Telford & Wrekin Objectively Assessed Housing Need

Final Report

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1 INTRODUCTION

1.1 This report is part of a study commissioned by Telford & Wrekin Council in October 2014, to provide an objective assessment of the need for both housing and economic land uses in the plan period to 2031. The study as a whole is to provide an integrated view of future demography, housing and jobs, to inform the emerging Local Plan for the borough. The brief sets out key questions that the study should address as follows:

- '*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?'*

1.2 Below, Chapter 2 draws Telford & Wrekin's housing market area. Chapters 2-4 provide the objective assessment of housing need, starting from demographic projections and then considering additional evidence on past provision, market signals and affordable housing. Chapter 4 assessed the need for economic land uses and the alignment of jobs and housing. Finally Chapter 5 summarises our findings and discusses how the Council might translate the assessed need into housing targets for the Local Plan.

2 DEFINING THE HOUSING MARKET AREA

Introduction

2.1 The NPPF instructs that, where a housing market area (HMA) covers more than one local authority, plan-makers should assess housing needs for the whole area rather than each authority individually. Therefore the first step in the study is to see if Telford & Wrekin is a standalone HMA. If it were not, in order to provide a sound needs assessment we would need to add further authorities to the analysis, even if they are not taking part in the study.

2.2 The PG provides technical advice on how housing market areas should be defined, noting that an HMA should be a reasonably self-contained area in terms of migration – so that a high proportion of house moves occur within the area, as opposed to crossing its boundaries. It adds that this share of moves occurring within the HMA is 'typically 70%... *excluding long-distance moves* (*e.g. those due to a change of lifestyle or retirement)'*. The PG also identifies other data that can help identify housing market areas, including commuting patterns – '*which will influence house price and location*'.

2.3 In identifying a housing market area for Telford & Wrekin, our starting point is the geography defined in a study by the Centre for Urban and Regional Studies (CURDS) and others for the former National Housing and Planning Council (NHPAU). That study, published by CLG in 2010[1], created a consistent set of HMAs across England, based on migration and commuting data from the 2001 Census. As the NHPAU study is the only one of its kinds and has not been updated following the 2011 Census, we test the findings against up-to-date on migration and commuting data from that Census.

The NHPAU geography

2.4 The results of the NHPAU study are hosted on the CURDS website. It defines a three-tiered hierarchy of HMAs: strategic, single-tier and local. The study starts from a fine-grained analysis, producing HMAs that cut across administrative boundaries. But for the strategic and single-tier layers the study also provides a 'silver standard' version, which fits the HMAs to local authority boundaries.

2.5 In our view, for our present purpose the single-tier 'silver standard' geography[2] is the most helpful. We take this view for pragmatic reasons. Thus, we prefer the single-tier layer because strategic HMAs are often too large to be manageable; we prefer the 'silver standard' because HMAs boundaries that straddle local authority areas are usually impractical, given that planning policy is mostly made at the local authority level, and many kinds of data are unavailable for smaller areas.

[1] C Jones, M Coombes and C Wong, Geography of housing market areas, Final report, November 2010, Department for Communities and Local Government

[2] http://www.ncl.ac.uk/curds/assets/documents/6.pdf / http://www.ncl.ac.uk/curds/assets/documents/28.xls

2.6 In the NHPAU geography Telford & Wrekin forms a single-tier HMA, numbered 44, with just one other district, Bridgnorth. Since that geography was created, Bridgnorth has joined four other districts to form a much larger unitary authority called Shropshire. Of these four other districts, three – North Shropshire, Oswestry and Shrewsbury and Atcham - are grouped together in the NHPAU geography to form HMA 84; the fourth, South Shropshire, is grouped with Herefordshