests that 852 jobs per annum could be supported by an additional 497 dwellings per annum. No other employment forecasts are considered.
- xxviii. Employment forecasts produced by Experian Economics (Sept 2016), Oxford Economics (July 2016) and Cambridge Econometrics (November 2015) have been considered by Barton Willmore. An average of these three forecasts has been considered over the period 2011-2031 (693 jobs per annum) to reflect policy-off employment forecasts in-line with PPG recommendations.
- xxix. The extent to which the demographic OAHN would support economic growth has been considered in-line with PPG recommendations. We find that Barton Willmore's 10-year migration trend (2005-2015) would only support growth of 406 jobs per annum in Telford and Wrekin over the period 2011-2031 which is significantly lower than the projected job demand (693 jobs per annum). For this reason, a further adjustment should be made to the demographic OAHN in order to support economic growth in Telford and Wrekin.

- xxx. Modelling work undertaken by Barton Willmore has found that to support growth of 693 jobs in Telford and Wrekin there is a need for between 826 and 891 dwellings per annum depending on which household formation rate adjustment is applied.
- xxxi. On this basis, Barton Willmore consider economic OAHN for Telford and Wrekin to be between 826 and 891 dwellings per annum (2011-2031) in order to support growth of 693 jobs per annum.

Market Signals

- xxxii. Analysis of market signals has been undertaken by Barton Willmore and several adverse market signals have been observed in Telford and Wrekin including a worsening of affordability, which has been influenced by increasing house prices/ rents and a significant shortfall of supply. Likewise, overcrowding and the number of concealed households has worsened in Telford and Wrekin. Although perhaps less severe than the national average, market signals issues in Telford and Wrekin are more severe than the regional average, which, according to PPG, should be met with an appropriate boost in housing supply
- xxxiii. Telford and Wrekin has persistently failed to meet its annual housing targets by a significant margin, such that the shortfall since 2006/07 stands at 3,896 dwellings or 59% of the cumulative target.
- xxxiv. In light of Inspector's decisions in relation to market signals uplift ranging between 10% and 20% and given that OAHN for Telford and Wrekin represents an uplift of between 65% and 77% from the starting point estimate, it is considered appropriate not to recommend a further uplift to the proposed OAHN to address market signals. It is considered that OAHN of between 826 and 891 dwellings per annum represents a significantly accelerated rate of growth compared against recent delivery performance. As a result, it has potential to create downward pressure on house prices within Telford and Wrekin, which in turn will begin to address market signals issues

Affordable Housing Need

- xxxv. Barton Willmore have not undertaken an assessment of affordable housing need but have considered the findings of the Council's most recent assessment of affordable housing need. The Telford and Wrekin Strategic Housing Market Assessment (SHMA) was published in March 2016 identified net affordable housing need of 665 dwellings per annum.

- xxxvi. Policy H05 of the submitted Local Plan contains affordable housing targets of between 25% and 35%. If affordable housing units are to be delivered according to the lowest of these thresholds (25%), then the total housing requirement would be 2,660 dwellings per annum over a 5-year period. This is significantly higher than the full OAHN proposed in the March 2015 report for 497 dwellings per annum (2011-2031).
- xxxvii. Although Barton Willmore's OAHN range of between 826 and 891 dwellings per annum (2011-2031) also falls short of meeting affordable housing need in full, the Inspector's judgment in *ELM Park v Kings Lynn and West Norfolk BC*, affordable need does not need to be met in full by the OAHN. However, the level of net affordable need in Telford and Wrekin indicates that the district needs to boost the supply of housing to significantly higher levels than have been delivered in the past. It is considered that Barton Willmore's OAHN of between 826 and 891 dwellings per annum (2011-2031), which represents between a 34% and 44% uplift on past housing delivery, will begin to address the high level of affordable need in Telford and Wrekin.

Telford and Wrekin FOAHN

- xxxviii. Based on an assessment of up to date demographic, economic and market signals evidence, full OAHN for Telford and Wrekin is assessed to be between 826 and 891 dwellings per annum (2011-2031). This OAHN would:
- Accommodate the housing need number implied by the latest demographic evidence;
 - Meet projected job demand; and
 - On reasonable assumptions, improve affordability.
- xxxix. As such, it is considered that the OAHN represents the full, objectively assessed level of housing need for Telford and Wrekin as currently required by PPG.

Table 1: Summary – OAHN for Telford and Wrekin (2011-2031)

		Blended HFR 100%	Blended HFR 50%	HFR Sensitivity 2001
A	CLG 2014-based SNHP (Households)	9,730 (487 pa)		
	Vacant/Second Homes Adjustment	3.03%		
	OAHN STARTING POINT (Dwellings)	10,034 (502 dpa)		
B	Starting point with adjusted HFRs (Dwellings)	12,292 (615 pa)	11,147 (557 pa)	11,642 (582 pa)
	Adjustment to A	+113 dpa	+55 dpa	+80 dpa
C	10yr Migration Trend (2005-2015) with adjusted HFRs (Dwellings)	13,606 (680 pa)	12,422 (621 pa)	12,941 (647 pa)
	Adjustment to A+B	+178 dpa	+119 dpa	+145 dpa
=	DEMOGRAPHIC OAHN (A+B+C)	13,606 (680 dpa)	12,422 (621 dpa)	12,941 (647 dpa)
D	Jobs Supported by Demographic OAHN (C)	8,116 (406 pa)		
	Job Demand (average of CE, OE & Experian)	13,860 (693 pa)		
	Labour Surplus/Deficit	-5,774 (-287 pa)		
=	ECONOMIC-LED HOUSING NEED	17,827 (891 dpa)	16,522 (826 dpa)	17,104 (855 dpa)
	(Adjustment to Demographic OAHN)	+211 dpa	+205 dpa	+208 dpa
	Adverse Market Signals Observed?	Yes		
	Average Delivery Rate 2006 – 2015	617		
	Subtotal Dwellings per annum	891	826	855
	Increase vs. Recent Performance (%)	44%	34%	39%
	Increase vs. Starting Point (%)	77%	65%	70%
	Further Increase Recommended? (Y/N)	No		
	FULL OBJECTIVELY ASSESSED HOUSING NEED	17,827 (891 dpa)	16,522 (826 dpa)	17,104 (855 dpa)

Source: ONS/CLG, Barton Willmore Modelling (Appendix 1)

- xi. Under the LPEG recommendations for assessing housing need, OAHN for Telford and Wrekin would be 752 dwellings per annum (2011-2031). This is lower than full OAHN identified by Barton Willmore based on the current PPG methodology due to the LPEG methodology excluding the consideration of economic growth from the OAHN calculation. However, the LPEG does still require consideration to be given to economic growth when setting the overall housing requirement. In this context, it is considered that Barton Willmore's OAHN of between 826 and 891 dwellings per annum does provide an indication of Telford and Wrekin's future housing requirement over the period 2011-2031.

1.0 INTRODUCTION

- 1.1 This study has been prepared by Barton Willmore LLP on behalf of Gladman Developments Limited. It is intended to provide an in-depth understanding of the market dynamics and future needs for housing in Telford and Wrekin Unitary Authority. The study has been prepared in accordance with National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG), and the key output is a full, objective assessment of housing need (OAHN).

Barton Willmore Housing Needs Assessments to Date

- 1.2 In August 2014, Barton Willmore undertook a housing needs assessment for Telford and Wrekin on behalf of Gladman Developments Limited. The August 2014 study identified that the population increase for Telford and Wrekin projected by the ONS 2012-based Sub National Population Projections (SNPP) would not support economic growth in line with Experian Economics June 2014 projection for growth of 577 jobs per annum (2011-2031). OAHN of 845 dwellings per annum (2011-2031) was identified to support this level of economic growth
- 1.3 In March 2016, Barton Willmore provided a comprehensive update to the August 2014 study in order to take account of the release of the CLG 2012-based household projections (published 27 February 2015) as well as new housing evidence produced by Telford and Wrekin Council. The March 2016 OAHN assessment identified OAHN of 961 dwellings per annum (2011-2031) in order to support growth of 690 jobs per annum over the same period, which was the average level of projected job growth based on the most recent forecasts (at the time) from Experian Economics, Oxford Economics and Cambridge Econometrics.
- 1.4 This September 2016 OAHN study provides the most recent assessment of OAHN for Telford and Wrekin and has been produced to take account of:
- the ONS 2014-based SNPP (published 25 May 2016);
 - the accompanying CLG 2014-based household projections (published 12 July 2016);
 - the ONS 2014 and 2015 Mid-Year Population Estimates which also allow for an updated 10-year migration trend;
 - new approaches to sensitivity testing an adjustment to household formation rates;
 - a new approach to projecting economic activity;
 - an update to market signals, in particular affordability;
 - the Council's March 2016 affordable housing needs assessment.
- 1.5 In addition, this report also considers OAHN for Telford and Wrekin following the Local Plans Expert Group (LPEG) recommended methodology. Currently the LPEG methodology is just a

proposal and holds no official status but has been included to illustrate OAHN for Telford and Wrekin if it is to become official guidance.

Report Structure

- 1.6 The report is structured as follows:
- 1.7 Chapter 2, National Policy Context and Methodology, introduces the relevant aspects of national planning policy and guidance, demonstrating how this study meets the required standard for an OAHN. The chapter also sets out the methodological approach taken in carrying out the required analysis.
- 1.8 Chapter 3, Assessment Area Definition, provides the rationale behind analysing the selected authorities, and, more specifically, how published research into HMA boundary definitions has been translated into a functional study area and confirmed through independent analysis of key data sources.
- 1.9 Chapter 4, Local Policy Context and Evidence Base Review, critically evaluates the housing evidence base documents for Local Planning Authorities (LPAs) within the HMA defined in the previous chapter. In addition to this, key information (including housing targets, affordable housing quotas and economic growth aspirations) from adopted/emerging planning policy is summarised.
- 1.10 Chapter 5, Demographic Context and Demographic-led Housing Need, reviews official data sources relating to population and household change, including population/household projections, household formation rates and migration trends. This analysis provides key inputs into the modelling process, which in turn underpins the OAHN. The final part of the chapter summarises the first demographic modelling stages, and establishes the 'Starting Point' estimate of housing need as well as necessary demographic adjustments.
- 1.11 Chapter 6, Economic Context and Economic-led Housing Need, puts the labour force capacity arising from the demographic-led position established in the previous chapter into context by reviewing independent and official trends and forecasts of employment growth for the HMA. Where necessary, further modelling work is carried out to determine the number of homes needed to supply a labour force of sufficient size to meet anticipated demand.
- 1.12 Chapter 7, Market Signals, provides detailed analysis of how the housing market functions locally, including a review of existing housing stock characteristics and analysis of key market signals (as set out in PPG). The chapter then considers the level of housing supply response

needed to positively address any market signals issues, and provides a recommendation of and justification for any uplift to the OAHN (again, as required by PPG).

- 1.13 Chapter 8, Objective Assessment of Housing Need, summarises the evidence, analysis and modelling provided in the preceding chapters and confirms the full OAHN for the HMA. This chapter also considers the OAHN in the context of affordable housing need, and establishes the extent to which affordable need could be met by the OAHN.

2.0 NATIONAL POLICY CONTEXT AND METHODOLOGY

- 2.1 The requirement for all Local Planning Authorities (LPAs) to base their housing targets on objective assessments of need is rooted in national planning policy – specifically the National Planning Policy Framework (NPPF) and the Planning Practice Guidance (PPG).

National Planning Policy Framework (NPPF, 27 March 2012)

- 2.2 NPPF sets out the Government's planning policies for England and how these are expected to be applied. NPPF states that planning should proactively drive and support sustainable economic development to deliver the homes that the country needs, and that every effort should be made to objectively identify and then meet housing needs, taking account of market signals (paragraph 17).
- 2.3 In respect of delivering a wide choice of high quality homes, NPPF confirms the need for local authorities to boost significantly the supply of housing. To do so, it states that local authorities should use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area (paragraph 47).
- 2.4 With regard to plan-making, local planning authorities are directed to set out strategic priorities for their area in the Local Plan, including policies to deliver the homes and jobs needed in the area (paragraph 156).
- 2.5 Further, Local Plans are to be based on adequate, up to date and relevant evidence, integrating assessments of and strategies for housing and employment uses, taking full account of relevant market and economic signals (paragraph 158).
- 2.6 For plan-making purposes, local planning authorities are required to clearly understand housing needs in their area. To do so they should prepare a Strategic Housing Market Assessment (SHMA) that identifies the scale and mix of housing and the range of tenures that the local population is likely to need over the plan period (paragraph 159).

Planning Practice Guidance (PPG, 06 March 2014)

- 2.7 PPG was issued as a web based resource on 6th March 2014, following the publication of 'beta' guidance in 2013. Guidance on the assessment of housing development needs (PPG ID2a) includes the SHMA requirement set out in NPPF and supersedes all previous published SHMA practice guidance (CLG, 2007).

- 2.8 The primary objective of the housing development needs assessment (the SHMA) is to identify the future quantity of housing needed, including a breakdown by type, tenure and need (PPG ID2a 002).
- 2.9 Housing need refers to the scale of housing likely to be needed in the housing market area over the plan period, which should cater for the housing demand in the area and identify the scale of housing supply necessary to meet that demand (PPG ID2a 003).
- 2.10 The assessment of need is an objective assessment based on facts and unbiased evidence and constraints should not be applied (PPG ID2a 004).
- 2.11 Use of the PPG methodology for assessing housing need is strongly recommended, to ensure that the assessment is transparent (ID2a 005). The area assessed should be the housing market area (ID2a 008), reflecting the key functional linkages between places where people live and work (ID2a 010).

PPG methodology for assessing housing need

- 2.12 The full methodology is set out at ID 2a 014 to 029 (overall housing need at ID2a 015 to 020), and is introduced as an assessment that should be based predominately on secondary data (ID2a 014).

i) Starting point estimate of need

- 2.13 The methodology states that the starting point for assessing overall housing need should be the household projections published by the Department for Communities and Local Government, but that they are trends based and may require adjustment to reflect factors, such as unmet or suppressed need, not captured in past trends (ID2a 015).

"The household projection-based estimate of housing need may require adjustment to reflect factors affecting local demography and household formation rates which are not captured in past trends. For example, formation rates may have been suppressed historically by under-supply and worsening affordability of housing." (2a-015) (Our emphasis)

ii) Adjusting for demographic evidence

- 2.14 The PPG methodology advises that adjustments to household projection-based estimates of overall housing need should be made on the basis established sources of robust evidence, such as ONS estimates (2a-017).

iii) Adjusting for likely change in job numbers

- 2.15 In addition to taking into account demographic evidence the methodology states that job trends and or forecasts should also be taken into account when assessing overall housing need. The implication is that housing numbers should be increased where this will enable labour force supply to match projected job growth (2a-018).

"Where the supply of working age population that is economically active (labour force supply) is less than the projected job growth, this could result in unsustainable commuting patterns ... and could reduce the resilience of local businesses. In such circumstances, plan makers will need to consider how the location of new housing or infrastructure development could help address these problems." (2a-018)

iv) Adjusting for market signals

- 2.16 The final part of the methodology regarding overall housing need is concerned with market signals and their implications for housing supply (2a-019:020).

"The housing need number suggested by household projections (the starting point) should be adjusted to reflect appropriate market signals, as well as other market indicators of the balance between the demand for and supply of dwellings." (2a-019)

- 2.17 Assessment of market signals is a further test intended to inform whether the starting point estimate of overall housing need (the household projections) should be adjusted upwards. Particular attention is given to the issue of affordability (2a-020).

"The more significant the affordability constraints ... and the stronger other indicators of high demand ... the larger the improvement in affordability needed and, therefore, the larger the additional supply response should be." (2a-020)

v) Overall housing need

- 2.18 An objective assessment of overall housing need can be summarised as a test of whether the household projection based starting point can be reconciled with a) the latest demographic evidence, b) the ability to accommodate projected job demand, c) the requirement to address worsening market signals. If it cannot be reconciled, then an adjustment should be made.
- 2.19 The extent of any adjustment should be based on the extent to which it passes each test. That is,

- It will at least equal the housing need number implied by the latest demographic evidence,
- It will at least accommodate projected job demand; and,
- On reasonable assumptions, it could be expected to improve affordability.

2.20 The approach used by Barton Willmore to objectively assess overall housing need follows the methodology set out in PPG 2a-014:20 and summarised above. The result is a policy off assessment of housing need that takes no account of the impact of planned interventions strategies and policies.

vi) Affordable housing need assessment

2.21 The methodology for assessing affordable housing need is set out at 2a-022 to 029 and is largely unchanged from the methodology it supersedes (SHMA 2007). In summary, total affordable need is estimated by subtracting total available stock from total gross need. Whilst it has no bearing on the assessment of overall housing need, delivering the required number of affordable homes can be used to justify an increase in planned housing supply (2a-029).

“The total affordable housing need should then be considered in the context of its likely delivery as a proportion of mixed market and affordable housing developments ... An increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes.” (2a-029) (our emphasis)

Barton Willmore Methodological Approach

2.22 Barton Willmore's approach to OAHN follows the approach set out in PPG, and is therefore methodologically robust.

Stage One – Define the Housing Market Area Boundary

2.23 Before any assessment can be carried out, the limits of the HMA must be defined. This is vital to ensure that the OAHN reflects the social and economic dynamics of the area, and informs discussions on distribution should a particular LPA within the HMA face insurmountable challenges in accommodating its own demand for housing.

2.24 As a starting point, research from the Centre for Urban and Regional Development Studies (CURDS) at Newcastle University is consulted, and compared against ONS Travel to Work Areas (most recently produced in 2007 from 2001 Census data – update due in 2015) and HMA definitions applied within recent LPA evidence base studies. These definitions are then tested

using commuting and migration flow data (plus data on house prices) to determine which is most appropriate for the purpose of assessing housing need, taking account of guidance set out at PPG ID: 2a-009 to 013. The HMA area as defined and used by the LPAs has also been considered within this assessment.

Stage Two – Identify and Adjust Demographic Starting Point

- 2.25 The CLG 2014-based Household Projections (released 12 July 2016) act as the starting point for assessing housing need (as established in PPG ID: 2a-015). However, these projections alone do not constitute OAHN – in line with PPG guidance, Barton Willmore consider several adjustments are required to the household projections based on further evidence that indicates past demographic and household trends have been affected by past under delivery of housing and the economic recession.
- 2.26 The first adjustment considered necessary is to account for suppressed household formation inherent in the 2014-based household formation rates. The problem of suppression arises because although formation rate projections are based on a long run trend which takes its bearings from Census points since 1961/71, that trend is distorted by the results of the 2011 Census, taken at a time when formation was greatly constrained by economic factors (supply, affordability and the aftermath of recession).
- 2.27 A recent Town and Country Planning paper² suggests that lower household formation is as a result of the ‘policy and economic environment’ and therefore refers to this as fixed circumstances that will not be reversed. This includes a ‘sustained increase’ in younger people not leaving home, which could be related to the introduction of student fees from 1998 and the increase in ‘precarious employment’. All of which have resulted in worsening affordability and lower headship rates for younger households. The clear aim of the Government is to afford everyone the opportunity to establish their own home. Co-author of the research, Christine Whitehead stated in a related press release:

“One of the biggest concerns is that couples aged between 25 and 34 – at the time when family formation is at its highest – are expected to be less well housed in 2031 than their counterparts in 2011.”³

- 2.28 To plan on the basis of using the 2014-based household formation rates will inevitably lead to a worsening of the current situation and a spiralling in the number of young adults forced into a position where they delay setting up their own home. This does not conform to NPPF’s

² T&CP Tomorrow Series Paper 17: New Estimates of Housing Requirements in England, 2012- to 2037, Neil McDonald and Christine Whitehead

³ <http://www.tcpa.org.uk/resources.php?action=resource&id=1273>

requirement to 'plan positively' (paragraph 182) and 'significantly boost' housing supply (paragraph 47).

- 2.29 If there is evidence of the 2014-based household formation rates suppressing household formation for 25-44 year olds, then an adjustment to the 2014-based household formation rates is considered necessary and is suggested by paragraph ID2a-15 of the PPG. The extent of the adjustment is a matter of judgement and for this reason we sensitivity test three difference approaches to adjusting household formation rates for people aged 25-44 years (presented in Chapter 5 of this report).
- 2.30 The second adjustment considered necessary is to test alternative assumptions of net migration. The 'starting point' estimate (the CLG 2014-based household projections) are underpinned by the ONS 2014-based Sub National Population Projections (SNPP). The 2014-based SNPP draw migration trends from the period 2009-2014 which again may have been distorted by the recession effecting the movement of people between places. For this reason, longer term trends, typically drawn from a 10-year period which incorporates a period of economic recession and buoyancy, may provide a more robust guide of likely migration patterns in the future.

Stage Three – Assess Labour Force Capacity

- 2.31 To identify the extent to which forecast labour demand will be accommodated by the OAHN following the approach described above, a comparison is made between the size of the workforce arising from the adjusted demographic-led modelling and job creation forecasts, taking into account 'policy-off' job growth trends forecasts and potential changes in unemployment and economic activity rates over the plan period. The ratio of residents in employment and workforce jobs (the commuting ratio) is also an important input into this process.
- 2.32 If the size of the arising workforce is less than the forecast number of jobs, it is likely that a further uplift in the dwelling target would be required. Should this occur, additional jobs-led modelling is carried out to identify the population growth (and therefore number of dwellings) required to supply sufficient labour capacity.

Stage Four - Assess Market Signals

- 2.33 Housing costs in all parts of the country are less affordable now than 20 years ago, largely due to a significant decline in the number of homes being built. The extent to which this breakdown between the supply of and demand for housing occurs within the subject HMA is observed through an analysis of Market Signals.

- 2.34 Several key Market Signals are assessed including House Prices, Private Rents, Affordability, Concealed and Overcrowded Households and Completion Rates. As stipulated at PPG ID: 2a-020, a worsening trend in any of these indicators requires a boost to the planned level of housing supply.

Stage Five – Bringing the Evidence Together

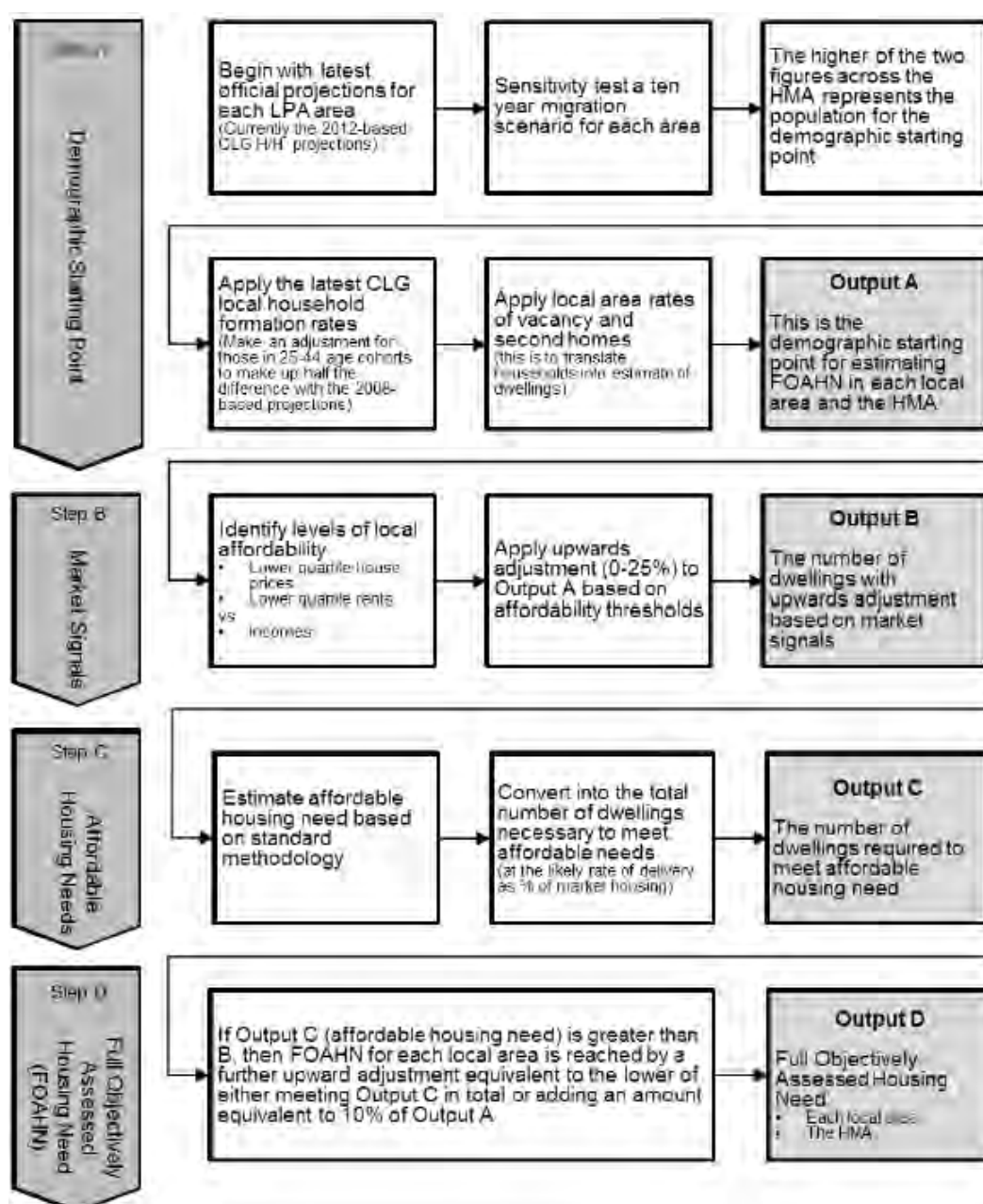
- 2.35 Overall housing need is identified by distilling the analyses discussed above into a single OAHN for the period 2011-2031. This figure, by definition, does not take into account policy considerations which may place constraints on supply or limit the deliverability of housing. Housing need figures are provided for the relevant individual LPAs, but distribution of the overall HMA OAHN will in practice be subject to agreements between LPAs being made, including any constraints in particular areas.

Stage Six – Affordable Housing Need

- 2.36 The extent to which the OAHN arrived at through the previous stages would meet affordable need is also assessed. Where the local authority SHMA has provided a recent and detailed account of affordable need which draws on primary research, this is used as the basis for much of the analysis.

Local Plans Expert Group (LPEG) - Report to the Communities Secretary and to the Minister of Housing and Planning (March 2016)

- 2.37 The LPEG was established by the now former Communities Secretary (Greg Clark) and the Minister for Housing and Planning (Brandon Lewis), in September 2015, with a remit to consider how local plan making can be made more efficient and effective.
- 2.38 In short, the LPEG identified two main problems for local authorities:
- There is no pre-set determination of the boundaries of Housing Market Areas;
 - There is no definitive guidance on the way in which to prepare a SHMA, leading to significant disagreement and uncertainty over housing numbers, which then affects every stage of the plan making progress.
- 2.39 The LPEG report therefore makes a series of recommended changes to the current Housing and Economic Development Needs Assessment (HEDNA) section of PPG in order to establish OAHN. The recommended methodology is summarised as follows:



Source: Page 22, Local Plans Expert Group Appendices, March 2016

The LPEG recommendations are currently being considered by the Communities and Local Government Select Committee, and it is important to emphasise how they do not, at the present time, hold any weight in the determination of OAHN. However for completeness and for information purposes only, we have included a calculation of OAHN based on the recommendations of LPEG (see Appendix 1).

Chapter Summary

- 2.40 The approach of national policy and guidance clearly states the importance of objectivity and transparency in the assessment of housing requirements. This study has been prepared in accordance with this approach, and uses data and methodologies (where possible) which can be traced and replicated. The ultimate output of this study is a clear, unambiguous

recommendation for housing development which is supported by a robust evidence base and sound assumptions.

3.0 ASSESSMENT AREA DEFINITION

3.1 As established in the previous chapter, LPAs are required to assess need within their wider HMAs, rather than simply within their own boundaries.

3.2 In defining 'What is a housing market area?', the Planning Practice Guidance states:

"A housing market area is a geographical area defined by household demand and preferences for all types of housing, reflecting the key functional linkages between places where people live and work. The extent of the housing market areas identified will vary, and many will in practice cut across various local planning authority administrative boundaries. Local planning authorities should work with all the other constituent authorities under the duty to cooperate."⁴

3.3 However, there is no single definition of where the boundaries for each HMA fall.

Independent Definitions

3.4 As a starting point, two sources of information are taken into consideration – one academic led (funded by CLG) and one from the ONS.

CURDS/NHPAU – The Geography of Housing Markets in England

3.5 Research carried out by leading academics from the Centre for Urban & Regional Development Studies (CURDS) at Newcastle University acts as a good starting point for defining a HMA. The research was funded by the National Housing and Planning Advisory Unit at CLG, and focuses on creating a robust set of HMA definitions with a tiered structure:

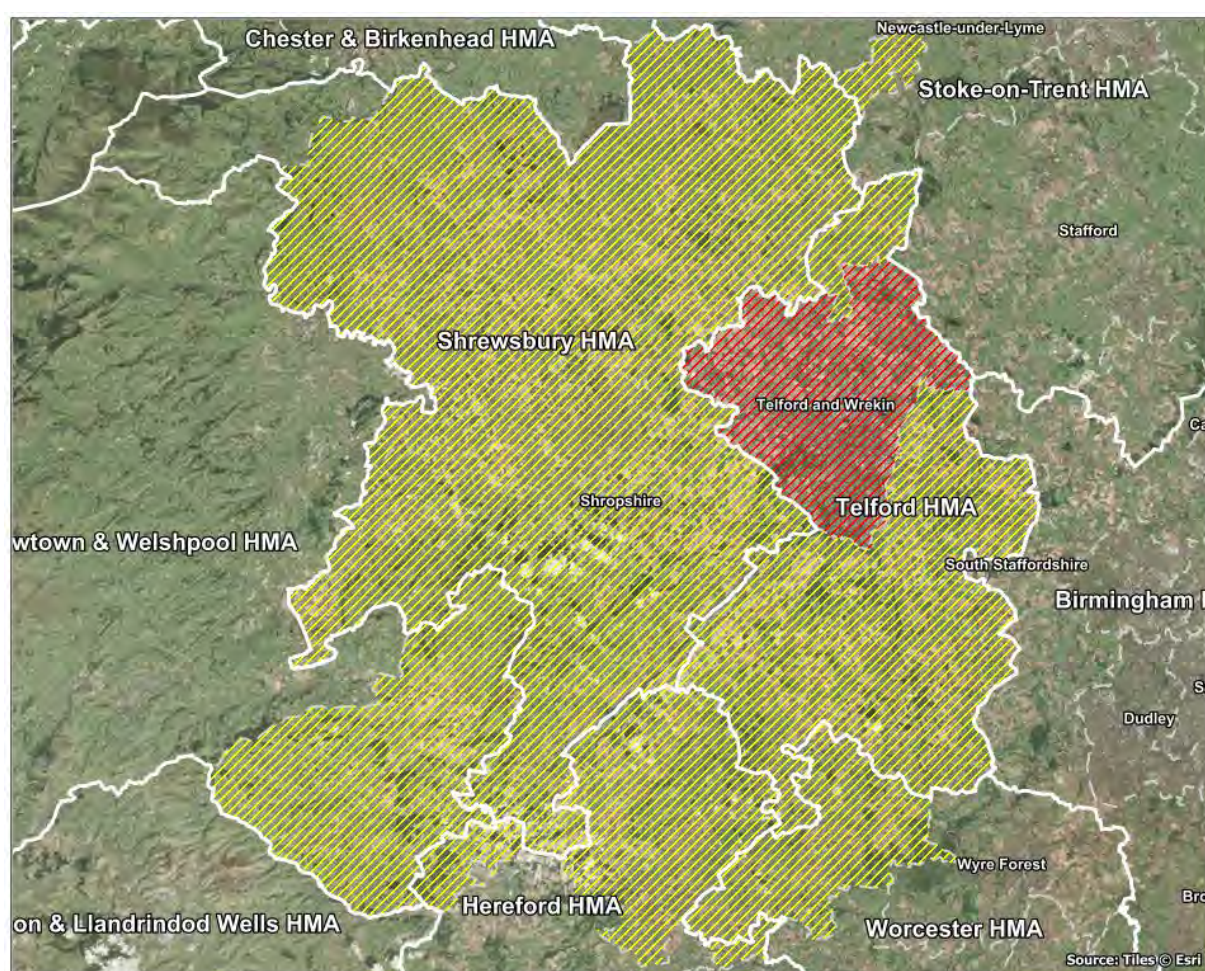
- The upper tier (Strategic) covers the whole country, providing appropriate areas for modelling and analysis relating to strategic housing policy. Strategic HMAs are defined by long distance commuting flows and the long term spatial framework within which housing markets operate. The researchers also state that the Strategic tier is particularly useful for modelling affordability.
- The lower tier (Local) applies primarily to heavily urbanised regions, splitting the Strategic HMA boundaries into smaller areas for detailed monitoring of the balance of housing supply and demand.

⁴ Paragraph: 010 Reference ID: 2a-011-20140306, Planning Practice Guidance, 06 March 2014

3.6 These sets of HMAs are termed 'gold standard' because their boundaries are defined to the maximum possible level of detail. They are built up from c.9000 wards using detailed migration and commuting statistics, which were made available to the CURDS researchers from the 2001 Census (it is currently unclear whether or not this exercise will be repeated based on the recently-released Census 2011 flow data). Given that this study is primarily concerned with informing strategic housing policy, the Strategic HMA definitions represent the most logical and appropriate option.

3.7 Figure 3.1 below shows the Gold Standard Strategic HMA boundaries in the area surrounding Telford and Wrekin.

Figure 3.1: Strategic Housing Market Area Boundaries – Gold Standard



Source: ONS, CURDS/CLG. Contains data from ONS (© Crown Copyright) and Esri (© Esri)

3.8 Following local government reorganisation in 2009, Telford and Wrekin is the only local planning authority which falls within the Telford HMA on a 'best fit' basis. The large unitary authority of Shropshire, incorporating the former districts of Bridgnorth (which was considered to be part on the Telford HMA on a 'best fit' basis when the research was originally published),

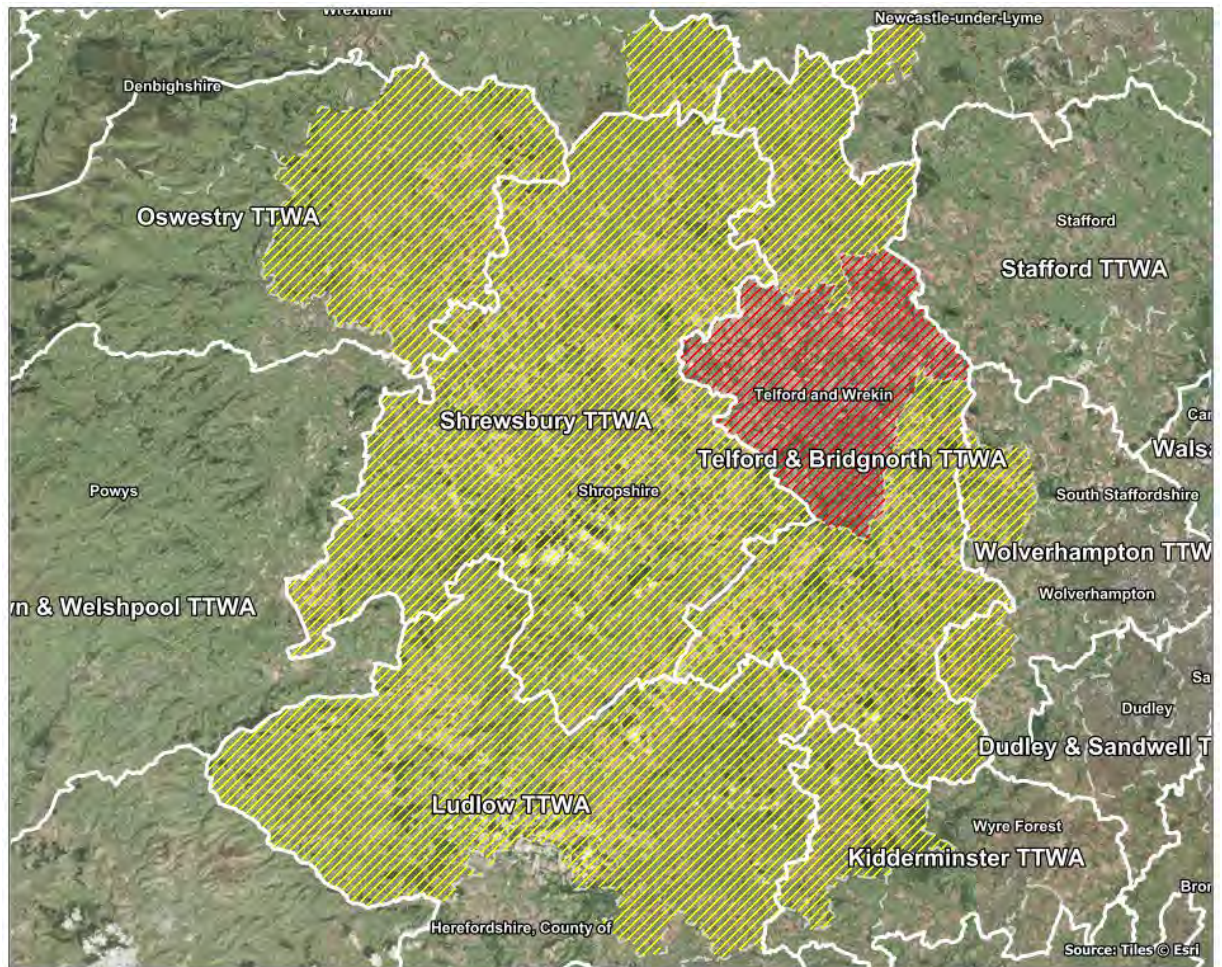
North Shropshire, Oswestry, Shrewsbury & Atcham and South Shropshire, now largely falls within the Shrewsbury HMA.

ONS – Travel to Work Areas

- 3.9 Travel to Work Areas (TTWAs), last produced by ONS in 2007, also provide a useful point of reference when determining the correct HMA definition. Although TTWAs do not take housing market factors into account, they do reflect the ways in which people travel between home and work, and are therefore a good indicator of the Functional Economic Market Area (FEMA), which must be taken into consideration when assessing the need for employment land.
- 3.10 Travel to work areas are the result of an iterative process, which aims to identify discrete and statistically robust geographical regions within which a large proportion of the resident labour force is contained (i.e. people living and working in the same TTWA). The containment thresholds applied within the 2007 research ranged from 66.7% (for larger areas) to 75%+ for smaller areas⁵.
- 3.11 Figure 3.2 below shows the limits of the various TTWAs in the area surrounding Telford and Wrekin.

⁵ ONS, 'Introduction to 2001-based Travel to Work Areas', p.2

Figure 3.2: Travel to Work Areas



Source: ONS. Contains data from ONS (© Crown Copyright) and Esri (© Esri)

- 3.12 On this basis, Telford and Wrekin falls entirely within the Telford & Bridgnorth TTWA. The remainder of the TTWA falls within Shropshire UA.

Local Authority Definitions

- 3.13 The definitions applied by LPAs in their policy and evidence base documents can also provide useful insight into local political dynamics.
- 3.14 The most up-to-date evidence produced by the council relating to HMA definitions is contained within the 2015 Telford & Wrekin Objectively Assessed Housing Need report by Peter Brett Associates. The analysis contained within this report indicates that Telford and Wrekin forms a self-contained HMA.

Definition Testing

3.15 The evidence considered above suggests two possible HMA definitions:

- Telford and Wrekin in isolation
- Telford and Wrekin plus Shropshire as a HMA

3.16 These definitions are tested below.

Travel to Work Flow Containment

3.17 The first aspect assessed is the containment of Travel to Work flows. Flow data from the 2011 Census is used to estimate the proportion of workers who live and work within the various HMA definitions. In line with the containment thresholds applied during the determination of the TTWAs, retention of at least 67-75% of the workforce is considered an appropriate benchmark.

Table 3.1: Travel to Work Flow Containment

		Place of Work		
		Telford and Wrekin	Shropshire	Other
Usual Residence	Telford and Wrekin	60,088	8,185	10,351
	Shropshire	11,105	117,370	23,834
	Other	12,313	21,089	-

Source: ONS, Census 2011

3.18 In isolation, both Telford and Wrekin and Shropshire fall within the TTWA threshold of 66-75%, suggesting that they can be considered to represent discrete HMAs.

Household Move Containment

3.19 The second aspect considered is the containment of household moves. The analysis is again derived from Census 2011 flow data, this time from the table providing the origins and destinations of people who had moved home in the 12 months leading up to census day (27 March 2011). Unlike commuting flows, PPG provides a useful guideline for household move containment of 70%.

- 3.20 Although the majority of people tend to move only short distances, certain age groups such as 18-24s (moving to and from university) and over 50s (urban to rural, retirement) can distort the picture. Migration flows for those aged 25-44 are therefore used to limit distorting influences.

Table 3.2: Household Move Containment

		Previous Residence		
		Telford and Wrekin	Shropshire	Other
Current Residence	Telford and Wrekin	12,563	1,343	4,101
	Shropshire	1,459	18,608	10,343
	Other	4,302	9,950	-

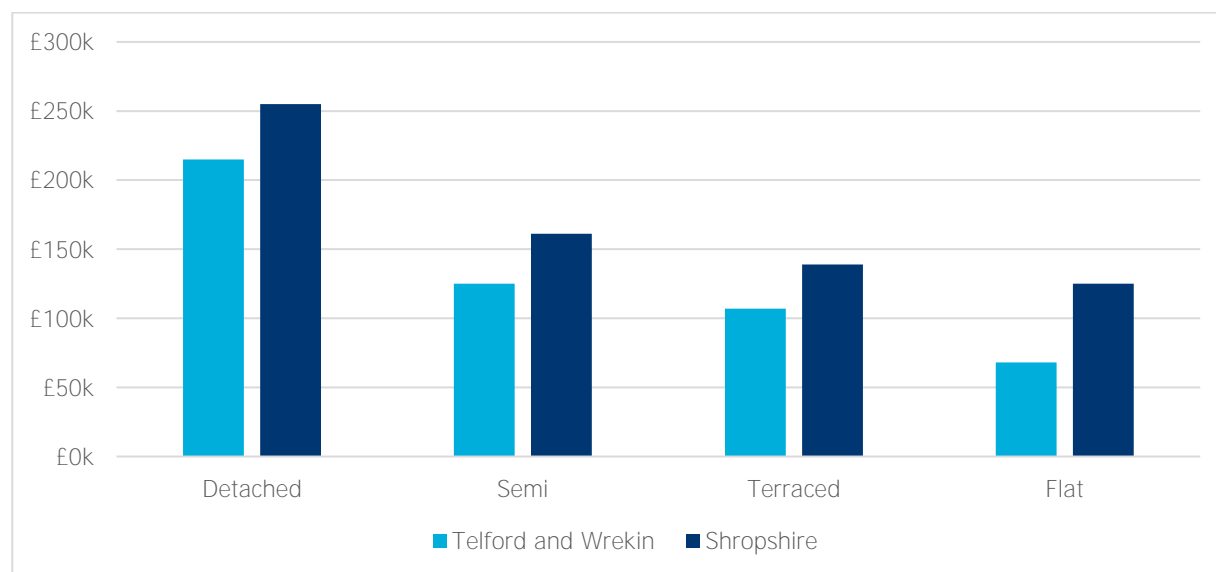
Source: ONS, Census 2011

- 3.21 Telford and Wrekin surpasses the 70% threshold set out in PPG, and Shropshire falls just 1% below it. On this basis, both LPAs can reasonably be considered to represent separate HMAs.

House Price Variance

- 3.22 The final aspect taken into account is house price variance. As stated within PPG, areas which have clearly different price levels to surrounding areas are unlikely to be considered to belong to the same housing market. This analysis has been carried out using land registry price paid data for the full calendar year of 2015. Figure 3.3 below shows the median prices paid for different types of property in the two LPAs.

Figure 3.3: Median House Prices by property type, 2015



Source: Land Registry

- 3.23 Based on this analysis, house prices in Shropshire appear to be significantly higher than in Telford and Wrekin. Detached house prices are on average 19% higher in Shropshire compared to Telford and Wrekin, whereas flats are on average 84% higher in Shropshire.
- 3.24 Shropshire is clearly a substantially more expensive place to buy property than Telford and Wrekin. This serves as further evidence of the two LPAs being separate.

Recommended Definition

- 3.25 Although there is evidence that Telford and Wrekin and Shropshire have some functional relationships with one another, it is clear that the two LPAs can reasonably be considered to be largely discrete entities. Telford and Wrekin retains 73% of its employed labour force (within the containment range used by ONS when defining TTWAs), and 71% of people aged 25-44 who had moved house in the year prior to Census day 2011 remained in the LPA.
- 3.26 It is therefore considered reasonable to assess the need for housing in Telford and Wrekin only – in line with the latest housing evidence produced by the Council.

4.0 LOCAL POLICY CONTEXT AND EVIDENCE BASE REVIEW

- 4.1 This chapter provides an outline of the local authority policy and evidence base documents for Telford and Wrekin in order to determine whether the housing need has been objectively assessed in line with PPG recommendations.

Adopted/ Emerging Local Plans and Core Strategies

- i) *Shaping Places Local Plan 2011 – 2031: Strategy and Options Document (June 2013)*

- 4.2 In June 2013 (prior to the publication of the SHMA and subsequent OAHN report) Telford and Wrekin Council consulted on its 'Shaping Places' Strategy and Options Local Plan.

- 4.3 Three options for housing growth, 2011-2031, were put forward:

- Housing Completion Led: 13,640 dwellings (682 dwellings per annum);
- Planned Growth: 17,800 dwellings (890 dwellings per annum);
- Hub for Growth & Business: 26,500 dwellings (1,325 dwellings per annum).

- 4.4 Of these three options, the Council's preferred housing target was for growth of 26,500 dwellings, 2011-2031.

- 4.5 The rationale for the 'Hub for Growth & Business' housing target is set out as follows:

"It is derived from an assessment of local land capacity at the local level carried out by the Council, which would support the potential development opportunities and delivery of future growth to underpin Telford and Wrekin's role in the sub-region. The delivery of this level of development would allow the Council to plan effectively for the future of the borough, by supporting services, regenerating communities and delivering new investment and jobs. It would place the borough in a position to respond quickly to future changes in economic outlook, and create greater certainty and choice for the market." ⁶

- 4.6 Although it is commendable that the Council has sought to pursue the most ambitious of the three housing targets it has set out, the supporting evidence does not comply with PPG requirements for an unconstrained objective assessment of overall housing need (which should be based on demographic trends, economic forecasts, market signals, and affordable housing need).

⁶ Paragraph 4.1.5, Page 22, Shaping Places Strategy and Options, Telford & Wrekin Council, June 2013

- 4.7 The document further sets out the Council's growth ambition, stating that:

"By 2031 Telford and Wrekin will have grown to serve a population of over 200,000. Development will realise the borough as an outstanding destination for living, working and visiting that its residents are proud of and combines the best of town and countryside."⁷

- 4.8 In order for the population of Telford and Wrekin to grow to more than 200,000, population growth in excess of all recent ONS population projections would be required. It should be recognised, though, that the ONS projections are based on past migration trends, which will have been influenced by past completions; in this instance, past completion rates have been significantly below target (see Chapter 8), and future growth forecasts are therefore likely to be suppressed as a result.

- 4.9 The document also confirms the Council's ambitions to boost employment over the course of the plan period:

"To provide a sufficient quantity and range of good quality homes that are well designed, affordable and sustainable.... Locate new housing to support services, education and employment opportunities.... Increase the number of jobs over the Plan period."⁸
(Our emphasis)

- 4.10 Finally, the document acknowledged the importance of the relationship between housing and employment. Paragraph 5.0.4 states:

"It is important for the economic prosperity of the borough that all options regarding the distribution of new homes is directed at increasing employment and the opportunities associated with it..."⁹ (Our emphasis)

- 4.11 It is therefore surprising that the subsequent February 2014 SHMA (described later in this chapter) did not take account of economic growth in its assessment of housing need.

- 4.12 In respect of affordable housing provision, Option 6 of the draft Plan suggests the following thresholds:

"Set separate affordable housing targets for Telford, Newport and the rural area. These would apply to qualifying sites at levels

⁷ Paragraph 3.1.1, Page 18, Shaping Places Strategy and Options, Telford & Wrekin Council, June 2013

⁸ Paragraph 3.2 & 3.3, Page 18, Shaping Places Strategy and Options, Telford & Wrekin Council, June 2013

⁹ Paragraph 5.0.4, Page 28, Shaping Places Strategy and Options, Telford & Wrekin Council, June 2013

advised by local viability evidence (currently 20% in Telford, 35% in Newport and 40% in the rural area)." ¹⁰

ii) *Shaping Places Local Plan 2011 – 2031: Proposed Housing and Employment Sites Document (May 2014)*

4.13 The Proposed Housing and Employment Sites document was published for consultation in May 2014, setting out sites which are proposed for future development within Telford and Wrekin in the context of the overall housing target proposed over the Plan period (2011-2031). The consultation results will inform the selection of the preferred sites which will be included in the emerging draft Local Plan.

4.14 In the context of housing provision, the document sets out the Council's preferred proposed housing requirement for the emerging Local Plan over the plan period (2011-2031) as follows:

"We suggest a plan target of approximately 20,000 new homes. With 11,885 homes committed as a result of planning permissions, we need around 8,115 new homes to deliver the target." ¹¹ (Our emphasis)

4.15 It is important to note how the level of overall housing provision set out in the document is lower than 26,500 dwellings originally outlined in the Strategy and Options document (2013). The Council felt that this revised target was necessary to:

"Protect our unique selling point of green spaces whilst suggesting managed sustainable growth" ¹²

4.16 The explanation for this target again appears to be based on land availability and capacity, rather than a full objective assessment of overall housing need based on a proportionate evidence base.

"The housing target will be met by homes already committed through existing planning permissions, sites with resolution to permit and sites in an adopted development plan, together with homes built on sites proposed in the Proposed Housing and Employment Sites document. Committed sites, once developed, will provide 11,885 new homes. Proposed sites have the potential to provide approximately 9,986 new homes. This represents 23% more homes than need to be delivered from proposed sites to achieve the housing target. This additional percentage has been included to allow for discussions on site suitability during the consultation process and provide some flexibility over the choice of

¹⁰ Option 6, Page 66, Shaping Places Strategy and Options, Telford & Wrekin Council, June 2013

¹¹ Paragraph 2.3, Page 2, Telford & Wrekin Council - Proposed Housing and Employment Sites, May 2014

¹² Paragraph 2.4, Page 2, Telford & Wrekin Council - Proposed Housing and Employment Sites, May 2014

sites to be taken forward to the draft plan stage. Following consultation, the selection of sites will be refined to take into account comments received as well as the most recent household projections anticipated to be released by the Office for National Statistics later in 2014.”¹³

- 4.17 The technical report fails to refer to demographic and economic projections/forecasts, market signals, or affordable housing provision.

iii) Telford & Wrekin Local Plan 2011-2031 – Submission Version (June 2016)

- 4.18 In January 2016 the Council published the Telford & Wrekin Local Plan Publication Version for consultation and in June 2016 submitted the Local Plan to the Planning Inspectorate for examination. The submitted Plan sets a vision for the Borough that includes:

“...the provision of sufficient homes of the right type and quality in the right places to meet a growing and ageing population, the right businesses and jobs to provide employment, economic prosperity and education to deliver the skills required by growing business as well as the provision of services and facilities to meet our communities’ current and future needs’¹⁴

- 4.19 The aims and objectives of the Local Plan expand the vision and provide the basis for the spatial strategy and policies of the Plan.
- 4.20 Aim 1 of the Plan is to ‘promote prosperity and opportunity for everyone’. Although the Plan does not state a specific job target, Policy EC1 of the Plan states:

“It is anticipated a minimum addition of 76 hectares of employment land will be required to be delivered over the lifetime of the Local Plan.”¹⁵

- 4.21 Aim 2 is to ‘meet local housing needs and aspirations’ with Policy HO1 of the Plan setting out a housing requirement for Telford & Wrekin Borough of 15,555 net new dwellings between 2011 and 2031. The Plan goes on to say:

“The housing requirement set out in Policy HO1 is higher than the objectively assessed needs identified in the *Telford & Wrekin Objectively Assessed Housing Need* report by Peter Brett Associates (March 2015), which identified an overall housing need of 9,940 dwellings up to 2031. The housing requirement is therefore not solely based on the overall housing need. It also allows for additional development of an appropriate scale, nature and location

¹³ Page 2-3, Telford & Wrekin Council - Proposed Housing and Employment Site Selection: Supplementary Technical Report, May 2014

¹⁴ Paragraph 2.2.4, Page 26, Telford & Wrekin Local Plan 2011-2031 – Publication Version, January 2016

¹⁵ Policy EC1, Page 43, Telford & Wrekin Local Plan 2011-2031 – Publication Version, January 2016

which will support delivery of the overall plan vision and growth strategy, including supporting the delivery of affordable housing”¹⁶

4.22 Policy H05 of the submitted Local Plan sets affordable housing thresholds and percentages for all proposals which comprise of 11 dwellings or more, or where gross floorspace is greater than 1,000 square metres. Such schemes within Telford are required to provide 25% affordable housing, with a 35% target applied to all other areas.

4.23 This section now goes on to review the evidence base underpinning the housing needs assessment.

Housing Evidence Base

4.24 The main piece of evidence underpinning the Council’s housing needs assessment is the Telford and Wrekin Objectively Assessed Housing Need (OAHN) Report by Peter Brett Associates (PBA) published in March 2015. The PBA OAHN report updates the overall housing need assessment for Telford and Wrekin presented in the February 2014 Strategic Housing Market Assessment (SHMA). However, the PBA OAHN report relied on the February 2014 SHMA’s assessment of affordable housing need.

4.25 In March 2016, Telford and Wrekin Council published an updated SHMA (undertaken by Arc4). However, the SHMA does not provide a new assessment of OAHN and instead presents the work undertaken by PBA in March 2015. The March 2016 SHMA does however, provide a new assessment of affordable housing need.

4.26 These two main evidence documents are reviewed below in order to determine whether the housing need for Telford and Wrekin has been objectively assessed in line with NPPF and PPG requirements.

iv) Telford and Wrekin Objectively Assessed Housing Need – Final Report (March 2015)

4.27 The Telford and Wrekin OAHN final report was published by Peter Brett Associates (PBA) in March 2015. This section critically reviews the OAHN report in the context of the NPPF and PPG, and determines the extent to which it can be considered to represent a full OAHN for Telford and Wrekin.

4.28 The PBA OAHN Report aimed to address the following questions (paragraph 1.1):

¹⁶ Paragraph 5.1.1.4, Page 66, Telford & Wrekin Local Plan 2011-2031 – Publication Version, January 2016

- How wide should Telford & Wrekin's functional housing market be drawn?
- How should the different national population and household projections covering the period up to 2031 be treated as part of the assessment method? What reasonable adjustments might be made to the assumptions applied to national population and household projections to reflect local circumstances?
- How should recent economic effects of the recession on the projection of future household formation and local labour demand forecasts be treated? Is it reasonable to assume that there will be some return to past trends were the economy to [continue] to improve?
- What is the relationship between the projected need for housing and projected future labour supply?

a) Housing Market Area definition

- 4.29 The PPG clearly states the need for local authorities to work collaboratively when assessing housing needs, most importantly those local authorities within the relevant housing market area (HMA).
- 4.30 The OAHN report (Chapter 2) considers the housing market area based on the Centre for Urban and Regional Studies (CURDS) definition. However, as this research is primarily based on 2001 Census data the report also looks at updated migration and commuting flows from the 2011 Census and concurs with the previous SHMA (February 2014) findings that Telford & Wrekin forms a separate housing market area on its own. Therefore the OAHN report assesses housing need for the Borough in isolation.
- 4.31 The analysis undertaken by Barton Willmore and presented in Chapter 3 of this report, also concurs that Telford and Wrekin Borough forms a separate housing market of its own.

b) Objective assessment of housing need

- 4.32 The OAHN report follows the approach for objectively assessing housing need as set out in PPG and outlined in Chapter 2 of this report.

Demographic Starting Point

- 4.33 The PPG recommends that the CLG Household Projections should be used as the starting point for assessing housing need. The PPG states the following in relation to the use of official data sources in an assessment:

"The household projections produced by the Department for Communities and Local Government are statistically robust and are based on nationally consistent assumptions. However, plan makers may consider sensitivity testing, specific to their local circumstances, based on alternative assumptions in relation to the underlying demographic projections and household formation rates. Account should also be taken of the most recent demographic evidence including the latest Office of National Statistics population estimates."¹⁷

- 4.34 The OAHN report (Table 3.1) takes account of the CLG 2012-based household projections which were the latest household projections available at the time the OAHN report was produced. The 2012-based household projections project growth of 446 households per annum over the plan period 2011-2031 (equivalent to 461 dwellings per annum once the report's 3.1% allowance for vacancy and second homes has been applied).

Adjustments to the starting point

- 4.35 However, at paragraph 3.6 the Report outlines a weakness with the 2012-based Sub National Population Projections (SNPP) which underpin the 2012-based household projections. That is that the 2012-based SNPP are based on migration trends observed over the period 2007-2012. This period coincides with an economic recession and is therefore not considered to represent a robust projection.
- 4.36 To correct this weakness, PBA have created two alternative population projections which they refer to as PBA trends (paragraph 3.8). Both alternative projections use a base year of 2013 and use the ONS 2013 Mid-Year Population Estimates (MYPE) as the starting population. The two scenarios are:
- PBA trends 2003-13 based on a 10-year migration trend from the period 2003-13;
 - PBA Trends 2008-13 based on a 5-year migration trend from the period 2008-2013 which is similar to the ONS SNPP but from a more recent 5-year period.

¹⁷ Paragraph: 017 Reference ID: 2a-017-20140306, Planning Practice Guidance, 06 March 2014

- 4.37 It is reported that the ONS 2012-based SNPP project growth of 583 people per annum over the period 2011-2031, which is correct. However, the PBA trends 2008-2013 projects higher growth of 785 people per annum and the PBA trends 2003-2013 projects higher growth still of 838 people per annum (Table 3.1, page 13).
- 4.38 Barton Willmore support the consideration of longer term migration trends for the reasons PBA cite. However, Barton Willmore has replicated the creation of a 10-year migration trend drawn from the period 2003-2013 and constraining to the 2011-2013 MYPEs for consistency with the PBA work and analysis (presented in Chapter 5 of this report) and Barton Willmore's equivalent 10-year migration trend results in growth of 699 people per annum – lower than the equivalent scenario produced by PBA.
- 4.39 Barton Willmore's 2003-2013 trend projects comparable population growth to the 2014-based SNPP which were published on 25 May 2016 after the publication of the Council's March 2015 OAHN report. The 2014-based SNPP project growth of 702 persons per annum which is comparable to growth of 699 persons per annum projected by Barton Willmore's 2003-2013 trend. This is expected given net migration from the period 2003-2013 averages -50 people per annum, and net migration from the period 2009-2014 (which underpins the 2014-based SNPP) averages -58 persons per annum.
- 4.40 It is considered that the use of different forecasting models is the reason for the differences seen between the 2003-2013 trends produced by PBA and Barton Willmore. Barton Willmore use the POPGROUP and Derived Forecast demographic forecasting model maintained by Edge Analytics and used by over 100 organisations (both public and private). POPGROUP is specifically designed to be able to produce alternative migration scenarios in a way that replicates (to a degree) the ONS method. It is believed PBA use a forecasting model developed by John Hollis but specific details are not known.
- 4.41 Nonetheless, since the publication of the PBA report in March 2015, the ONS have published the 2014 and 2015 MYPEs. These estimate the population of Telford and Wrekin to be 169,440 people in 2014 and 171,159 people in 2015 – higher than the level of population growth projected for these years by the PBA trends 2003-2013 scenario. This indicates that Telford and Wrekin's population is growing at a faster rate than projected by the 2003-2013 trend (both PBA and Barton Willmore's 2003-2013 trend), therefore suggesting the use of a migration trend from this period is not suitable. This issue is explored in more detail in Chapter 5 of this report.
- 4.42 The March 2015 OAHN report initially considered household formation based on the 'interim' 2011-based household formation rates but adjusted these by applying an indexed return after

2021 to the pre-recession trend (as termed by PBA in paragraph 3.8) of the CLG 2008-based rates. However, following publication of the CLG 2012-based household projections on 27 February 2015, PBA produced a new set of projections called PBA Trends Adjusted which applied the CLG 2012-based household formation rates (with no adjustments) to the PBA trends population projections described above.

- 4.43 Analysis by Barton Willmore (presented in Chapter 5 of this report) has found that the CLG 2012-based household formation rates project lower household formation rates for those people aged 25-34 years than the 'interim' 2011-based household formation rates. PBA acknowledged that the 'interim' 2011-based rates were affected by the recession, hence the reason for applying the original adjustment assuming an indexed return to the 2008-based rates. For this reason it is unclear why PBA have decided not to make a similar adjustment to the 2012-based rates given they project lower rates than the 'interim' 2011-based rates.
- 4.44 Using the 2012-based household formation rates with no adjustment will continue to project suppressed household formation. PPG recommends that where rates may have been historically suppressed the rates may require adjustment (paragraph 15). Therefore in this instance an adjustment to the 2012-based rates is deemed necessary. Using the 2008-based rates as a benchmark of unsuppressed household formation is considered appropriate and an approach also adopted by PBA before the publication of the 2012-based household formation rates.
- 4.45 The OAHN report (paragraph 3.25) presents housing need based on demographic-need alone as 483 dwellings per annum based on the short term PBA Trends Adjusted 2008-2013 scenario, increasing to 497 dwellings per annum based on the long term PBA Trends Adjusted 2003-13 scenario. Both trends are presented as being comparable with growth shown in the 2012-based household projections of 446 households (or 461 dwellings per annum) with the differences being as a result of the alternative starting population age and gender profile.
- 4.46 Dwelling growth is calculated by PBA by applying a 3.1% adjustment factor to the household number to account for vacancy and second homes based on 2011 Census data (paragraph 3.21).
- 4.47 The long term trend scenario is presented in the March 2015 report as being more robust because it is based on a longer reference period (paragraph 3.26). For this reason the OAHN is presented by PBA as being 497 dwellings per annum over the period 2011-2031 (paragraph 3.27).

- 4.48 The PBA Study also considers the demographic implications of providing 15,000 net new dwellings (750 per annum) over the period 2011-2031 (paragraphs 3.28 to 3.32). This is the number of dwellings Council officers' estimate is the Borough's supply capacity over the plan period and whilst it has no bearing on the OAHN, it has been produced to help inform the Council's thinking on the housing policy target.

Accounting for Economic Growth

- 4.49 The PPG emphasises the need for plan makers to take employment trends into account when assessing overall housing needs. To this effect, it states that plan makers should consider past trends and forecasts of job growth when objectively assessing housing need, and explicitly reinforces that a 'failure to do so will mean that there would be an increase in unmet housing need'¹⁸.
- 4.50 In line with PPG, the PBA OAHN Report considers if the demographically projected housing need would provide enough workers to support Telford and Wrekin's expected job growth.
- 4.51 PBA commissioned Experian to produce an employment forecast based on the preferred PBA Trends 2003-2013 population projection referred to as Experian's 'Trends Scenario'. The PBA report states that the population assumption is the only difference between Experian's 'Trends Scenario' and the standard Experian 'baseline forecast' dated December 2014 (paragraph 5.2).
- 4.52 Experian's standard baseline forecast (December 2014) shows growth of 810 jobs per annum in Telford and Wrekin over the period 2011-2031. The 'Trends Scenario' based on applying Experian's economic assumptions to the PBA Trends 2003-13 scenario shows growth of 852 jobs per annum.
- 4.53 The PBA OAHN report concludes that the demographic-led need represented by the PBA Trends Adjusted 2003-13 will support a healthy economic future and therefore there is no requirement for a further adjustment to support economic growth (paragraph 5.21).
- 4.54 Barton Willmore have assessed the Council's job growth of 852 jobs per annum and within the context of past trends and economic forecasts (see Chapter 6 of this report for more detail) consider 852 jobs per annum to be high. Barton Willmore's recommendation would be for a slightly lower, but yet more realistic job target of 693 jobs per annum to be used for the purposes of assessing OAHN. This is based on an average of growth projected over the period 2011-2031 by Experian Economics September 2016 forecast (710 jobs per annum), Oxford

¹⁸ Reference ID: 2a-018-20140306, Planning Practice Guidance, 06 March 2014

Economics July 2016 forecast (418 jobs per annum) and Cambridge Econometrics November 2015 projection (951 jobs per annum).

- 4.55 It is argued that economic forecasts produced by the three forecasting houses referred to above, already include a view on the future population and therefore it is logically inconsistent to then use these economic forecasts against a different population projection. However, both Cambridge Econometrics and Oxford Economics have confirmed that their forecasts are demand based and not constrained by population (see Appendix 4 of this report). Furthermore, exploration of the economic outputs from Experian (published as Appendix D to the March 2015 OAHN report) reveals that the *unconstrained* job demand forecast that sits at the heart of Experian's analysis is near identical to the *constrained* projection of workplace jobs suggesting that for Telford and Wrekin, use of the Experian baseline job demand forecast is reasonable as an indication of future job demand.
- 4.56 Barton Willmore have modelled the housing need of 693 jobs per annum and the result is between 826 and 891 dwellings per annum would be required depending on which adjustment to addressing suppressed household formation for younger people is applied. This is a significantly higher housing need than that indicated by the PBA assessment for a lower job growth target. Even if the lower end of the projected job growth range is taken (418 jobs per annum as projected by Oxford Economics) the associated dwelling need is 565 dwellings per annum if 2014-based household formation rates are applied, which again is still higher than the housing need projected by PBA for a much lower job growth target.
- 4.57 The results of Barton Willmore's modelling presents a very different picture of housing need compared to PBA's assessment. For example, the PBA work shows fewer dwellings are required for higher job growth. This suggests that there are marked differences in respect of the underlying economic assumptions (unemployment, commuting ratio and economic activity) which are outlined below.

Underlying economic modelling assumptions

Unemployment rates

- 4.58 A comparison of the unemployment assumptions used in the Barton Willmore and PBA modelling work is shown in Table 4.1.

Table 4.1: Comparison of unemployment assumptions for Telford and Wrekin

	Barton Willmore	PBA
2011	9.1%	9.7%
2012	8.7%	8.6%
2013	8.2%	9.3%
2014	7.8%	7.3%
2015	7.3%	6.4%
2016	6.9%	5.8%
2017	6.4%	5.2%
2018	6.0%	4.5%
2019	5.5%	4.3%
2020	5.1%	4.3%
2021	4.6%	4.3%

Source: Barton Willmore and PBA

- 4.59 Table 4.1 illustrates that whilst PBA assume higher unemployment at the start of the projection period, the unemployment rate is modelled to fall more quickly by PBA reaching 4.3% by 2021 which is then held constant to 2031. In contrast Barton Willmore assume a more gradual reduction in unemployment reaching the pre-recession average by 2021 (4.6%) which is then held constant to 2031. PBA's use of a lower unemployment rate assumes that more labour can be drawn from the resident labour supply meaning that fewer homes will be needed to attract more workers.
- 4.60 The source of the PBA unemployment rates is not stated in the report. However, the unemployment rates used by Barton Willmore are taken from the Annual Population Survey (APS) model based estimates of unemployment which is considered a robust source as it is the only source that is regularly updated at a local level and provides consistent analysis back to 2004, allowing the calculation of a pre-recession average.

Commuting rate

- 4.61 Analysis of the commuting rate assumptions highlights that both Barton Willmore and PBA assume that Telford and Wrekin is a net importer of labour. Whilst Experian do not use a commuting ratio directly, analysis of the economic outputs for the preferred PBA Trends 2003-13 scenario (Appendix D of the March 2015 OAHN report) has identified that PBA/ Experian assumes that Telford and Wrekin relies more heavily on labour from outside of the district.
- 4.62 The ratio of resident based employment and workplace jobs generates a commuting ratio of 0.85 in 2011 which reduces to 0.82 by 2031. However, after taking account of double-jobbing (thereby basing the ratio on resident based employment and workplace based employment) the assumed commuting ratio is 0.88 in 2011. Whilst the ratio fluctuates ever so slightly over the projection period, the ratio remains at 0.88 by 2031. The latter approach assumes an

increase in the number of double-jobbers for which there is no clear justification. On this basis, and to provide consistent comparison with Barton Willmore's approach, the assumed commuting ratio of 0.85 reducing to 0.82 by 2031 is considered to provide a consistent comparison with Barton Willmore's approach.

- 4.63 Barton Willmore's analysis of commuting flows based on 2011 Census data results in a commuting ratio of 0.94 which is held constant throughout the projection period (2011-2031). As data from a census year is usually used as a benchmark to re-base various official data sets, it is considered that a commuting ratio from the 2011 Census is more reliable than one calculated independently by Experian.
- 4.64 Furthermore, Barton Willmore's approach of fixing the commuting ratio over the projection period rather than assuming a decline as used in the PBA/ Experian analysis is considered the more robust approach. In the context of the ratio from the 2001 Census (0.93) Barton Willmore's approach to hold constant the commuting ratio at 0.94 (from the 2011 Census) is considered reasonable. Assuming a fall in the commuting ratio, as is the approach by PBA/ Experian, will have an impact on neighbouring authorities or those authorities from which commuters to Telford and Wrekin originate. As the PAS guidance states:

"The expected shift in commuting should be believable, and acceptable to the other local authorities affected by it. Strategies of recalling commuters should not be adopted unilaterally; they require cross-boundary agreement in line with the Duty to Cooperate."¹⁹

- 4.65 In this instance it is considered the strategy of assuming a higher reliance on labour from outside of the borough should have the same cautions applied.
- 4.66 PBA's use of a lower commuting ratio (0.85 at the start of the projection period compared to 0.94 as used by Barton Willmore) means that housing need to support job growth will be lower based on PBA's assessment as it assumes that a greater proportion of the labour needed to support the job growth will come from outside of the district.

Economic activity rates

- 4.67 PBA have published economic activity rate assumptions as part of the economic outputs (Appendix D of the March 2015 OAHN report). These are presented as a combined rate for males and females and for ages 16+, 16-64, 65+ years and working age. It is not clear whether more detailed rates were used in the modelling work and what the upper age limit is of the age ranges (if there is one). Barton Willmore use separate economic activity rates for males

¹⁹ Paragraph 8.16, Page 36, Objectively Assessed Need and Housing Targets: Technical Advice Note, July 2015, Prepared by PBA for the Planning Advisory Service

and females and by five year age group up to the age of 89 years. However, in order to aid comparison with the rates published by PBA, the Barton Willmore rates have been combined and are presented in Table 4.2 alongside the PBA rates.

Table 4.2: Comparison of economic activity assumptions for Telford and Wrekin

	Barton Willmore	PBA
	2011	2011
Overall (16+)	64.6%*	61.5%
16-64	76.5%	73.5%
65+	9.9% [^]	8.1%
	2031	2031
	2031	2031
Overall (16+)	60.6%*	60.8%
16-64	77.3%	75.7%
65+	14.5% [^]	19.2%

Source: Barton Willmore/ PBA

* Barton Willmore's 16+ is actually 16-89 years and therefore may not be directly comparable with PBA

[^] Barton Willmore's 65+ is actually 65-89 years and therefore may not be directly comparable with PBA

- 4.68 Table 4.2 indicates that there is a difference in the baseline assumptions (year 2011) used by both parties. Barton Willmore's 2011 rates are taken from the 2011 Census which is comprehensive data source that provides a complete picture of the UK population. The 2011 rates used in PBA's assessment are those used by Experian and are taken from the Annual Population Survey (APS). At the time of the Council's assessment the APS survey had not been rebased to the 2011 Census and are therefore the 2011 rates used by PBA are considered outdated. Census data for the year 2011 is also more robust than annual surveys which are based on only a sample of the population.
- 4.69 It is also expected that the economic activity rates presented in Table 4.2 are not directly comparable because Barton Willmore's economic activity rates only extend to age 89 years, whereas PBA's may go beyond this age. If this is the case, then PBA's economic activity rates may be diluted because, for example, the number of people working beyond 89 years will be low – calculating a rate as a proportion of all people over the age of 65 years rather than 65-89 years will create a lower rate. However, due to the ageing population, a lower rate applied to all people over the age of 65 years will result in a higher number of economically active people than a higher rate applied to just those aged 65-89 years.
- 4.70 Given the likely inconsistencies between PBA and Barton Willmore with regards to the age groups, it is perhaps more important to consider the change in economic activity rates between 2011 and 2031 applied by each party. The PBA rates assume a 137% increase in economic activity of 65+ year olds whereas Barton Willmore assume a 46% increase. Whilst increases to State Pension Age will see economic activity increase in those aged 65+, it is important not

to over exaggerate the future labour supply from an ageing population as is this is likely to be unachievable in reality.

- 4.71 The Barton Willmore approach to projecting economic activity rates is set out in more detail in Chapter 6 of this report. Barton Willmore consider their approach to be robust and methodological.
- 4.72 Although the difference in economic assumptions may appear small, these indicators are highly sensitive and therefore a slight difference in assumption can lead to very different results of housing need. It is Barton Willmore's opinion that the assumptions made by PBA in relation to commuting and economic activity are unreasonable for the reasons outlined above and for this reason Barton Willmore's approach provides a more robust assessment of housing need.

c) Market Signals Adjustment

- 4.73 PPG states that the housing need number suggested by household projections will require an upward adjustment if there is a worsening trend in any of the indicators including; land prices, house prices, rents, affordability, rate of development and overcrowding (paragraphs 19 and 20).
- 4.74 The Telford and Wrekin OAHN report considers all of the market signals outlined in PPG.
- 4.75 Analysis of past housing delivery shows that housing delivery has consistently fallen short of the targets. However, lack of land supply is not presented as the reason for this shortfall, rather lack of demand and poor viability led to delayed development (paragraph 4.20).
- 4.76 It concludes that there is nothing in the market evidence to suggest that demographic projections based on recent 5-year or 10-year trends underestimate future housing need and should be adjusted upwards (paragraph 4.51).
- 4.77 Barton Willmore disagree with this assessment as our analysis of market signals (presented in Chapter 7 of this report) indicates a worsening trend with regards to overcrowding, concealed households, worsening affordability, and past housing delivery falling significantly below target. On this basis, it is considered necessary to provide an uplift to address market signals issues in Telford and Wrekin.
- 4.78 This view is further supported by the LPEG methodology, which under the current recommendation proposes a 10% uplift to the demographic OAHN in Telford and Wrekin on the basis of the three-year average of the median affordability ratio.

d) Affordable Housing Need Assessment

- 4.79 The March 2015 PBA report does not undertake a new assessment of the need for affordable housing but rather summarises the findings of the Telford and Wrekin SHMA (2014).
- 4.80 The Borough's total affordable housing need is estimated to be between 567 and 1,859 net new affordable units per annum, depending on whether the backlog of existing households in need is absorbed over five years or the 20-year plan period (paragraph 4.37).
- 4.81 The affordable need for net new dwellings alone is 1,237 dwellings per annum if the backlog is spread over five years and 445 dwellings per annum if it is spread over 20 years (paragraph 4.40).
- 4.82 This identified level of need is significantly higher than past delivery rates of affordable housing as presented in Table 4.3.

Table 4.3: Historic affordable housing delivery in Telford and Wrekin

Year	Affordable completions
2006/07	21
2007/08	73
2008/09	139
2009/10	184
2010/11	202
2011/12	275
2012/13	211
2013/14	319
2014/15	427

Source: Table 2.3, Telford and Wrekin Annual Monitoring Report 2015

- 4.83 The OAHN report states that to pay for the lowest of the affordable needs (445 affordable dwellings per annum over 20 years) at the average rate of delivery over the last five years (38% annual affordable delivery) total housing development would have to be 1,171 dwellings per annum (paragraph 4.47).
- 4.84 Even on this basis the level of affordable need is greater than the OAHN for 497 dwellings per annum (2011-2031).
- 4.85 To help deliver some of this affordable housing the OAHN report states that the Council should be looking for realistic opportunities to attract market demand and build housing over and

above the OAHN calculated (paragraph 4.49). This additional demand could be overspill from the Greater Birmingham, Solihull and Black Country housing market.

- 4.86 Since the publication of the March 2015 OAHN report, a new assessment of affordable housing need has been undertaken within the March 2016 SHMA. This is discussed below.

v) *Strategic Housing Market Assessment (March 2016)*

- 4.87 The March 2016 SHMA was published by Arc4 and replaced the previous SHMA published in 2014 by Housing Vision.
- 4.88 The NPPF requires all local planning authorities to produce a SHMA to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries (paragraph 159).
- 4.89 The March 2016 SHMA seeks to present all of the required components of a SHMA. However, the March 2016 SHMA has not undertaken its own OAHN assessment and instead presents the work carried out by PBA in the March 2015 OAHN report²⁰. For this reason, the March 2016 SHMA also presents OAHN for Telford and Wrekin as being 497 dwellings per annum (2011-2031).

Affordable Housing Need Assessment

- 4.90 The 2016 SHMA provides an assessment of affordable housing need using the needs assessment model advocated by the CLG. The SHMA identifies net affordable housing need of 665 dwellings per annum.
- 4.91 Appendix D of the 2016 SHMA presents the detailed components of the assessment. Total backlog need is based primarily on data provided from Telford and Wrekin's housing register also taking account of affordable housing stock currently available on the assumption that the housing register is complete. This is considered to be a robust approach, and as such, the backlog need identified is likely to be a realistic representation of need in Telford and Wrekin. In total, backlog need equates to 3,878 dwellings. This relates to an annual requirement of 776 dwellings, assuming backlog is cleared over five years.
- 4.92 In addition to backlog need, the SHMA identifies newly arising affordable housing need as being 447 households per annum²¹. However, later in the assessment new arising need is

²⁰ Paragraph 6.2, page 69, Telford and Wrekin Strategic Housing Market Assessment, March 2016, Arc4

²¹ Paragraph D.20, page 117, Appendix D, Telford and Wrekin Strategic Housing Market Assessment, March 2016, Arc4

presented as being 442 households per annum²² and it is this lower figure which has been taken forward in the overall calculations of affordable housing need. Total annual affordable housing need is presented as being 1,217 dwellings per annum, although if the higher newly arising need figure is taken this would equate to total affordable need of 1,223 dwellings per annum.

4.93 After taking account of future supply (552 units per annum), the SHMA identifies an annual net affordable requirement for 665 affordable homes per annum over the 5-year period 2015-2020 (3,325 in total)²³. This is a significant decrease in affordable housing need from the previous 2014 SHMA which showed total affordable need for 1,859 new homes per annum over 5 years.

4.94 The 2016 SHMA concludes by stating:

"The Telford and Wrekin new Local Plan sets out a Housing Requirement of 15,555 dwellings up to 2031. This is considerably higher than the OAN figure of 9,940 and reflects the growth ambitions of the Council and supports the delivery of affordable housing." ²⁴

4.95 Policy HO5 of the submitted Local Plan contains affordable housing targets of between 25% and 35%. If 665 affordable housing units are to be delivered according to the lowest of these thresholds (25%), then the total housing requirement would be 2,660 dwellings per annum over a 5-year period. This is significantly higher than the annual housing requirement set out in the local plan (778 dwellings per annum) and therefore it can be concluded that the higher housing requirement of the Local Plan would not meet affordable housing need in full.

Chapter Summary

4.96 The most recent assessment of OAHN for Telford and Wrekin was undertaken in March 2015 by Peter Brett Associates (PBA) and presented in the Telford & Wrekin Objectively Assessed Housing Need report. This report does seek to follow the guidance outlined in NPPF and PPG for assessing overall housing need.

4.97 Account has been taken of the CLG 2012-based household projections which were the latest available projections at the time of the assessment and which project growth of 446 household per annum over the period 2011-2031 (461 dwellings per annum once the Council's household to dwelling adjustment of 3.1% is applied to represent vacancy and second homes).

²² Paragraph D.41, page 121, Appendix D, Telford and Wrekin Strategic Housing Market Assessment, March 2016, Arc4

²³ Table D6, page 121, Appendix D, Telford and Wrekin Strategic Housing Market Assessment, March 2016, Arc4

²⁴ Paragraph 8.18, page 87, Telford and Wrekin Strategic Housing Market Assessment, March 2016, Arc4

- 4.98 However, PBA correctly identify that the CLG 2012-based household projections are underpinned by the ONS 2012-based Sub National Population Projections (SNPP) which are based on migration trends observed over the recessionary period 2007-2012. For this reason PBA present two alternative population projections, one of which is based on a long-term migration trend over the period 2003-13 and the other based on a short-term migration trend over the period 2008-13. Both take account of the 2013 Mid-Year Population Estimates as published by ONS.
- 4.99 The OAHN presented is for 497 dwellings per annum over the period 2011-2031 based on the PBA Trends long-term (2003-2013) scenario with CLG 2012-based household representative rates applied.
- 4.100 However, Barton Willmore consider that OAHN of 497 dwellings per annum represents an underestimate of housing need in Telford and Wrekin for the following reasons:

Migration trends

- Whilst Barton Willmore support the use of a 10-year migration trend as it provides a more stable period on which to assess population growth, the level of growth projected by the PBA trend 2003-2013 is questionable. Barton Willmore's equivalent 2003-2013 migration trend scenario (presented in Chapter 5 of this report) generates lower population growth than the PBA equivalent;
- Further doubt with the PBA 2003-2013 trend arises in light of the 2014-based SNPP which projects comparable growth to Barton Willmore's 2003-2013 migration trend which is expected given average net migration from the period which underpins the 2014-based SNPP (2009-2014) is similar to that from the period 2003-2013;
- Nonetheless, population growth projected by the 2003-2013 migration trend is considered to provide an underestimate of population growth for Telford and Wrekin in light of more recent demographic evidence published after the March 2015 OAHN assessment, namely the 2014 and 2015 Mid-Year Population Estimates which estimate a higher population than projected for these years by the 2003-2013 trend. On this basis Barton Willmore believes account should be taken of the most recent 10-year migration trend (2005-2015) and this is analysed in more detail in Chapter 5 of this report;

Household formation rates

- PBA do not propose any amendment to the CLG 2012-based household formation rates. However, Barton Willmore's analysis of the 2012-based household formation rates has found that the 2012-based rates continue to suppress household formation in the

younger age groups, particularly those aged 25-44 years, as did the previous 'interim' 2011-based household representative rates;

- Prior to the release of the 2012-based rates, PBA's approach was to adjust the 'interim' 2011-based rates to address the issue of suppression by assuming a return to the trend as projected in the 2008-based rates after 2021. Given, the 2012-based rates continue to show suppression in the younger age groups as did the 'interim' 2011-based rates, it is unclear why PBA chose to apply an adjustment to the 2011-based rates but not the 2012-based rates?;
- Barton Willmore consider it appropriate to apply an adjustment to address household suppression inherent in the 2012-based rates for 25-44 year olds. Chapter 5 of this report explores this issue in more detail;

Adjustments to support economic growth

- The March 2015 OAHN report has given consideration to the level of economic growth that can be supported by the demographic-led OAHN and concludes that 497 dwellings per annum could support 852 jobs per annum. In this context the Council's evidence suggests that their demographic-led OAHN will support a healthy economic future. Barton Willmore do not agree that 497 dwellings could support growth of 852 jobs per annum. Barton Willmore's modelling has found that to support growth of just 693 jobs per annum between 826 and 891 dwellings per annum would be required between 2011 and 2031 – therefore a higher level of dwelling growth for a lower number of jobs. Our analysis has found that the March 2015 OAHN report assumes a very high reliance on labour from outside of the borough and high labour market participation of people aged 65+ years which in Barton Willmore's opinion is unreasonable.

Market signals adjustment

- All market signals set out in the PPG have been considered in the Council's OAHN report and concludes that no upward adjustment is required to alleviate any worsening trends. Barton Willmore's analysis of market signals has shown that several adverse market signals have been observed in Telford and Wrekin including an increase in the number of concealed families and overcrowding, a worsening of affordability and past housing delivery which has significantly fallen below target. See Chapter 7 of this report for more detail. In light of this, it is considered that an upward adjustment for market signals is required.

Affordable housing need

- The March 2015 OAHN report presents net affordable need as being 1,237 dwellings per annum if the backlog is cleared over 5 years and 445 dwellings per annum if cleared over 20 years. Both quantities are significantly higher than the historic level of affordable housing delivery in Telford and Wrekin since 2006/07 which reached a peak in 2012/13 at 283 units. The OAHN report states that to even meet the lowest of the affordable needs (445 dwellings per annum) at the average ratio of delivery over the last five years (38% annual affordable delivery) total housing development would have to be 1,171 dwellings per annum. This is significantly higher than the full OAHN proposed in the March 2015 report for 497 dwellings per annum (2011-2031);
- The March 2016 SHMA provides a more recent assessment of affordable housing need for Telford and Wrekin. Net affordable housing need is presented as being 665 dwellings per annum, which is significantly lower than the previous assessment. Nonetheless, OAHN of 497 dwellings per annum would still not meet affordable housing need in full.

4.101 The following chapters of this report address the concerns raised with the Council's evidence base in order to arrive at an alternative OAHN for Telford and Wrekin over the period 2011-2031.

5.0 DEMOGRAPHIC CONTEXT AND DEMOGRAPHIC OAHN

- 5.1 Demographic projections and estimates from the Office for National Statistics (ONS) and Department for Communities and Local Government (CLG) underpin much of the OAHN, providing information on population change, age structure, household formation, fertility/mortality and migration.
- 5.2 This chapter begins with an overview of the population profile in the base year (2011), according to the 2011 Census. Next, a summary of the most recent population and household projections from ONS/CLG is provided, with comparisons made against other recent series. Key modelling inputs are then discussed, drawing on the population/household projections plus ONS mid-year population estimates.
- 5.3 The final part of the chapter summarises the results of the initial demographic-led modelling, setting out the starting point (as described in PPG) plus any required adjustments.
- 5.4 A concise summary of modelling inputs can be found in Appendix 2, whilst detailed model output tables can be found in Appendix 3 (including outputs for scenarios discussed in later chapters).

i) Existing Population Profile

- 5.5 Table 5.1 below shows the total population of Telford and Wrekin, the West Midlands region and England according to the 2011 Census. Population density (number of people per hectare) and the proportion of people living in areas classed as urban are also shown.

Table 5.1: Population – 2011 Census

	Population (usual residents)	Population Density (people per hectare)	% of population in Urban Areas
Telford and Wrekin	166,641	5.7	93.3%
West Midlands	5,601,847	4.3	84.9%
England	53,012,456	4.1	82.4%

Source: ONS, Census 2011

- 5.6 Around 166,600 people were living in Telford and Wrekin Borough at the time of the 2011 Census. The majority of these people (93%) were living in urban areas. Telford and Wrekin is more populated than the West Midlands region with a population density of 5.7 people per hectare (compared with 4.3 regionally).

- 5.7 Table 5.2 below shows the number of dwellings and households within Telford and Wrekin on Census day.

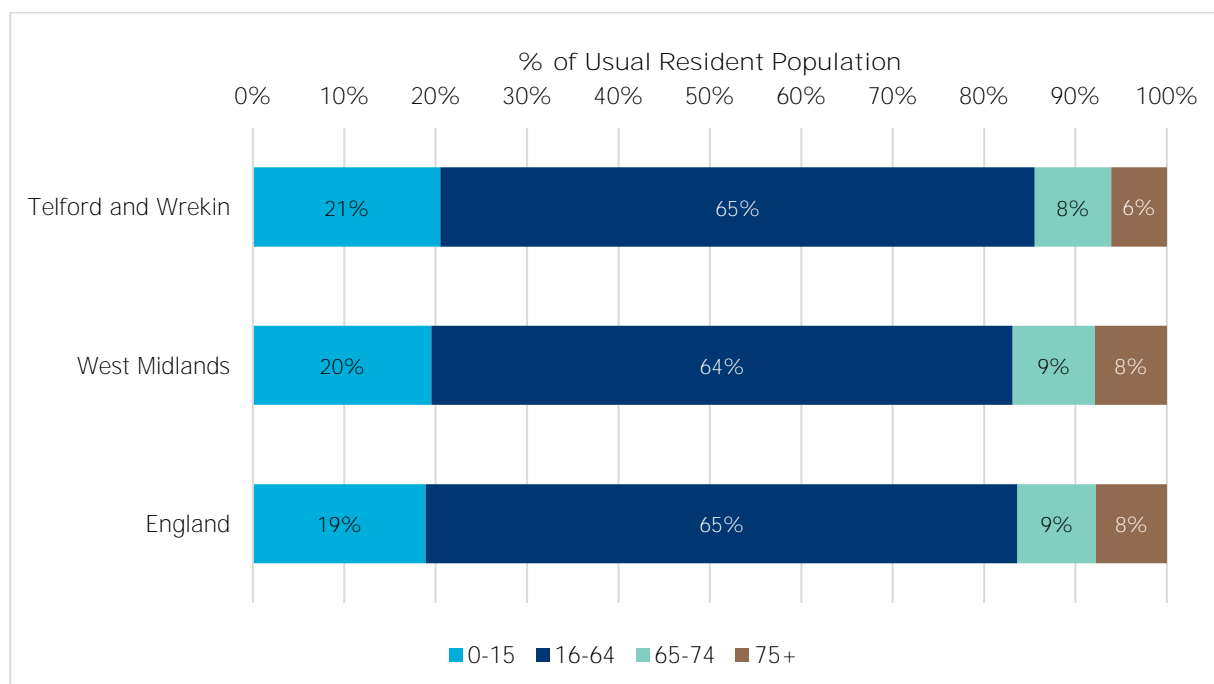
Table 5.2: Dwellings and Households – 2011 Census

	Total Dwellings	Household Spaces - Occupied	Household Spaces - No Usual Residents
Telford and Wrekin	68,714	66,608	2,122
West Midlands	2,376,728	2,294,909	86,008
England	22,976,066	22,063,368	980,729

Source: ONS, Census 2011

- 5.8 The number of dwellings in Telford and Wrekin totalled 68,700 according to the 2011 Census, the vast majority of which were occupied by a single household. Across Telford and Wrekin around 2,100 household spaces with no usual residents were recorded. These households tend to be either vacant or only occupied for part of the year (such as holiday homes) and in Telford and Wrekin around 3% of household spaces had no usual residents – lower than the regional and national average.
- 5.9 Figure 5.1 below summarises the age structure of Telford and Wrekin according to the 2011 Census.

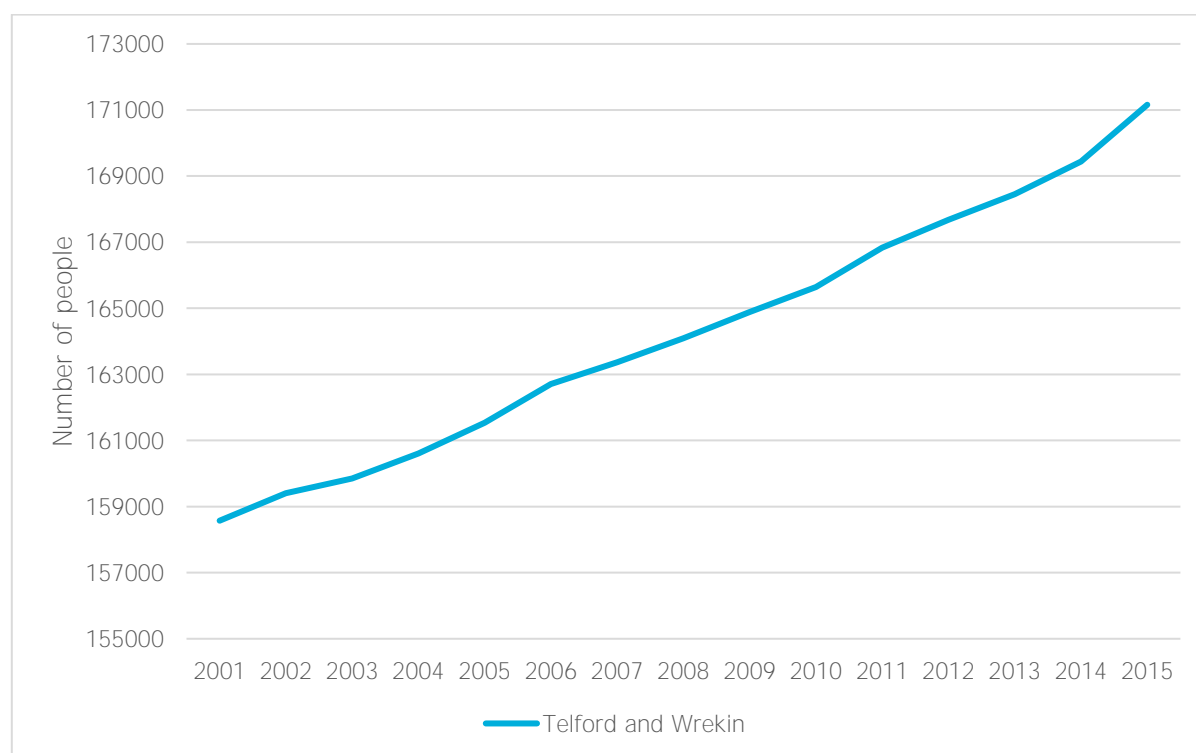
Figure 5.1: Age Structure – 2011 Census



Source: ONS, Census 2011

- 5.10 Telford and Wrekin has a younger population profile than the regional and national average with more 16-64 year olds and fewer 65+ year olds. However, this is expected given Telford and Wrekin is predominantly more urban. The median age Telford and Wrekin was 38 years compared to 39 years for the national and regional average.
- 5.11 Since 2011, the population of Telford and Wrekin has increased by an additional 4,328 people (+2.6%) resulting in a total population estimate of 171,200 people according to the 2015 Mid-Year Population Estimates (MYPE).

Figure 5.2: Mid-Year Population Estimates (2011-2015)



Source: Office for National Statistics

ii) Office for National Statistics (ONS) Population Projections

- 5.12 The Office for National Statistics produces population projections for all local authority areas in England. These are referred to as the Sub National Population Projections (SNPP) and are published by the ONS usually every two years.
- 5.13 The ONS SNPP are trend-based projections. That is, they project forward past demographic trends in births, deaths and migration. They do not take account of any future changes to government policy which may affect these past trends.

- 5.14 Table 5.3 sets out the official ONS SNPP in chronological order from the 2008-based series to the most recent 2014-based SNPP (25 May 2016). The 'interim' 2011-based SNPP and 2012-based SNPP take account of findings from the 2011 Census of the population.

Table 5.3: ONS SNPP series – Telford and Wrekin

Series	2011	2021	2031	2011-2021 (per annum)	2011-2031 (per annum)
2014-based	166,800	174,800	180,900	8,000 (800)	14,100 (710)
2012-based	166,800	173,600	178,500	6,800 (680)	11,700 (590)
2011-based (interim)	166,800	176,600		9,800 (980)	
2008-based	163,500	169,300	174,500	5,800 (580)	11,000 (550)

Source: ONS. Note figures have been individually rounded to the nearest one hundred (per annum figures to the nearest ten) and may not sum.

- 5.15 Telford and Wrekin's projected population has increased with each release of the ONS SNPP, with the exception of the 'interim' 2011-based series which were known to over project the population because despite being the first projection series to take account of the 2011 Census population profile, the underlying trends for fertility, mortality and migration were not updated to take account of 2011 Census findings and therefore outdated trends were applied to an updated population profile resulting in an unnaturally high population projection for Telford and Wrekin.
- 5.16 Under the most recent 2014-based SNPP, Telford and Wrekin's population is projected to increase by an additional 710 people per annum over the Local Plan period (2011-2031). This is higher than growth of 590 people per annum projected by the previous 2012-based SNPP.
- 5.17 The latest 2014-based SNPP, like the 2012-based SNPP before them, represent an important dataset in determining future population growth, and associated demands on housing. There are, however, two fundamental issues which cast doubt on the reliability of both the 2014 and the previous 2012-based projections:
- They are based upon recent five year trends in population change which have been heavily influenced by the recent recession. The extent to which the projections are representative of longer term population change over a series of economic cycles is questionable;

- The 2014-based ONS SNPP reflect the 2014-based national projections in assuming net international migration of 185,000 people per annum across England. However, as a consequence of the recently revised international migration estimates, both the 2014-based national and SNPP are considered to significantly underestimate net international migration trends. The latest quarterly net international migration estimates²⁵ suggest that net international migration totalled 327,000 people per annum in the year ending March 2016. The 10-year trend is approximately 250,000 people per annum.

5.18 It is therefore necessary to consider in more detail the migration trends underpinning the 2014-based SNPP and how these compare to trends drawn from a longer period (which incorporate a period prior to the recession and the recession itself) and a more recent period.

Migration Flows

5.19 The economic downturn has led to atypical net migration patterns in some areas. The difficulties in using data which covers the recession are well documented in the PAS Technical advice note – Objectively Assessed Need and Housing Targets produced by PBA in July 2015. Paragraph 6.23 of the advisory note states that:

“The base period used in the latest official projections, 2007-2012, is especially problematic. The period covers all of the last recession, in which migration was severely suppressed as many households were unable to move due to falling incomes and tight credit. Therefore the official projections may underestimate future migration – so that they show too little population growth for the more prosperous parts of the country, which have been recipients of net migration in the past. If so, by the same token the projections will also overestimate population growth for areas with a history of net out migration.”

5.20 To cancel out fluctuations in migration trends, the PAS Guidance suggests sensitivity testing a longer trend.

“In assessing housing need it is generally advisable to test alternative scenarios based on a longer reference period, probably starting with the 2001 Census (further back in history may be unreliable). Other things being equal, a 10-15 year base period should provide more stable and more robust projections than the ONS’ five years. But sometimes other things will not be equal, because the early years of this long period included untypical one-off events as described earlier. If so, a shorter base period despite its disadvantages could be preferable.”²⁶

²⁵ Office for National Statistics, Migration Statistics Quarterly Report: August 2016

²⁶ Paragraph 6.24, Planning Advisory Service (PAS) Objectively Assessed Need and Housing Targets Technical Advice Note, produced by Peter Brett Associates, July 2015

5.21 Table 5.4 summarises the key components of population change for Telford and Wrekin between 2001/2 and 2014/15, based on detailed data from the ONS Mid-Year Population Estimates.

Table 5.4: ONS components of population change for Telford and Wrekin

	Natural change	Net Migration	Other changes		Total change
			Total	Of which UPC	
2001/02	541	265	22	20	828
2002/03	519	-57	-15	11	447
2003/04	720	8	27	7	755
2004/05	665	222	45	10	932
2005/06	854	294	27	27	1,175
2006/07	857	-238	39	47	658
2007/08	890	-256	87	93	721
2008/09	886	-164	78	108	800
2009/10	899	-263	116	136	752
2010/11	940	71	179	153	1,190
2011/12	936	-130	45	0	851
2012/13	797	-43	16	0	770
2013/14	824	73	91	0	988
2014/15	583	1,113	23	0	1,719
Total 2001-15	10,911	895	780	612	12,586
Average 2001/15	779	64	56	44	899
Average 2007/12	910	-148	101	98	863
Average 2009/14	879	-58	89	58	910
Average 2010/15	816	217	71	31	1,104
Average 2003/13	844	-50	66	58	860
Average 2005/15	847	46	70	56	962

Source: ONS

5.22 It is evident from Table 5.4 that net migration flows for Telford and Wrekin decreased significantly during the recession. In the 5-year period 2007-2012, which is the period from which the ONS 2012-based SNPP trends are drawn, net migration averaged -148 net migrants per annum which means there was an outflow of people from Telford and Wrekin. A more recent 5-year trend drawn from the period 2009-2014 which underpins the 2014-based SNPP generates an average of -58 net migrants per annum. The periods which underpin both the 2012 and 2014-based SNPP are therefore characterised by a trend of net outward migration. However, to a lesser extent over the period 2009-2014 which explains why the 2014-based SNPP project higher population growth than the 2012-based SNPP.

5.23 Given migration trends for Telford and Wrekin appear to have been affected by the economic recession, it seems appropriate to consider a longer 10-year trend for Telford and Wrekin which

incorporates a period of both economic recession and buoyancy. The Council's housing needs evidence was underpinned by a 10-year migration trend taken from the period 2003-2013. Table 5.4 indicates migration over this period averaged -50 migrants per annum. However, a long term trend drawn from the most recent 10-year period (2005-2015) indicates positive inward migration of 46 net migrants per annum.

- 5.24 The analysis of migration trends set out above indicates that the continuation of long term (10-year) trends in net migration could require an uplift in the number of homes planned for, as it is likely that population growth would exceed the level indicated by both the ONS 2012 and 2014-based SNPP.
- 5.25 New homes are still required even though historically net migration has been negative in Telford and Wrekin. This is because the existing population of Telford and Wrekin will naturally be expanding through increased births. As children grow up over the plan period they will at some point require a home and there will be a natural dissolution of households through separations/ divorce.
- 5.26 The aforementioned PAS Technical advice note also recognises the problem of Unattributable Population Change (UPC) in relation to migration data. UPC is a discrepancy in population statistics that arose between 2001 and 2011 Censuses. The UPC is likely to be the result of miscounted population in one or both of the Censuses, and possibly also due to unrecorded migration between the Censuses.
- 5.27 The level of UPC in Telford and Wrekin is illustrated in Table 5.4. For Telford and Wrekin, UPC was a marginal positive figure, equating to approximately 600 people over 10 years, which means there was underestimation of the population between 2001 and 2011 and the mid-year population estimates for the last decade have therefore been revised upwards.
- 5.28 ONS decided not to readjust its 2012 or 2014-based SNPP to take account of UPC because it did not introduce any bias in the trend data. Furthermore, the ONS considered that UPC was unlikely to be seen in continuing subnational trends because:
- "it is unclear what proportion of the UPC is due to sampling error in the 2001 Census,
 - adjustments made to population estimates following the 2001 Census, sampling error in the 2011 Census and/or error in the intercensal components (mainly migration)
 - if it is caused by either the 2001 Census or 2011 Census, then the components of population change will be unaffected
 - if it is caused by international migration, it is likely that the biggest impacts will be seen earlier in the decade between 2001 and 2011 and will have less of an impact in the later

years when improvements were introduced to migration estimates"²⁷

- 5.29 Barton Willmore's approach is to also exclude UPC, whether positive or negative.
- 5.30 Notwithstanding this position, it is considered that UPC in Telford and Wrekin is positive, and if any of this can be attributed to in-migration, it would suggest that the 2014-based SNPP, and therefore the existing starting point estimate of OAHN could provide an underestimate.

Working age population

- 5.31 The 2014-based SNPP projects the working age population (16-74 years) to grow at a much slower rate than the population as a whole as is shown in Table 5.5. Given the extension of State Pension Age, there will be an increasing number of people working beyond the age of 64 years and therefore it is also important to consider the projected growth of the 65-74 year old population.

Table 5.5: Working Age Population Change in Telford and Wrekin, 2011-2031

Age Group	2012-based SNPP	2014-based SNPP
16-64	-4,900 (-4.5%)	-2,600 (-2.4%)
65-74	6,000 (42.2%)	5,900 (41.8%)
Total (16-74 years)	1,000 (0.9%)	3,300 (2.7%)
Total (all ages)	11,700 (7.0%)	14,000 (8.4%)

Source: Office for National Statistics

- 5.32 It is evident from Table 5.5 that for Telford and Wrekin, the 2014-based SNPP project the working age population (aged 16-74 years) to increase by an additional 3,300 people over the 20-year period 2011-2031. However, all of this increase is accounted for by an increase in the working age population aged 65-74 years, as the population aged 16-64 years is projected to decline by -2,600 people over this period. The ability of the 2014-based ONS SNPP to support job growth of any magnitude in Telford and Wrekin is therefore questionable. The pattern of projected working age population growth was similar for the 2012-based SNPP.
- 5.33 Although it is important to consider growth in the population aged 65-74 years, it would be wholly unrealistic to expect the majority of this age group to remain economically active, particularly given the relative affluence of the area and people in this age group being able to

²⁷ Page 7, ONS Quality and Methodology Information: Subnational population projections, 10 September 2015

retire and be financially secure. Economic activity rates are considered in more detail in Chapter 6 of this report.

- 5.34 For each major release of SNPP, CLG produces an accompanying set of Sub-National Household Projections (SNHP) by applying household formation rates (the likelihood that a person of a given age and gender will become the notional head of household) to the ONS SNPP. The next section considers the four most recent series of CLG household projections.

iii) Communities and Local Government (CLG) Household Projections

- 5.35 According to PPG, CLG household projections should provide the 'starting point' estimate of overall housing need (ID 2a-015). Table 5.6 sets out the official CLG household projections for Telford and Wrekin in chronological order from the 2008-based series to the most recent 2014-based series (published 12 July 2016).

Table 5.6: CLG Household Projection series – Telford and Wrekin

Series	2011	2021	2031		2011-2021 (per annum)	2011-2031 (per annum)
2014-based	66,700	72,000	76,400		5,300 (530)	9,700 (490)
2012-based	66,700	71,600	75,600		4,900 (490)	8,900 (450)
2011-based (interim)	66,700	71,900			5,200 (520)	
2008-based	68,500	73,900	78,200		5,300 (530)	9,700 (490)

Source: (CLG) Communities and Local Government. All figures have been individually rounded to the nearest hundred and may not sum. Per annum figures rounded to the nearest ten.

- 5.36 The 2014-based household projections project growth of 490 households per annum over the period 2011-31. As with the SNPP, the level of household growth projected by the 2014-based household projections is higher than projected by any previous series but this is expected given the household projections are underpinned by the SNPP.
- 5.37 According to PPG growth of 490 households per annum is the 'starting point' estimate of overall housing need. It is clear that the underlying population projections are having a key impact on the household projections. However, it is also important to give consideration to the underlying household formation rates because these are also playing a role. For example, there was a 20% increase in the projected annual growth of the population, yet only a 9% increase in the projected annual household growth between the 2012 and 2014-based series

for Telford and Wrekin. The next section provides an in depth analysis of the household formation rates underpinning each of the household projections series in order to determine whether they require any adjustment as indicated by PPG (ID2a-015 and 017).

Household formation rates

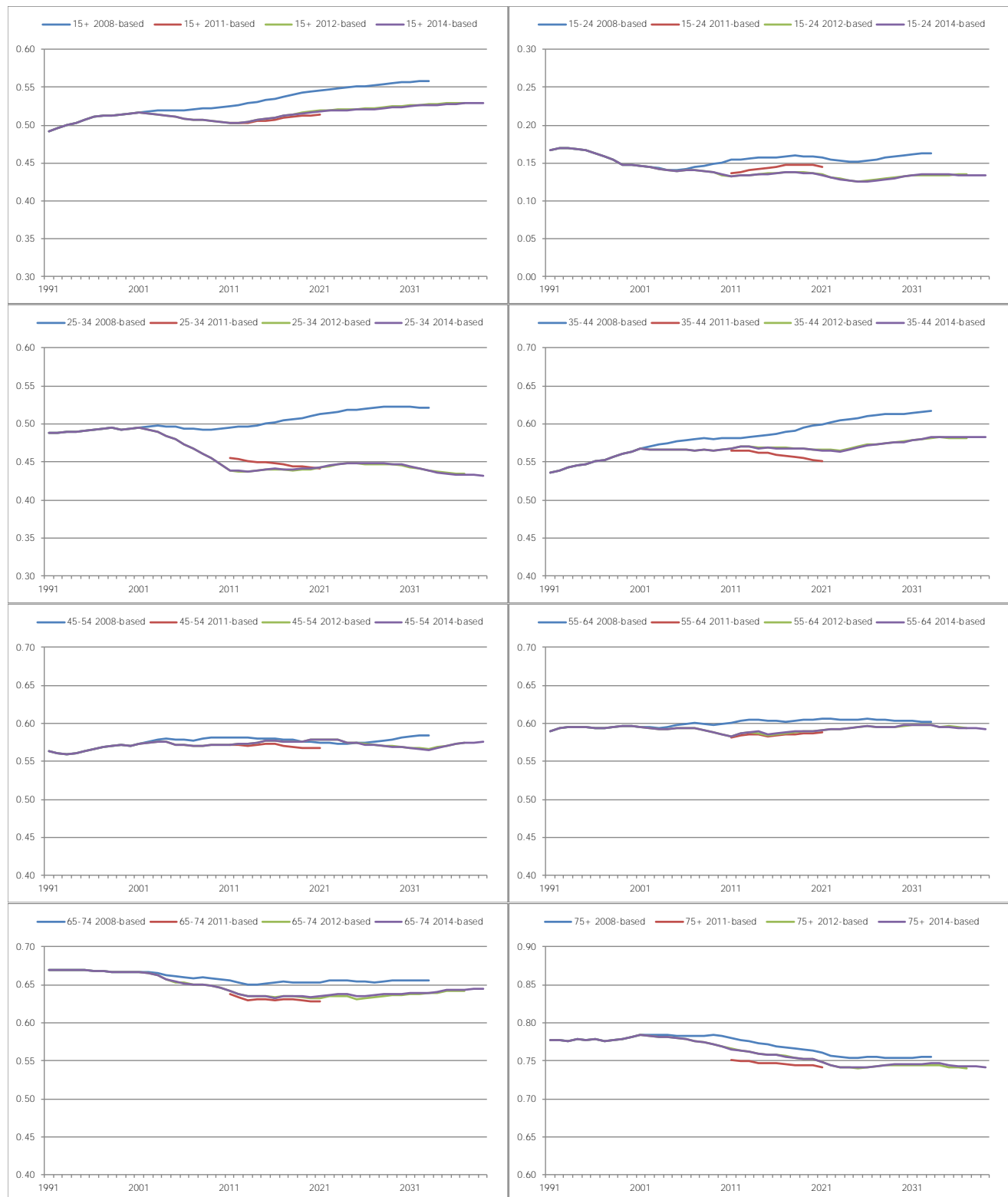
- 5.38 With each release of household projections, the CLG publish the underlying assumptions related to household formation. Household Formation Rates (HFRs) by age and gender for Telford and Wrekin are presented in Figure 5.3 to provide a comparison of the HFRs used to derive the last four series of CLG household projections.
- 5.39 The 2014-based HFRs are near identical to the 2012-based HFRs which have been acknowledged by Local Plan Inspectors as incorporating recessionary trends in household formation in comparison to the more positive 2008-based HFRs.
- 5.40 Figure 5.3 illustrates that whilst the 2014-based HFRs begin to alleviate suppression in household formation overall, for the younger age groups (in particular those aged 25-34 and 35-44 years) the gap between the 2014-based and 2008-based HFRs is increasing. The trend for declining household formation in this age group is likely to be caused in part by worsening affordability.
- 5.41 Planning for housing on the basis of a continuation of these suppressed HFRs is not supported by PPG which recommends adjustments to HFRs to reflect factors not captured in past trends (ID 2a-015). Furthermore, planning on the basis of the 2014-based HFRs is not considered to be in accordance with the principles of positive planning, and would likely place significant pressure on housing supply as the economy improves. Recent Planning Inspectorate decisions concur with this view.²⁸
- 5.42 The PPG therefore states the following in respect of household formation rates:

"The household projection-based estimate of housing need may require adjustment to reflect factors affecting local demography and household formation rates which are not captured in past trends. For example, formation rates may have been suppressed historically by under-supply and worsening affordability of housing."²⁹ (our emphasis)

²⁸ Paragraph 3.8, page 7, Cornwall Local Plan Strategic Policies – Examination: Preliminary findings following the hearings in May 2015; and Paragraph 29, page 6, Appeal Decision APP/G2435/W/15/3005052

²⁹ Paragraph: 015 Reference ID: 2a-015-20140306, Planning Practice Guidance, 06 March 2014

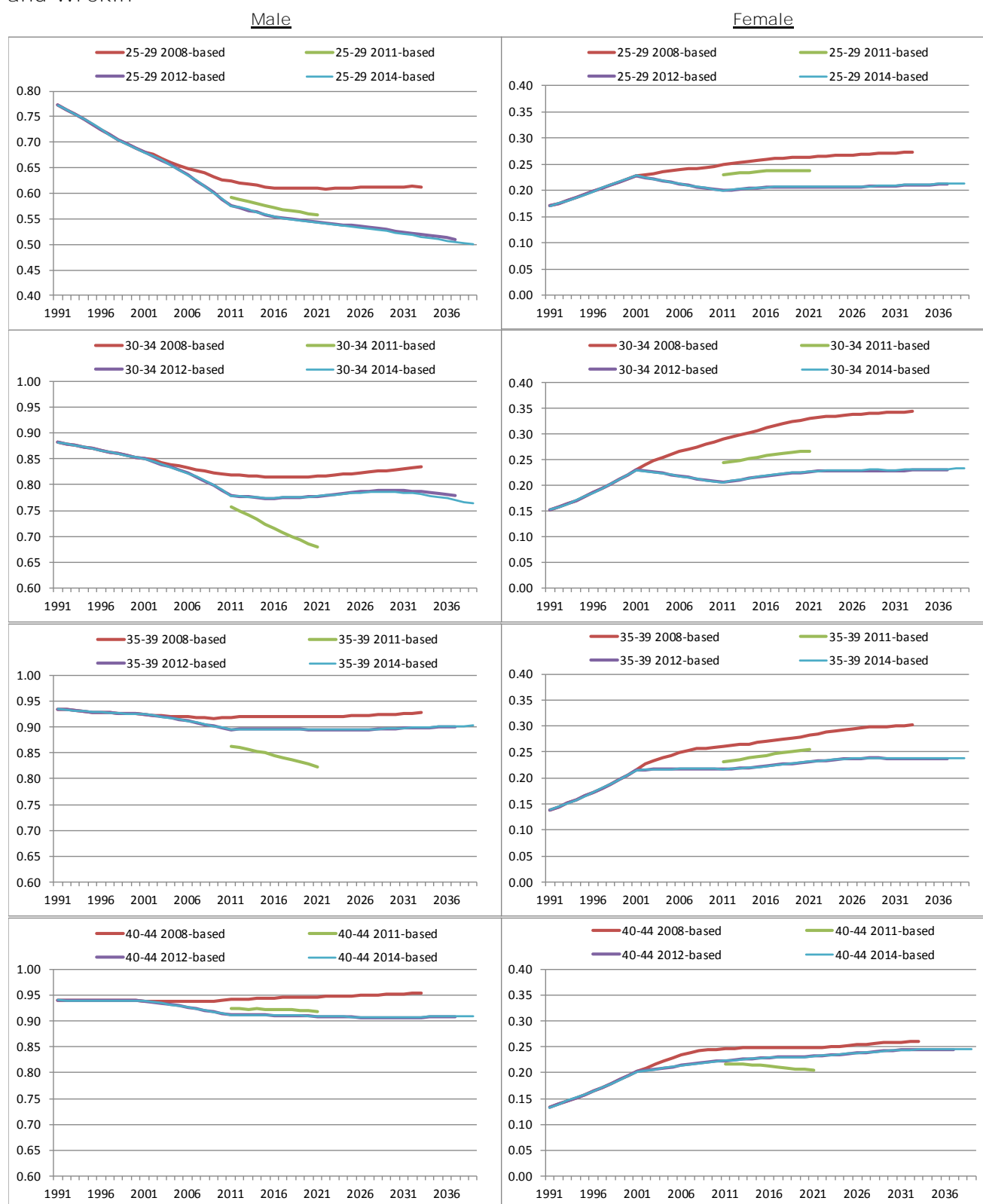
Figure 5.3: Household Formation Rates, Telford and Wrekin



- 5.43 Given the recommendation set out in PPG concerning the adjustment of household formation rates, Barton Willmore considers that a more positive approach to HFRs is required in the 25-34 and 35-44 year old age groups, to improve affordability and make it possible for younger people to form their own households. This would comply with the National Planning Policy Framework's (NPPF) clear policy to 'boost significantly' the supply of housing, 'promote economic growth' and 'positively prepare' Local Plans. Planning on the basis of the 2014-based formation rates across all age groups would only serve to compound the suppression identified above, over an 18-year plan period.
- 5.44 Barton Willmore have undertaken sensitivity analysis to consider the effect of three different approaches to adjustment HFRs.
- The 'Blended HFR 100%' adjustment gradually returns the 2014 HFRs for 25-34 and 35-44 year olds back to the 2008-based rate by 2033 and then follows the 2014 projected rate of change. All other age groups would remain at the 2014-based projected rates. This approach has been supported by the Inspector for a s78 appeal in Coalville, North West Leicestershire.³⁰
 - The 'Blended HFRs 50%' is similar to the 'Blended HFR 100%' approach, in that 2014 rates for 25-44 year olds are returned to the 2008 rates. However, under this sensitivity the 2008 rates are reduced so that by 2033 they recover half of the difference between the 2008 and 2014 rates (rather than 100% in the alternative approach). This 'partial return' is the approach which has been recommended by the LPEG in their proposed changes to the OAHN methodology in the PPG.
 - The 'HFR Sensitivity – 2001' gradually returns the 2014 HFRs for males and females aged 25-44 years back to the 2001 rates by 2031, only where the 2014 HFRs are projected to decline below the 2001 rates. All other age groups remain at the 2014-based rates.
- 5.45 Figure 5.4 illustrates that the 'HFR Sensitivity – 2001' adjustment for Telford and Wrekin requires an adjustment to the male rates for those aged 25-44 years and also the female rates for those aged 25-29 years only – to amend the female rates for the other age groups would suppress household formation further than already projected in the 2014-based rates.

³⁰ Paragraph 29, Appeal decision Land South of Greenhill Road, Coalville, Leicestershire, 5 January 2016

Figure 5.4: Household formation rates for males and females aged 25-44 years in Telford and Wrekin



5.46 Applying either of the three HFR adjustments would increase household formation assumptions beyond that projected by the 2014-based household projection and would therefore necessitate

a higher figure than the 490 households per annum (2011-2031), which according to PPG is the 'starting point' estimate of housing need in Telford and Wrekin.

iv) OAHN Starting Point and Demographic Adjustments

- 5.47 Having assessed the base year population profile, reviewed the most recent official population and household projections and analysed household formation and net migration behaviour, it is possible to arrive at an estimate of demographic-led housing need.

Starting Point

- 5.48 As stated in PPG, the starting point estimate of OAHN is the most recent CLG household projection, which is currently the 2014-based series (published 12 July 2016). The 2014-based series projects growth of 490 households per annum (2011-2031).
- 5.49 In order to convert the official projections into a housing need figure, it is necessary to adjust for vacant and second homes. This reveals the total number of dwellings that would need to be built to accommodate the basic projection. Table 5.7 below summarises the adjustments applied for Telford and Wrekin.

Table 5.7: Households-to-Dwellings adjustment factors

	Second Homes	+	Vacant	=	Adjustment
Telford and Wrekin	0.26%		2.77%		3.03%

Source: CLG, CTB 2015 (Second Homes); CLG Live Table 125/615 2015 (Vacant)

- 5.50 The OAHN starting point for Telford and Wrekin can therefore be summarised as follows:

Table 5.8: OAHN Starting Point – 2011-31

	Population Growth	Households	Dwellings
Telford and Wrekin	14,049 (702 pa)	9,730 (487 pa)	10,034 (502 pa)

Source: ONS, CLG, Barton Willmore calculations. Note that figures may not match exactly those noted in the context section above, due to the use detailed unrounded data supplied for modelling purposes.

Demographic Adjustments

- 5.51 As discussed previously in this chapter, it is necessary to consider the implications of applying alternative demographic assumptions, particularly surrounding Household Formation Rates and Net Migration Flows. These implications have been tested by producing alternative

demographic projections through the POPGROUP demographic forecasting system. POPGROUP is the industry standard tool for carrying out such analysis, and is widely used by public and private sector researchers and demographers.

- 5.52 Details of key modelling assumptions can be found in Appendix 2, including base year population, fertility, mortality and migration assumptions. Assumptions relating to the economic activity and the labour force are also summarised, and discussed in greater detail in Chapter 6.
- 5.53 The first adjustment made is to account for the suppression in HFRs discussed previously in this chapter. This adjustment must be made first, as it is of relevance to each subsequent adjustment made throughout the assessment process.
- 5.54 Using the POPGROUP and Derived Forecast demographic forecasting model, the adjusted HFRs are applied to the ONS 2014-based SNPP by age and gender. Table 5.9 presents the effect on the starting point of applying the three alternative HFRs assumptions.

Table 5.9: 2014-based SNPP for Telford and Wrekin with HFR sensitivities (2011-2031)

	Population Growth	Household Growth	Dwelling Growth
Blended HFR 100%	14,049 (702 pa)	11,920 (596 pa)	12,292 (615 pa)
Blended HFR 50%		10,809 (540 pa)	11,147 (557 pa)
HFR Sensitivity - 2001		11,289 (564 pa)	11,642 (582 pa)

Source: ONS/CLG; Barton Willmore modelling

- 5.55 The result of applying a HFR adjustment is to increase the number of households forming from the same base population growth (the 2014-based SNPP). The overall housing need figure for Telford and Wrekin increases from 502 dwellings per annum to between 557 and 615 dwellings per annum (2011-2031) depending on which of the HFR adjustments is applied. This is an increase from the starting point estimate, of between 11% and 23%.
- 5.56 The second adjustment made is to account for atypical net migration patterns underpinning the ONS 2014-based SNPP. Table 5.10 below summarises the impact of a continuation of long term 10-year trends taken from the period 2003-2013 (to provide consistency with the Council's evidence base) and also the most recent 10-year period 2005-2015.
- 5.57 The alternative migration trends have been modelled by assuming a constant count of international migrants but rates for internal migrants taken from the respective 10-year period. These Long Term Migration (LTM) scenarios constrain to the ONS Mid-Year Population

Estimates up to the final year from which the trend is taken and also incorporate the HFR adjustments described above.

Table 5.10: Long Term Migration Trend scenarios for Telford and Wrekin with HFR adjustments (2011-2031)

	Population Growth	Household Growth	Dwelling Growth
LTM Trend (2003-2013)			
2014 HFRs	13,984 (699 pa)	9,787 (489 pa)	10,093 (505 pa)
Blended HFR 100%		12,030 (601 pa)	12,405 (620 pa)
Blended HFR 50%		10,892 (545 pa)	11,232 (562 pa)
HFR Sensitivity - 2001		11,390 (570 pa)	11,746 (587 pa)
LTM Trend (2005-2015)			
2014 HFRs	16,701 (835 pa)	10,982 (547 pa)	11,273 (564 pa)
Blended HFR 100%		13,194 (660 pa)	13,606 (680 pa)
Blended HFR 50%		12,046 (602 pa)	12,422 (621 pa)
HFR Sensitivity - 2001		12,549 (627 pa)	12,941 (647 pa)

Source: ONS/CLG; Barton Willmore modelling

- 5.58 The LTM trend from 2003-2013 projects comparable population growth to the 2014-based SNPP (growth of 699 persons per annum compared to growth of 702 persons per annum projected by the 2014-based SNPP). This was expected because analysis of historic migration trends presented earlier in this report (Table 5.4) identified that average net migration from the period 2003-2013 is comparable to average net migration over the period 2009-2014 (the period which underpins the 2014-based SNPP).
- 5.59 The LTM trend from 2005-2015 projects higher population growth than the 2014-based SNPP and therefore an increase in housing need. Under this scenario, Telford and Wrekin's population would increase by an additional 835 persons per annum (an additional 133 people per annum above the 2014-based SNPP), resulting in a need for between 621 and 680 dwellings per annum compared to between 557 and 615 dwellings per annum according to the 2014-based SNPP.
- 5.60 Given migration to Telford and Wrekin was suppressed by the recession, Barton Willmore consider it is necessary to assess demographic OAHN on the basis of a LTM trend which incorporates a period of both economic recession and buoyancy. In the context of the NPPF's requirement to 'plan positively' and 'boost significantly the supply of housing', Barton Willmore believe it is appropriate to assess demographic OAHN on the LTM trend taken from the most recent 10-year period (2005-2015).

v) Chapter Summary – Demographic OAHN

5.61 In summary, this section has considered official ONS and CLG projections for Telford and Wrekin which PPG acknowledges should provide the 'starting point' estimate of housing need. The analysis has given consideration as to whether any adjustments are necessary to the 'starting point' estimate of need (the CLG 2014-based household projection) to address indicators that may have been affected by past trends.

5.64 The main points to note are as follows, Table 5.11 then summarises Barton Willmore's assessment of demographic OAHN for Telford and Wrekin:

- The 'starting point estimate' of overall housing need for Telford and Wrekin is 487 households per annum over the period 2011-2031, equating to 502 dwellings per annum once an allowance of 3.03% has been applied to take account of vacancy and second homes;
- However, growth of 502 dwellings per annum could represent a significant underestimate due to the recessionary based 2014-based household formation rates the projections are underpinned by;
- Barton Willmore consider an adjustment to the 2014-based HFRs are required. The results of the three household formation rate sensitivities suggest an increase in housing need above the 'starting point' estimate ranging between 557 to 615 dwellings per annum (2011-2031);
- Barton Willmore's 'Blended HFRs 100%' approach (which assumes a full return to the 2008-based rates for 25-44 year olds by 2033) increases housing need by 113 dwellings per annum above the 'starting point' estimate equating to a total need for 615 dwellings per annum (2011-2031). The approach to HFRs recommended by the LPEG (50% Blended 25-44) would require 557 dwellings per annum.
- However, Barton Willmore also consider that an adjustment to the 2014-based SNPP is required to address suppressed migration trends. Barton Willmore has considered two LTM trends, one of which is underpinned by migration trends from the period 2003-2013 (the same period the Council's LTM trend is drawn from) and the other from the most recent 10-year period (2005-2015);
- The LTM trend 2003-13 projects comparable population growth to the 2014-based SNPP which are considered to be underpinned by conservative estimates of international

migration. For this reason, Barton Willmore consider the LTM trend 2005-2015 to provide a more appropriate projection of future population growth for Telford and Wrekin on which to assess demographic OAHN;

Table 5.11: Summary of Demographic OAHN for Telford and Wrekin (2011-2031)

		Blended HFR 100%	Blended HFR 50%	HFR Sensitivity 2001
A	CLG 2014-based SNHP (Households)	9,730 (487 pa)		
	Vacant/Second Homes Adjustment	3.03%		
	OAHN STARTING POINT (Dwellings)	10,034 (502 dpa)		
B	Starting point with adjusted HFRs (Dwellings)	12,292 (615 pa)	11,147 (557 pa)	11,642 (582 pa)
	Adjustment to A	+113 dpa	+55 dpa	+80 dpa
C	10yr Migration Trend (2005-2015) with adjusted HFRs (Dwellings)	13,606 (680 pa)	12,422 (621 pa)	12,941 (647 pa)
	Adjustment to A+B	+178 dpa	+119 dpa	+145 dpa
=	DEMOGRAPHIC OAHN (A+B+C)	13,606 (680 pa)	12,422 (621 pa)	12,941 (647 pa)

Source: ONS/CLG, Barton Willmore Modelling

- 5.66 Having determined the OAHN starting point and made necessary adjustments for suppressed household formation and migration trends, demographic OAHN for Telford and Wrekin has been estimated at between 621 and 680 dwellings per annum 2011-31 based on a LTM trend (2005-2015) with adjustments applied to address suppressed household formation for younger people aged 25-44 years.
- 5.67 Establishing demographic OAHN is, however, only the PPGs first step in assessing full OAHN. The extent to which the demographic-level of population and housing growth would support policy-off employment forecasts and respond to adverse market signals is analysed in the following chapters.

6.0 ECONOMIC CONTEXT AND ECONOMIC OAHN

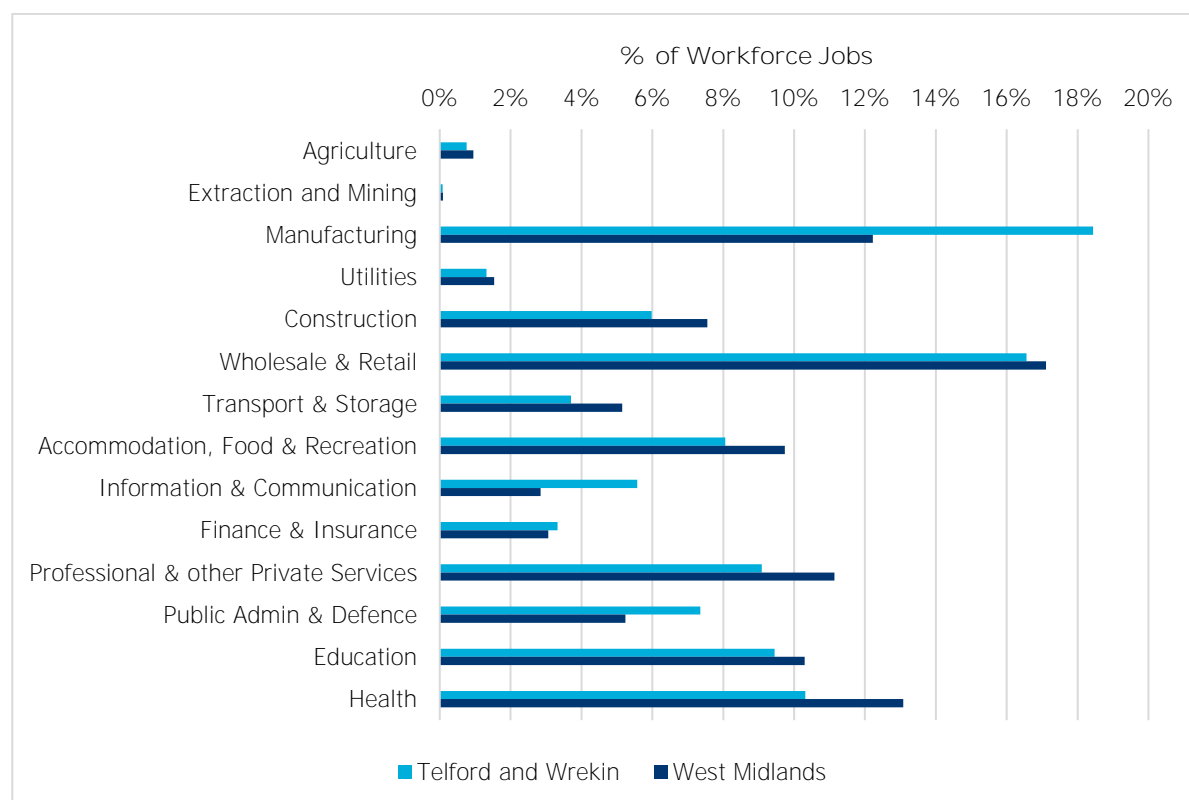
- 6.1 Economic growth and housing provision are inextricably linked; if insufficient housing is provided to accommodate workers, economic growth is put at risk. It is therefore vital that employment growth is balanced with housing provision.
- 6.2 This chapter begins with a brief overview of the economic profile of Telford and Wrekin - highlighting the key industry sectors, identifying commuting relationships and determining base year unemployment and economic activity rates. Next, the likely change in number of jobs over the plan period is determined, drawing on econometric forecasts and trends from a number of independent sources. Finally, the number of homes required to balance with forecast employment growth is estimated, taking into account reductions in the unemployment rate and increases in economic activity associated with people working further into old age.

i) Economic Profile

Employment by Industry

- 6.3 Figure 6.1 below summarises the profile of employment by industrial class for Telford and Wrekin according to the 2011 Census. A regional benchmark is also shown for comparison.

Figure 6.1: Employment by Industry, Census 2011



Source: ONS, Census 2011 (Workplace Statistics)

- 6.4 The industries employing the most people within Telford and Wrekin are Manufacturing and Wholesale & Retail. Employment in Education and Health is also significant, but below regional average. Employment in Information & Communications and Public Admin & Defence is significant higher than regional average.

Commuting Balance

- 6.5 Table 6.1 below summarises the commuting ratio (the number of residents in employment per workforce job) for Telford and Wrekin.

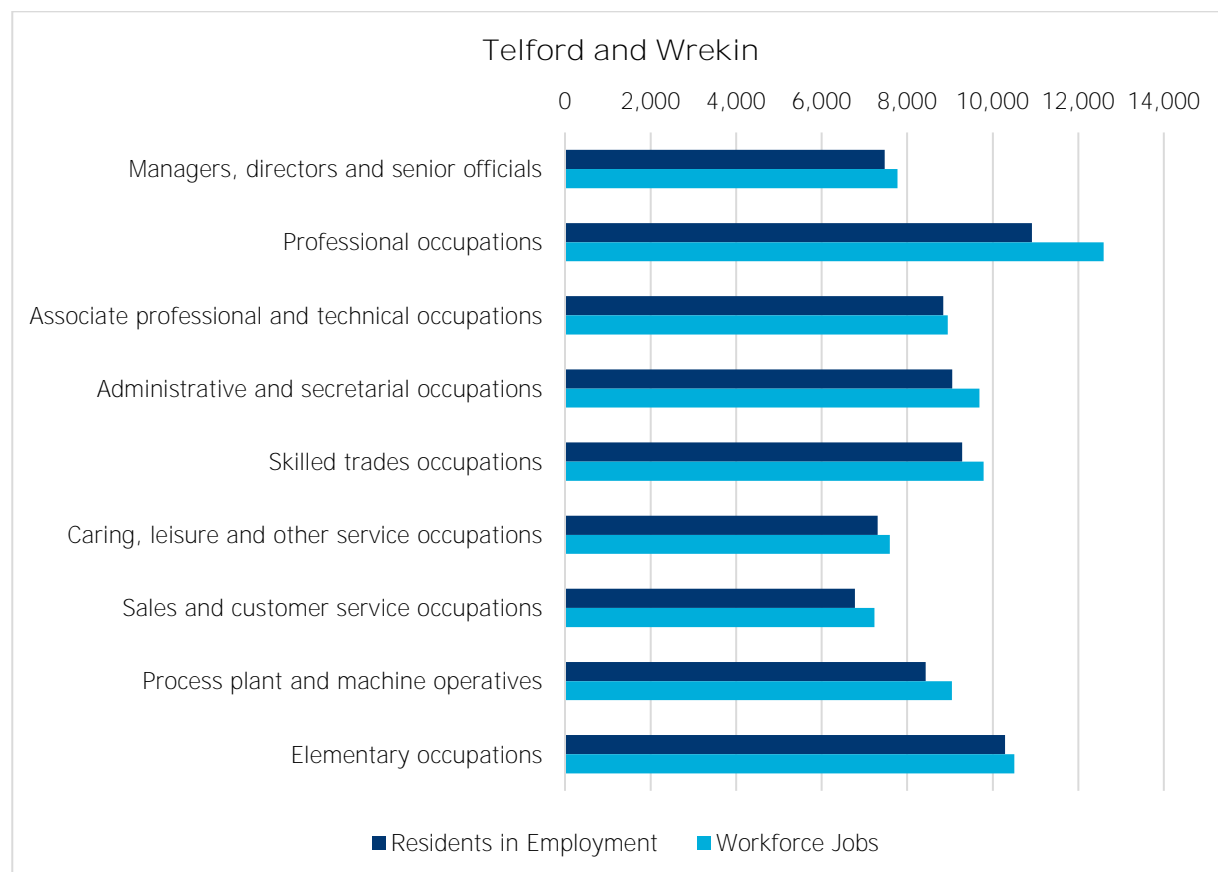
Table 6.1: Commuting Ratios, Census 2011

	Residents in Employment	Workforce Jobs	Ratio
Telford and Wrekin	78,624	83,506	0.94

Source: ONS, Census 2011 (Origin-Destination Tables); Analysis includes home workers, workers with no fixed place of work (assumed to work within home LPA), workers with workplaces overseas and offshore workers.

- 6.6 Telford and Wrekin is a net importer of labour and to an extent is reliant on labour from nearby authorities including Shropshire, Stafford, South Staffordshire and Wolverhampton. Assuming that these commuting relationships continue unchanged, it is likely that some housing development in these authorities will be in support of economic growth in Telford and Wrekin.
- 6.7 Figure 6.2 below shows the commuting balance by occupational class (based on the SOC2007 specification and derived from the 2011 Census) for Telford and Wrekin.
- 6.8 Although there is a net deficit of Residents in Employment (relative to jobs) in all occupational classes (as summarised by the commuting ratio of 0.94), the biggest deficit is in Professional Occupations (net inflow of approximately 1,700 workers) – potentially an indicator of professionals choosing to work but not live in Telford.

Figure 6.2: Commuting Balance by Occupation

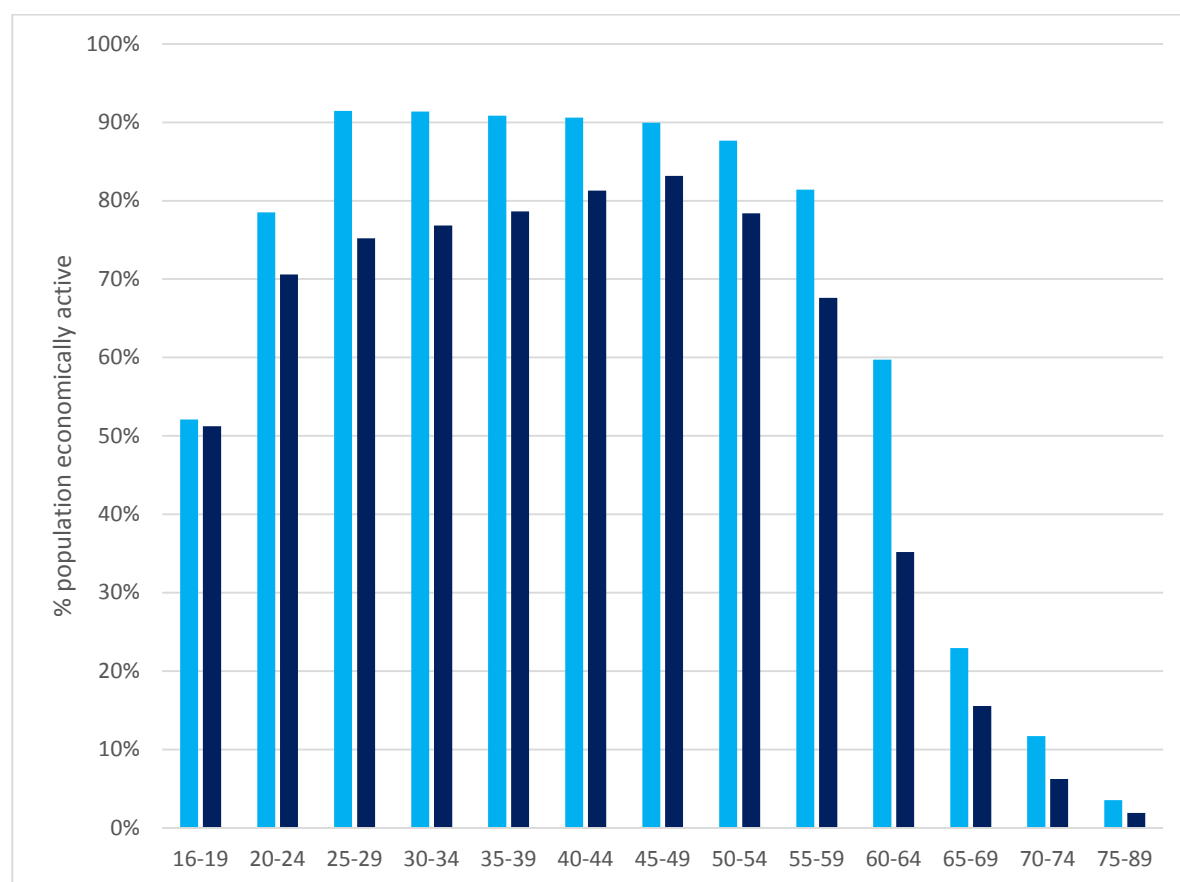


Source: ONS, Census 2011

Economic Activity and Unemployment

- 6.9 According to the 2011 Census, there were 84,900 economically active people (69.5%) aged 16-74 years within Telford and Wrekin. However, the proportion varies by gender with 75.2% of males and 63.8% of females aged 16-74 years being economically active. Figure 6.3 presents economic activity rates from the 2011 Census by age and gender for Telford and Wrekin.

Figure 6.3: Economic activity rates by age and gender for Telford and Wrekin (2011 Census)



Source: ONS, Census 2011

- 6.10 It is anticipated that these economic activity rates will change over time, as the state pension age increases and people continue to work further into old age. This is discussed in more detail later in this chapter.
- 6.11 The economically active population provides an indication of the resident labour supply. However, not all of the economically active population will be in employment – a proportion will be unemployed.
- 6.12 Table 6.2 below summarises unemployment rates for Telford and Wrekin, based on data from the Annual Population Survey model-based estimates of unemployment.

Table 6.2: Unemployment Rates – Annual Population Survey

	2011	High (2004-14)	Low (2004-14)	Average (2004-14)	Pre-Recession Average (2004-07)
Telford and Wrekin	9.1%	9.4%	3.8%	6.8%	4.6%
West Midlands	8.7%	9.4%	5.0%	7.4%	5.4%
England	7.7%	8.1%	4.7%	6.5%	5.1%

Source: ONS, Annual Population Survey Model-based Estimates of Unemployment

6.13 Unemployment rates in Telford and Wrekin in 2011 (9.1%) were above the typical levels seen prior to the recession (4.6%), but below peak levels seen during the recession (9.4%). Unemployment rates in Telford and Wrekin were generally higher than the national average during the recession but lower pre-recession.

6.14 As with economic activity, it is necessary to consider how unemployment might reduce over time when determining economic-led housing need.

Past employment trends and future growth prospects

6.15 PPG requires economic growth to be considered in the context of past trends and/ or economic forecasts. Past trends in job growth and future job growth for Telford and Wrekin have been considered using latest economic forecasts from Cambridge Econometrics (November 2015), Oxford Economics (July 2016) and Experian Economics (September 2016). The results are presented in Table 6.3.

Table 6.3: Historic and projected job growth (per annum) in Telford and Wrekin

	1997-2011	2011-2031
Cambridge Econometrics*	347	951
Oxford Economics	64	418
Experian Economics	-86	710
Average of three forecasts	108	693

*Although CE forecast remains November 2015 as used in BW's March 2016 assessment, CE have made a slight revision to the regional November 2015 forecast which in turn affects the local area data

6.16 It is argued that economic forecasts produced by the three forecasting houses referred to above, already include a view on the future population and therefore it is logically inconsistent to then use these economic forecasts against a different population projection. This point is accepted. However, both Cambridge Econometrics and Oxford Economics have confirmed that their forecasts are demand based and not constrained by population (see Appendix 4 of this report). Furthermore, exploration of the economic outputs from Experian (published as Appendix D to the March 2015 OAHN report) reveals that Experian's *unconstrained* baseline

job demand forecast, which sits at the heart of the Experian projection model, is near identical to the projection of workplace jobs suggesting that for Telford and Wrekin, use of the Experian baseline job demand forecasts is reasonable as an indication of future job demand.

- 6.17 Due to the fluctuation between economic forecasts, it is recommended that the most robust approach would be to take a simple average of the expected future job growth from the three independent employment forecasts. This equates to 693 jobs per annum over the period 2011-2031.
- 6.18 As discussed earlier in this report, the SHMAs future jobs scenarios are found to be questionable and unsound, 1) because some of the forecasts are now dated 2) because the range of job growth projected appears to be implausibly wide 3) a household formation rate adjustment to address clear evidence of suppressed need, acknowledged by the SHMA, is not applied.
- 6.17 Whereas this assessment has looked across a range of more up to date forecasts, two of which (CE and Experian) are closely aligned. Accordingly, future 'policy-off' jobs growth in Telford and Wrekin is assumed to be an additional 693 jobs per annum over the period 2011-2031, based on the most recent job growth forecasts from the three leading forecasting houses.

ii) Balancing Jobs and Homes

- 6.18 Having established key base year information from the 2011 Census, and having formed a robust view on future employment prospects for Telford and Wrekin, it is now possible to determine whether or not an uplift to the demographic-led assessment of housing need (set out in the previous chapter) is required to ensure that sufficient homes will be built to support economic growth.
- 6.19 As part of the modelling process it is necessary to estimate potential increases in economic activity and/or decreases in unemployment, as this latent supply of labour has the potential to accommodate some of the forecast employment growth.

Projecting economic activity

- 6.20 The Barton Willmore approach to modelling economic activity rates is to take the 2011 Census profile of economic activity by age group and gender for Telford and Wrekin and project this forward following the Office for Budget Responsibility (OBR) national projection of economic participation rates (November 2015). The OBR projections are for ages 16-19 years and from then onwards 5-year age group up to the age of 89 years.

- 6.21 The OBR projection seeks to predict what might happen to activity rates in the future, taking account of changes to the state pension age (SPA) and trends in participation including working into old age. It is anticipated that economic activity rates will generally increase over time, as the state pension age increases and people continue to work further into old age.

"We [the OBR] adjust participation rates for changes in the SPA. Although most individuals will choose to exit the labour market before or after they reach the SPA, exit rates do spike around that point. In order to capture the effect on participation rates of raising the SPA, we assume in effect that exit rates move with changes in the SPA, so that a 65 year old when the SPA is 66 has the equivalent exit rate to a 64 year old when the SPA is 65. As in last year's report, we smooth this transition over earlier periods, as individuals would be expected to adapt their labour market participation choices over a longer period." ³¹

- 6.22 The use of the OBR projection is considered a robust approach because the OBR projections:

"...capture cohort effects and a rising SPA. Modelling these two factors alone would suggest that employment rates for men aged 60 to 64 years will continue rising over time, although slightly more gradually than in the recent past, and ending the period below the level seen in the 1970s.

Employment rates for women of the same age are projected to pick up more significantly over the next five years, as the SPA is equalised. And SPA changes are also projected to raise the shares of both men and women working into their late sixties. We do not assume that this pace of change continues into later life." ³²

- 6.23 The use of OBR rates has also been endorsed by the Planning Inspectorate in a recent section 78 appeal decision, during which the use of economic activity rates was discussed at length and on which determination of OAHN relied. In commenting on the robustness of using the OBR rates, the Inspector commented as follows:

"the OBR was set up in 2010 to provide independent economic forecasts to central government. It has a duty to report on the sustainability of public finances under the National Audit Act 2011. It updates its economic activity forecasts roughly annually, but nevertheless looks at the longer term. In arriving at his OAHN figure of 355 dpa, (the appellant) has used the latest set of OBR economic activity forecasts issued in November 2015. Those forecasts are very recent and I accept, in the words of Mr Williamson's closing submissions for the appellant, that the "OBR

³¹ Paragraph 3.25, Page 63, Fiscal Sustainability Report, June 2015, OBR

³² Paragraphs A26 and A27, Appendix 1 of Fiscal Sustainability Report (FSR), June 2014, OBR

figures are used by the Government in the most important activities of the State." ³³

6.24 The Inspector concluded as follows:

"I attach greater weight to the OBR projections. They give me cause to seriously doubt the markedly higher activity rates assumed by Experian." ³⁴ (our emphasis)

6.25 Further justification for their use comes from the recently published 'Local Plans Expert Group' (LPEG) report to the Communities Secretary and to the Minister of Housing and Planning (March 2016). The LPEG report has been prepared for Government and its remit has been to consider how local plan making can be made more efficient and effective. Although the LPEG report excludes employment growth from the calculation of OAHN, it is included in establishing a 'policy on' housing requirement that is based on employment growth. In respect of economic activity rates Appendix 6 of the LPEG report recommends the following change to the Housing and Economic Development Needs Assessment (HEDNA) section of the PPG:

"Where plan makers choose to set a 'policy on' housing requirement in excess of the FOAHN, based on employment growth, this should be based on applying the changes in economic activity rates that are projected in estimates produced annually by the Office for Budget Responsibility, applied to the local baseline rates of economic activity." ³⁵ (Our emphasis)

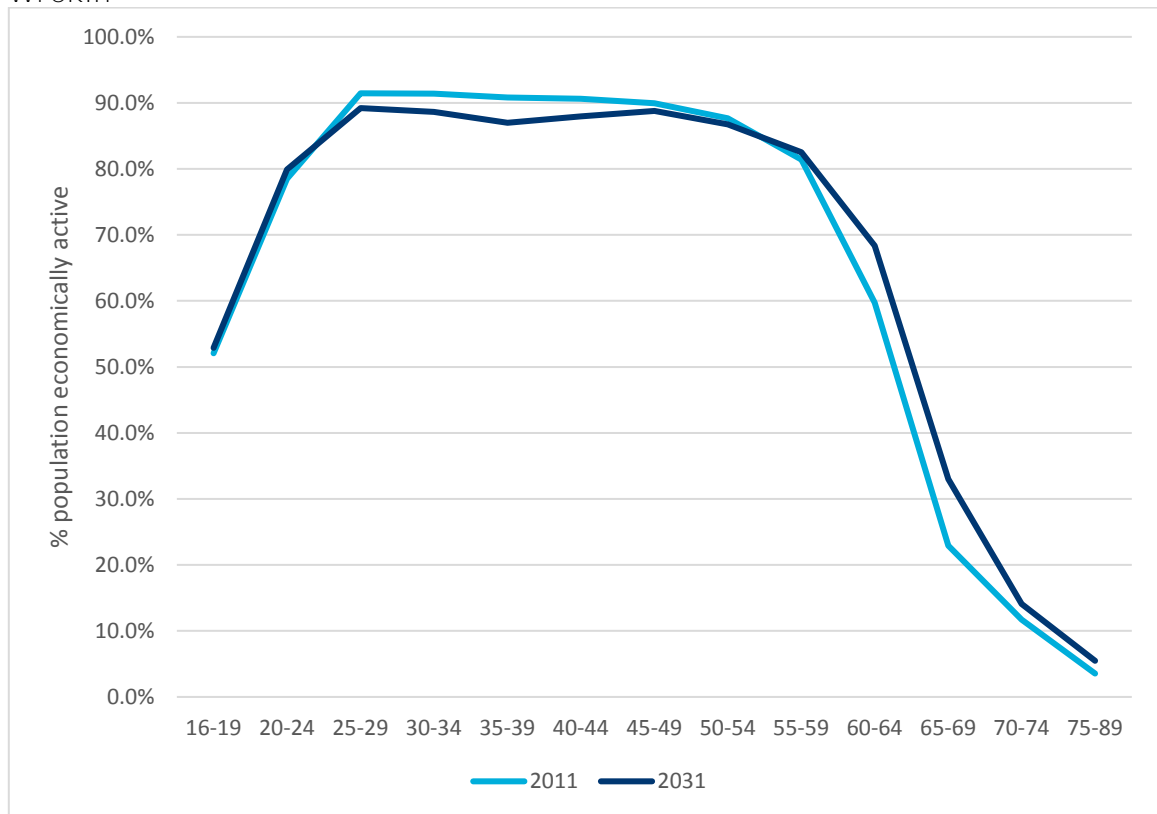
6.26 Figures 6.4 and 6.5 compare economic activity rates from the 2011 Census alongside the projected economic activity rates for males and females in Telford and Wrekin by 2031 following the OBR November 2015 projection.

³³ Paragraph 20, page 6, Appeal Ref: APP/V0728/W/15/3018546, Longbank Farm, Ormesby, Middlesbrough, TS7 9EF, 09 March 2016

³⁴ Paragraph 21, page 7, Appeal Ref: APP/V0728/W/15/3018546, Longbank Farm, Ormesby, Middlesbrough, TS7 9EF, 09 March 2016

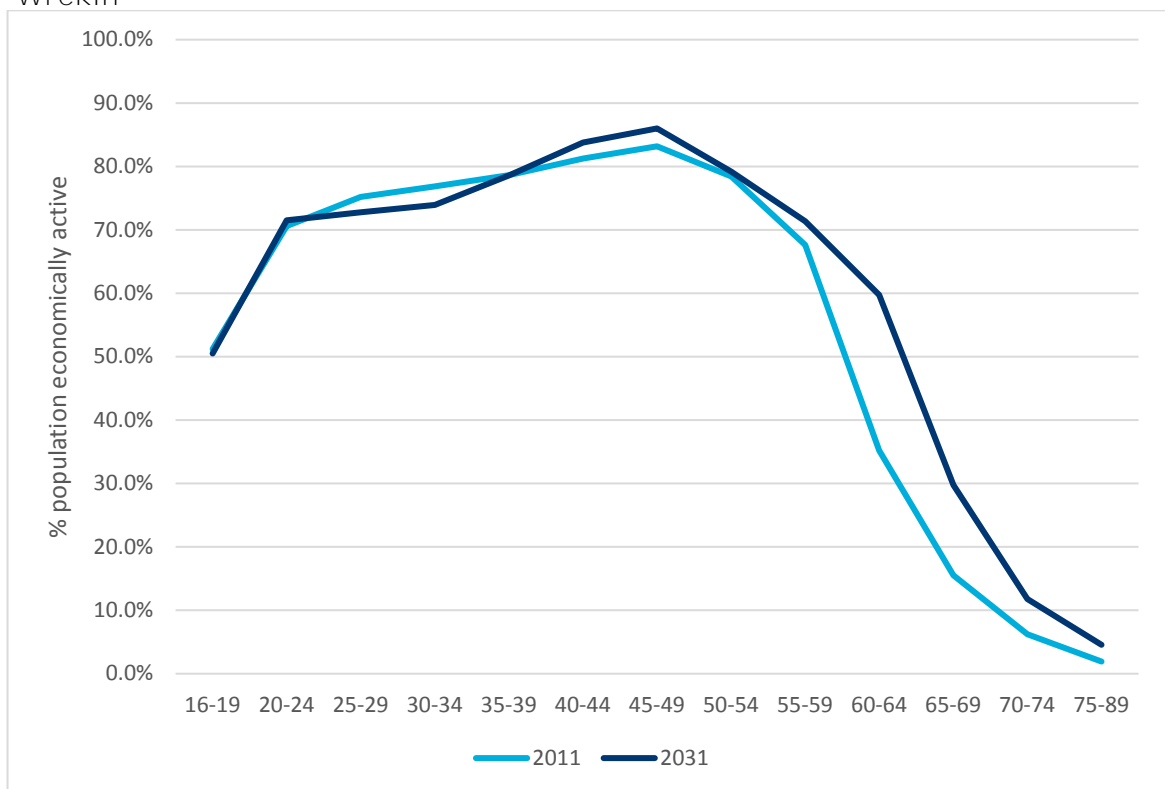
³⁵ Page 25, Appendix 6, Local Plans Expert Group report, March 2016

Figure 6.4: Current and projected male economic activity rates for Telford and Wrekin



Source: OBR/ Barton Willmore

Figure 6.5: Current and projected female economic activity rates for Telford and Wrekin



Source: OBR/ Barton Willmore

Projecting unemployment

- 6.27 For unemployment, it has been assumed that the 2011 rates will gradually return to average pre-recession levels as shown in Table 6.2 over the first ten years of the plan period. Rates are then held constant at these reduced levels for the final ten years.
- 6.28 For Telford and Wrekin this assumes an unemployment rate of 9.1% at the start of the plan period reducing to 4.6% by 2021.

Projecting commuting flows

- 6.29 The 2011 Census commuting ratio is held constant throughout the entire plan period. As the PAS Guidance states:

“Another risky approach is to plan for recalling commuters, so the ratio of workplace jobs to resident workers – and hence to population and number of dwellings – is assumed to rise over the plan period. Like increasing activity rates, this assumption means that more jobs can be accommodated for a given number of dwellings, or a given number of jobs needs fewer dwellings. But the expected shift in commuting should be believable, and acceptable to the other local authorities affected by it. Strategies of recalling commuters should not be adopted unilaterally; they require cross-boundary agreement in line with the Duty to Cooperate.”³⁶

- 6.30 For Telford and Wrekin the 2011 Census commuting ratio is 0.94 which assumes that Telford and Wrekin is a net importer of labour.

iii) Jobs supported by the demographic scenarios

- 6.31 Table 6.4 below summarises the potential number of jobs that can be supported by the three demographic scenarios presented in Chapter 5 of this report: 2014-based SNPP; LTM Trend (2003-2013); and LTM Trend (2005-2015).

³⁶ Paragraph 8.16, page 36, Planning Advisory Service (PAS) Technical Advice Note: Objectively Assessed Need and Housing Targets, July 2015, 2nd edition

Table 6.4: Jobs supported by demographic scenarios in Telford and Wrekin (2011-2031)

	2014-based SNPP	LTM Trend (2003-2013)	LTM trend (2005-2015)
Population growth	14,049 (702 pa)	13,984 (699 pa)	16,701 (835 pa)
Growth in economically active population	2,042 (102 pa)	2,624 (131 pa)	3,997 (200 pa)
Jobs supported*	6,132 (307 pa)	6,724 (336 pa)	8,116 (406 pa)
Job demand	13,860 (693 pa)		
Job surplus/ deficit	-7,728 (-386 pa)	-7,136 (-357 pa)	-5,744 (-287 pa)

Source: ONS/CLG, Barton Willmore Modelling.

*Adjusted for commuting, reduced unemployment and increased economic activity

6.32 The number of jobs that could be supported by the starting point estimate (the 2014-based SNPP) is 307 jobs per annum. However, Barton Willmore's preferred demographic scenario (LTM trend 20015-2015) would support growth of 406 jobs per annum.

6.33 However, regardless of which demographic scenario is assumed, the level of jobs that can be supported is significantly lower than projected job demand. The deficit is equivalent to between 287 and 386 jobs per annum against the growth suggested by current economic forecasts (693 jobs per annum). Therefore additional dwellings will be required to allow the labour supply to grow in-line to support job growth suggested by current economic forecasts.

iv) Housing need to support projected job growth

6.34 Table 6.5 summarises the number of dwellings required in Telford and Wrekin to provide the resident workforce (after taking account of unemployment, commuting and economic activity) to support growth of 693 jobs per annum over the period 2011-2031. This scenario represents economic-led housing need. Note that the HFR adjustments discussed in Chapter 5 have also been applied here. Detailed model output tables can be found in Appendix 2.

Table 6.5: Economic-led Housing Need in Telford and Wrekin (growth between 2011 and 2031)

Growth	Future Projection (693 jobs per annum)		
Population	27,228 (1,361 pa)		
Economically active population	9,657 (483 pa)		
	Blended HFR 100%	Blended HFR 50%	HFR Sensitivity 2001
Households	17,287 (864 pa)	16,022 (801 pa)	16,586 (829 pa)
Dwellings	17,827 (891 pa)	16,522 (826 pa)	17,104 (855 pa)

Source: ONS/CLG, Barton Willmore modelling

- 6.35 The economic-led scenario for Telford and Wrekin requires growth of between 826 and 891 dwellings per annum, depending on which HFR adjustment is applied, to support growth of 693 jobs per annum over the period 2011-2031. The lower end of the range is the result of applying the 'Blended HFR 50%' sensitivity and the upper end of the range is the result of applying the 'Blended HFR 100%' sensitivity.

v) Chapter Summary - Economic-led Housing Need

- 6.36 Telford and Wrekin is particularly reliant on employment in Manufacturing and Wholesale & Retail. Employment in Telford and Wrekin follows a similar pattern to the West Midlands region as a whole but with a greater reliance on Manufacturing compared to the regional average.
- 6.37 Telford and Wrekin is a net importer of labour and therefore there are more workforce jobs in the area than there are residents in employment in the same area. For the purpose of this OAHN, it has been assumed that commuting patterns will remain unchanged from the 2011 Census.
- 6.38 However, to reflect the contribution that a reduction in relatively high unemployment rates can make to satisfying job demand, it has been assumed that unemployment rates will gradually fall until reaching the pre-recession average level in 2021 (and held constant thereafter). Economic activity rates have been projected following the OBR national projection (November 2015). This approach takes into account changes in the state pension age and increased economic activity in older age groups over the Plan period.

- 6.39 Past and projected future job growth has been considered based the average of three independent and well-respected sources of employment forecasts: Cambridge Econometrics (November 2015), Oxford Economics (July 2016) and Experian Economics (September 2016). The average of the three forecasts shows projected growth of 693 jobs per annum, 2011-2031. It is this level of growth which Barton Willmore consider should be supported by the OAHN for Telford and Wrekin.
- 6.40 Analysis of the labour supply arising from the demographic OAHN (based on the LTM Trend 2005-2015) indicates that a greater increase in available labour would be needed to accommodate forecast employment demand. This results in an increased need for housing in Telford and Wrekin.
- 6.41 In order to support growth of 693 jobs per annum in Telford and Wrekin over the period 2011-2031 Barton Willmore consider economic OAHN to be between 826 and 891 dwellings per annum, depending on which adjustment to address suppressed household formation is applied.
- 6.42 Table 6.6 summarises the recommended economic-led assessment of housing need for Telford and Wrekin. Appendix 3 provides the full modelling outputs for the economic-led housing need figure

Table 6.6: Economic OAHN for Telford and Wrekin (2011-2031)

		Blended HFR 100%	Blended HFR 50%	HFR Sensitivity 2001
A	CLG 2014-based SNHP (Households)	9,730 (487 pa)		
	Vacant/Second Homes Adjustment	3.03%		
	OAHN STARTING POINT (Dwellings)	10,034 (502 dpa)		
B	Starting point with adjusted HFRs (Dwellings)	12,292 (615 pa)	11,147 (557 pa)	11,642 (582 pa)
	Adjustment to A	+113 dpa	+55 dpa	+80 dpa
C	10yr Migration Trend (2005-2015) with adjusted HFRs (Dwellings)	13,606 (680 pa)	12,422 (621 pa)	12,941 (647 pa)
	Adjustment to A+B	+178 dpa	+119 dpa	+145 dpa
=	DEMOGRAPHIC OAHN (A+B+C)	13,606 (680 pa)	12,422 (621 pa)	12,941 (647 pa)
D	Jobs Supported by Demographic OAHN (C)	8,116 (406 pa)		
	Job Demand (average of CE, OE & Experian)	13,860 (693 pa)		
	Labour Surplus/Deficit	-5,774 (-287 pa)		
=	ECONOMIC-LED HOUSING NEED	17,827 (891 pa)	16,522 (826 pa)	17,104 (855 pa)
	(Adjustment to Demographic OAHN)	+211 dpa	+205 pa	+208 pa

Source: ONS/CLG, Barton Willmore Modelling

7.0 MARKET SIGNALS

- 7.1 This chapter analyses in detail the key housing market characteristics and trends relating to Telford and Wrekin, and identifies the extent to which the supply of dwellings over recent years has kept pace with demand.
- 7.2 The problems arising from historic under-delivery of housing across the country can be observed locally through analysis of market signals. Five key market signals have been taken into consideration – Rate of Development, House Prices, Affordability, Residential Rents and Overcrowding.
- 7.3 The findings of this analysis inform the extent to which the OAHN may need to be adjusted to take into account market dysfunction observed through analysis of market signals.

i) Rate of Development

- 7.4 The PPG states how a meaningful period should be used to measure supply. If the historic rate of development shows that actual supply falls below planned supply, future supply should be increased to reflect the likely under-delivery of a plan. Table 7.1 sets out the annual net housing completions recorded by Telford and Wrekin Council over the period 2006/07 to 2014/15 against the housing target, identifying and surplus or shortfall.

Table 7.1: Delivery Performance vs. Target – Dwellings per Annum

	Delivery Performance	Housing Target	Surplus/Deficit
2006/07	452	1,330	-878
2007/08	363	1,330	-967
2008/09	462	1,330	-868
2009/10	483	1,330	-847
2010/11	551	1,330	-779
2011/12	720	700	+20
2012/13	607	700	-93
2013/14	842	700	+142
2014/15	1,074	700	+374
Total	5,554	9,450	-3,896

Source: Telford and Wrekin Annual Monitoring Report 2015 and housing targets from Telford and Wrekin OAHN Final Report (March 2015) paragraph 4.8

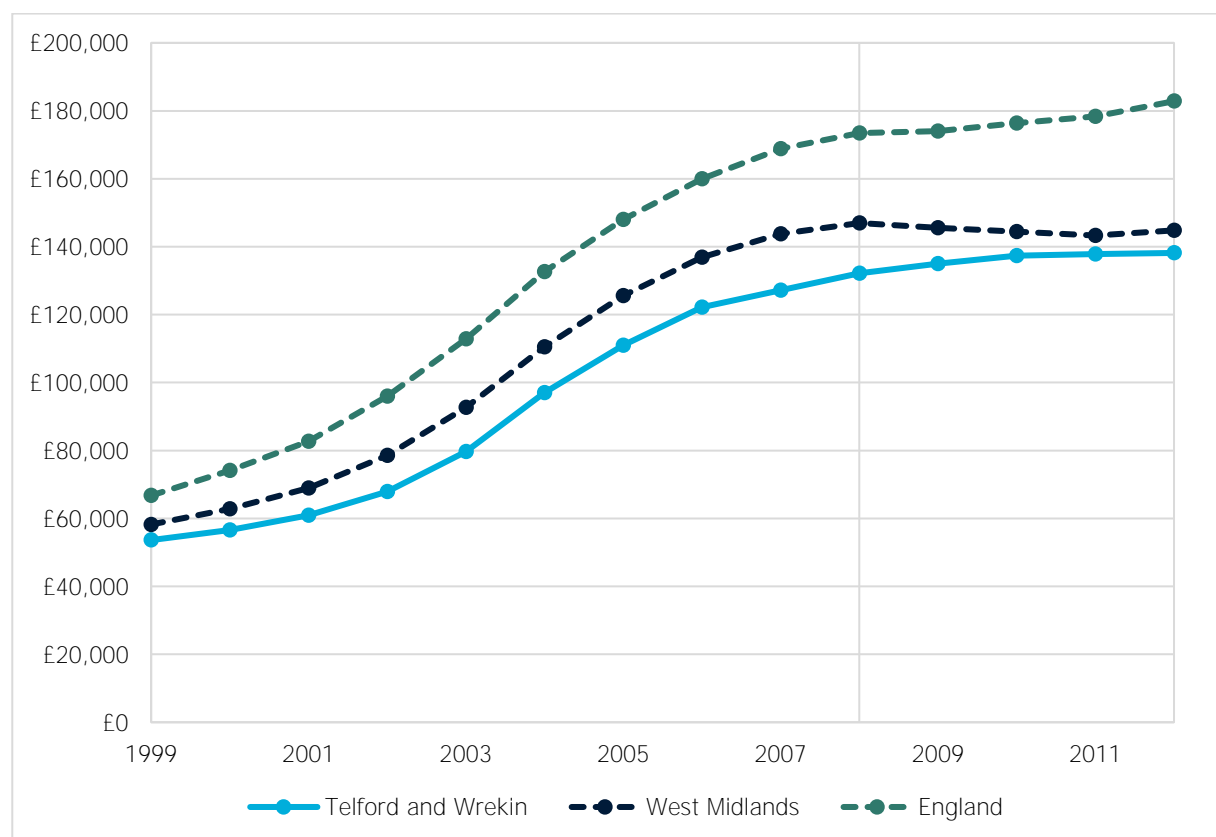
7.5 Between 2006/07 and 2014/15 there were 5,554 net housing completions in Telford and Wrekin which only accounted for 59% of the target set. Housing delivery has consistently fallen short of the annual housing targets (with the exception of the last couple of years) as is shown in Table 7.1 and this shortfall in housing provision will have contributed to pressure on the local housing market potentially resulting in an increase in overcrowding/ concealed households and thereby influencing household suppression which was identified in Chapter 5 of this report.

ii) House Prices

7.6 The second indicator taken into account is median house price. House prices are influenced by a wide variety of factors and can vary significantly within a district; the median house price has been used to limit the influence of extreme high and low values.

7.7 Figure 7.1 below tracks the median house price within Telford and Wrekin over the period 1997-2012, according to data from the Land Registry (published by CLG in Live Table 586).

Figure 7.1: Median House Prices 1997-2012 (3yr rolling average)



Source: Land Registry via CLG Live Table 586

7.8 Median house prices in Telford and Wrekin have remained at levels significantly lower than national average over the period analysed. However, house prices in Telford and Wrekin are only marginally lower than the regional average.

7.9 Table 7.2 below analyses change in median house prices since 1997, both in absolute and percentage terms. An index of the change against national average is provided, where 100 = the national average rate of change.

Table 7.2: Analysis of Median House Price Change 1997-2012

	Absolute Change 1997-2012	Index (England=100)	Percentage Change 1997-2012	Index (England=100)
Telford and Wrekin	£87,050	70	171%	83
West Midlands	£90,307	73	165%	80
England	£123,500	100	206%	100

Source: Land Registry via CLG Live Table 586

7.10 Median house prices have increased by 171% in Telford and Wrekin over the 15-year period. This represents a higher rate of change than the regional average (165%) but lower rate of change than the national average (206%).

7.11 Alongside the rate of change, PPG requires the absolute levels of change to be analysed. Telford and Wrekin's median house prices have increased by £87,050 over 15 years. This is lower than the regional average (£90,307) and national average (£123,500).

7.12 Table 7.3 below shows the same analysis for Lower Quartile-priced homes.

Table 7.3: Analysis of Lower Quartile House Price Change 1997-2012

	Absolute Change 1997-2012	Index (England=100)	Percentage Change 1997-2012	Index (England=100)
Telford and Wrekin	£67,875	84	183%	99
West Midlands	£69,044	85	168%	91
England	£81,048	100	184%	100

Source: Land Registry via CLG Live Table 586

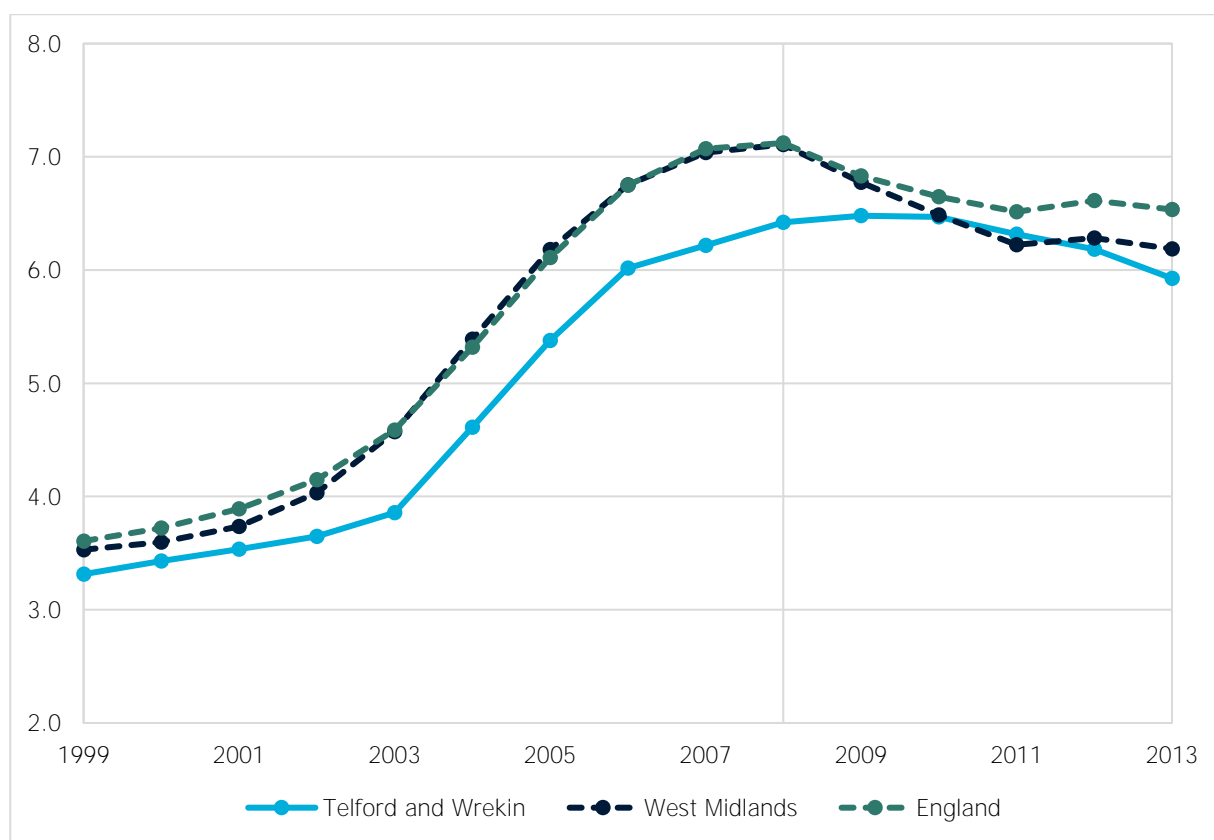
7.13 Although the rate of increase for Lower Quartile homes is also below the national average rate, it is much closer (almost matching the rate in percentage terms) and remains higher than the regional rate of change.

iii) Affordability – Lower Quartile

7.14 The third indicator taken into account is affordability, assessed using the ratio between lower quartile house prices and lower quartile earnings. This indicator is particularly salient given the well-publicised barriers to ownership faced by many first time buyers and low-earners.

7.15 Figure 7.2 below tracks the Lower Quartile affordability ratio 1997-2013. Given that the ratio is a product of two independent data sources, a three year rolling average has been used to limit the effects of volatility in either data source.

Figure 7.2: Affordability Ratio 1997-2013 (3yr rolling averages)



Source: Land Registry/ASHE, via CLG Live Table 576

7.16 In 1997 the affordability ratio for Telford and Wrekin (3.2) was just below the typical mortgage borrowing multiplier of 3.5, meaning that for many buying a house was affordable. However, by 2007 (the pre-recession peak in many areas) the affordability ratio had reached 6.2 in Telford and Wrekin, an impassable barrier for many newly forming households, but lower than the regional average (7.0) and national average (7.1) in 2007. In 2013, Telford and Wrekin's affordability ratio was 5.9, again slightly lower than the regional average (6.2) and national average (6.5).

- 7.17 The affordability ratio has worsened for all areas assessed, including England as a whole. This is the result of lower quartile house prices rising more quickly than lower quartile earnings. However the situation in Telford and Wrekin is more acute than the average of the West Midlands region.
- 7.18 In terms of the tests required by PPG (absolute levels and rates of change), Table 7.4 shows how the affordability ratio has increased by 75% between 1997 and 2013 in Telford and Wrekin. This rate of change is higher than the regional average (71%) but lower than the national average (81%). The absolute change in the ratio has been 2.4 in Telford and Wrekin which is lower than both the regional and national average.

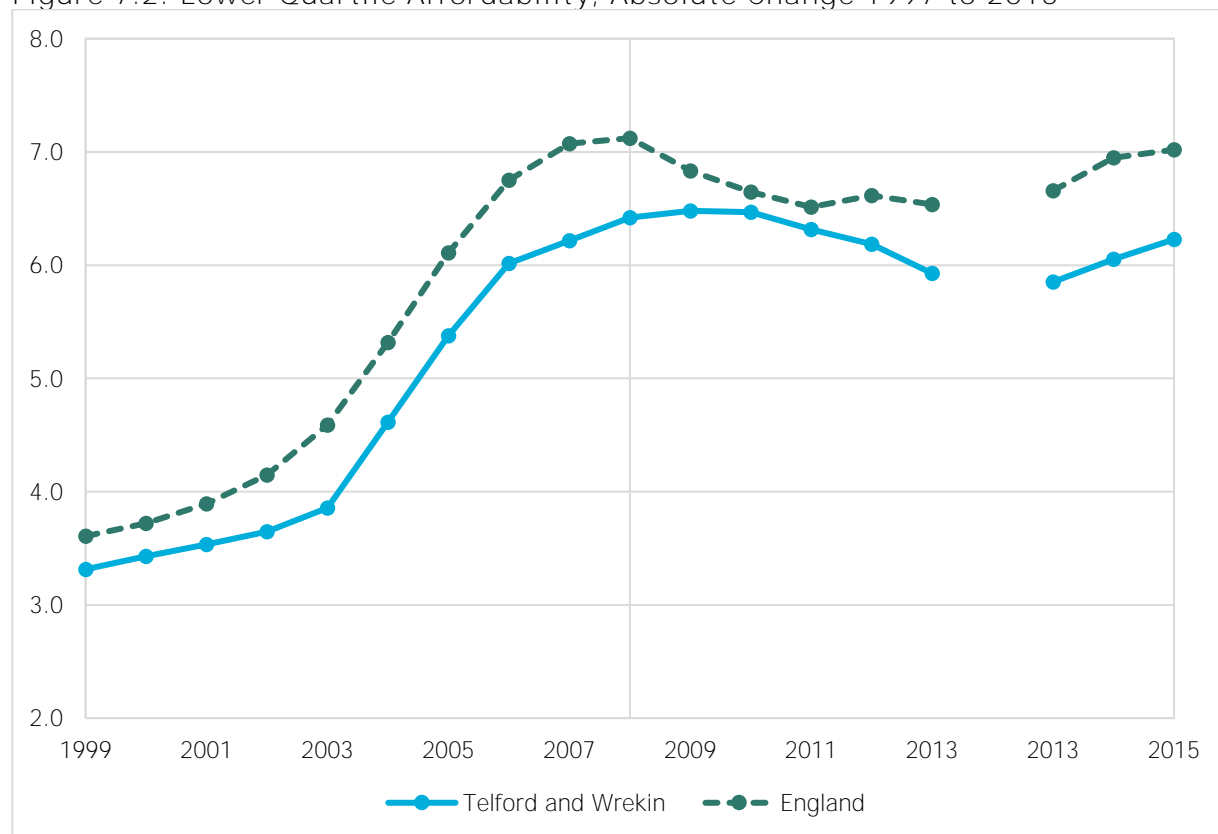
Table 7.4: Analysis of Lower Quartile Affordability Ratio Change 1997-2013

	Absolute Change 1997-2013	Index (England=100)	Percentage Change 1997-2013	Index (England=100)
Telford and Wrekin	2.4	83	75%	92
West Midlands	2.5	87	71%	88
England	2.9	100	81%	100

Source: Land Registry via CLG Live Table 586

- 7.19 The ONS have published more recent affordability ratios for years 2013, 2014 and 2015 using a different source of house price data to that used to produce the ratios presented in Figure 7.2 and Table 7.4 above. The new methodology leads to slight differences in the distribution of affordability ratios over time. Accordingly, the affordability time series shown in Figure 7.3 is presented in 2 blocks, the first (old method) up to 2013 and the second (new method) from 2013.
- 7.20 Under the new methodology, Telford and Wrekin's lower quartile affordability ratio in 2013 is slightly lower at 5.85 than in 2013 according to the old method (5.9) but is estimated to have increased to 6.23 in the year 2015. The 2015 ratio remains below the national average (7.02).

Figure 7.2: Lower Quartile Affordability, Absolute Change 1997 to 2015

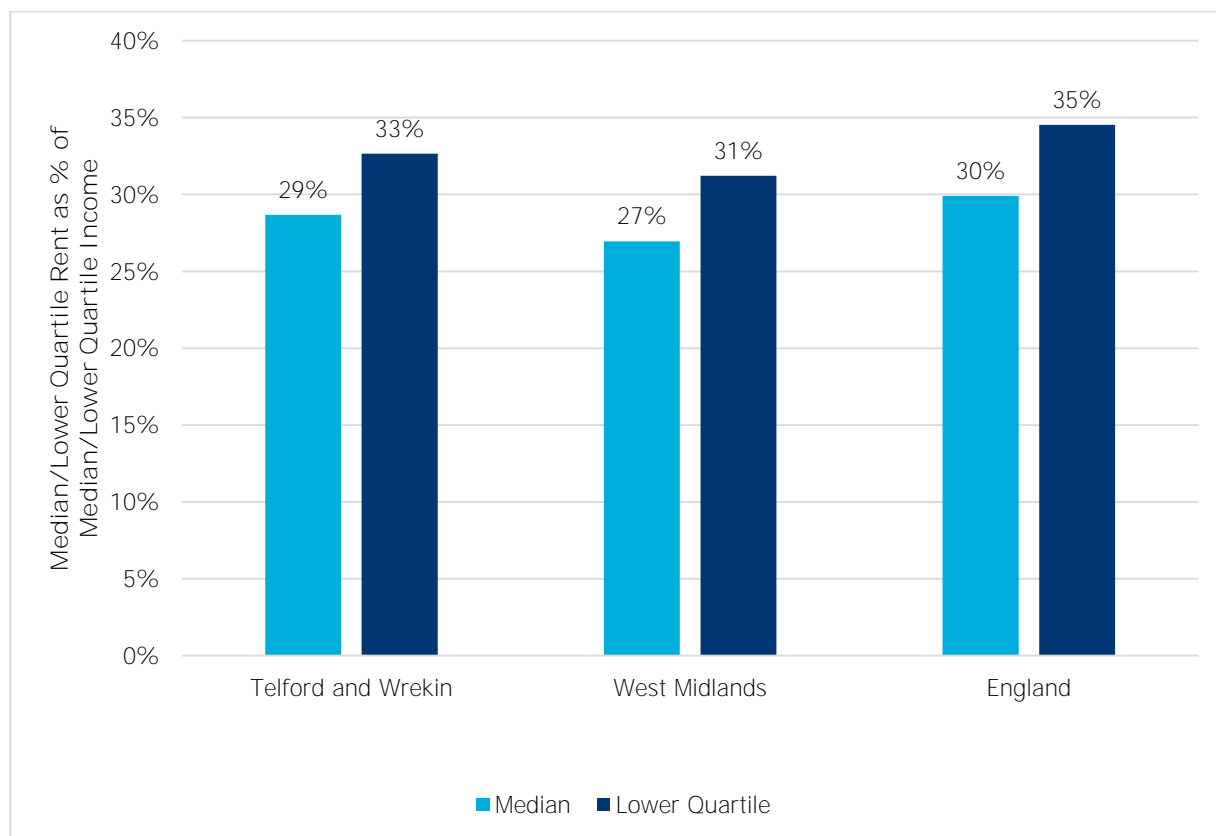


Source: Office for National Statistics/Land Registry, via CLG Live Table 576

iv) Residential Rents

7.21 The fourth indicator taken into account is residential rent payable in the private sector. Figure 7.3 below shows the ratio between Lower/ Median Quartile personal income and Lower/ Median Quartile private rent, both annualised.

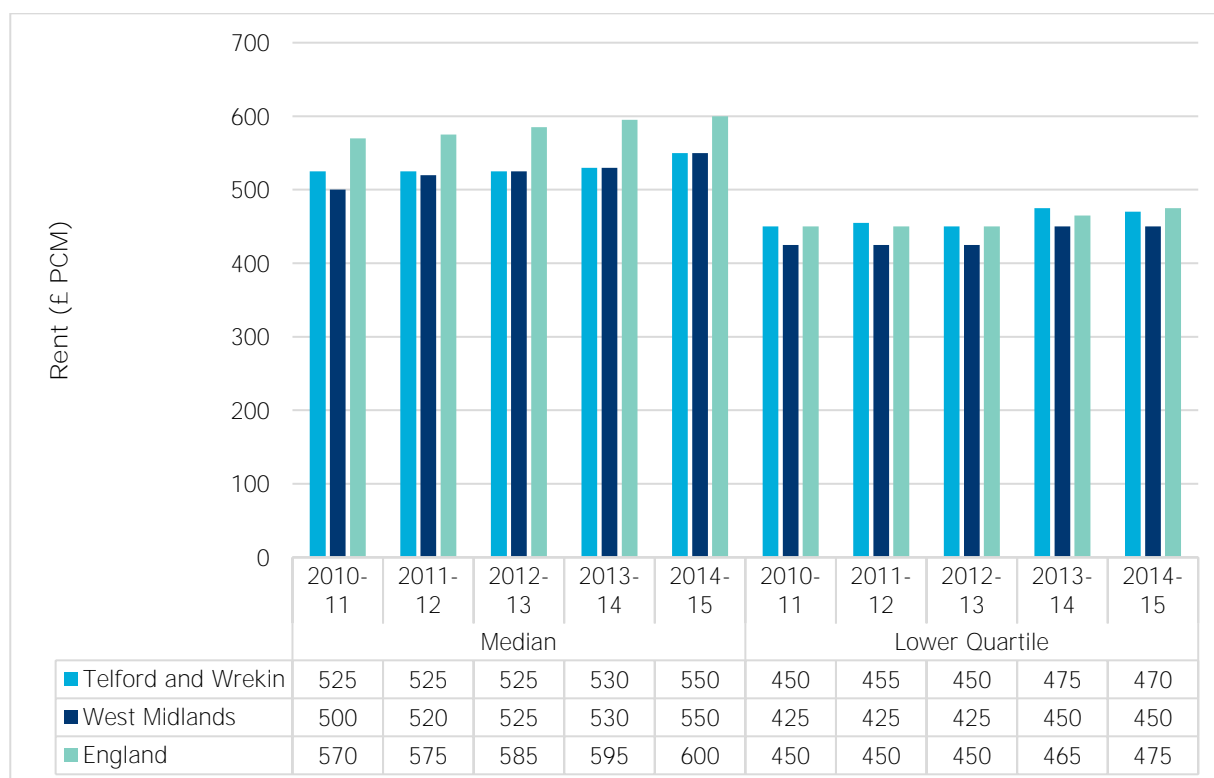
Figure 7.3: Median/Lower Quartile Rent as % of Median/Lower Quartile Income



Source: Valuation Office Agency

- 7.22 Renting in Telford and Wrekin is approximately as affordable as the national average, with a lower quartile-priced property costing around 33% of income. This remains above the 25% threshold often used in affordable housing need assessments, suggesting that renting in Telford is relatively expensive. Figure 7.4 below shows lower quartile and median private rents since 2010/11 – the earliest year for which consistent data is available.

Figure 7.4: Private Residential Rents, Per Calendar Month



Source: Valuation Office Agency

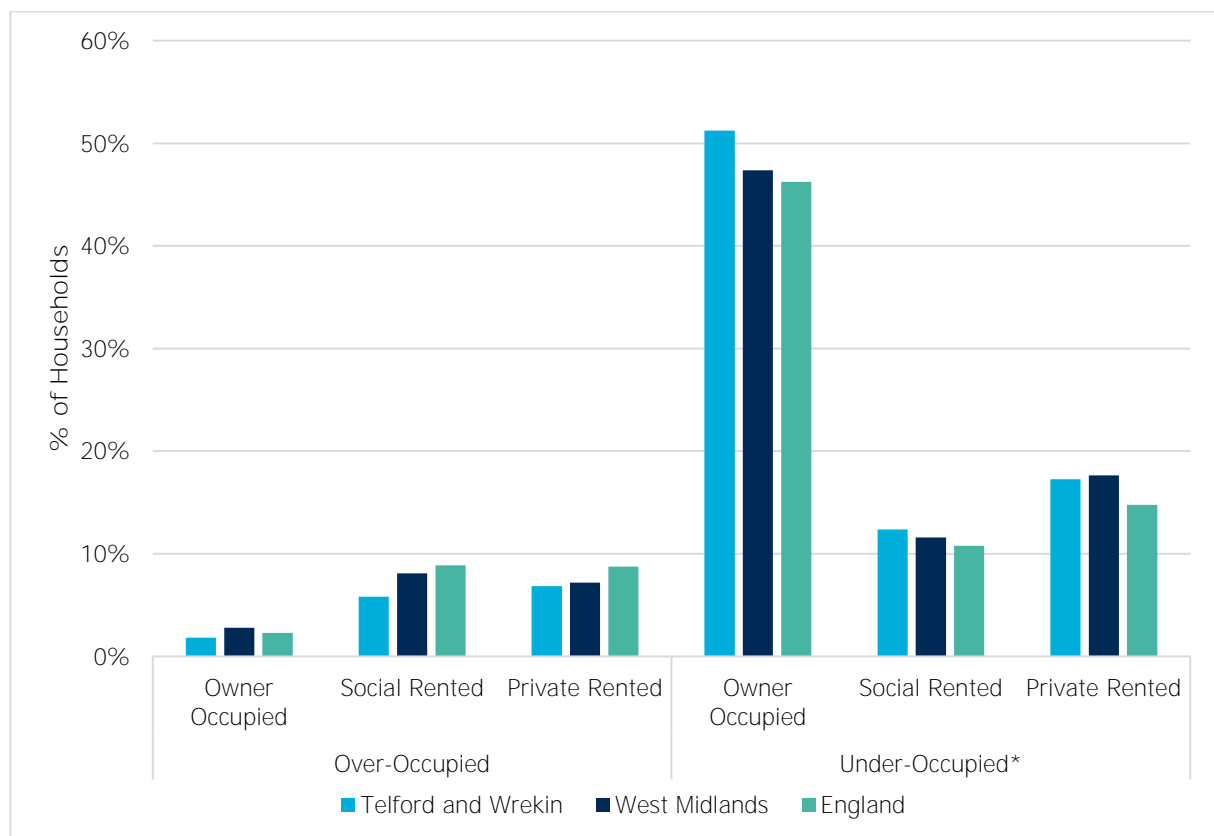
7.23 Private rents have remained relatively static in Telford and Wrekin since 2010/11. However, median rents have increased in the last year (2014/15). In Telford and Wrekin this is equivalent to a 4% increase which is the same as the regional average but higher than the national average (0.8%).

v) Overcrowding

7.24 The final indicator is overcrowding, taking into account the proportion of households which are over-occupied (i.e. having fewer rooms than required for the number of usual residents) and Concealed households (multiple households living in a single dwelling). This market signal is considered to illustrate the problems created by the worsening affordability situation indicated earlier in this section of the study.

7.25 Figure 7.5 below compares the proportion of households classified as over and under occupied in the 2011 Census.

Figure 7.5: Over and under-occupation, 2011



Source: ONS, Census 2011

* Under-occupied by 2+ bedrooms

7.26 As Figure 7.5 shows, Telford and Wrekin's level of over-occupation – where there are fewer bedrooms than required – is proportionally lower than the regional and national averages.

7.27 The second aspect of overcrowding taken into account is Concealed Families. A concealed household is defined as follows:

"Concealed households are family units or single adults living within other households, who may be regarded as potential separate households which may wish to form given appropriate opportunity." ³⁷

7.28 One dwelling typically houses a single family. Concealed families occur when multiple families occupy the same dwelling, often due to affordability issues, although in some cases there are strong cultural traditions of extended families living together in the same dwelling.

7.29 In terms of overcrowding, the ONS have recently published data to show a 70% increase in concealed households across the country between 2001 and 2011. Table 7.5 summarises the

³⁷ Paragraph 3.4, page 42, Estimating Housing Need, CLG, November 2010

number of concealed families within Telford and Wrekin compared with the West Midlands region and nationally.

Table 7.5: Concealed Households, 2001-2011

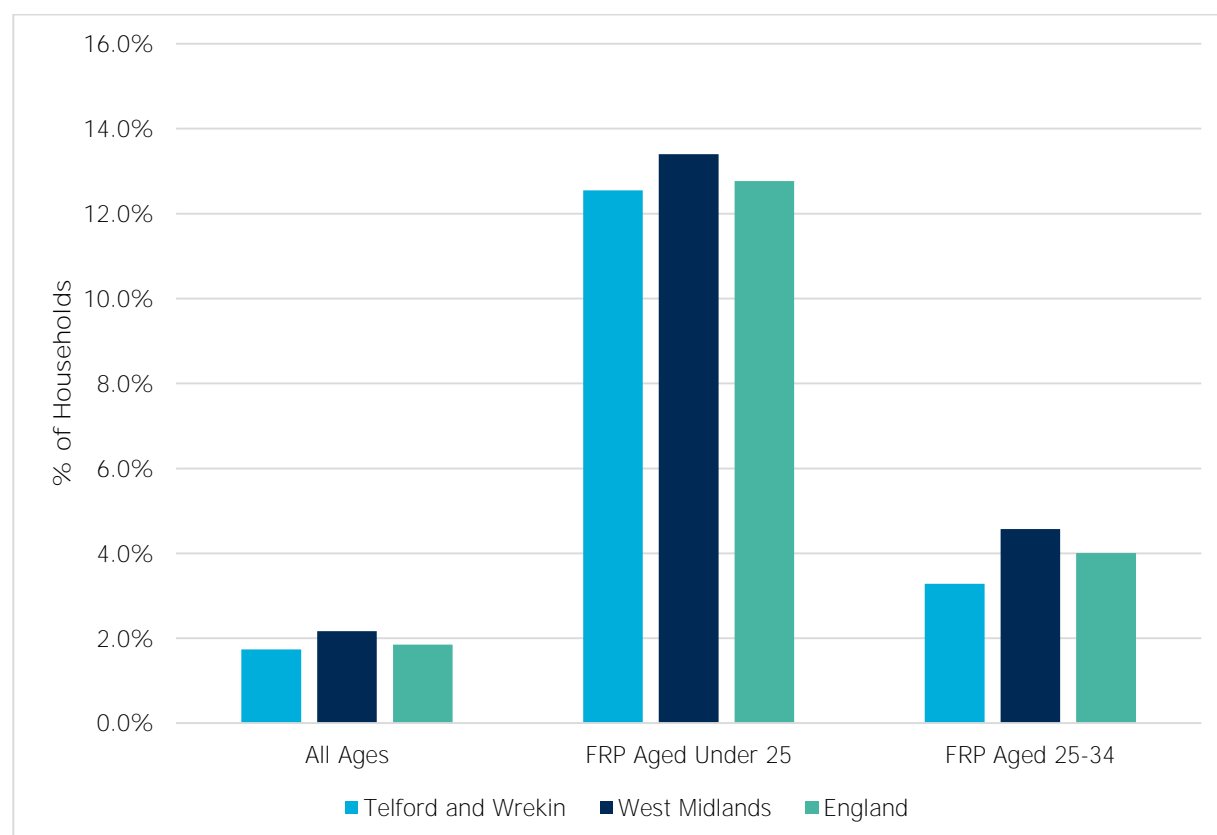
	2001	2011	2001-2011 Change	
			Number	%
Telford and Wrekin	426	853	427	100.2
West Midlands	21,435	34,461	13,026	60.8
England & Wales	169,765	289,295	119,530	70.4

Source: ONS, Census 2001/11

7.30 The number of concealed families in Telford and Wrekin has increased by 100% between 2001 and 2011. This percentage increase is noticeably higher in Telford and Wrekin (100%) compared to the regional (61%) and national (70%) average.

7.31 Figure 7.6 provides more detail in respect of the proportion of concealed households by age.

Figure 7.6: Concealed families, 2011



Source: ONS

- 7.32 Figure 7.6 illustrates how the highest proportion of concealed families in Telford and Wrekin is within younger households where the age of the family reference person is under the age of 25 years. 12.5% of all households where the FRP is under 25 years are concealed in Telford and Wrekin, which is lower than the regional and national average.
- 7.33 Nonetheless, the worsening affordability of housing is leading to a much larger number of people having to share with others, and not being able to form their own households. This is particularly so in younger age groups where the housing market is inaccessible to first time buyers.
- 7.34 In addition to concealed families, there are many concealed individuals who would like to form their own household but have not been able to due to the recession. Whilst it is not possible to derive the number of these individuals from the Census, research by Bramley et al. (2010) suggests that single adults account for around half of concealed households³⁸.

vi) Summary of Market Signals

- 7.35 The market signals issues within Telford and Wrekin can be summarised as follows:
- Delivery performance: Has significantly been below target. Between 2006/07 and 2014/15 housing delivery only reached 59% of target representing a shortfall of 3,896 dwellings over this period;
 - House prices: Prices have risen significantly, but by less (and at a slower rate) than the national average. However, both lower quartile and median house prices in Telford and Wrekin have increased by a higher rate than the regional average;
 - Affordability: Housing is now significantly less affordable than in the late 1990s, which has caused some suppression in household formation. The affordability ratio in 2015 was 6.2 meaning that a lower quartile priced house costs 6.2 times more than lower quartile earnings. Telford and Wrekin, however, remains more affordable than the national average but the affordability ratio between 1997 and 2013 has worsened at a greater rate than the regional average (+75% compared to +71%);
 - Private Rents: Rents are relatively unaffordable which puts further pressure on the market. Rents have remained relatively static in recent years but in the most recent year (2014/15) median rents have increased at faster rate in Telford and Wrekin (+4%) compared to the national average (+0.8%);

³⁸ Bramley et al. (2010), Estimating housing need, Department for Communities and Local Government

- Overcrowding and Concealed Families: A 100% increase in the number of concealed families between censuses higher than the national average of 70% but with similar levels overall to the national average. Overcrowding has also worsened, but is less severe than national average;

7.36 Several adverse market signals have been observed in Telford and Wrekin including a worsening of affordability, which has been influenced by increasing house prices/ rents and a significant shortfall of supply. Although perhaps less severe than the national average, market signals issues in Telford and Wrekin are more severe than the regional average, which, according to PPG, should be met with an appropriate boost in housing supply.

vii) Uplift to OAHN for Market Signals?

7.37 In light of the market signals analysis and the identification of a worsening trend in several market signals indicators, there is considered strong justification for a market signals increase to demographic projections in order to improve affordability in Telford and Wrekin.

7.38 PPG states:

"The housing need number suggested by household projections (the starting point) should be adjusted to reflect appropriate market signals, as well as other market indicators of the balance between the demand for and supply of dwellings." (PPG ID: 2a-019)

"A worsening trend in any of these indicators will require upward adjustment to planned housing numbers compared to ones based solely on household projections.....In areas where an upward adjustment is required plan makers should set this adjustment as a level that is reasonable.....should increase planned supply by an amount that, on reasonable assumptions and consistent with the principles of sustainable development, could be expected to improve affordability" (PPG ID: 2a-020)

7.39 A 'reasonable' adjustment is not quantified in the PPG and therefore in the absence of clear guidance from Government on how much of an uplift to OAHN should be applied to account for adverse market signals Barton Willmore has given consideration to this in respect of:

- Inspectors recommendations for market signals uplifts; and
- The Barker Review threshold, which identified an 86% increase in housebuilding would be required to bring house price inflation down to the European average (1.1%).

Inspector's recommendations

7.40 There have been a number of Inspectors recommendations for a market signals adjustment ranging from between 10 and 20%.

7.41 The Uttlesford Local Plan Inspector (December 2014) concluded that an uplift for market signals was required to the Council's proposed housing number and considered it 'appropriate to examine an overall increase of around 10%' ³⁹. This was to be applied alongside the headship rate adjustment.

7.42 The Eastleigh Local Plan Inspector (February 2015) recommended a 10% increase to the demographic-led OAHN figure to address the 'modest' pressure of market signals:

"I consider a cautious approach is reasonable bearing in mind that any practical benefit is likely to be very limited because Eastleigh is only a part of a much larger HMA. Exploration of an uplift of, say, 10% would be compatible with the "modest" pressure of market signals recognised in the SHMA itself." ⁴⁰ (Our emphasis)

7.43 In this example the affordability ratio had increased by 97% (Eastleigh Borough) and 92% (HMA). Telford and Wrekin has seen a 75% increase in its affordability ratio which is below the Eastleigh rates. However, Telford and Wrekin's lower quartile affordability ratio was 6.2 in 2015, meaning that house prices are unaffordable for most.

7.44 Furthermore, the more recent EiP decision in Canterbury (August 2015) suggested a 20% uplift for market signals, with the Inspector concluding as follows:

"An uplift of 10% to reflect a modest pressure of market signals has been used by Inspectors in other examinations. However, here NLP conclude that the scale of market signal pressure is greater than modest, such that on reasonable assumptions the uplift should be more than 10% with 20% used by way of illustration to give a need figure of 744 dpa." ⁴¹ (Our emphasis)

7.45 In Canterbury the affordability ratio increased by 89%.

³⁹ Paragraph 1.10, page 3, Examination of the Uttlesford Local Plan: Inspector's conclusions, December 2014

⁴⁰ Paragraph 41, page 12, Eastleigh Borough Local Plan, Inspector's Report February 2015

⁴¹ Paragraph 20, Canterbury District Local Plan, Note on main outcomes of Stage 1 hearings, August 2015

The Barker Review Threshold

- 7.46 The Barker Review of Housing Supply (2004) indicated that an 86% increase in house building would be required to bring house price inflation down to the European average (1.1%):

"Achieving the desired improvement in the housing market would, it was asserted, require an additional 120,000 housing starts per year on top of the 140,000 in 2002/3, taking the annual total to 260,000. According to the Review's modelling, this scenario would see between 5,000 and 15,000 newly formed households priced into the market in each year between 2011 and 2021." ⁴²

- 7.47 Barton Willmore have considered how much of an uplift the proposed OAHN (in this instance the starting point, plus adjustments for HFRs and an adjustment to accommodate employment growth) provides compared with the starting point (see Table 7.7) and recent delivery performance (see Table 7.8).

Table 7.7: Proposed OAHN vs. Starting Point (2011-31)

	Starting Point (dwellings)	Proposed OAHN (dwellings)	Uplift (%)
Telford and Wrekin	10,034 (502 dpa)	Between 16,522 and 17,827 (826 and 891 pa)	Between 65% and 77%

Source: ONS/CLG, Barton Willmore modelling

Table 7.8: Proposed OAHN vs. Past Delivery Performance (2011-2031)

	Delivery Performance (dwellings)*	Proposed OAHN (dwellings)	Uplift (%)
Telford and Wrekin	5,554 (617 dpa)	Between 16,522 and 17,827 (826 and 891 pa)	Between 34% and 44%

Source: ONS/CLG, Barton Willmore modelling

* Average completions over the period 2006/07 – 2014/15

- 7.48 An OAHN for Telford and Wrekin of between 826 and 891 dwellings per annum provides between a 65% and 77% uplift against the starting point and between a 34% and 44% uplift against past delivery performance in Telford and Wrekin.
- 7.49 The analysis undertaken by Barton Willmore has identified market signals issues within Telford and Wrekin that warrants an upward adjustment to the starting point estimate (the CLG 2014-based household projections). However, given the proposed OAHN provides between a 65% and 77% uplift against the starting point, which is in excess of market signals uplift applied in

⁴² Home Builders Federation (2014), 'Barker Review – a decade on', p.7

other authorities, it is considered that no further uplift to address market signals issues is recommended.

- 7.50 On this basis, the OAHN range of between 826 and 891 dwellings per annum represents a significantly accelerated rate of growth compared against recent delivery performance. As a result, it has potential to create downward pressure on house prices within Telford and Wrekin, which in turn will begin to address market signals issues.

8.0 FULL OBJECTIVE ASSESSMENT OF HOUSING NEED

8.1 This final chapter draws together the evidence presented on housing need to determine the full OAHN for Telford and Wrekin. Table 8.1 below summarises the steps taken towards reaching a recommendation for OAHN.

Table 8.1: Summary of OAHN for Telford and Wrekin (2011-2031)

		Blended HFR 100%	Blended HFR 50%	HFR Sensitivity 2001
A	CLG 2014-based SNHP (Households)	9,730 (487 pa)		
	Vacant/Second Homes Adjustment	3.03%		
	OAHN STARTING POINT (Dwellings)	10,034 (502 dpa)		
B	Starting point with adjusted HFRs (Dwellings)	12,292 (615 pa)	11,147 (557 pa)	11,642 (582 pa)
	Adjustment to A	+113 dpa	+55 dpa	+80 dpa
C	10yr Migration Trend (2005-2015) with adjusted HFRs (Dwellings)	13,606 (680 pa)	12,422 (621 pa)	12,941 (647 pa)
	Adjustment to A+B	+178 dpa	+119 dpa	+145 dpa
=	DEMOGRAPHIC OAHN (A+B+C)	13,606 (680 dpa)	12,422 (621 dpa)	12,941 (647 dpa)
D	Jobs Supported by Demographic OAHN (C)	8,116 (406 pa)		
	Job Demand (average of CE, OE & Experian)	13,860 (693 pa)		
	Labour Surplus/Deficit	-5,774 (-287 pa)		
=	ECONOMIC-LED HOUSING NEED	17,827 (891 dpa)	16,522 (826 dpa)	17,104 (855 dpa)
	(Adjustment to Demographic OAHN)	+211 dpa	+205 dpa	+208 dpa
	Adverse Market Signals Observed?	Yes		
	Average Delivery Rate 2006 – 2015	617		
	Subtotal Dwellings per annum	891	826	855
	Increase vs. Recent Performance (%)	44%	34%	39%
	Increase vs. Starting Point (%)	77%	65%	70%
	Further Increase Recommended? (Y/N)	No		
	FULL OBJECTIVELY ASSESSED HOUSING NEED	17,827 (891 dpa)	16,522 (826 dpa)	17,104 (855 dpa)

Source: ONS/CLG, Barton Willmore Modelling

i) Starting point estimate

- 8.2 The starting point, derived from the CLG 2014-based household projections (the 2014-based SNPP with 2014 household formation rates (HFRs) applied) indicates growth of 487 households per annum in Telford and Wrekin over the period 2011-2031. Once an adjustment for vacant and second homes has been applied, the starting point estimate of housing need is equivalent to 502 dwellings per annum.

ii) Demographic adjustments

- 8.3 Consideration has then been given as to whether an adjustment to the starting point estimate of need is necessary to address demographic factors affecting past trends, in particular, suppressed household formation rates and migration trends.
- 8.4 Analysis of HFRs identified that the 2014-based HFRs project suppressed household formation for younger people between the ages of 25-44 years. This would not be a prudent basis on which to plan housing need in respect of the NPPF's (paragraph 182) requirement to ensure Local Plans are 'positively prepared' and to afford everyone the right to establish their own home. On this basis, an adjustment to address suppressed household formation is required. Barton Willmore has sensitivity tested three different HFR adjustments which suggest the starting point estimate of housing need increases to between 557 and 615 dwellings per annum (2011-2031).
- 8.5 Analysis of migration trends has indicated that the recession did suppress migration trends for Telford and Wrekin and therefore an adjustment to the 2014-based SNPP to address suppressed migration trends is deemed necessary within Telford and Wrekin.
- 8.6 Two long-term (10-year) migration trends have been considered; one drawing on migration trends from the period 2003-2013 (consistent with the period which underpins the Council's demographic assessment) and one based on migration trends from the most recent 10-year period (2005-2015). The LTM trend 2003-13 projects comparable population growth to the 2014-based SNPP which are considered to be underpinned by conservative estimates of international migration. For this reason, Barton Willmore consider the LTM trend 2005-2015 to provide a more appropriate projection of future population growth for Telford and Wrekin on which to assess demographic OAHN.
- 8.7 Barton Willmore have therefore established demographic OAHN for Telford and Wrekin to be between 621 and 680 dwellings per annum (2011-2031) based on the LTM trend (2005-2015) with adjusted 2014 HFRs.

iii) Supporting economic growth

8.8 Analysis of labour supply and demand has revealed that the demographic OAHN would only support growth of 406 jobs per annum (2011-2031) and therefore there will be a shortfall in the number of workers available to take up jobs in Telford and Wrekin as suggested by recent forecasts by Experian Economics, Oxford Economics and Cambridge Econometrics. An average of these forecasts suggests growth of 693 jobs per annum in Telford and Wrekin over the period 2011-2031.

8.9 It has been determined that to supply sufficient labour to support growth of 693 additional jobs per annum in Telford and Wrekin over the period 2011-2031 economic OAHN of between 826 and 891 dwellings per annum would be required depending on which approach to addressing suppressed housing formation is applied.

iv) Market signals assessment

8.10 A worsening trend in several market signals indicators have been observed in Telford and Wrekin as outlined in Chapter 7 of this study. This includes housing completions falling short of targets over the last 9 years; worsening affordability, increasing house prices and an increase in concealed families.

8.11 In the absence of any official guidance on how an appropriate response to market signals issues should be calculated, the subtotal OAHN (taking account of the starting point, demographic adjustments and economic-led uplift) was compared against past delivery performance and the OAHN starting point.

8.12 In light of Inspector's decisions in relation to market signals uplift ranging between 10% and 20% and given that OAHN for Telford and Wrekin represents an uplift of between 65% and 77% from the starting point estimate, it is considered appropriate not to recommend a further uplift to the proposed OAHN to address market signals. It is considered that OAHN of between 826 and 891 dwellings per annum represents a significantly accelerated rate of growth compared against recent delivery performance. As a result, it has potential to create downward pressure on house prices within Telford and Wrekin, which in turn will begin to address market signals issues.

v) Bringing the evidence together

8.13 Taking into account all of the evidence presented above, it is concluded that the full OAHN for Telford and Wrekin totals between 826 and 891 dwellings per annum 2011-31. This OAHN will:

- Accommodate the housing need number implied by the latest demographic evidence;
- Meet projected job demand; and
- On reasonable assumptions, improve affordability.

vi) Relationship with Affordable Housing Need

8.14 As stated within NPPF, LPAs are required to ensure their local plans meet OAHN for both market and affordable housing. The *Satnam v Warrington BC* High Court Judgment discussed in Chapter 4 provides useful guidance on the proper exercise that needs to be undertaken to assess affordable need:

“(a) having identified OAHN for affordable housing, that should then be considered in the context of its likely delivery as a proportion of mixed market/affordable housing development; an increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes;

(b) the Local Plan should then meet the OAHN for affordable housing, subject only to the constraints referred to in NPPG, paragraphs 14 and 47.”⁴³

8.15 However, the *ELM Park v Kings Lynn and West Norfolk BC* High Court Judgment (July 2015) outlined that affordable need did not have to be met in full when determining OAHN but rather:

“This consideration of an increase to help deliver the required number of affordable homes, rather than an instruction that the requirement be met in total, is consistent with the policy in paragraph 159 of the Framework requiring that the SHMA “addresses” these needs in determining the FOAHN. They should have an important influence increasing the derived FOAHN since they are significant factors in providing for housing needs within an area.”⁴⁴

8.16 The most recent evidence produced by the Council on affordable housing need is provided in the March 2016 SHMA. The SHMA presents net affordable need as being 665 dwellings per

⁴³ *Satnam Millennium Limited vs. Warrington Borough Council*, Judgment, dated 19th February 2015

⁴⁴ Paragraph 33, *Elm Park Holdings Ltd vs. Kings Lynn and West Norfolk BC*, Judgment, dated 9th July 2015

annum over the 5-year period 2015-2020. Historic affordable housing delivery in Telford and Wrekin has been significantly below this level (as shown in Table 4.3 of this report) with the peak of affordable housing delivery only reaching 427 units in 2014/15.

- 8.17 Assuming affordable housing is delivered at the submitted Local Plan target of between 25% and 35%, if 665 affordable housing units are to be delivered according to the lowest of these thresholds (25%), then the total housing requirement would be 2,660 dwellings per annum over a 5-year period. This is significantly higher than the annual housing requirement set out in the local plan (778 dwellings per annum) and therefore it can be concluded that the higher housing requirement of the Local Plan would not meet affordable housing need in full.
- 8.18 Barton Willmore's OAHN range of between 826 and 891 dwellings per annum falls short of meeting affordable housing need in full. However, following the Inspector's judgment in ELM Park v Kings Lynn and West Norfolk BC, affordable need does not need to be met in full by the OAHN. Despite this, OAHN of between 826 and 891 dwellings per annum is considered to make some contribution towards meeting affordable need in Telford and Wrekin which paragraph ID2a-029 of PPG supports.

Local Plans Expert Group (LPEG)

- 8.19 The LPEG OAHN recommendations do not have any official status at the current time. However, based on the proposal, OAHN for Telford and Wrekin would be approximately 752 dwellings per annum (see Appendix 1 for the summary of BW's calculation). This is lower than full OAHN presented in the report for between 826 and 891 dwellings per annum (2011-2031). The reason for the difference is because the LPEG recommendation doesn't give consideration to economic growth as part of the OAHN calculation whereas the current PPG HEDNA guidance does. However, LPEG does require economic growth is required to be taken into account when setting the housing requirement.

Overall Conclusions on Full OAHN

- 8.20 The council's evidence relating to objectively assessed housing need is considered not to be representative of likely change over the Telford and Wrekin plan period. This report has set out an alternative OAHN, closely following the methodology described by PPG. Adjustments made to official projections are justified and in keeping with the principles of positive planning.
- 8.21 The Barton Willmore assessment concludes that no fewer than 16,522 net additional dwellings need to be built within Telford and Wrekin over the period 2011-31 – an average of 826 per annum. However, housing need could increase to 17,827 net additional dwellings (891 per

annum) with the application of an alternative adjustment to address suppressed household formation for younger people.

- 8.22 The Telford and Wrekin Local Plan 2011-2031 Publication Version (January 2016) plans for 15,555 net new dwellings over the plan period (equivalent to 778 dwellings per annum) and represents an uplift from the level of OAHN established in the PBA March 2015 report. The Council have considered it appropriate to set the planned level of development above the identified need in order to support the social and economic objectives of the plan and deliver the affordable housing need in the Borough⁴⁵.
- 8.23 Barton Willmore's OAHN of between 826 and 891 dwellings per annum (2011-2031) as set out in this report is considered a more realistic assessment of need than the Council's OAHN of 497 dwellings per annum. However, adverse and worsening market signals and a very substantial level of net affordable housing need provide further evidence that Telford and Wrekin need to consider boosting the supply of housing to levels significantly higher. OAHN of between 826 and 891 dwellings per annum (2011-2031) should therefore be considered an absolute minimum, and planning for even greater numbers of dwellings will have a positive effect on reducing affordable need, widening access to the private housing market and improving Telford and Wrekin's economic competitiveness.

⁴⁵ Paragraphs 5.63 and 5.64, Telford and Wrekin Council Local Plan 2011-2031, Technical Paper Housing Growth July 2015

APPENDIX 1:

LPEG OAHN CALCULATION FOR TELFORD AND WREKIN

LOCAL PLANS EXPERT GROUP (LPEG) – RECOMMENDED OAHN METHODOLOGY

Stage	Step	OAHN Process	Growth 2011-2031 (per annum)
A. Demographic Starting Point	1.	Latest CLG household projection <u>population</u> (2014-based ONS SNPP)	14,049 (702)
	2.	10-year migration trend (2005-2015) scenario <u>population</u>	16,701 (835)
	3.	Highest <u>population</u> (CLG projection or 10-year Migration)	16,701 (835)
	4.	10-year migration trend (2014 HFRs unadjusted) <u>households</u>	10,932 (547)
	5.	10-year migration trend (50% 25-44 HFR return to 2008-based HFRs) <u>households</u>	12,048 (602)
	6.	Vacant and second homes adjustment	3.03%
	7.	OUTPUT A: Demographic starting point (<u>Dwellings</u>)	12,422 (621)
B. Market Signals	1.	Ratio of <u>median</u> quartile house prices to median earnings (3 year average)	5.7
	2.	Upward adjustment required to Output A	10%
	3.	OUTPUT B: Demographic starting point plus market signals adjustment - <u>dwellings</u>	13,664 (683)
C. Affordable Housing Need	1.	Estimate affordable need based on standard methodology (<u>dwellings</u>)	13,300 (665)
	2.	Total number of dwellings necessary to meet affordable needs (as the likely rate of delivery at 25% of market housing) <u>dwellings</u> .	53,200 (2,660)
	3.	OUTPUT C: Number of dwellings required to meet affordable housing need (<u>dwellings</u>)	53,200 (2,660)
FULL OAHN	1.	Lower of meeting either 1) Output C in full, <u>or</u> 2) Output B plus 10%?	Output B + 10%
	2.	Output B plus 10% = Total Dwellings 2011-2031	15,030 (752)
	3.	FULL OBJECTIVELY ASSESSED HOUSING NEED FOR TELFORD AND WREKIN 2014-2032	15,030 (752)

*Affordable need set out in Telford and Wrekin SHMA (March 2016)

APPENDIX 2:

POPGROUP MODELLING INPUT ASSUMPTIONS

POPGROUP modelling input assumptions: Telford and Wrekin forecasts

Variable	Data set	Source
Base population	Population Estimates by single year of age and gender	2011 Mid-Year Population Estimates, Office for National Statistics (ONS).
Fertility rate	Age specific fertility rates	ONS 2014-based Sub National Population Projections
Mortality rate	Age standardised mortality ratios by gender	ONS 2014-based Sub National Population Projections
Standard Migrant profile	Age and gender specific migration rates for Telford and Wrekin broken down by in-migrants from overseas, in migrants from elsewhere within the UK, out-migrants to overseas, out-migrants to elsewhere in the UK	ONS 2014-based Sub National Population Projections
Adjusted Migrant profile	Telford and Wrekin specific age and gender migration <u>rates</u> for internal (within the UK) migration and counts for international migration. Averages calculated for the 10-year period under observation	ONS Mid-Year Population Estimates, Detailed Components of Change
Communal establishment population	Age and gender counts of people living in communal establishments. For ages 75+ proportions rather than counts are used to reflect the ageing population.	CLG 2014-based household projections
Household representative rates	Household representative rates by age and gender	CLG 2014-based household projections (Stage One) with sensitivity tests using

Variable	Data set	Source
		2008-based rates and rates as at 2001.
Vacancy/ Second home rate	Proportion of dwellings vacant and second homes. Combined rate specific for Telford and Wrekin (3.03%)	2015 Council Tax Base (CLG)
Commuting ratio	Ratio based on residents in employment divided by workplace jobs specific for Telford and Wrekin (0.94)	2011 Census Travel to Work Statistics (Table WU01UK), ONS
Unemployment rate	APS model-based 2011 estimates falling to average rate between 2004 and 2007 by 2021 and then held constant. Rate for Telford and Wrekin 9.1% falling to 4.6%	Annual Population Survey (APS), ONS
Economic activity rates	Economic activity rates by age and gender are applied to the resident population to calculate resident labour force	2011 Census (ONS) and projected following Office for Budget Responsibility November 2015 projection.

APPENDIX 3

POPGROUP DEMOGRAPHIC FORECASTING OUTPUT

2014 SNPP 2014 HFRs

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	2011-12	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	1,083	1,078	1,077	1,084	1,089	1,090	1,093	1,093	1,090	1,089	1,087	1,085	1,082	1,078	1,073	1,070	1,069	1,068	1,069	1,070
Female	1,032	1,027	1,026	1,032	1,037	1,038	1,041	1,041	1,038	1,037	1,035	1,033	1,031	1,027	1,022	1,019	1,018	1,018	1,018	1,019
<i>All Births</i>	2,115	2,106	2,103	2,116	2,126	2,129	2,135	2,133	2,127	2,125	2,123	2,118	2,113	2,105	2,095	2,089	2,086	2,086	2,087	2,090
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	635	656	733	698	691	703	711	720	729	735	746	759	770	781	794	809	820	834	848
Female	634	641	652	733	680	690	692	693	698	705	711	720	729	739	749	761	775	788	800	813
<i>All deaths</i>	1,248	1,276	1,308	1,466	1,378	1,381	1,395	1,404	1,418	1,433	1,446	1,466	1,488	1,509	1,530	1,555	1,584	1,607	1,634	1,661
SMR: males	112.2	112.2	112.0	121.1	112.2	107.5	105.7	103.4	101.2	99.0	96.5	94.6	93.0	91.1	89.2	87.8	86.4	84.8	83.5	82.4
SMR: females	110.0	109.4	109.7	119.9	109.9	108.9	107.1	104.5	102.5	100.6	98.7	97.0	95.2	93.6	91.9	90.4	89.2	87.7	86.2	85.0
SMR: persons	111.1	110.8	110.9	120.5	111.0	108.2	106.4	104.0	101.9	99.8	97.5	95.8	94.1	92.3	90.5	89.0	87.7	86.2	84.8	83.6
Expectation of life: males	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.3
Expectation of life: female:	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: person:	80.9	80.9	80.9	79.9	80.8	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	2,936	2,947	2,957	2,989	2,992	3,003	3,004	3,011	3,006	3,002	3,007	3,014	3,022	3,035	3,050	3,066	3,077	3,092	3,107	3,120
Female	3,002	3,007	3,012	3,029	3,029	3,029	3,029	3,025	3,017	3,008	3,006	3,008	3,011	3,021	3,036	3,051	3,063	3,079	3,096	3,109
<i>All</i>	5,938	5,954	5,969	6,018	6,021	6,032	6,034	6,036	6,023	6,010	6,013	6,022	6,033	6,057	6,085	6,117	6,140	6,170	6,204	6,229
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,103	3,117	3,116	3,124	3,130	3,125	3,119	3,122	3,109	3,096	3,087	3,088	3,090	3,098	3,112	3,123	3,135	3,152	3,165	3,177
Female	3,145	3,136	3,145	3,137	3,149	3,140	3,123	3,118	3,106	3,096	3,087	3,087	3,094	3,107	3,114	3,124	3,138	3,156	3,172	3,180
<i>All</i>	6,247	6,253	6,260	6,261	6,279	6,265	6,242	6,241	6,216	6,193	6,174	6,175	6,185	6,205	6,227	6,247	6,273	6,308	6,338	6,357
SMigR: males	80.6	80.7	80.7	80.9	80.9	80.8	80.7	80.8	80.8	80.8	80.7	80.8	80.8	80.8	80.9	80.9	80.9	81.0	81.0	81.0
SMigR: females	89.5	89.4	89.8	89.5	89.6	89.7	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.7	89.8	89.9	89.9	90.0	90.1	90.2
In-migration from Overseas																				
Male	577	406	509	475	420	405	404	389	378	372	373	373	374	374	375	375	375	375	376	377
Female	430	386	534	394	346	335	336	324	317	312	313	315	315	316	316	316	316	316	317	318
<i>All</i>	1,007	792	1,044	869	767	740	741	713	695	684	686	688	689	690	690	691	691	691	693	695
Out-migration to Overseas																				
Male	356	288	328	253	250	257	261	262	260	263	264	264	265	265	266	266	266	266	267	268
Female	358	265	232	217	211	216	221	221	221	223	224	226	226	226	227	227	227	227	228	229
<i>All</i>	714	552	559	469	461	472	482	484	482	486	488	490	491	492	492	492	493	493	495	497
SMigR: males	75.9	61.2	70.0	54.0	53.4	54.7	55.7	56.0	55.7	56.4	56.8	57.1	57.5	57.6	57.7	57.7	57.7	57.5	57.5	57.5
SMigR: females	98.0	72.9	63.8	59.7	58.1	59.6	61.2	61.5	61.8	62.6	63.2	63.9	64.2	64.5	64.7	64.6	64.6	64.4	64.5	64.5
Migration - Net Flows																				

2014 SNPP 2014 HFRs

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UK	-309	-299	-291	-243	-258	-233	-208	-205	-193	-183	-161	-154	-152	-148	-141	-130	-133	-137	-134	-128
Overseas	+293	+240	+484	+400	+306	+268	+259	+229	+213	+198	+198	+198	+198	+198	+198	+198	+198	+198	+198	+198
Summary of population change																				
Natural change	+867	+830	+795	+650	+748	+748	+739	+730	+710	+692	+677	+652	+625	+596	+565	+534	+503	+478	+454	+428
Net migration	-16	-60	+193	+157	+48	+35	+51	+24	+20	+15	+37	+45	+46	+50	+57	+68	+65	+61	+64	+70
Net change	+851	+770	+988	+807	+796	+783	+790	+754	+730	+707	+714	+697	+671	+646	+622	+602	+567	+539	+518	+498
Crude Birth Rate /000	12.65	12.53	12.45	12.46	12.46	12.42	12.39	12.33	12.25	12.18	12.12	12.05	11.97	11.88	11.78	11.71	11.65	11.61	11.59	11.57
Crude Death Rate /000	7.46	7.59	7.74	8.63	8.08	8.05	8.10	8.11	8.16	8.22	8.26	8.34	8.43	8.51	8.60	8.71	8.85	8.95	9.07	9.20
Crude Net Migration Rate	-0.09	-0.35	1.14	0.92	0.28	0.20	0.29	0.14	0.12	0.09	0.21	0.25	0.26	0.28	0.32	0.38	0.36	0.34	0.36	0.39

Summary of Population estimates/forecasts*Population at mid-year*

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,468	11,458	11,437	11,231	11,053	10,903	10,830	10,794	10,811	10,817	10,816	10,806	10,791	10,772	10,746	10,715	10,684	10,658	10,640	10,634
5-10	12,033	12,398	12,696	13,077	13,427	13,714	13,866	13,858	13,844	13,739	13,554	13,389	13,252	13,185	13,155	13,180	13,193	13,197	13,189	13,171	13,147
11-15	10,793	10,598	10,276	10,036	10,060	9,991	10,192	10,512	10,816	11,053	11,340	11,513	11,580	11,604	11,562	11,380	11,219	11,081	11,016	10,996	11,027
16-17	4,658	4,529	4,523	4,460	4,191	4,191	4,152	3,964	3,916	3,998	4,136	4,279	4,467	4,532	4,538	4,649	4,730	4,712	4,635	4,529	4,436
18-59Female, 64Male	98,411	98,286	98,297	98,381	98,540	98,581	98,464	98,471	98,203	97,823	97,508	97,307	97,018	96,752	96,609	96,365	96,123	95,923	95,719	95,536	95,273
60/65 -74	19,274	19,903	20,342	20,802	21,219	21,588	21,861	22,068	22,298	22,647	22,840	22,691	22,858	23,101	23,371	23,790	24,184	24,683	25,081	25,485	25,941
75-84	7,537	7,778	8,093	8,348	8,619	8,872	9,234	9,651	10,114	10,467	10,922	11,652	12,145	12,614	12,981	13,304	13,583	13,730	13,920	14,090	14,173
85+	2,699	2,722	2,767	2,899	2,961	3,053	3,154	3,264	3,384	3,561	3,690	3,873	4,092	4,309	4,546	4,742	5,010	5,315	5,647	5,935	6,250
Total	166,831	167,682	168,452	169,440	170,247	171,043	171,825	172,616	173,370	174,100	174,806	175,520	176,217	176,888	177,534	178,156	178,758	179,325	179,865	180,382	180,880

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
65+ / 16-65	0.22	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.30	0.30	0.31	0.31	0.32	0.33	0.34	0.34	0.35	0.36	0.37
0-15 and 65+ / 16-65	0.54	0.56	0.57	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.64	0.65	0.65	0.66	0.67	0.67	0.68	0.69	0.71
Median age males	36.9	37.1	37.3	37.5	37.5	37.6	37.7	37.8	38.0	38.1	38.2	38.4	38.5	38.6	38.8	38.9	39.0	39.0	39.2	39.3
Median age females	38.5	38.8	39.0	39.1	39.3	39.4	39.5	39.5	39.7	39.9	40.2	40.4	40.6	40.8	41.0	41.2	41.3	41.5	41.7	41.9
Sex ratio males /100 fema	98.1	98.3	98.3	98.2	98.3	98.4	98.5	98.5	98.6	98.6	98.7	98.8	98.8	98.9	99.0	99.0	99.1	99.1	99.2	99.3

Households

Number of Households	66,666	67,163	67,654	68,291	68,845	69,392	69,951	70,451	70,978	71,495	72,014	72,491	72,933	73,394	73,853	74,334	74,786	75,191	75,615	76,018	76,397
Change in Households over previous year	+497	+491	+637	+554	+547	+559	+500	+527	+517	+519	+477	+442	+442	+462	+458	+481	+452	+406	+423	+404	+379
Number of Dwellings	68,748	69,260	69,767	70,424	70,995	71,559	72,135	72,650	73,194	73,727	74,263	74,754	75,210	75,686	76,159	76,655	77,121	77,540	77,976	78,392	78,782
Change in Dwellings over previous year	+512	+506	+657	+571	+564	+576	+515	+544	+533	+535	+491	+456	+456	+476	+473	+496	+466	+419	+436	+416	+390

Economically active

Number of Economically a	85,111	85,554	85,930	86,377	86,568	86,815	86,962	87,056	87,026	87,023	86,960	86,966	86,978	86,941	86,985	87,102	87,230	87,275	87,248	87,219	87,153
Change in Economically active over pr		+443	+375	+448	+191	+247	+147	+94	-30	-3	-62	+6	+12	-37	+44	+117	+128	+45	-28	-29	-66
Number of Jobs	82,305	83,141	83,916	84,765	85,365	86,023	86,584	87,093	87,477	87,889	88,241	88,247	88,259	88,222	88,267	88,385	88,515	88,561	88,533	88,504	88,437
Change in Jobs over previous year		+837	+775	+849	+600	+658	+561	+509	+385	+412	+352	+6	+12	-38	+45	+118	+130	+46	-28	-29	-67

2014 SNPP 100% FR25-44 HFRs

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	Year beginning July 1st																			
	2011-12	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	1,083	1,078	1,077	1,084	1,089	1,090	1,093	1,093	1,090	1,089	1,087	1,085	1,082	1,078	1,073	1,070	1,069	1,068	1,069	1,070
Female	1,032	1,027	1,026	1,032	1,037	1,038	1,041	1,041	1,038	1,037	1,035	1,033	1,031	1,027	1,022	1,019	1,018	1,018	1,018	1,019
<i>All Births</i>	2,115	2,106	2,103	2,116	2,126	2,129	2,135	2,133	2,127	2,125	2,123	2,118	2,113	2,105	2,095	2,089	2,086	2,086	2,087	2,090
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	635	656	733	698	691	703	711	720	729	735	746	759	770	781	794	809	820	834	848
Female	634	641	652	733	680	690	692	693	698	705	711	720	729	739	749	761	775	788	800	813
<i>All deaths</i>	1,248	1,276	1,308	1,466	1,378	1,381	1,395	1,404	1,418	1,433	1,446	1,466	1,488	1,509	1,530	1,555	1,584	1,607	1,634	1,661
SMR: males	112.2	112.2	112.0	121.1	112.2	107.5	105.7	103.4	101.2	99.0	96.5	94.6	93.0	91.1	89.2	87.8	86.4	84.8	83.5	82.4
SMR: females	110.0	109.4	109.7	119.9	109.9	108.9	107.1	104.5	102.5	100.6	98.7	97.0	95.2	93.6	91.9	90.4	89.2	87.7	86.2	85.0
SMR: persons	111.1	110.8	110.9	120.5	111.0	108.2	106.4	104.0	101.9	99.8	97.5	95.8	94.1	92.3	90.5	89.0	87.7	86.2	84.8	83.6
Expectation of life: m	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.3
Expectation of life: fe	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: p	80.9	80.9	80.9	79.9	80.8	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	2,936	2,947	2,957	2,989	2,992	3,003	3,004	3,011	3,006	3,002	3,007	3,014	3,022	3,035	3,050	3,066	3,077	3,092	3,107	3,120
Female	3,002	3,007	3,012	3,029	3,029	3,029	3,029	3,025	3,017	3,008	3,006	3,008	3,011	3,021	3,036	3,051	3,063	3,079	3,096	3,109
<i>All</i>	5,938	5,954	5,969	6,018	6,021	6,032	6,034	6,036	6,023	6,010	6,013	6,022	6,033	6,057	6,085	6,117	6,140	6,170	6,204	6,229
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,103	3,117	3,116	3,124	3,130	3,125	3,119	3,122	3,109	3,096	3,087	3,088	3,090	3,098	3,112	3,123	3,135	3,152	3,165	3,177
Female	3,145	3,136	3,145	3,137	3,149	3,140	3,123	3,118	3,106	3,096	3,087	3,087	3,094	3,107	3,114	3,124	3,138	3,156	3,172	3,180
<i>All</i>	6,247	6,253	6,260	6,261	6,279	6,265	6,242	6,241	6,216	6,193	6,174	6,175	6,185	6,205	6,227	6,247	6,273	6,308	6,338	6,357
SMigR: males	80.6	80.7	80.7	80.9	80.9	80.8	80.7	80.8	80.8	80.8	80.7	80.8	80.8	80.8	80.9	80.9	80.9	81.0	81.0	81.0
SMigR: females	89.5	89.4	89.8	89.5	89.6	89.7	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.7	89.8	89.9	89.9	90.0	90.1	90.2
In-migration from Overseas																				
Male	577	406	509	475	420	405	404	389	378	372	373	373	374	374	375	375	375	375	376	377
Female	430	386	534	394	346	335	336	324	317	312	313	315	315	316	316	316	316	316	317	318
<i>All</i>	1,007	792	1,044	869	767	740	741	713	695	684	686	688	689	690	690	691	691	691	693	695
Out-migration to Overseas																				
Male	356	288	328	253	250	257	261	262	260	263	264	264	265	265	266	266	266	266	267	268
Female	358	265	232	217	211	216	221	221	221	223	224	226	226	226	227	227	227	227	228	229
<i>All</i>	714	552	559	469	461	472	482	484	482	486	488	490	491	492	492	492	493	493	495	497
SMigR: males	75.9	61.2	70.0	54.0	53.4	54.7	55.7	56.0	55.7	56.4	56.8	57.1	57.5	57.6	57.7	57.7	57.7	57.5	57.5	57.5
SMigR: females	98.0	72.9	63.8	59.7	58.1	59.6	61.2	61.5	61.8	62.6	63.2	63.9	64.2	64.5	64.7	64.6	64.6	64.4	64.5	64.5

Migration - Net Flows

UK	-309	-299	-291	-243	-258	-233	-208	-205	-193	-183	-161	-154	-152	-148	-141	-130	-133	-137	-134	-128
Overseas	+293	+240	+484	+400	+306	+268	+259	+229	+213	+198	+198	+198	+198	+198	+198	+198	+198	+198	+198	+198

Summary of population change

Natural change	+867	+830	+795	+650	+748	+748	+739	+730	+710	+692	+677	+652	+625	+596	+565	+534	+503	+478	+454	+428
Net migration	-16	-60	+193	+157	+48	+35	+51	+24	+20	+15	+37	+45	+46	+50	+57	+68	+65	+61	+64	+70
Net change	+851	+770	+988	+807	+796	+783	+790	+754	+730	+707	+714	+697	+671	+646	+622	+602	+567	+539	+518	+498
Crude Birth Rate /00	12.65	12.53	12.45	12.46	12.46	12.42	12.39	12.33	12.25	12.18	12.12	12.05	11.97	11.88	11.78	11.71	11.65	11.61	11.59	11.57
Crude Death Rate /00	7.46	7.59	7.74	8.63	8.08	8.05	8.10	8.11	8.16	8.22	8.26	8.34	8.43	8.51	8.60	8.71	8.85	8.95	9.07	9.20
Crude Net Migration	-0.09	-0.35	1.14	0.92	0.28	0.20	0.29	0.14	0.12	0.09	0.21	0.25	0.26	0.28	0.32	0.38	0.36	0.34	0.36	0.39

Summary of Population estimates/forecasts

	Population at mid-year																				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,468	11,458	11,437	11,231	11,053	10,903	10,830	10,794	10,811	10,817	10,816	10,806	10,791	10,772	10,746	10,715	10,684	10,658	10,640	10,634
5-10	12,033	12,398	12,696	13,077	13,427	13,714	13,866	13,858	13,844	13,739	13,554	13,389	13,252	13,185	13,155	13,180	13,193	13,197	13,189	13,171	13,147
11-15	10,793	10,598	10,276	10,036	10,060	9,991	10,192	10,512	10,816	11,053	11,340	11,513	11,580	11,604	11,562	11,380	11,219	11,081	11,016	10,996	11,027
16-17	4,658	4,529	4,523	4,460	4,191	4,191	4,152	3,964	3,916	3,998	4,136	4,279	4,467	4,532	4,538	4,649	4,730	4,712	4,635	4,529	4,436
18-59Female, 64Ma	98,411	98,286	98,297	98,381	98,540	98,581	98,464	98,471	98,203	97,823	97,508	97,307	97,018	96,752	96,609	96,365	96,123	95,923	95,719	95,536	95,273
60/65 -74	19,274	19,903	20,342	20,802	21,219	21,588	21,861	22,068	22,298	22,647	22,840	22,691	22,858	23,101	23,371	23,790	24,184	24,683	25,081	25,485	25,941
75-84	7,537	7,778	8,093	8,348	8,619	8,872	9,234	9,651	10,114	10,467	10,922	11,652	12,145	12,614	12,981	13,304	13,583	13,730	13,920	14,090	14,173
85+	2,699	2,722	2,767	2,899	2,961	3,053	3,154	3,264	3,384	3,561	3,690	3,873	4,092	4,309	4,546	4,742	5,010	5,315	5,647	5,935	6,250
Total	166,831	167,682	168,452	169,440	170,247	171,043	171,825	172,616	173,370	174,100	174,806	175,520	176,217	176,888	177,534	178,156	178,758	179,325	179,865	180,382	180,880

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
65+ / 16-65	0.22	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.30	0.30	0.31	0.31	0.32	0.33	0.34	0.34	0.35	0.36	0.37
0-15 and 65+ / 16-65	0.54	0.56	0.57	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.64	0.65	0.65	0.66	0.67	0.67	0.68	0.69	0.70
Median age males	36.9	37.1	37.3	37.5	37.5	37.6	37.7	37.8	38.0	38.1	38.2	38.4	38.5	38.6	38.8	38.9	39.0	39.0	39.2	39.3
Median age females	38.5	38.8	39.0	39.1	39.3	39.4	39.5	39.5	39.7	39.9	40.2	40.4	40.6	40.8	41.0	41.2	41.3	41.5	41.7	41.9
Sex ratio males /100	98.1	98.3	98.3	98.2	98.3	98.4	98.5	98.5	98.6	98.6	98.7	98.8	98.8	98.9	99.0	99.0	99.1	99.1	99.2	99.3

Households

Number of Househo	66,666	67,163	67,654	68,291	68,981	69,661	70,354	70,984	71,644	72,290	72,938	73,547	74,121	74,703	75,286	75,880	76,453	76,979	77,525	78,061	78,586
Change in Households over pre	+497	+491	+637	+690	+680	+693	+631	+659	+646	+648	+609	+574	+581	+583	+595	+573	+525	+546	+536	+526	
Number of Dwellings	68,748	69,260	69,767	70,424	71,135	71,836	72,551	73,201	73,881	74,547	75,215	75,844	76,436	77,035	77,637	78,250	78,841	79,382	79,946	80,498	81,040
Change in Dwellings over previ	+512	+506	+657	+711	+701	+714	+650	+680	+666	+668	+628	+592	+599	+601	+613	+591	+542	+563	+553	+542	

Economically active

Number of Economic	85,111	85,554	85,930	86,377	86,568	86,815	86,962	87,056	87,026	87,023	86,960	86,966	86,978	86,941	86,985	87,102	87,230	87,275	87,248	87,219	87,153
Change in Economically active	+443	+375	+448	+191	+247	+147	+94	-30	-3	-62	+6	+12	-37	+44	+117	+128	+45	-28	-29	-66	
Number of Jobs	82,305	83,141	83,916	84,765	85,365	86,023	86,584	87,093	87,477	87,889	88,241	88,247	88,259	88,222	88,267	88,385	88,515	88,561	88,533	88,504	88,437
Change in Jobs over previous y	+837	+775	+849	+600	+658	+561	+509	+385	+412	+352	+6	+12	-38	+45	+118	+130	+46	-28	-29	-67	

2014 SNPP 50% FR25-44 HFRs

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	Year beginning July 1st																			
	2011-12	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	1,083	1,078	1,077	1,084	1,089	1,090	1,093	1,093	1,090	1,089	1,087	1,085	1,082	1,078	1,073	1,070	1,069	1,068	1,069	1,070
Female	1,032	1,027	1,026	1,032	1,037	1,038	1,041	1,041	1,038	1,037	1,035	1,033	1,031	1,027	1,022	1,019	1,018	1,018	1,018	1,019
<i>All Births</i>	2,115	2,106	2,103	2,116	2,126	2,129	2,135	2,133	2,127	2,125	2,123	2,118	2,113	2,105	2,095	2,089	2,086	2,086	2,087	2,090
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	635	656	733	698	691	703	711	720	729	735	746	759	770	781	794	809	820	834	848
Female	634	641	652	733	680	690	692	693	698	705	711	720	729	739	749	761	775	788	800	813
<i>All deaths</i>	1,248	1,276	1,308	1,466	1,378	1,381	1,395	1,404	1,418	1,433	1,446	1,466	1,488	1,509	1,530	1,555	1,584	1,607	1,634	1,661
SMR: males	112.2	112.2	112.0	121.1	112.2	107.5	105.7	103.4	101.2	99.0	96.5	94.6	93.0	91.1	89.2	87.8	86.4	84.8	83.5	82.4
SMR: females	110.0	109.4	109.7	119.9	109.9	108.9	107.1	104.5	102.5	100.6	98.7	97.0	95.2	93.6	91.9	90.4	89.2	87.7	86.2	85.0
SMR: persons	111.1	110.8	110.9	120.5	111.0	108.2	106.4	104.0	101.9	99.8	97.5	95.8	94.1	92.3	90.5	89.0	87.7	86.2	84.8	83.6
Expectation of life: m	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.3
Expectation of life: fe	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: p	80.9	80.9	80.9	79.9	80.8	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	2,936	2,947	2,957	2,989	2,992	3,003	3,004	3,011	3,006	3,002	3,007	3,014	3,022	3,035	3,050	3,066	3,077	3,092	3,107	3,120
Female	3,002	3,007	3,012	3,029	3,029	3,029	3,029	3,025	3,017	3,008	3,006	3,008	3,011	3,021	3,036	3,051	3,063	3,079	3,096	3,109
<i>All</i>	5,938	5,954	5,969	6,018	6,021	6,032	6,034	6,036	6,023	6,010	6,013	6,022	6,033	6,057	6,085	6,117	6,140	6,170	6,204	6,229
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,103	3,117	3,116	3,124	3,130	3,125	3,119	3,122	3,109	3,096	3,087	3,088	3,090	3,098	3,112	3,123	3,135	3,152	3,165	3,177
Female	3,145	3,136	3,145	3,137	3,149	3,140	3,123	3,118	3,106	3,096	3,087	3,087	3,094	3,107	3,114	3,124	3,138	3,156	3,172	3,180
<i>All</i>	6,247	6,253	6,260	6,261	6,279	6,265	6,242	6,241	6,216	6,193	6,174	6,175	6,185	6,205	6,227	6,247	6,273	6,308	6,338	6,357
SMigR: males	80.6	80.7	80.7	80.9	80.9	80.8	80.7	80.8	80.8	80.8	80.7	80.8	80.8	80.8	80.9	80.9	80.9	81.0	81.0	81.0
SMigR: females	89.5	89.4	89.8	89.5	89.6	89.7	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.7	89.8	89.9	89.9	90.0	90.1	90.2
In-migration from Overseas																				
Male	577	406	509	475	420	405	404	389	378	372	373	373	374	374	375	375	375	375	376	377
Female	430	386	534	394	346	335	336	324	317	312	313	315	315	316	316	316	316	316	317	318
<i>All</i>	1,007	792	1,044	869	767	740	741	713	695	684	686	688	689	690	690	691	691	691	693	695
Out-migration to Overseas																				
Male	356	288	328	253	250	257	261	262	260	263	264	264	265	265	266	266	266	266	267	268
Female	358	265	232	217	211	216	221	221	221	223	224	226	226	226	227	227	227	227	228	229
<i>All</i>	714	552	559	469	461	472	482	484	482	486	488	490	491	492	492	492	493	493	495	497
SMigR: males	75.9	61.2	70.0	54.0	53.4	54.7	55.7	56.0	55.7	56.4	56.8	57.1	57.5	57.6	57.7	57.7	57.7	57.5	57.5	57.5
SMigR: females	98.0	72.9	63.8	59.7	58.1	59.6	61.2	61.5	61.8	62.6	63.2	63.9	64.2	64.5	64.7	64.6	64.6	64.4	64.5	64.5

Migration - Net Flows

UK	-309	-299	-291	-243	-258	-233	-208	-205	-193	-183	-161	-154	-152	-148	-141	-130	-133	-137	-134	-128
Overseas	+293	+240	+484	+400	+306	+268	+259	+229	+213	+198	+198	+198	+198	+198	+198	+198	+198	+198	+198	+198

Summary of population change

Natural change	+867	+830	+795	+650	+748	+748	+739	+730	+710	+692	+677	+652	+625	+596	+565	+534	+503	+478	+454	+428
Net migration	-16	-60	+193	+157	+48	+35	+51	+24	+20	+15	+37	+45	+46	+50	+57	+68	+65	+61	+64	+70
Net change	+851	+770	+988	+807	+796	+783	+790	+754	+730	+707	+714	+697	+671	+646	+622	+602	+567	+539	+518	+498
Crude Birth Rate /00	12.65	12.53	12.45	12.46	12.46	12.42	12.39	12.33	12.25	12.18	12.12	12.05	11.97	11.88	11.78	11.71	11.65	11.61	11.59	11.57
Crude Death Rate /00	7.46	7.59	7.74	8.63	8.08	8.05	8.10	8.11	8.16	8.22	8.26	8.34	8.43	8.51	8.60	8.71	8.85	8.95	9.07	9.20
Crude Net Migration	-0.09	-0.35	1.14	0.92	0.28	0.20	0.29	0.14	0.12	0.09	0.21	0.25	0.26	0.28	0.32	0.38	0.36	0.34	0.36	0.39

Summary of Population estimates/forecasts

	Population at mid-year																				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,468	11,458	11,437	11,231	11,053	10,903	10,830	10,794	10,811	10,817	10,816	10,806	10,791	10,772	10,746	10,715	10,684	10,658	10,640	10,634
5-10	12,033	12,398	12,696	13,077	13,427	13,714	13,866	13,858	13,844	13,739	13,554	13,389	13,252	13,185	13,155	13,180	13,193	13,197	13,189	13,171	13,147
11-15	10,793	10,598	10,276	10,036	10,060	9,991	10,192	10,512	10,816	11,053	11,340	11,513	11,580	11,604	11,562	11,380	11,219	11,081	11,016	10,996	11,027
16-17	4,658	4,529	4,523	4,460	4,191	4,191	4,152	3,964	3,916	3,998	4,136	4,279	4,467	4,532	4,538	4,649	4,730	4,712	4,635	4,529	4,436
18-59Female, 64Ma	98,411	98,286	98,297	98,381	98,540	98,581	98,464	98,471	98,203	97,823	97,508	97,307	97,018	96,752	96,609	96,365	96,123	95,923	95,719	95,536	95,273
60/65 -74	19,274	19,903	20,342	20,802	21,219	21,588	21,861	22,068	22,298	22,647	22,840	22,691	22,858	23,101	23,371	23,790	24,184	24,683	25,081	25,485	25,941
75-84	7,537	7,778	8,093	8,348	8,619	8,872	9,234	9,651	10,114	10,467	10,922	11,652	12,145	12,614	12,981	13,304	13,583	13,730	13,920	14,090	14,173
85+	2,699	2,722	2,767	2,899	2,961	3,053	3,154	3,264	3,384	3,561	3,690	3,873	4,092	4,309	4,546	4,742	5,010	5,315	5,647	5,935	6,250
Total	166,831	167,682	168,452	169,440	170,247	171,043	171,825	172,616	173,370	174,100	174,806	175,520	176,217	176,888	177,534	178,156	178,758	179,325	179,865	180,382	180,880

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
65+ / 16-65	0.22	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.30	0.30	0.31	0.31	0.32	0.33	0.34	0.34	0.35	0.36	0.37	0.38
0-15 and 65+ / 16-65	0.54	0.56	0.57	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.64	0.65	0.65	0.66	0.67	0.67	0.68	0.69	0.70	0.71
Median age males	36.9	37.1	37.3	37.5	37.5	37.6	37.7	37.8	38.0	38.1	38.2	38.4	38.5	38.6	38.8	38.9	39.0	39.0	39.2	39.3	39.5
Median age females	38.5	38.8	39.0	39.1	39.3	39.4	39.5	39.5	39.7	39.9	40.2	40.4	40.6	40.8	41.0	41.2	41.3	41.5	41.7	41.9	42.0
Sex ratio males /100	98.1	98.3	98.3	98.2	98.3	98.4	98.5	98.5	98.6	98.6	98.7	98.8	98.8	98.9	99.0	99.0	99.1	99.1	99.2	99.3	99.3

Households

Number of Househo	66,666	67,163	67,654	68,291	68,913	69,525	70,149	70,712	71,302	71,881	72,461	73,000	73,505	74,021	74,538	75,072	75,585	76,053	76,540	77,014	77,475
Change in Households over pre	+497	+491	+637	+622	+612	+624	+562	+590	+579	+580	+539	+506	+516	+517	+534	+513	+468	+487	+475	+461	
Number of Dwellings	68,748	69,260	69,767	70,424	71,065	71,696	72,340	72,920	73,529	74,126	74,724	75,279	75,801	76,333	76,866	77,417	77,945	78,428	78,930	79,419	79,895
Change in Dwellings over previ	+512	+506	+657	+641	+631	+644	+580	+609	+597	+598	+556	+522	+532	+533	+551	+529	+483	+502	+490	+476	

Economically active

Number of Economic	85,111	85,554	85,930	86,377	86,568	86,815	86,962	87,056	87,026	87,023	86,960	86,966	86,978	86,941	86,985	87,102	87,230	87,275	87,248	87,219	87,153
Change in Economically active		+443	+375	+448	+191	+247	+147	+94	-30	-3	-62	+6	+12	-37	+44	+117	+128	+45	-28	-29	-66
Number of Jobs	82,305	83,141	83,916	84,765	85,365	86,023	86,584	87,093	87,477	87,889	88,241	88,247	88,259	88,222	88,267	88,385	88,515	88,561	88,533	88,504	88,437
Change in Jobs over previous y		+837	+775	+849	+600	+658	+561	+509	+385	+412	+352	+6	+12	-38	+45	+118	+130	+46	-28	-29	-67

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	Year beginning July 1st																			
	2011-12	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	1,083	1,078	1,077	1,084	1,089	1,090	1,093	1,093	1,090	1,089	1,087	1,085	1,082	1,078	1,073	1,070	1,069	1,068	1,069	1,070
Female	1,032	1,027	1,026	1,032	1,037	1,038	1,041	1,041	1,038	1,037	1,035	1,033	1,031	1,027	1,022	1,019	1,018	1,018	1,018	1,019
<i>All Births</i>	2,115	2,106	2,103	2,116	2,126	2,129	2,135	2,133	2,127	2,125	2,123	2,118	2,113	2,105	2,095	2,089	2,086	2,086	2,087	2,090
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	635	656	733	698	691	703	711	720	729	735	746	759	770	781	794	809	820	834	848
Female	634	641	652	733	680	690	692	693	698	705	711	720	729	739	749	761	775	788	800	813
<i>All deaths</i>	1,248	1,276	1,308	1,466	1,378	1,381	1,395	1,404	1,418	1,433	1,446	1,466	1,488	1,509	1,530	1,555	1,584	1,607	1,634	1,661
SMR: males	112.2	112.2	112.0	121.1	112.2	107.5	105.7	103.4	101.2	99.0	96.5	94.6	93.0	91.1	89.2	87.8	86.4	84.8	83.5	82.4
SMR: females	110.0	109.4	109.7	119.9	109.9	108.9	107.1	104.5	102.5	100.6	98.7	97.0	95.2	93.6	91.9	90.4	89.2	87.7	86.2	85.0
SMR: persons	111.1	110.8	110.9	120.5	111.0	108.2	106.4	104.0	101.9	99.8	97.5	95.8	94.1	92.3	90.5	89.0	87.7	86.2	84.8	83.6
Expectation of life: m	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.3
Expectation of life: fe	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: p	80.9	80.9	80.9	79.9	80.8	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	2,936	2,947	2,957	2,989	2,992	3,003	3,004	3,011	3,006	3,002	3,007	3,014	3,022	3,035	3,050	3,066	3,077	3,092	3,107	3,120
Female	3,002	3,007	3,012	3,029	3,029	3,029	3,029	3,025	3,017	3,008	3,006	3,008	3,011	3,021	3,036	3,051	3,063	3,079	3,096	3,109
<i>All</i>	5,938	5,954	5,969	6,018	6,021	6,032	6,034	6,036	6,023	6,010	6,013	6,022	6,033	6,057	6,085	6,117	6,140	6,170	6,204	6,229
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,103	3,117	3,116	3,124	3,130	3,125	3,119	3,122	3,109	3,096	3,087	3,088	3,090	3,098	3,112	3,123	3,135	3,152	3,165	3,177
Female	3,145	3,136	3,145	3,137	3,149	3,140	3,123	3,118	3,106	3,096	3,087	3,087	3,094	3,107	3,114	3,124	3,138	3,156	3,172	3,180
<i>All</i>	6,247	6,253	6,260	6,261	6,279	6,265	6,242	6,241	6,216	6,193	6,174	6,175	6,185	6,205	6,227	6,247	6,273	6,308	6,338	6,357
SMigR: males	80.6	80.7	80.7	80.9	80.9	80.8	80.7	80.8	80.8	80.8	80.7	80.8	80.8	80.8	80.9	80.9	80.9	81.0	81.0	81.0
SMigR: females	89.5	89.4	89.8	89.5	89.6	89.7	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.7	89.8	89.9	89.9	90.0	90.1	90.2
In-migration from Overseas																				
Male	577	406	509	475	420	405	404	389	378	372	373	373	374	374	375	375	375	375	376	377
Female	430	386	534	394	346	335	336	324	317	312	313	315	315	316	316	316	316	316	317	318
<i>All</i>	1,007	792	1,044	869	767	740	741	713	695	684	686	688	689	690	690	691	691	691	693	695
Out-migration to Overseas																				
Male	356	288	328	253	250	257	261	262	260	263	264	264	265	265	266	266	266	266	267	268
Female	358	265	232	217	211	216	221	221	221	223	224	226	226	226	227	227	227	227	228	229
<i>All</i>	714	552	559	469	461	472	482	484	482	486	488	490	491	492	492	492	493	493	495	497
SMigR: males	75.9	61.2	70.0	54.0	53.4	54.7	55.7	56.0	55.7	56.4	56.8	57.1	57.5	57.6	57.7	57.7	57.7	57.5	57.5	57.5
SMigR: females	98.0	72.9	63.8	59.7	58.1	59.6	61.2	61.5	61.8	62.6	63.2	63.9	64.2	64.5	64.7	64.6	64.6	64.4	64.5	64.5

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Migration - Net Flows

UK	-309	-299	-291	-243	-258	-233	-208	-205	-193	-183	-161	-154	-152	-148	-141	-130	-133	-137	-134	-128
Overseas	+293	+240	+484	+400	+306	+268	+259	+229	+213	+198	+198	+198	+198	+198	+198	+198	+198	+198	+198	+198

Summary of population change

Natural change	+867	+830	+795	+650	+748	+748	+739	+730	+710	+692	+677	+652	+625	+596	+565	+534	+503	+478	+454	+428
Net migration	-16	-60	+193	+157	+48	+35	+51	+24	+20	+15	+37	+45	+46	+50	+57	+68	+65	+61	+64	+70
Net change	+851	+770	+988	+807	+796	+783	+790	+754	+730	+707	+714	+697	+671	+646	+622	+602	+567	+539	+518	+498
Crude Birth Rate /00	12.65	12.53	12.45	12.46	12.46	12.42	12.39	12.33	12.25	12.18	12.12	12.05	11.97	11.88	11.78	11.71	11.65	11.61	11.59	11.57
Crude Death Rate /00	7.46	7.59	7.74	8.63	8.08	8.05	8.10	8.11	8.16	8.22	8.26	8.34	8.43	8.51	8.60	8.71	8.85	8.95	9.07	9.20
Crude Net Migration	-0.09	-0.35	1.14	0.92	0.28	0.20	0.29	0.14	0.12	0.09	0.21	0.25	0.26	0.28	0.32	0.38	0.36	0.34	0.36	0.39

Summary of Population estimates/forecasts

	Population at mid-year																				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,468	11,458	11,437	11,231	11,053	10,903	10,830	10,794	10,811	10,817	10,816	10,806	10,791	10,772	10,746	10,715	10,684	10,658	10,640	10,634
5-10	12,033	12,398	12,696	13,077	13,427	13,714	13,866	13,858	13,844	13,739	13,554	13,389	13,252	13,185	13,155	13,180	13,193	13,197	13,189	13,171	13,147
11-15	10,793	10,598	10,276	10,036	10,060	9,991	10,192	10,512	10,816	11,053	11,340	11,513	11,580	11,604	11,562	11,380	11,219	11,081	11,016	10,996	11,027
16-17	4,658	4,529	4,523	4,460	4,191	4,191	4,152	3,964	3,916	3,998	4,136	4,279	4,467	4,532	4,538	4,649	4,730	4,712	4,635	4,529	4,436
18-59Female, 64Ma	98,411	98,286	98,297	98,381	98,540	98,581	98,464	98,471	98,203	97,823	97,508	97,307	97,018	96,752	96,609	96,365	96,123	95,923	95,719	95,536	95,273
60/65 -74	19,274	19,903	20,342	20,802	21,219	21,588	21,861	22,068	22,298	22,647	22,840	22,691	22,858	23,101	23,371	23,790	24,184	24,683	25,081	25,485	25,941
75-84	7,537	7,778	8,093	8,348	8,619	8,872	9,234	9,651	10,114	10,467	10,922	11,652	12,145	12,614	12,981	13,304	13,583	13,730	13,920	14,090	14,173
85+	2,699	2,722	2,767	2,899	2,961	3,053	3,154	3,264	3,384	3,561	3,690	3,873	4,092	4,309	4,546	4,742	5,010	5,315	5,647	5,935	6,250
Total	166,831	167,682	168,452	169,440	170,247	171,043	171,825	172,616	173,370	174,100	174,806	175,520	176,217	176,888	177,534	178,156	178,758	179,325	179,865	180,382	180,880

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
65+ / 16-65	0.22	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.30	0.30	0.31	0.31	0.32	0.33	0.34	0.34	0.35	0.36	0.37	0.38
0-15 and 65+ / 16-65	0.54	0.56	0.57	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.64	0.65	0.65	0.66	0.67	0.67	0.68	0.69	0.70	0.71
Median age males	36.9	37.1	37.3	37.5	37.5	37.6	37.7	37.8	38.0	38.1	38.2	38.4	38.5	38.6	38.8	38.9	39.0	39.0	39.2	39.3	39.5
Median age females	38.5	38.8	39.0	39.1	39.3	39.4	39.5	39.5	39.7	39.9	40.2	40.4	40.6	40.8	41.0	41.2	41.3	41.5	41.7	41.9	42.0
Sex ratio males /100	98.1	98.3	98.3	98.2	98.3	98.4	98.5	98.5	98.6	98.6	98.7	98.8	98.8	98.9	99.0	99.0	99.1	99.1	99.2	99.3	99.3

Households

Number of Househo	66,666	67,163	67,654	68,291	68,942	69,584	70,240	70,833	71,455	72,065	72,676	73,246	73,784	74,325	74,869	75,424	75,955	76,444	76,958	77,460	77,956
Change in Households over pre	+497	+491	+637	+651	+642	+656	+593	+622	+609	+612	+570	+538	+541	+544	+555	+530	+489	+514	+502	+496	
Number of Dwellings	68,748	69,260	69,767	70,424	71,095	71,757	72,434	73,045	73,686	74,315	74,946	75,533	76,088	76,646	77,207	77,779	78,326	78,831	79,361	79,879	80,390
Change in Dwellings over previ	+512	+506	+657	+671	+662	+676	+611	+642	+628	+631	+587	+555	+558	+561	+573	+547	+505	+530	+517	+512	

Economically active

Number of Economic	85,111	85,554	85,930	86,377	86,568	86,815	86,962	87,056	87,026	87,023	86,960	86,966	86,978	86,941	86,985	87,102	87,230	87,275	87,248	87,219	87,153
Change in Economically active		+443	+375	+448	+191	+247	+147	+94	-30	-3	-62	+6	+12	-37	+44	+117	+128	+45	-28	-29	-66
Number of Jobs	82,305	83,141	83,916	84,765	85,365	86,023	86,584	87,093	87,477	87,889	88,241	88,247	88,259	88,222	88,267	88,385	88,515	88,561	88,533	88,504	88,437
Change in Jobs over previous y		+837	+775	+849	+600	+658	+561	+509	+385	+412	+352	+6	+12	-38	+45	+118	+130	+46	-28	-29	-67

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	Year beginning July 1st																			
	2011-12	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	1,083	1,078	1,077	1,077	1,099	1,100	1,104	1,104	1,101	1,101	1,101	1,100	1,098	1,095	1,090	1,088	1,087	1,087	1,088	1,089
Female	1,031	1,026	1,025	1,026	1,046	1,047	1,051	1,051	1,049	1,049	1,049	1,048	1,046	1,043	1,039	1,036	1,035	1,035	1,036	1,037
<i>All Births</i>	2,114	2,104	2,102	2,104	2,145	2,147	2,155	2,155	2,150	2,151	2,150	2,148	2,144	2,138	2,129	2,124	2,122	2,122	2,124	2,126
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	635	656	733	698	690	702	709	717	725	731	742	754	764	774	787	801	811	824	838
Female	634	641	652	733	680	690	692	693	698	704	710	719	728	737	746	758	771	783	795	808
<i>All deaths</i>	1,248	1,276	1,308	1,466	1,378	1,380	1,394	1,402	1,415	1,430	1,441	1,461	1,481	1,501	1,521	1,545	1,572	1,594	1,619	1,646
SMR: males	112.2	112.2	112.0	121.1	112.2	107.5	105.7	103.5	101.2	99.0	96.5	94.6	92.9	91.1	89.2	87.7	86.4	84.7	83.5	82.4
SMR: females	110.0	109.4	109.7	119.9	109.8	108.9	107.1	104.6	102.5	100.6	98.6	97.0	95.2	93.6	91.8	90.4	89.1	87.6	86.2	84.9
SMR: persons	111.1	110.8	110.9	120.5	111.0	108.2	106.4	104.0	101.8	99.8	97.5	95.8	94.0	92.3	90.5	89.0	87.7	86.1	84.8	83.6
Expectation of life: m	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.4
Expectation of life: fe	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: p	80.9	80.9	80.9	79.9	80.9	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	2,978	2,988	2,999	3,031	3,033	3,045	3,047	3,054	3,050	3,047	3,052	3,059	3,068	3,079	3,094	3,110	3,120	3,134	3,150	3,161
Female	2,981	2,987	2,992	3,009	3,009	3,010	3,013	3,010	3,004	2,997	2,996	2,997	3,000	3,010	3,022	3,037	3,050	3,064	3,079	3,091
<i>All</i>	5,959	5,975	5,991	6,041	6,043	6,055	6,060	6,064	6,054	6,044	6,047	6,056	6,068	6,088	6,116	6,146	6,169	6,198	6,229	6,252
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,134	3,150	3,148	3,155	3,177	3,175	3,172	3,178	3,168	3,159	3,154	3,161	3,169	3,181	3,205	3,219	3,236	3,255	3,271	3,286
Female	3,160	3,155	3,161	3,153	3,182	3,169	3,153	3,151	3,136	3,129	3,123	3,125	3,136	3,150	3,157	3,165	3,182	3,204	3,220	3,227
<i>All</i>	6,294	6,304	6,309	6,308	6,360	6,344	6,325	6,329	6,304	6,289	6,277	6,286	6,305	6,332	6,362	6,385	6,418	6,459	6,492	6,513
SMigR: males	81.4	81.6	81.5	81.7	81.7	81.6	81.5	81.6	81.5	81.5	81.4	81.5	81.5	81.5	81.7	81.7	81.8	81.8	81.9	81.9
SMigR: females	89.9	90.0	90.2	90.0	90.1	90.1	89.9	90.0	89.9	89.9	89.9	89.9	90.0	90.2	90.3	90.3	90.4	90.5	90.6	90.7
In-migration from Overseas																				
Male	546	396	500	842	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
Female	423	437	585	838	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376
<i>All</i>	969	833	1,084	1,680	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847
Out-migration to Overseas																				
Male	334	286	327	134	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267
Female	313	276	245	197	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204
<i>All</i>	648	562	572	331	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
SMigR: males	71.3	61.0	69.8	28.6	56.7	56.6	56.6	56.6	56.6	56.6	56.7	56.8	56.9	56.9	56.9	56.7	56.6	56.3	56.1	55.8
SMigR: females	85.8	75.9	67.5	54.3	55.9	56.0	56.2	56.4	56.6	56.8	57.1	57.3	57.4	57.5	57.6	57.5	57.4	57.3	57.1	56.9

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Migration - Net Flows

UK	-335	-329	-318	-268	-317	-289	-264	-265	-250	-244	-230	-230	-237	-243	-246	-238	-249	-262	-263	-261
Overseas	+321	+271	+512	+1,349	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376

Summary of population change

Natural change	+865	+828	+794	+637	+766	+768	+760	+753	+735	+721	+709	+687	+663	+637	+608	+579	+550	+528	+505	+480
Net migration	-14	-58	+194	+1,082	+59	+87	+111	+111	+125	+132	+146	+146	+139	+132	+130	+138	+127	+114	+113	+114
Net change	+851	+770	+988	+1,719	+825	+854	+872	+863	+861	+852	+855	+833	+802	+769	+738	+717	+677	+642	+617	+595
Crude Birth Rate /00	12.64	12.52	12.44	12.35	12.50	12.45	12.43	12.37	12.29	12.23	12.17	12.10	12.02	11.93	11.83	11.76	11.70	11.66	11.63	11.60
Crude Death Rate /00	7.46	7.59	7.74	8.61	8.03	8.00	8.05	8.05	8.09	8.13	8.16	8.23	8.30	8.38	8.45	8.55	8.67	8.76	8.87	8.98
Crude Net Migration	-0.08	-0.34	1.15	6.35	0.34	0.50	0.64	0.64	0.72	0.75	0.83	0.82	0.78	0.74	0.72	0.76	0.70	0.63	0.62	0.62

Summary of Population estimates/forecasts

	Population at mid-year																				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,468	11,458	11,437	11,276	11,063	10,909	10,845	10,806	10,915	10,930	10,940	10,941	10,936	10,926	10,908	10,883	10,858	10,836	10,821	10,817
5-10	12,033	12,398	12,696	13,077	13,513	13,808	13,965	13,931	13,940	13,745	13,551	13,364	13,228	13,175	13,147	13,251	13,273	13,288	13,291	13,283	13,268
11-15	10,793	10,598	10,276	10,036	10,119	10,065	10,278	10,612	10,916	11,172	11,458	11,661	11,719	11,749	11,706	11,446	11,266	11,126	11,073	11,054	11,153
16-17	4,658	4,529	4,523	4,460	4,223	4,233	4,192	4,009	3,964	4,033	4,198	4,347	4,537	4,593	4,595	4,727	4,821	4,799	4,695	4,589	4,443
18-59Female, 64Ma	98,411	98,286	98,297	98,381	99,149	99,241	99,193	99,287	99,118	98,882	98,682	98,618	98,464	98,300	98,272	98,116	98,002	97,925	97,835	97,726	97,546
60/65 -74	19,274	19,903	20,342	20,802	21,295	21,649	21,931	22,158	22,392	22,746	22,964	22,801	22,991	23,252	23,537	23,967	24,342	24,819	25,224	25,651	26,098
75-84	7,537	7,778	8,093	8,348	8,629	8,892	9,244	9,628	10,082	10,421	10,853	11,578	12,059	12,530	12,895	13,210	13,502	13,668	13,855	14,033	14,128
85+	2,699	2,722	2,767	2,899	2,955	3,034	3,127	3,241	3,356	3,521	3,651	3,833	4,037	4,243	4,468	4,660	4,911	5,194	5,512	5,780	6,079
Total	166,831	167,682	168,452	169,440	171,159	171,984	172,838	173,710	174,573	175,434	176,287	177,142	177,975	178,777	179,546	180,284	181,001	181,678	182,320	182,937	183,532

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.32	0.33
65+ / 16-65	0.22	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.29	0.30	0.30	0.31	0.32	0.32	0.33	0.34	0.35	0.35	0.36	0.37
0-15 and 65+ / 16-65	0.54	0.56	0.57	0.57	0.58	0.59	0.60	0.61	0.62	0.62	0.63	0.64	0.64	0.65	0.65	0.66	0.66	0.67	0.68	0.69	0.70
Median age males	36.9	37.1	37.3	37.5	37.5	37.6	37.6	37.8	37.9	38.0	38.1	38.3	38.4	38.5	38.6	38.7	38.8	38.9	39.0	39.2	39.3
Median age females	38.5	38.8	39.0	39.1	39.2	39.3	39.4	39.4	39.6	39.9	40.1	40.3	40.5	40.7	40.9	41.0	41.2	41.4	41.6	41.8	41.9
Sex ratio males /100	98.1	98.3	98.3	98.2	98.4	98.5	98.7	98.8	98.9	99.0	99.1	99.2	99.3	99.4	99.5	99.6	99.7	99.8	99.8	99.9	100.0

Households

Number of Househo	66,666	67,163	67,654	68,291	69,258	69,816	70,410	70,946	71,517	72,085	72,653	73,189	73,690	74,209	74,727	75,261	75,771	76,231	76,710	77,167	77,598
Change in Households over pre	+497	+491	+637	+967	+557	+595	+536	+571	+568	+569	+536	+500	+519	+518	+533	+511	+460	+479	+456	+431	
Number of Dwellings	68,748	69,260	69,767	70,424	71,421	71,996	72,609	73,161	73,750	74,336	74,922	75,475	75,991	76,526	77,061	77,611	78,138	78,612	79,106	79,576	80,021
Change in Dwellings over previ	+512	+506	+657	+997	+575	+613	+552	+589	+586	+587	+553	+516	+535	+535	+550	+527	+474	+494	+471	+445	

Economically active

Number of Economic	85,111	85,554	85,930	86,377	87,135	87,414	87,623	87,794	87,850	87,950	88,007	88,136	88,261	88,318	88,461	88,671	88,909	89,044	89,089	89,130	89,108
Change in Economically active		+443	+375	+448	+758	+279	+209	+170	+57	+100	+56	+129	+126	+56	+144	+209	+239	+135	+45	+42	-22
Number of Jobs	82,305	83,141	83,916	84,765	85,925	86,617	87,242	87,830	88,306	88,826	89,303	89,434	89,561	89,619	89,764	89,977	90,219	90,356	90,401	90,443	90,421
Change in Jobs over previous y		+837	+775	+849	+1,160	+692	+625	+588	+476	+520	+477	+131	+128	+57	+146	+213	+242	+137	+45	+42	-22

	<i>Year beginning July 1st</i>																			
	2011-12	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	1,083	1,078	1,077	1,077	1,099	1,100	1,104	1,104	1,101	1,101	1,101	1,100	1,098	1,095	1,090	1,088	1,087	1,087	1,088	1,089
Female	1,031	1,026	1,025	1,026	1,046	1,047	1,051	1,051	1,049	1,049	1,049	1,048	1,046	1,043	1,039	1,036	1,035	1,035	1,036	1,037
<i>All Births</i>	2,114	2,104	2,102	2,104	2,145	2,147	2,155	2,155	2,150	2,151	2,150	2,148	2,144	2,138	2,129	2,124	2,122	2,122	2,124	2,126
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	635	656	733	698	690	702	709	717	725	731	742	754	764	774	787	801	811	824	838
Female	634	641	652	733	680	690	692	693	698	704	710	719	728	737	746	758	771	783	795	808
<i>All deaths</i>	1,248	1,276	1,308	1,466	1,378	1,380	1,394	1,402	1,415	1,430	1,441	1,461	1,481	1,501	1,521	1,545	1,572	1,594	1,619	1,646
SMR: males	112.2	112.2	112.0	121.1	112.2	107.5	105.7	103.5	101.2	99.0	96.5	94.6	92.9	91.1	89.2	87.7	86.4	84.7	83.5	82.4
SMR: females	110.0	109.4	109.7	119.9	109.8	108.9	107.1	104.6	102.5	100.6	98.6	97.0	95.2	93.6	91.8	90.4	89.1	87.6	86.2	84.9
SMR: persons	111.1	110.8	110.9	120.5	111.0	108.2	106.4	104.0	101.8	99.8	97.5	95.8	94.0	92.3	90.5	89.0	87.7	86.1	84.8	83.6
Expectation of life: m	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.4
Expectation of life: fe	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: p	80.9	80.9	80.9	79.9	80.9	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	2,978	2,988	2,999	3,031	3,033	3,045	3,047	3,054	3,050	3,047	3,052	3,059	3,068	3,079	3,094	3,110	3,120	3,134	3,150	3,161
Female	2,981	2,987	2,992	3,009	3,009	3,010	3,013	3,010	3,004	2,997	2,996	2,997	3,000	3,010	3,022	3,037	3,050	3,064	3,079	3,091
<i>All</i>	5,959	5,975	5,991	6,041	6,043	6,055	6,060	6,064	6,054	6,044	6,047	6,056	6,068	6,088	6,116	6,146	6,169	6,198	6,229	6,252
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,134	3,150	3,148	3,155	3,177	3,175	3,172	3,178	3,168	3,159	3,154	3,161	3,169	3,181	3,205	3,219	3,236	3,255	3,271	3,286
Female	3,160	3,155	3,161	3,153	3,182	3,169	3,153	3,151	3,136	3,129	3,123	3,125	3,136	3,150	3,157	3,165	3,182	3,204	3,220	3,227
<i>All</i>	6,294	6,304	6,309	6,308	6,360	6,344	6,325	6,329	6,304	6,289	6,277	6,286	6,305	6,332	6,362	6,385	6,418	6,459	6,492	6,513
SMigR: males	81.4	81.6	81.5	81.7	81.7	81.6	81.5	81.6	81.5	81.5	81.4	81.5	81.5	81.5	81.7	81.7	81.8	81.8	81.9	81.9
SMigR: females	89.9	90.0	90.2	90.0	90.1	90.1	89.9	90.0	89.9	89.9	89.9	89.9	90.0	90.2	90.3	90.3	90.4	90.5	90.6	90.7
In-migration from Overseas																				
Male	546	396	500	842	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
Female	423	437	585	838	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376
<i>All</i>	969	833	1,084	1,680	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847
Out-migration to Overseas																				
Male	334	286	327	134	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267
Female	313	276	245	197	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204
<i>All</i>	648	562	572	331	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
SMigR: males	71.3	61.0	69.8	28.6	56.7	56.6	56.6	56.6	56.6	56.6	56.7	56.8	56.9	56.9	56.9	56.7	56.6	56.3	56.1	55.8
SMigR: females	85.8	75.9	67.5	54.3	55.9	56.0	56.2	56.4	56.6	56.8	57.1	57.3	57.4	57.5	57.6	57.5	57.4	57.3	57.1	56.9

Migration - Net Flows

UK	-335	-329	-318	-268	-317	-289	-264	-265	-250	-244	-230	-230	-237	-243	-246	-238	-249	-262	-263	-261
Overseas	+321	+271	+512	+1,349	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376

Summary of population change

Natural change	+865	+828	+794	+637	+766	+768	+760	+753	+735	+721	+709	+687	+663	+637	+608	+579	+550	+528	+505	+480
Net migration	-14	-58	+194	+1,082	+59	+87	+111	+111	+125	+132	+146	+146	+139	+132	+130	+138	+127	+114	+113	+114
Net change	+851	+770	+988	+1,719	+825	+854	+872	+863	+861	+852	+855	+833	+802	+769	+738	+717	+677	+642	+617	+595
Crude Birth Rate /00	12.64	12.52	12.44	12.35	12.50	12.45	12.43	12.37	12.29	12.23	12.17	12.10	12.02	11.93	11.83	11.76	11.70	11.66	11.63	11.60
Crude Death Rate /00	7.46	7.59	7.74	8.61	8.03	8.00	8.05	8.05	8.09	8.13	8.16	8.23	8.30	8.38	8.45	8.55	8.67	8.76	8.87	8.98
Crude Net Migration	-0.08	-0.34	1.15	6.35	0.34	0.50	0.64	0.64	0.72	0.75	0.83	0.82	0.78	0.74	0.72	0.76	0.70	0.63	0.62	0.62

Summary of Population estimates/forecasts

	Population at mid-year																				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,468	11,458	11,437	11,276	11,063	10,909	10,845	10,806	10,915	10,930	10,940	10,941	10,936	10,926	10,908	10,883	10,858	10,836	10,821	10,817
5-10	12,033	12,398	12,696	13,077	13,513	13,808	13,965	13,931	13,940	13,745	13,551	13,364	13,228	13,175	13,147	13,251	13,273	13,288	13,291	13,283	13,268
11-15	10,793	10,598	10,276	10,036	10,119	10,065	10,278	10,612	10,916	11,172	11,458	11,661	11,719	11,749	11,706	11,446	11,266	11,126	11,073	11,054	11,153
16-17	4,658	4,529	4,523	4,460	4,223	4,233	4,192	4,009	3,964	4,033	4,198	4,347	4,537	4,593	4,595	4,727	4,821	4,799	4,695	4,589	4,443
18-59Female, 64Ma	98,411	98,286	98,297	98,381	99,149	99,241	99,193	99,287	99,118	98,882	98,682	98,618	98,464	98,300	98,272	98,116	98,002	97,925	97,835	97,726	97,546
60/65 -74	19,274	19,903	20,342	20,802	21,295	21,649	21,931	22,158	22,392	22,746	22,964	22,801	22,991	23,252	23,537	23,967	24,342	24,819	25,224	25,651	26,098
75-84	7,537	7,778	8,093	8,348	8,629	8,892	9,244	9,628	10,082	10,421	10,853	11,578	12,059	12,530	12,895	13,210	13,502	13,668	13,855	14,033	14,128
85+	2,699	2,722	2,767	2,899	2,955	3,034	3,127	3,241	3,356	3,521	3,651	3,833	4,037	4,243	4,468	4,660	4,911	5,194	5,512	5,780	6,079
Total	166,831	167,682	168,452	169,440	171,159	171,984	172,838	173,710	174,573	175,434	176,287	177,142	177,975	178,777	179,546	180,284	181,001	181,678	182,320	182,937	183,532

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.32	0.33
65+ / 16-65	0.22	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.29	0.30	0.30	0.31	0.32	0.32	0.33	0.34	0.35	0.35	0.36	0.37
0-15 and 65+ / 16-65	0.54	0.56	0.57	0.57	0.58	0.59	0.60	0.61	0.62	0.62	0.63	0.64	0.64	0.65	0.65	0.66	0.66	0.67	0.68	0.69	0.70
Median age males	36.9	37.1	37.3	37.5	37.5	37.6	37.6	37.8	37.9	38.0	38.1	38.3	38.4	38.5	38.6	38.7	38.8	38.9	39.0	39.2	39.3
Median age females	38.5	38.8	39.0	39.1	39.2	39.3	39.4	39.4	39.6	39.9	40.1	40.3	40.5	40.7	40.9	41.0	41.2	41.4	41.6	41.8	41.9
Sex ratio males /100	98.1	98.3	98.3	98.2	98.4	98.5	98.7	98.8	98.9	99.0	99.1	99.2	99.3	99.4	99.5	99.6	99.7	99.8	99.8	99.9	100.0

Households

Number of Househo	66,666	67,163	67,654	68,291	69,395	70,086	70,817	71,487	72,193	72,894	73,596	74,268	74,905	75,548	76,197	76,849	77,487	78,072	78,680	79,276	79,860
Change in Households over pre	+497	+491	+637	+1,104	+691	+731	+670	+706	+701	+702	+672	+637	+642	+649	+653	+638	+585	+608	+596	+584	
Number of Dwellings	68,748	69,260	69,767	70,424	71,562	72,275	73,028	73,719	74,447	75,170	75,894	76,587	77,244	77,907	78,576	79,249	79,907	80,510	81,137	81,751	82,354
Change in Dwellings over previ	+512	+506	+657	+1,138	+713	+754	+691	+728	+723	+723	+693	+657	+662	+669	+673	+658	+604	+627	+614	+602	

Economically active

Number of Economic	85,111	85,554	85,930	86,377	87,135	87,414	87,623	87,794	87,850	87,950	88,007	88,136	88,261	88,318	88,461	88,671	88,909	89,044	89,089	89,130	89,108
Change in Economically active		+443	+375	+448	+758	+279	+209	+170	+57	+100	+56	+129	+126	+56	+144	+209	+239	+135	+45	+42	-22
Number of Jobs	82,305	83,141	83,916	84,765	85,925	86,617	87,242	87,830	88,306	88,826	89,303	89,434	89,561	89,619	89,764	89,977	90,219	90,356	90,401	90,443	90,421
Change in Jobs over previous y		+837	+775	+849	+1,160	+692	+625	+588	+476	+520	+477	+131	+128	+57	+146	+213	+242	+137	+45	+42	-22

	<i>Year beginning July 1st</i>																			
	2011-12	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	1,083	1,078	1,077	1,077	1,099	1,100	1,104	1,104	1,101	1,101	1,101	1,100	1,098	1,095	1,090	1,088	1,087	1,087	1,088	1,089
Female	1,031	1,026	1,025	1,026	1,046	1,047	1,051	1,051	1,049	1,049	1,049	1,048	1,046	1,043	1,039	1,036	1,035	1,035	1,036	1,037
<i>All Births</i>	2,114	2,104	2,102	2,104	2,145	2,147	2,155	2,155	2,150	2,151	2,150	2,148	2,144	2,138	2,129	2,124	2,122	2,122	2,124	2,126
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	635	656	733	698	690	702	709	717	725	731	742	754	764	774	787	801	811	824	838
Female	634	641	652	733	680	690	692	693	698	704	710	719	728	737	746	758	771	783	795	808
<i>All deaths</i>	1,248	1,276	1,308	1,466	1,378	1,380	1,394	1,402	1,415	1,430	1,441	1,461	1,481	1,501	1,521	1,545	1,572	1,594	1,619	1,646
SMR: males	112.2	112.2	112.0	121.1	112.2	107.5	105.7	103.5	101.2	99.0	96.5	94.6	92.9	91.1	89.2	87.7	86.4	84.7	83.5	82.4
SMR: females	110.0	109.4	109.7	119.9	109.8	108.9	107.1	104.6	102.5	100.6	98.6	97.0	95.2	93.6	91.8	90.4	89.1	87.6	86.2	84.9
SMR: persons	111.1	110.8	110.9	120.5	111.0	108.2	106.4	104.0	101.8	99.8	97.5	95.8	94.0	92.3	90.5	89.0	87.7	86.1	84.8	83.6
Expectation of life: m	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.4
Expectation of life: fe	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: p	80.9	80.9	80.9	79.9	80.9	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	2,978	2,988	2,999	3,031	3,033	3,045	3,047	3,054	3,050	3,047	3,052	3,059	3,068	3,079	3,094	3,110	3,120	3,134	3,150	3,161
Female	2,981	2,987	2,992	3,009	3,009	3,010	3,013	3,010	3,004	2,997	2,996	2,997	3,000	3,010	3,022	3,037	3,050	3,064	3,079	3,091
<i>All</i>	5,959	5,975	5,991	6,041	6,043	6,055	6,060	6,064	6,054	6,044	6,047	6,056	6,068	6,088	6,116	6,146	6,169	6,198	6,229	6,252
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,134	3,150	3,148	3,155	3,177	3,175	3,172	3,178	3,168	3,159	3,154	3,161	3,169	3,181	3,205	3,219	3,236	3,255	3,271	3,286
Female	3,160	3,155	3,161	3,153	3,182	3,169	3,153	3,151	3,136	3,129	3,123	3,125	3,136	3,150	3,157	3,165	3,182	3,204	3,220	3,227
<i>All</i>	6,294	6,304	6,309	6,308	6,360	6,344	6,325	6,329	6,304	6,289	6,277	6,286	6,305	6,332	6,362	6,385	6,418	6,459	6,492	6,513
SMigR: males	81.4	81.6	81.5	81.7	81.7	81.6	81.5	81.6	81.5	81.5	81.4	81.5	81.5	81.5	81.7	81.7	81.8	81.8	81.9	81.9
SMigR: females	89.9	90.0	90.2	90.0	90.1	90.1	89.9	90.0	89.9	89.9	89.9	89.9	90.0	90.2	90.3	90.3	90.4	90.5	90.6	90.7
In-migration from Overseas																				
Male	546	396	500	842	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
Female	423	437	585	838	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376
<i>All</i>	969	833	1,084	1,680	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847
Out-migration to Overseas																				
Male	334	286	327	134	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267
Female	313	276	245	197	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204
<i>All</i>	648	562	572	331	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
SMigR: males	71.3	61.0	69.8	28.6	56.7	56.6	56.6	56.6	56.6	56.6	56.7	56.8	56.9	56.9	56.9	56.7	56.6	56.3	56.1	55.8
SMigR: females	85.8	75.9	67.5	54.3	55.9	56.0	56.2	56.4	56.6	56.8	57.1	57.3	57.4	57.5	57.6	57.5	57.4	57.3	57.1	56.9

Migration - Net Flows

UK	-335	-329	-318	-268	-317	-289	-264	-265	-250	-244	-230	-230	-237	-243	-246	-238	-249	-262	-263	-261
Overseas	+321	+271	+512	+1,349	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376

Summary of population change

Natural change	+865	+828	+794	+637	+766	+768	+760	+753	+735	+721	+709	+687	+663	+637	+608	+579	+550	+528	+505	+480
Net migration	-14	-58	+194	+1,082	+59	+87	+111	+111	+125	+132	+146	+146	+139	+132	+130	+138	+127	+114	+113	+114
Net change	+851	+770	+988	+1,719	+825	+854	+872	+863	+861	+852	+855	+833	+802	+769	+738	+717	+677	+642	+617	+595
Crude Birth Rate /00	12.64	12.52	12.44	12.35	12.50	12.45	12.43	12.37	12.29	12.23	12.17	12.10	12.02	11.93	11.83	11.76	11.70	11.66	11.63	11.60
Crude Death Rate /00	7.46	7.59	7.74	8.61	8.03	8.00	8.05	8.05	8.09	8.13	8.16	8.23	8.30	8.38	8.45	8.55	8.67	8.76	8.87	8.98
Crude Net Migration	-0.08	-0.34	1.15	6.35	0.34	0.50	0.64	0.64	0.72	0.75	0.83	0.82	0.78	0.74	0.72	0.76	0.70	0.63	0.62	0.62

Summary of Population estimates/forecasts

	Population at mid-year																				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,468	11,458	11,437	11,276	11,063	10,909	10,845	10,806	10,915	10,930	10,940	10,941	10,936	10,926	10,908	10,883	10,858	10,836	10,821	10,817
5-10	12,033	12,398	12,696	13,077	13,513	13,808	13,965	13,931	13,940	13,745	13,551	13,364	13,228	13,175	13,147	13,251	13,273	13,288	13,291	13,283	13,268
11-15	10,793	10,598	10,276	10,036	10,119	10,065	10,278	10,612	10,916	11,172	11,458	11,661	11,719	11,749	11,706	11,446	11,266	11,126	11,073	11,054	11,153
16-17	4,658	4,529	4,523	4,460	4,223	4,233	4,192	4,009	3,964	4,033	4,198	4,347	4,537	4,593	4,595	4,727	4,821	4,799	4,695	4,589	4,443
18-59Female, 64Ma	98,411	98,286	98,297	98,381	99,149	99,241	99,193	99,287	99,118	98,882	98,682	98,618	98,464	98,300	98,272	98,116	98,002	97,925	97,835	97,726	97,546
60/65 -74	19,274	19,903	20,342	20,802	21,295	21,649	21,931	22,158	22,392	22,746	22,964	22,801	22,991	23,252	23,537	23,967	24,342	24,819	25,224	25,651	26,098
75-84	7,537	7,778	8,093	8,348	8,629	8,892	9,244	9,628	10,082	10,421	10,853	11,578	12,059	12,530	12,895	13,210	13,502	13,668	13,855	14,033	14,128
85+	2,699	2,722	2,767	2,899	2,955	3,034	3,127	3,241	3,356	3,521	3,651	3,833	4,037	4,243	4,468	4,660	4,911	5,194	5,512	5,780	6,079
Total	166,831	167,682	168,452	169,440	171,159	171,984	172,838	173,710	174,573	175,434	176,287	177,142	177,975	178,777	179,546	180,284	181,001	181,678	182,320	182,937	183,532

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.32	0.33
65+ / 16-65	0.22	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.29	0.30	0.30	0.31	0.32	0.32	0.33	0.34	0.35	0.35	0.36	0.37
0-15 and 65+ / 16-65	0.54	0.56	0.57	0.57	0.58	0.59	0.60	0.61	0.62	0.62	0.63	0.64	0.64	0.65	0.65	0.66	0.66	0.67	0.68	0.69	0.70
Median age males	36.9	37.1	37.3	37.5	37.5	37.6	37.6	37.8	37.9	38.0	38.1	38.3	38.4	38.5	38.6	38.7	38.8	38.9	39.0	39.2	39.3
Median age females	38.5	38.8	39.0	39.1	39.2	39.3	39.4	39.4	39.6	39.9	40.1	40.3	40.5	40.7	40.9	41.0	41.2	41.4	41.6	41.8	41.9
Sex ratio males /100	98.1	98.3	98.3	98.2	98.4	98.5	98.7	98.8	98.9	99.0	99.1	99.2	99.3	99.4	99.5	99.6	99.7	99.8	99.8	99.9	100.0

Households

Number of Househo	66,666	67,163	67,654	68,291	69,327	69,949	70,610	71,210	71,846	72,478	73,109	73,709	74,275	74,850	75,430	76,019	76,594	77,119	77,664	78,195	78,712
Change in Households over pre	+497	+491	+637	+1,035	+622	+661	+600	+635	+632	+631	+600	+566	+575	+580	+589	+575	+525	+546	+531	+517	
Number of Dwellings	68,748	69,260	69,767	70,424	71,492	72,134	72,815	73,434	74,089	74,741	75,392	76,011	76,595	77,188	77,785	78,393	78,986	79,527	80,090	80,637	81,170
Change in Dwellings over previ	+512	+506	+657	+1,068	+642	+682	+619	+655	+652	+651	+619	+584	+593	+598	+608	+593	+541	+563	+548	+533	

Economically active

Number of Economic	85,111	85,554	85,930	86,377	87,135	87,414	87,623	87,794	87,850	87,950	88,007	88,136	88,261	88,318	88,461	88,671	88,909	89,044	89,089	89,130	89,108
Change in Economically active		+443	+375	+448	+758	+279	+209	+170	+57	+100	+56	+129	+126	+56	+144	+209	+239	+135	+45	+42	-22
Number of Jobs	82,305	83,141	83,916	84,765	85,925	86,617	87,242	87,830	88,306	88,826	89,303	89,434	89,561	89,619	89,764	89,977	90,219	90,356	90,401	90,443	90,421
Change in Jobs over previous y		+837	+775	+849	+1,160	+692	+625	+588	+476	+520	+477	+131	+128	+57	+146	+213	+242	+137	+45	+42	-22

LTNM 2001 HFRs

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	<i>Year beginning July 1st</i>																			
	2011-12	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	1,083	1,078	1,077	1,077	1,099	1,100	1,104	1,104	1,101	1,101	1,101	1,100	1,098	1,095	1,090	1,088	1,087	1,087	1,088	1,089
Female	1,031	1,026	1,025	1,026	1,046	1,047	1,051	1,051	1,049	1,049	1,049	1,048	1,046	1,043	1,039	1,036	1,035	1,035	1,036	1,037
<i>All Births</i>	2,114	2,104	2,102	2,104	2,145	2,147	2,155	2,155	2,150	2,151	2,150	2,148	2,144	2,138	2,129	2,124	2,122	2,122	2,124	2,126
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	635	656	733	698	690	702	709	717	725	731	742	754	764	774	787	801	811	824	838
Female	634	641	652	733	680	690	692	693	698	704	710	719	728	737	746	758	771	783	795	808
<i>All deaths</i>	1,248	1,276	1,308	1,466	1,378	1,380	1,394	1,402	1,415	1,430	1,441	1,461	1,481	1,501	1,521	1,545	1,572	1,594	1,619	1,646
SMR: males	112.2	112.2	112.0	121.1	112.2	107.5	105.7	103.5	101.2	99.0	96.5	94.6	92.9	91.1	89.2	87.7	86.4	84.7	83.5	82.4
SMR: females	110.0	109.4	109.7	119.9	109.8	108.9	107.1	104.6	102.5	100.6	98.6	97.0	95.2	93.6	91.8	90.4	89.1	87.6	86.2	84.9
SMR: persons	111.1	110.8	110.9	120.5	111.0	108.2	106.4	104.0	101.8	99.8	97.5	95.8	94.0	92.3	90.5	89.0	87.7	86.1	84.8	83.6
Expectation of life: m	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.4
Expectation of life: fe	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: p	80.9	80.9	80.9	79.9	80.9	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	2,978	2,988	2,999	3,031	3,033	3,045	3,047	3,054	3,050	3,047	3,052	3,059	3,068	3,079	3,094	3,110	3,120	3,134	3,150	3,161
Female	2,981	2,987	2,992	3,009	3,009	3,010	3,013	3,010	3,004	2,997	2,996	2,997	3,000	3,010	3,022	3,037	3,050	3,064	3,079	3,091
<i>All</i>	5,959	5,975	5,991	6,041	6,043	6,055	6,060	6,064	6,054	6,044	6,047	6,056	6,068	6,088	6,116	6,146	6,169	6,198	6,229	6,252
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,134	3,150	3,148	3,155	3,177	3,175	3,172	3,178	3,168	3,159	3,154	3,161	3,169	3,181	3,205	3,219	3,236	3,255	3,271	3,286
Female	3,160	3,155	3,161	3,153	3,182	3,169	3,153	3,151	3,136	3,129	3,123	3,125	3,136	3,150	3,157	3,165	3,182	3,204	3,220	3,227
<i>All</i>	6,294	6,304	6,309	6,308	6,360	6,344	6,325	6,329	6,304	6,289	6,277	6,286	6,305	6,332	6,362	6,385	6,418	6,459	6,492	6,513
SMigR: males	81.4	81.6	81.5	81.7	81.7	81.6	81.5	81.6	81.5	81.5	81.4	81.5	81.5	81.5	81.7	81.7	81.8	81.8	81.9	81.9
SMigR: females	89.9	90.0	90.2	90.0	90.1	90.1	89.9	90.0	89.9	89.9	89.9	89.9	90.0	90.2	90.3	90.3	90.4	90.5	90.6	90.7
In-migration from Overseas																				
Male	546	396	500	842	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
Female	423	437	585	838	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376
<i>All</i>	969	833	1,084	1,680	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847
Out-migration to Overseas																				
Male	334	286	327	134	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267
Female	313	276	245	197	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204
<i>All</i>	648	562	572	331	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
SMigR: males	71.3	61.0	69.8	28.6	56.7	56.6	56.6	56.6	56.6	56.6	56.7	56.8	56.9	56.9	56.9	56.7	56.6	56.3	56.1	55.8
SMigR: females	85.8	75.9	67.5	54.3	55.9	56.0	56.2	56.4	56.6	56.8	57.1	57.3	57.4	57.5	57.6	57.5	57.4	57.3	57.1	56.9

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Migration - Net Flows

UK	-335	-329	-318	-268	-317	-289	-264	-265	-250	-244	-230	-230	-237	-243	-246	-238	-249	-262	-263	-261
Overseas	+321	+271	+512	+1,349	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376

Summary of population change

Natural change	+865	+828	+794	+637	+766	+768	+760	+753	+735	+721	+709	+687	+663	+637	+608	+579	+550	+528	+505	+480
Net migration	-14	-58	+194	+1,082	+59	+87	+111	+111	+125	+132	+146	+146	+139	+132	+130	+138	+127	+114	+113	+114
Net change	+851	+770	+988	+1,719	+825	+854	+872	+863	+861	+852	+855	+833	+802	+769	+738	+717	+677	+642	+617	+595
Crude Birth Rate /00	12.64	12.52	12.44	12.35	12.50	12.45	12.43	12.37	12.29	12.23	12.17	12.10	12.02	11.93	11.83	11.76	11.70	11.66	11.63	11.60
Crude Death Rate /00	7.46	7.59	7.74	8.61	8.03	8.00	8.05	8.05	8.09	8.13	8.16	8.23	8.30	8.38	8.45	8.55	8.67	8.76	8.87	8.98
Crude Net Migration	-0.08	-0.34	1.15	6.35	0.34	0.50	0.64	0.64	0.72	0.75	0.83	0.82	0.78	0.74	0.72	0.76	0.70	0.63	0.62	0.62

Summary of Population estimates/forecasts

	Population at mid-year																				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,468	11,458	11,437	11,276	11,063	10,909	10,845	10,806	10,915	10,930	10,940	10,941	10,936	10,926	10,908	10,883	10,858	10,836	10,821	10,817
5-10	12,033	12,398	12,696	13,077	13,513	13,808	13,965	13,931	13,940	13,745	13,551	13,364	13,228	13,175	13,147	13,251	13,273	13,288	13,291	13,283	13,268
11-15	10,793	10,598	10,276	10,036	10,119	10,065	10,278	10,612	10,916	11,172	11,458	11,661	11,719	11,749	11,706	11,446	11,266	11,126	11,073	11,054	11,153
16-17	4,658	4,529	4,523	4,460	4,223	4,233	4,192	4,009	3,964	4,033	4,198	4,347	4,537	4,593	4,595	4,727	4,821	4,799	4,695	4,589	4,443
18-59Female, 64Ma	98,411	98,286	98,297	98,381	99,149	99,241	99,193	99,287	99,118	98,882	98,682	98,618	98,464	98,300	98,272	98,116	98,002	97,925	97,835	97,726	97,546
60/65 -74	19,274	19,903	20,342	20,802	21,295	21,649	21,931	22,158	22,392	22,746	22,964	22,801	22,991	23,252	23,537	23,967	24,342	24,819	25,224	25,651	26,098
75-84	7,537	7,778	8,093	8,348	8,629	8,892	9,244	9,628	10,082	10,421	10,853	11,578	12,059	12,530	12,895	13,210	13,502	13,668	13,855	14,033	14,128
85+	2,699	2,722	2,767	2,899	2,955	3,034	3,127	3,241	3,356	3,521	3,651	3,833	4,037	4,243	4,468	4,660	4,911	5,194	5,512	5,780	6,079
Total	166,831	167,682	168,452	169,440	171,159	171,984	172,838	173,710	174,573	175,434	176,287	177,142	177,975	178,777	179,546	180,284	181,001	181,678	182,320	182,937	183,532

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.32	0.33
65+ / 16-65	0.22	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.29	0.30	0.30	0.31	0.32	0.32	0.33	0.34	0.35	0.35	0.36	0.37
0-15 and 65+ / 16-65	0.54	0.56	0.57	0.57	0.58	0.59	0.60	0.61	0.62	0.62	0.63	0.64	0.64	0.65	0.65	0.66	0.66	0.67	0.68	0.69	0.70
Median age males	36.9	37.1	37.3	37.5	37.5	37.6	37.6	37.8	37.9	38.0	38.1	38.3	38.4	38.5	38.6	38.7	38.8	38.9	39.0	39.2	39.3
Median age females	38.5	38.8	39.0	39.1	39.2	39.3	39.4	39.4	39.6	39.9	40.1	40.3	40.5	40.7	40.9	41.0	41.2	41.4	41.6	41.8	41.9
Sex ratio males /100	98.1	98.3	98.3	98.2	98.4	98.5	98.7	98.8	98.9	99.0	99.1	99.2	99.3	99.4	99.5	99.6	99.7	99.8	99.8	99.9	100.0

Households

Number of Househo	66,666	67,163	67,654	68,291	69,356	70,007	70,701	71,332	72,000	72,665	73,329	73,961	74,560	75,163	75,770	76,383	76,978	77,526	78,101	78,661	79,216
Change in Households over pre	+497	+491	+637	+1,064	+652	+694	+631	+668	+665	+664	+632	+599	+602	+607	+613	+595	+548	+575	+560	+554	
Number of Dwellings	68,748	69,260	69,767	70,424	71,521	72,194	72,909	73,560	74,249	74,934	75,619	76,271	76,888	77,510	78,136	78,768	79,382	79,947	80,540	81,118	81,689
Change in Dwellings over previ	+512	+506	+657	+1,097	+672	+715	+651	+689	+686	+685	+652	+618	+621	+626	+633	+614	+565	+593	+577	+572	

Economically active

Number of Economic	85,111	85,554	85,930	86,377	87,135	87,414	87,623	87,794	87,850	87,950	88,007	88,136	88,261	88,318	88,461	88,671	88,909	89,044	89,089	89,130	89,108
Change in Economically active		+443	+375	+448	+758	+279	+209	+170	+57	+100	+56	+129	+126	+56	+144	+209	+239	+135	+45	+42	-22
Number of Jobs	82,305	83,141	83,916	84,765	85,925	86,617	87,242	87,830	88,306	88,826	89,303	89,434	89,561	89,619	89,764	89,977	90,219	90,356	90,401	90,443	90,421
Change in Jobs over previous y		+837	+775	+849	+1,160	+692	+625	+588	+476	+520	+477	+131	+128	+57	+146	+213	+242	+137	+45	+42	-22

JOBS LED 2014 HFRs

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	<i>Year beginning July 1st</i>																			
	2011-12	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	1,083	1,076	1,072	1,068	1,083	1,087	1,094	1,098	1,102	1,106	1,111	1,123	1,133	1,141	1,147	1,154	1,160	1,170	1,181	1,193
Female	1,031	1,025	1,021	1,018	1,032	1,035	1,042	1,046	1,049	1,053	1,058	1,069	1,079	1,087	1,093	1,099	1,105	1,114	1,125	1,136
<i>All Births</i>	2,114	2,101	2,093	2,086	2,115	2,122	2,135	2,143	2,151	2,159	2,170	2,192	2,211	2,228	2,240	2,252	2,265	2,284	2,306	2,329
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	636	658	736	700	693	704	711	720	728	735	748	761	774	786	800	815	829	845	861
Female	634	645	661	738	687	696	698	698	704	710	717	726	737	748	759	772	787	801	816	831
<i>All deaths</i>	1,248	1,281	1,319	1,475	1,387	1,388	1,402	1,409	1,424	1,438	1,452	1,474	1,498	1,522	1,545	1,572	1,603	1,630	1,661	1,692
SMR: males	112.2	112.2	112.1	121.3	112.1	107.6	105.7	103.4	101.2	98.9	96.5	94.6	92.9	91.1	89.3	87.7	86.3	84.7	83.5	82.3
SMR: females	110.0	109.4	109.8	119.9	109.9	109.0	107.1	104.5	102.5	100.6	98.7	96.9	95.2	93.5	91.8	90.4	89.1	87.6	86.2	84.9
SMR: persons	111.1	110.8	110.9	120.6	111.0	108.3	106.4	104.0	101.9	99.8	97.5	95.7	94.0	92.3	90.5	89.0	87.6	86.1	84.8	83.6
Expectation of life: m	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.4
Expectation of life: fe	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: p	80.9	80.9	80.9	79.9	80.9	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	3,086	3,125	3,205	3,317	3,024	3,067	3,088	3,140	3,118	3,144	3,297	3,323	3,356	3,350	3,353	3,364	3,449	3,494	3,526	3,552
Female	3,089	3,123	3,197	3,293	3,000	3,033	3,053	3,096	3,070	3,093	3,237	3,255	3,282	3,275	3,275	3,286	3,371	3,415	3,447	3,473
<i>All</i>	6,175	6,248	6,402	6,609	6,024	6,100	6,141	6,236	6,188	6,237	6,534	6,578	6,637	6,626	6,628	6,650	6,821	6,909	6,973	7,025
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,027	2,997	2,925	2,858	3,160	3,124	3,106	3,073	3,091	3,059	2,919	2,936	2,943	2,998	3,053	3,094	3,052	3,066	3,091	3,110
Female	3,052	3,021	2,943	2,852	3,171	3,124	3,092	3,049	3,065	3,034	2,890	2,905	2,915	2,973	3,015	3,049	3,008	3,019	3,044	3,058
<i>All</i>	6,079	6,018	5,869	5,710	6,331	6,248	6,199	6,122	6,156	6,093	5,810	5,841	5,858	5,971	6,068	6,143	6,060	6,085	6,135	6,167
SMigR: males	78.6	78.1	76.3	74.4	82.0	81.1	80.5	79.4	79.8	78.9	75.1	74.7	74.2	74.6	75.1	75.3	73.6	73.0	72.7	72.4
SMigR: females	86.8	86.2	84.3	81.8	90.4	89.5	88.8	87.5	88.0	87.1	82.8	82.5	81.9	82.6	83.0	83.3	81.4	80.7	80.5	80.2
In-migration from Overseas																				
Male	0	0	0	0	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
Female	0	0	0	0	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376
<i>All</i>	0	0	0	0	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847
Out-migration to Overseas																				
Male	251	250	249	247	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267
Female	211	210	209	210	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204
<i>All</i>	463	460	458	456	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
SMigR: males	53.6	53.6	53.5	53.1	57.4	57.3	57.1	56.9	56.7	56.6	56.5	56.1	55.6	55.1	54.6	54.1	53.7	53.0	52.4	51.7
SMigR: females	57.9	57.9	57.9	58.0	56.4	56.5	56.6	56.6	56.6	56.7	56.7	56.4	56.0	55.5	55.1	54.7	54.2	53.7	53.1	52.5

JOBS LED 2014 HFRs

J1/16/1

Migration - Net Flows

UK	+96	+229	+533	+899	-307	-148	-58	+114	+33	+144	+724	+737	+780	+655	+560	+507	+761	+824	+838	+857
Overseas	-463	-460	-458	-456	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376

Summary of population change

Natural change	+865	+820	+774	+612	+728	+734	+734	+734	+727	+721	+718	+718	+713	+707	+695	+680	+662	+655	+646	+636
Net migration	-367	-231	+75	+443	+69	+227	+318	+489	+408	+520	+1,100	+1,113	+1,155	+1,031	+935	+883	+1,136	+1,199	+1,214	+1,233
Net change	+499	+589	+849	+1,054	+797	+961	+1,052	+1,223	+1,135	+1,240	+1,818	+1,830	+1,868	+1,738	+1,630	+1,562	+1,799	+1,854	+1,859	+1,869
Crude Birth Rate /00	12.65	12.53	12.43	12.32	12.43	12.41	12.41	12.37	12.33	12.30	12.25	12.25	12.23	12.20	12.16	12.12	12.07	12.06	12.06	12.06
Crude Death Rate /00	7.47	7.64	7.84	8.71	8.15	8.11	8.14	8.14	8.16	8.19	8.20	8.24	8.29	8.33	8.38	8.46	8.54	8.60	8.68	8.76
Crude Net Migration	-2.19	-1.38	0.45	2.61	0.40	1.33	1.85	2.83	2.34	2.96	6.21	6.22	6.39	5.64	5.08	4.75	6.06	6.33	6.35	6.39

Summary of Population estimates/forecasts

Population at mid-year																					
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,320	11,231	11,119	10,950	10,745	10,731	10,755	10,815	10,887	10,951	11,050	11,149	11,251	11,343	11,421	11,488	11,566	11,648	11,735	11,830
5-10	12,033	12,337	12,655	13,040	13,393	13,696	13,713	13,653	13,589	13,475	13,329	13,212	13,256	13,343	13,456	13,587	13,701	13,828	13,952	14,070	14,182
11-15	10,793	10,527	10,180	9,968	10,043	9,990	10,227	10,553	10,891	11,141	11,437	11,660	11,685	11,678	11,618	11,483	11,349	11,361	11,427	11,533	11,662
16-17	4,658	4,517	4,520	4,459	4,192	4,180	4,143	3,964	3,940	4,056	4,199	4,356	4,551	4,640	4,694	4,795	4,893	4,817	4,687	4,644	4,623
18-59Female, 64Ma	98,411	98,138	97,998	97,892	98,170	98,232	98,266	98,484	98,575	98,525	98,618	99,234	99,754	100,363	100,928	101,365	101,788	102,360	103,026	103,613	104,176
60/65 -74	19,274	19,912	20,384	20,970	21,416	21,806	22,103	22,308	22,542	22,858	23,079	22,989	23,190	23,459	23,814	24,291	24,715	25,311	25,797	26,300	26,835
75-84	7,537	7,833	8,122	8,398	8,667	8,879	9,214	9,631	10,100	10,483	10,917	11,660	12,196	12,704	13,085	13,435	13,748	13,922	14,134	14,322	14,454
85+	2,699	2,745	2,830	2,920	2,990	3,090	3,183	3,285	3,404	3,565	3,701	3,887	4,097	4,309	4,547	4,739	4,996	5,311	5,659	5,973	6,296
Total	166,831	167,330	167,919	168,767	169,821	170,618	171,580	172,632	173,855	174,990	176,231	178,048	179,879	181,747	183,485	185,115	186,678	188,476	190,330	192,190	194,059

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.33	0.33	0.33
65+ / 16-65	0.22	0.24	0.25	0.26	0.26	0.27	0.28	0.28	0.29	0.30	0.30	0.30	0.31	0.31	0.32	0.32	0.33	0.34	0.35	0.35	0.36
0-15 and 65+ / 16-65	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.63	0.63	0.64	0.64	0.65	0.65	0.65	0.66	0.67	0.68	0.69
Median age males	36.9	37.2	37.4	37.6	37.7	37.8	37.8	37.9	38.0	38.0	38.1	38.1	38.1	38.1	38.1	38.2	38.2	38.2	38.3	38.4	38.5
Median age females	38.5	38.9	39.2	39.4	39.5	39.6	39.7	39.8	39.8	40.0	40.1	40.2	40.2	40.3	40.4	40.5	40.6	40.6	40.7	40.8	40.8
Sex ratio males /100	98.1	98.2	98.2	98.3	98.3	98.4	98.6	98.7	98.8	98.9	99.1	99.2	99.3	99.4	99.5	99.7	99.8	99.9	100.0	100.1	100.1

Economically active

Number of Economic	85,111	85,407	85,699	85,989	86,275	86,559	86,841	87,119	87,395	87,668	87,939	88,622	89,305	89,988	90,671	91,354	92,037	92,720	93,403	94,086	94,769
Change in Economically active		+295	+292	+290	+287	+284	+281	+279	+276	+273	+271	+683	+683	+683	+683	+683	+683	+683	+683	+683	+683
Number of Jobs	82,305	82,998	83,691	84,384	85,077	85,770	86,463	87,156	87,849	88,542	89,235	89,928	90,621	91,314	92,007	92,700	93,393	94,086	94,779	95,472	96,165
Change in Jobs over previous y		+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693

Households

Number of Households	66,666	67,147	67,629	68,188	68,796	69,347	69,976	70,585	71,265	71,924	72,629	73,497	74,364	75,268	76,142	77,012	77,832	78,712	79,635	80,551	81,459
Change in Households over previous year	+480	+482	+559	+608	+552	+629	+609	+680	+659	+705	+868	+867	+904	+874	+870	+820	+880	+923	+916	+908	
Number of Dwellings	68,748	69,243	69,741	70,317	70,944	71,513	72,161	72,789	73,490	74,170	74,897	75,792	76,686	77,618	78,519	79,416	80,263	81,170	82,122	83,067	84,003
Change in Dwellings over previous year	+495	+497	+576	+627	+569	+648	+628	+701	+680	+727	+895	+894	+932	+902	+897	+846	+908	+952	+944	+936	

	Year beginning July 1st																			
	2011-12	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	1,083	1,076	1,072	1,068	1,083	1,087	1,094	1,098	1,102	1,106	1,111	1,123	1,133	1,141	1,147	1,154	1,160	1,170	1,181	1,193
Female	1,031	1,025	1,021	1,018	1,032	1,035	1,042	1,046	1,049	1,053	1,058	1,069	1,079	1,087	1,093	1,099	1,105	1,114	1,125	1,136
All Births	2,114	2,101	2,093	2,086	2,115	2,122	2,135	2,143	2,151	2,159	2,170	2,192	2,211	2,228	2,240	2,252	2,265	2,284	2,306	2,329
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	636	658	736	700	693	704	711	720	728	735	748	761	774	786	800	815	829	845	861
Female	634	645	661	738	687	696	698	698	704	710	717	726	737	748	759	772	787	801	816	831
All deaths	1,248	1,281	1,319	1,475	1,387	1,388	1,402	1,409	1,424	1,438	1,452	1,474	1,498	1,522	1,545	1,572	1,603	1,630	1,661	1,692
SMR: males	112.2	112.2	112.1	121.3	112.1	107.6	105.7	103.4	101.2	98.9	96.5	94.6	92.9	91.1	89.3	87.7	86.3	84.7	83.5	82.3
SMR: females	110.0	109.4	109.8	119.9	109.9	109.0	107.1	104.5	102.5	100.6	98.7	96.9	95.2	93.5	91.8	90.4	89.1	87.6	86.2	84.9
SMR: persons	111.1	110.8	110.9	120.6	111.0	108.3	106.4	104.0	101.9	99.8	97.5	95.7	94.0	92.3	90.5	89.0	87.6	86.1	84.8	83.6
Expectation of life: m	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.4
Expectation of life: fe	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: p	80.9	80.9	80.9	79.9	80.9	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	3,086	3,125	3,205	3,317	3,024	3,067	3,088	3,140	3,118	3,144	3,297	3,323	3,356	3,350	3,353	3,364	3,449	3,494	3,526	3,552
Female	3,089	3,123	3,197	3,293	3,000	3,033	3,053	3,096	3,070	3,093	3,237	3,255	3,282	3,275	3,275	3,286	3,371	3,415	3,447	3,473
All	6,175	6,248	6,402	6,609	6,024	6,100	6,141	6,236	6,188	6,237	6,534	6,578	6,637	6,626	6,628	6,650	6,821	6,909	6,973	7,025
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,027	2,997	2,925	2,858	3,160	3,124	3,106	3,073	3,091	3,059	2,919	2,936	2,943	2,998	3,053	3,094	3,052	3,066	3,091	3,110
Female	3,052	3,021	2,943	2,852	3,171	3,124	3,092	3,049	3,065	3,034	2,890	2,905	2,915	2,973	3,015	3,049	3,008	3,019	3,044	3,058
All	6,079	6,018	5,869	5,710	6,331	6,248	6,199	6,122	6,156	6,093	5,810	5,841	5,858	5,971	6,068	6,143	6,060	6,085	6,135	6,167
SMigR: males	78.6	78.1	76.3	74.4	82.0	81.1	80.5	79.4	79.8	78.9	75.1	74.7	74.2	74.6	75.1	75.3	73.6	73.0	72.7	72.4
SMigR: females	86.8	86.2	84.3	81.8	90.4	89.5	88.8	87.5	88.0	87.1	82.8	82.5	81.9	82.6	83.0	83.3	81.4	80.7	80.5	80.2
In-migration from Overseas																				
Male	0	0	0	0	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
Female	0	0	0	0	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376
All	0	0	0	0	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847
Out-migration to Overseas																				
Male	251	250	249	247	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267
Female	211	210	209	210	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204
All	463	460	458	456	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
SMigR: males	53.6	53.6	53.5	53.1	57.4	57.3	57.1	56.9	56.7	56.6	56.5	56.1	55.6	55.1	54.6	54.1	53.7	53.0	52.4	51.7
SMigR: females	57.9	57.9	57.9	58.0	56.4	56.5	56.6	56.6	56.6	56.7	56.7	56.4	56.0	55.5	55.1	54.7	54.2	53.7	53.1	52.5

JOBS LED 100% FR25-44 HFRs

J1/16/1

Migration - Net Flows

UK	+96	+229	+533	+899	-307	-148	-58	+114	+33	+144	+724	+737	+780	+655	+560	+507	+761	+824	+838	+857
Overseas	-463	-460	-458	-456	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376

Summary of population change

Natural change	+865	+820	+774	+612	+728	+734	+734	+734	+727	+721	+718	+718	+713	+707	+695	+680	+662	+655	+646	+636
Net migration	-367	-231	+75	+443	+69	+227	+318	+489	+408	+520	+1,100	+1,113	+1,155	+1,031	+935	+883	+1,136	+1,199	+1,214	+1,233
Net change	+499	+589	+849	+1,054	+797	+961	+1,052	+1,223	+1,135	+1,240	+1,818	+1,830	+1,868	+1,738	+1,630	+1,562	+1,799	+1,854	+1,859	+1,869
Crude Birth Rate /00	12.65	12.53	12.43	12.32	12.43	12.41	12.41	12.37	12.33	12.30	12.25	12.25	12.23	12.20	12.16	12.12	12.07	12.06	12.06	12.06
Crude Death Rate /0	7.47	7.64	7.84	8.71	8.15	8.11	8.14	8.14	8.16	8.19	8.20	8.24	8.29	8.33	8.38	8.46	8.54	8.60	8.68	8.76
Crude Net Migration	-2.19	-1.38	0.45	2.61	0.40	1.33	1.85	2.83	2.34	2.96	6.21	6.22	6.39	5.64	5.08	4.75	6.06	6.33	6.35	6.39

Summary of Population estimates/forecasts

Population at mid-year																					
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,320	11,231	11,119	10,950	10,745	10,731	10,755	10,815	10,887	10,951	11,050	11,149	11,251	11,343	11,421	11,488	11,566	11,648	11,735	11,830
5-10	12,033	12,337	12,655	13,040	13,393	13,696	13,713	13,653	13,589	13,475	13,329	13,212	13,256	13,343	13,456	13,587	13,701	13,828	13,952	14,070	14,182
11-15	10,793	10,527	10,180	9,968	10,043	9,990	10,227	10,553	10,891	11,141	11,437	11,660	11,685	11,678	11,618	11,483	11,349	11,361	11,427	11,533	11,662
16-17	4,658	4,517	4,520	4,459	4,192	4,180	4,143	3,964	3,940	4,056	4,199	4,356	4,551	4,640	4,694	4,795	4,893	4,817	4,687	4,644	4,623
18-59Female, 64Ma	98,411	98,138	97,998	97,892	98,170	98,232	98,266	98,484	98,575	98,525	98,618	99,234	99,754	100,363	100,928	101,365	101,788	102,360	103,026	103,613	104,176
60/65 -74	19,274	19,912	20,384	20,970	21,416	21,806	22,103	22,308	22,542	22,858	23,079	22,989	23,190	23,459	23,814	24,291	24,715	25,311	25,797	26,300	26,835
75-84	7,537	7,833	8,122	8,398	8,667	8,879	9,214	9,631	10,100	10,483	10,917	11,660	12,196	12,704	13,085	13,435	13,748	13,922	14,134	14,322	14,454
85+	2,699	2,745	2,830	2,920	2,990	3,090	3,183	3,285	3,404	3,565	3,701	3,887	4,097	4,309	4,547	4,739	4,996	5,311	5,659	5,973	6,296
Total	166,831	167,330	167,919	168,767	169,821	170,618	171,580	172,632	173,855	174,990	176,231	178,048	179,879	181,747	183,485	185,115	186,678	188,476	190,330	192,190	194,059

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.33	0.33	0.33
65+ / 16-65	0.22	0.24	0.25	0.26	0.26	0.27	0.28	0.28	0.29	0.30	0.30	0.30	0.31	0.31	0.32	0.32	0.33	0.34	0.35	0.35	0.36
0-15 and 65+ / 16-65	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.63	0.63	0.64	0.64	0.65	0.65	0.65	0.66	0.67	0.68	0.69
Median age males	36.9	37.2	37.4	37.6	37.7	37.8	37.8	37.9	38.0	38.0	38.1	38.1	38.1	38.1	38.1	38.2	38.2	38.2	38.3	38.4	38.5
Median age females	38.5	38.9	39.2	39.4	39.5	39.6	39.7	39.8	39.8	40.0	40.1	40.2	40.2	40.3	40.4	40.5	40.6	40.6	40.7	40.8	40.8
Sex ratio males /100	98.1	98.2	98.2	98.3	98.3	98.4	98.6	98.7	98.8	98.9	99.1	99.2	99.3	99.4	99.5	99.7	99.8	99.9	100.0	100.1	100.1

Economically active

Number of Economically active	85,111	85,407	85,699	85,989	86,275	86,559	86,841	87,119	87,395	87,668	87,939	88,622	89,305	89,988	90,671	91,354	92,037	92,720	93,403	94,086	94,769
Change in Economically active		+295	+292	+290	+287	+284	+281	+279	+276	+273	+271	+683	+683	+683	+683	+683	+683	+683	+683	+683	+683
Number of Jobs	82,305	82,998	83,691	84,384	85,077	85,770	86,463	87,156	87,849	88,542	89,235	89,928	90,621	91,314	92,007	92,700	93,393	94,086	94,779	95,472	96,165
Change in Jobs over previous y		+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693

Households

Number of Households	66,666	67,147	67,629	68,188	68,929	69,612	70,375	71,118	71,935	72,731	73,575	74,590	75,606	76,651	77,672	78,680	79,648	80,682	81,766	82,855	83,954
Change in Households over previous y		+480	+482	+559	+741	+683	+763	+743	+817	+796	+844	+1,015	+1,016	+1,045	+1,021	+1,008	+967	+1,034	+1,084	+1,089	+1,099
Number of Dwellings	68,748	69,243	69,741	70,317	71,081	71,786	72,572	73,339	74,181	75,003	75,873	76,920	77,967	79,045	80,098	81,137	82,135	83,201	84,319	85,442	86,575
Change in Dwellings over previous y		+495	+497	+576	+764	+704	+787	+766	+843	+821	+870	+1,047	+1,048	+1,077	+1,053	+1,039	+998	+1,066	+1,118	+1,123	+1,133

JOBS LED 50% 25-44 HFRs

J1/16/1

	<i>Year beginning July 1st</i>																			
	2011-12	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	1,083	1,076	1,072	1,068	1,083	1,087	1,094	1,098	1,102	1,106	1,111	1,123	1,133	1,141	1,147	1,154	1,160	1,170	1,181	1,193
Female	1,031	1,025	1,021	1,018	1,032	1,035	1,042	1,046	1,049	1,053	1,058	1,069	1,079	1,087	1,093	1,099	1,105	1,114	1,125	1,136
<i>All Births</i>	2,114	2,101	2,093	2,086	2,115	2,122	2,135	2,143	2,151	2,159	2,170	2,192	2,211	2,228	2,240	2,252	2,265	2,284	2,306	2,329
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	636	658	736	700	693	704	711	720	728	735	748	761	774	786	800	815	829	845	861
Female	634	645	661	738	687	696	698	698	704	710	717	726	737	748	759	772	787	801	816	831
<i>All deaths</i>	1,248	1,281	1,319	1,475	1,387	1,388	1,402	1,409	1,424	1,438	1,452	1,474	1,498	1,522	1,545	1,572	1,603	1,630	1,661	1,692
SMR: males	112.2	112.2	112.1	121.3	112.1	107.6	105.7	103.4	101.2	98.9	96.5	94.6	92.9	91.1	89.3	87.7	86.3	84.7	83.5	82.3
SMR: females	110.0	109.4	109.8	119.9	109.9	109.0	107.1	104.5	102.5	100.6	98.7	96.9	95.2	93.5	91.8	90.4	89.1	87.6	86.2	84.9
SMR: persons	111.1	110.8	110.9	120.6	111.0	108.3	106.4	104.0	101.9	99.8	97.5	95.7	94.0	92.3	90.5	89.0	87.6	86.1	84.8	83.6
Expectation of life: m	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.4
Expectation of life: f	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: p	80.9	80.9	80.9	79.9	80.9	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	3,086	3,125	3,205	3,317	3,024	3,067	3,088	3,140	3,118	3,144	3,297	3,323	3,356	3,350	3,353	3,364	3,449	3,494	3,526	3,552
Female	3,089	3,123	3,197	3,293	3,000	3,033	3,053	3,096	3,070	3,093	3,237	3,255	3,282	3,275	3,275	3,286	3,371	3,415	3,447	3,473
<i>All</i>	6,175	6,248	6,402	6,609	6,024	6,100	6,141	6,236	6,188	6,237	6,534	6,578	6,637	6,626	6,628	6,650	6,821	6,909	6,973	7,025
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,027	2,997	2,925	2,858	3,160	3,124	3,106	3,073	3,091	3,059	2,919	2,936	2,943	2,998	3,053	3,094	3,052	3,066	3,091	3,110
Female	3,052	3,021	2,943	2,852	3,171	3,124	3,092	3,049	3,065	3,034	2,890	2,905	2,915	2,973	3,015	3,049	3,008	3,019	3,044	3,058
<i>All</i>	6,079	6,018	5,869	5,710	6,331	6,248	6,199	6,122	6,156	6,093	5,810	5,841	5,858	5,971	6,068	6,143	6,060	6,085	6,135	6,167
SMigR: males	78.6	78.1	76.3	74.4	82.0	81.1	80.5	79.4	79.8	78.9	75.1	74.7	74.2	74.6	75.1	75.3	73.6	73.0	72.7	72.4
SMigR: females	86.8	86.2	84.3	81.8	90.4	89.5	88.8	87.5	88.0	87.1	82.8	82.5	81.9	82.6	83.0	83.3	81.4	80.7	80.5	80.2
In-migration from Overseas																				
Male	0	0	0	0	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
Female	0	0	0	0	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376
<i>All</i>	0	0	0	0	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847
Out-migration to Overseas																				
Male	251	250	249	247	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267
Female	211	210	209	210	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204
<i>All</i>	463	460	458	456	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
SMigR: males	53.6	53.6	53.5	53.1	57.4	57.3	57.1	56.9	56.7	56.6	56.5	56.1	55.6	55.1	54.6	54.1	53.7	53.0	52.4	51.7
SMigR: females	57.9	57.9	57.9	58.0	56.4	56.5	56.6	56.6	56.6	56.7	56.7	56.4	56.0	55.5	55.1	54.7	54.2	53.7	53.1	52.5

JOBS LED 50% 25-44 HFRs

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Migration - Net Flows

UK	+96	+229	+533	+899	-307	-148	-58	+114	+33	+144	+724	+737	+780	+655	+560	+507	+761	+824	+838	+857
Overseas	-463	-460	-458	-456	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376

Summary of population change

Natural change	+865	+820	+774	+612	+728	+734	+734	+734	+727	+721	+718	+718	+713	+707	+695	+680	+662	+655	+646	+636
Net migration	-367	-231	+75	+443	+69	+227	+318	+489	+408	+520	+1,100	+1,113	+1,155	+1,031	+935	+883	+1,136	+1,199	+1,214	+1,233
Net change	+499	+589	+849	+1,054	+797	+961	+1,052	+1,223	+1,135	+1,240	+1,818	+1,830	+1,868	+1,738	+1,630	+1,562	+1,799	+1,854	+1,859	+1,869
Crude Birth Rate /00	12.65	12.53	12.43	12.32	12.43	12.41	12.41	12.37	12.33	12.30	12.25	12.25	12.23	12.20	12.16	12.12	12.07	12.06	12.06	12.06
Crude Death Rate /00	7.47	7.64	7.84	8.71	8.15	8.11	8.14	8.14	8.16	8.19	8.20	8.24	8.29	8.33	8.38	8.46	8.54	8.60	8.68	8.76
Crude Net Migration	-2.19	-1.38	0.45	2.61	0.40	1.33	1.85	2.83	2.34	2.96	6.21	6.22	6.39	5.64	5.08	4.75	6.06	6.33	6.35	6.39

Summary of Population estimates/forecasts

	Population at mid-year																				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,320	11,231	11,119	10,950	10,745	10,731	10,755	10,815	10,887	10,951	11,050	11,149	11,251	11,343	11,421	11,488	11,566	11,648	11,735	11,830
5-10	12,033	12,337	12,655	13,040	13,393	13,696	13,713	13,653	13,589	13,475	13,329	13,212	13,256	13,343	13,456	13,587	13,701	13,828	13,952	14,070	14,182
11-15	10,793	10,527	10,180	9,968	10,043	9,990	10,227	10,553	10,891	11,141	11,437	11,660	11,685	11,678	11,618	11,483	11,349	11,361	11,427	11,533	11,662
16-17	4,658	4,517	4,520	4,459	4,192	4,180	4,143	3,964	3,940	4,056	4,199	4,356	4,551	4,640	4,694	4,795	4,893	4,817	4,687	4,644	4,623
18-59Female, 64Ma	98,411	98,138	97,998	97,892	98,170	98,232	98,266	98,484	98,575	98,525	98,618	99,234	99,754	100,363	100,928	101,365	101,788	102,360	103,026	103,613	104,176
60/65 -74	19,274	19,912	20,384	20,970	21,416	21,806	22,103	22,308	22,542	22,858	23,079	22,989	23,190	23,459	23,814	24,291	24,715	25,311	25,797	26,300	26,835
75-84	7,537	7,833	8,122	8,398	8,667	8,879	9,214	9,631	10,100	10,483	10,917	11,660	12,196	12,704	13,085	13,435	13,748	13,922	14,134	14,322	14,454
85+	2,699	2,745	2,830	2,920	2,990	3,090	3,183	3,285	3,404	3,565	3,701	3,887	4,097	4,309	4,547	4,739	4,996	5,311	5,659	5,973	6,296
Total	166,831	167,330	167,919	168,767	169,821	170,618	171,580	172,632	173,855	174,990	176,231	178,048	179,879	181,747	183,485	185,115	186,678	188,476	190,330	192,190	194,059

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.33	0.33	0.33
65+ / 16-65	0.22	0.24	0.25	0.26	0.26	0.27	0.28	0.28	0.29	0.30	0.30	0.30	0.31	0.31	0.32	0.32	0.33	0.34	0.35	0.35	0.36
0-15 and 65+ / 16-65	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.63	0.63	0.64	0.64	0.65	0.65	0.65	0.66	0.67	0.68	0.69
Median age males	36.9	37.2	37.4	37.6	37.7	37.8	37.8	37.9	38.0	38.0	38.1	38.1	38.1	38.1	38.1	38.2	38.2	38.2	38.3	38.4	38.5
Median age females	38.5	38.9	39.2	39.4	39.5	39.6	39.7	39.8	39.8	40.0	40.1	40.2	40.2	40.3	40.4	40.5	40.6	40.6	40.7	40.8	40.8
Sex ratio males /100	98.1	98.2	98.2	98.3	98.3	98.4	98.6	98.7	98.8	98.9	99.1	99.2	99.3	99.4	99.5	99.7	99.8	99.9	100.0	100.1	100.1

Economically active

Number of Economically active	85,111	85,407	85,699	85,989	86,275	86,559	86,841	87,119	87,395	87,668	87,939	88,622	89,305	89,988	90,671	91,354	92,037	92,720	93,403	94,086	94,769
Change in Economically active		+295	+292	+290	+287	+284	+281	+279	+276	+273	+271	+683	+683	+683	+683	+683	+683	+683	+683	+683	+683
Number of Jobs	82,305	82,998	83,691	84,384	85,077	85,770	86,463	87,156	87,849	88,542	89,235	89,928	90,621	91,314	92,007	92,700	93,393	94,086	94,779	95,472	96,165
Change in Jobs over previous y		+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693

Households

Number of Households	66,666	67,147	67,629	68,188	68,862	69,478	70,172	70,846	71,591	72,317	73,087	74,024	74,963	75,930	76,874	77,808	78,702	79,661	80,667	81,675	82,688
Change in Households over previous y		+480	+482	+559	+674	+616	+694	+673	+746	+725	+770	+937	+938	+968	+943	+934	+894	+959	+1,006	+1,008	+1,013
Number of Dwellings	68,748	69,243	69,741	70,317	71,013	71,648	72,364	73,058	73,827	74,575	75,369	76,336	77,303	78,301	79,274	80,237	81,160	82,149	83,186	84,226	85,270
Change in Dwellings over previous y		+495	+497	+576	+696	+635	+716	+694	+769	+748	+795	+966	+968	+998	+973	+963	+922	+989	+1,037	+1,039	+1,045

JOBS LED 2001 HFRs

J1/16/1

	Year beginning July 1st																			
	2011-12	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	1,083	1,076	1,072	1,068	1,083	1,087	1,094	1,098	1,102	1,106	1,111	1,123	1,133	1,141	1,147	1,154	1,160	1,170	1,181	1,193
Female	1,031	1,025	1,021	1,018	1,032	1,035	1,042	1,046	1,049	1,053	1,058	1,069	1,079	1,087	1,093	1,099	1,105	1,114	1,125	1,136
All Births	2,114	2,101	2,093	2,086	2,115	2,122	2,135	2,143	2,151	2,159	2,170	2,192	2,211	2,228	2,240	2,252	2,265	2,284	2,306	2,329
TFR	2.00	2.00	2.00	1.99	2.00	2.00	2.01	2.01	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Deaths																				
Male	615	636	658	736	700	693	704	711	720	728	735	748	761	774	786	800	815	829	845	861
Female	634	645	661	738	687	696	698	698	704	710	717	726	737	748	759	772	787	801	816	831
All deaths	1,248	1,281	1,319	1,475	1,387	1,388	1,402	1,409	1,424	1,438	1,452	1,474	1,498	1,522	1,545	1,572	1,603	1,630	1,661	1,692
SMR: males	112.2	112.2	112.1	121.3	112.1	107.6	105.7	103.4	101.2	98.9	96.5	94.6	92.9	91.1	89.3	87.7	86.3	84.7	83.5	82.3
SMR: females	110.0	109.4	109.8	119.9	109.9	109.0	107.1	104.5	102.5	100.6	98.7	96.9	95.2	93.5	91.8	90.4	89.1	87.6	86.2	84.9
SMR: persons	111.1	110.8	110.9	120.6	111.0	108.3	106.4	104.0	101.9	99.8	97.5	95.7	94.0	92.3	90.5	89.0	87.6	86.1	84.8	83.6
Expectation of life: m	78.7	78.7	78.7	77.7	78.7	79.1	79.3	79.6	79.9	80.1	80.4	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.4
Expectation of life: fe	82.8	82.8	82.8	81.8	82.8	82.9	83.0	83.4	83.5	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4	85.6
Expectation of life: p	80.9	80.9	80.9	79.9	80.9	81.1	81.3	81.6	81.8	82.0	82.3	82.5	82.7	82.9	83.1	83.3	83.5	83.7	83.9	84.0
In-migration from the UK																				
Male	3,086	3,125	3,205	3,317	3,024	3,067	3,088	3,140	3,118	3,144	3,297	3,323	3,356	3,350	3,353	3,364	3,449	3,494	3,526	3,552
Female	3,089	3,123	3,197	3,293	3,000	3,033	3,053	3,096	3,070	3,093	3,237	3,255	3,282	3,275	3,275	3,286	3,371	3,415	3,447	3,473
All	6,175	6,248	6,402	6,609	6,024	6,100	6,141	6,236	6,188	6,237	6,534	6,578	6,637	6,626	6,628	6,650	6,821	6,909	6,973	7,025
SMigR: males	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: females	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Out-migration to the UK																				
Male	3,027	2,997	2,925	2,858	3,160	3,124	3,106	3,073	3,091	3,059	2,919	2,936	2,943	2,998	3,053	3,094	3,052	3,066	3,091	3,110
Female	3,052	3,021	2,943	2,852	3,171	3,124	3,092	3,049	3,065	3,034	2,890	2,905	2,915	2,973	3,015	3,049	3,008	3,019	3,044	3,058
All	6,079	6,018	5,869	5,710	6,331	6,248	6,199	6,122	6,156	6,093	5,810	5,841	5,858	5,971	6,068	6,143	6,060	6,085	6,135	6,167
SMigR: males	78.6	78.1	76.3	74.4	82.0	81.1	80.5	79.4	79.8	78.9	75.1	74.7	74.2	74.6	75.1	75.3	73.6	73.0	72.7	72.4
SMigR: females	86.8	86.2	84.3	81.8	90.4	89.5	88.8	87.5	88.0	87.1	82.8	82.5	81.9	82.6	83.0	83.3	81.4	80.7	80.5	80.2
In-migration from Overseas																				
Male	0	0	0	0	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
Female	0	0	0	0	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376
All	0	0	0	0	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847
Out-migration to Overseas																				
Male	251	250	249	247	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267
Female	211	210	209	210	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204
All	463	460	458	456	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
SMigR: males	53.6	53.6	53.5	53.1	57.4	57.3	57.1	56.9	56.7	56.6	56.5	56.1	55.6	55.1	54.6	54.1	53.7	53.0	52.4	51.7
SMigR: females	57.9	57.9	57.9	58.0	56.4	56.5	56.6	56.6	56.6	56.7	56.7	56.4	56.0	55.5	55.1	54.7	54.2	53.7	53.1	52.5

JOBS LED 2001 HFRs

J1/16/1

Migration - Net Flows

UK	+96	+229	+533	+899	-307	-148	-58	+114	+33	+144	+724	+737	+780	+655	+560	+507	+761	+824	+838	+857
Overseas	-463	-460	-458	-456	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376	+376

Summary of population change

Natural change	+865	+820	+774	+612	+728	+734	+734	+734	+727	+721	+718	+718	+713	+707	+695	+680	+662	+655	+646	+636
Net migration	-367	-231	+75	+443	+69	+227	+318	+489	+408	+520	+1,100	+1,113	+1,155	+1,031	+935	+883	+1,136	+1,199	+1,214	+1,233
Net change	+499	+589	+849	+1,054	+797	+961	+1,052	+1,223	+1,135	+1,240	+1,818	+1,830	+1,868	+1,738	+1,630	+1,562	+1,799	+1,854	+1,859	+1,869
Crude Birth Rate /00	12.65	12.53	12.43	12.32	12.43	12.41	12.41	12.37	12.33	12.30	12.25	12.25	12.23	12.20	12.16	12.12	12.07	12.06	12.06	12.06
Crude Death Rate /00	7.47	7.64	7.84	8.71	8.15	8.11	8.14	8.14	8.16	8.19	8.20	8.24	8.29	8.33	8.38	8.46	8.54	8.60	8.68	8.76
Crude Net Migration	-2.19	-1.38	0.45	2.61	0.40	1.33	1.85	2.83	2.34	2.96	6.21	6.22	6.39	5.64	5.08	4.75	6.06	6.33	6.35	6.39

Summary of Population estimates/forecasts

	Population at mid-year																				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	11,426	11,320	11,231	11,119	10,950	10,745	10,731	10,755	10,815	10,887	10,951	11,050	11,149	11,251	11,343	11,421	11,488	11,566	11,648	11,735	11,830
5-10	12,033	12,337	12,655	13,040	13,393	13,696	13,713	13,653	13,589	13,475	13,329	13,212	13,256	13,343	13,456	13,587	13,701	13,828	13,952	14,070	14,182
11-15	10,793	10,527	10,180	9,968	10,043	9,990	10,227	10,553	10,891	11,141	11,437	11,660	11,685	11,678	11,618	11,483	11,349	11,361	11,427	11,533	11,662
16-17	4,658	4,517	4,520	4,459	4,192	4,180	4,143	3,964	3,940	4,056	4,199	4,356	4,551	4,640	4,694	4,795	4,893	4,817	4,687	4,644	4,623
18-59Female, 64Ma	98,411	98,138	97,998	97,892	98,170	98,232	98,266	98,484	98,575	98,525	98,618	99,234	99,754	100,363	100,928	101,365	101,788	102,360	103,026	103,613	104,176
60/65 -74	19,274	19,912	20,384	20,970	21,416	21,806	22,103	22,308	22,542	22,858	23,079	22,989	23,190	23,459	23,814	24,291	24,715	25,311	25,797	26,300	26,835
75-84	7,537	7,833	8,122	8,398	8,667	8,879	9,214	9,631	10,100	10,483	10,917	11,660	12,196	12,704	13,085	13,435	13,748	13,922	14,134	14,322	14,454
85+	2,699	2,745	2,830	2,920	2,990	3,090	3,183	3,285	3,404	3,565	3,701	3,887	4,097	4,309	4,547	4,739	4,996	5,311	5,659	5,973	6,296
Total	166,831	167,330	167,919	168,767	169,821	170,618	171,580	172,632	173,855	174,990	176,231	178,048	179,879	181,747	183,485	185,115	186,678	188,476	190,330	192,190	194,059

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.33	0.33	0.33
65+ / 16-65	0.22	0.24	0.25	0.26	0.26	0.27	0.28	0.28	0.29	0.30	0.30	0.30	0.31	0.31	0.32	0.32	0.33	0.34	0.35	0.35	0.36
0-15 and 65+ / 16-65	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.63	0.63	0.64	0.64	0.65	0.65	0.65	0.66	0.67	0.68	0.69
Median age males	36.9	37.2	37.4	37.6	37.7	37.8	37.8	37.9	38.0	38.0	38.1	38.1	38.1	38.1	38.1	38.2	38.2	38.2	38.3	38.4	38.5
Median age females	38.5	38.9	39.2	39.4	39.5	39.6	39.7	39.8	39.8	40.0	40.1	40.2	40.2	40.3	40.4	40.5	40.6	40.6	40.7	40.8	40.8
Sex ratio males /100	98.1	98.2	98.2	98.3	98.3	98.4	98.6	98.7	98.8	98.9	99.1	99.2	99.3	99.4	99.5	99.7	99.8	99.9	100.0	100.1	100.1

Economically active

Number of Economic	85,111	85,407	85,699	85,989	86,275	86,559	86,841	87,119	87,395	87,668	87,939	88,622	89,305	89,988	90,671	91,354	92,037	92,720	93,403	94,086	94,769
Change in Economically active		+295	+292	+290	+287	+284	+281	+279	+276	+273	+271	+683	+683	+683	+683	+683	+683	+683	+683	+683	+683
Number of Jobs	82,305	82,998	83,691	84,384	85,077	85,770	86,463	87,156	87,849	88,542	89,235	89,928	90,621	91,314	92,007	92,700	93,393	94,086	94,779	95,472	96,165
Change in Jobs over previous y		+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693	+693

Households

Number of Households	66,666	67,147	67,629	68,188	68,891	69,536	70,262	70,967	71,747	72,506	73,312	74,283	75,257	76,257	77,234	78,196	79,116	80,105	81,148	82,193	83,253
Change in Households over previous year	+480	+482	+559	+703	+645	+726	+706	+779	+760	+805	+972	+974	+1,000	+977	+962	+920	+990	+1,043	+1,045	+1,059	
Number of Dwellings	68,748	69,243	69,741	70,317	71,042	71,707	72,456	73,183	73,987	74,770	75,601	76,603	77,607	78,638	79,645	80,638	81,586	82,607	83,682	84,760	85,852
Change in Dwellings over previous year	+495	+497	+576	+725	+666	+748	+728	+804	+783	+831	+1,002	+1,004	+1,031	+1,007	+992	+949	+1,021	+1,075	+1,078	+1,092	

APPENDIX 4

CE AND OE EMAILS

Email from Oxford Economics

From: Nicole Penfold [mailto:N.Penfold@gladman.co.uk]

Sent: 02 December 2015 11:42

To: James Donagh <James.Donagh@bartonwillmore.co.uk>; Simon Macklen <Simon.Macklen@bartonwillmore.co.uk>; Dan Usher <dan.usher@bartonwillmore.co.uk>; Debbie Mayes <Debbie.Mayes@bartonwillmore.co.uk>

Subject: FW: OE unconstrained employment forecasts

All

Please see response below from Oxford Economics.

Thanks

Nicole

From: Kerry Houston [mailto:khouston@oxfordeconomics.com]

Sent: 02 December 2015 11:35

To: Nicole Penfold

Cc: Caroline Franklin

Subject: RE: OE unconstrained employment forecasts

Hi Nicole,

Caroline has forwarded me your query.

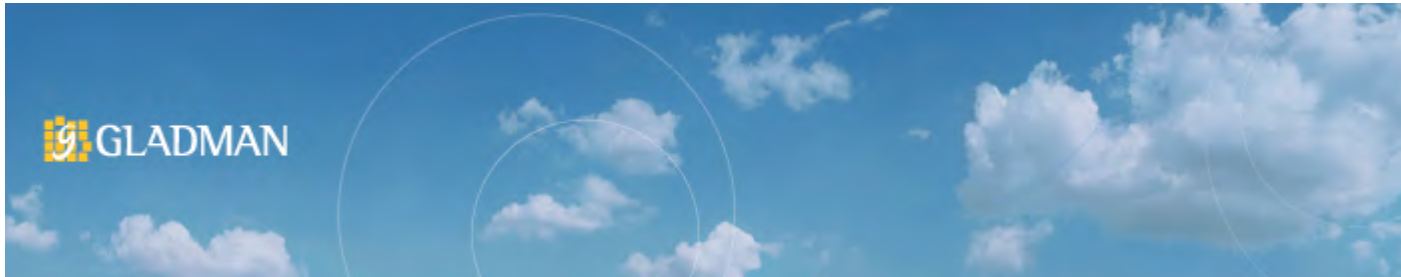
Our forecasts are demand based and are not constrained by population. We produce our own forecast of population which differs from the Official Projections. WE use the natural increase assumptions from the official projections but we have our own view on migration (the model assumes that people will move to where the jobs are). I've attached a short note which summarises our approach.

Also the 2014 National Population Projections have recently been released. We are working to incorporate these assumptions into our suite of forecast models. The UK migration forecast in the latest projections are much closer to our view in the short/medium term.

I hope this is helpful.

Best wishes,
Kerry

From: Nicole Penfold
Sent: 01 December 2015 14:13
To: George Armitage (garmitage@oxfordeconomics.com)
Cc: Phill Bamford
Subject: OE unconstrained employment forecasts



Good Afternoon George

I was wondering if you could assist me with something.

Attached is an example from Experian of the jobs demand output they can provide which is not constrained by population.

Our understanding is that the OE forecasts (similarly to the normal Experian forecasts) are constrained to the 2012 SNPP. I was therefore wondering whether you are able to supply a similar set of unconstrained economic forecasts? If so, would it be possible for you to provide these for Telford and Wrekin as an example.

Kind Regards,

Nicole

Nicole Penfold - Policy Planner | n.penfold@gladman.co.uk | DDI: 01260 288 849 | M: 07507 662 233

Gladman Developments | Gladman House | Alexandria Way | Congleton | Cheshire | CW12 1LB
T: 01260 288 800 | F: 01260 288 801
www.gladman.co.uk/land

Email from Cambridge Econometrics

From: Shyamoli Patel [<mailto:sp@camecon.com>]
Sent: 14 September 2015 12:03
To: Dan Usher <dan.usher@bartonwillmore.co.uk>
Cc: Anthony Barker <ab@camecon.com>; Mike May-Gillings <mmg@camecon.com>;
 Simon Macklen <Simon.Macklen@bartonwillmore.co.uk>; James Donagh
 <James.Donagh@bartonwillmore.co.uk>
Subject: RE: Query

Hi Dan,

I can confirm that our employment projections aren't constrained by the ONS population projections. I've outlined our methodology below, which I hope you find useful.

CE's employment projections are baseline economic projections based on historical growth in the local area relative to the region or UK (depending on which area it has the strongest relationship with), on an industry-by-industry basis. They assume that those relationships continue into the future. Thus, if an industry in the local area outperformed the industry in the region (or UK) as a whole in the past, then it will be assumed to do so in the future. Similarly, if it underperformed the region (or UK) in the past then it will be assumed to underperform the region (or UK) in the future.

They further assume that economic growth in the local area is not constrained by supply-side factors, such as population and the supply of labour. Therefore, no explicit assumptions for population, activity rates and unemployment rates are made in the projections. They assume that there will be enough labour (either locally or through commuting) with the right skills to fill the jobs. If, in reality, the labour supply is not there to meet projected growth in employment, growth could be slower.

I hope that helps.

Kind regards,
 Shyamoli

From: Dan Usher [<mailto:dan.usher@bartonwillmore.co.uk>]
Sent: 14 September 2015 11:32
To: Shyamoli Patel <sp@camecon.com>
Cc: Anthony Barker <ab@camecon.com>; Mike May-Gillings <mmg@camecon.com>;
 Simon Macklen <Simon.Macklen@bartonwillmore.co.uk>; James Donagh
 <James.Donagh@bartonwillmore.co.uk>
Subject: Query

Hi Shyamoli,

We are currently responding to a Planning Inspector's pre-hearing question which we would like your view on.

The question is as follows:

As argued by the Council, is the jobs led model used in the SHMA too circular and thus flawed to justify a housing requirement (HOU1, 3.80-3.89)?

In short, the SHMA being referred to recommends an uplift from the CLG household projections (and their population projections), to increase the population and labour force, to fill a job growth target. This is based on a model such as Chelmer or PopGroup.

However, the Council suggest this approach is flawed and is a 'circular argument', whereby the forecasts (such as yours for example) are based on sub national population projections from ONS, thereby meaning a higher population than ONS projections is not required.

"In order to predict future employment change many authorities rely on econometric forecasts, either standard or bespoke to reflect alternative macroeconomic expectations or policy aspirations. This is often deeply flawed because population is both an input and an output to the process. The jobs-led demographic modelling uses the expected future population (usually taken from CLG projections) as an input, and also produces future population as an output which is then used to calculate future housing need. Importantly however the input population already assumes a given amount of housing development and the guidance suggests that at best the process is logically circular, but generally the model is internally inconsistent, because the population that is output does not equal the population that is input. It is a 'self-defeating prophecy'."

In respect of the job forecast you sent me last week, can you let me know if the view put forward by the Council is correct, i.e. is your job forecast constrained to the ONS population projection? Thanks

Regards

Dan Usher

Research Associate

Planning . Design . Delivery
bartonwillmore.co.uk

The Observatory
 Southfleet Road
 Ebbsfleet
 Dartford
 Kent
 DA10 0DF

t : 01322 374 683

f : 01322 374 661

www.bartonwillmore.co.uk

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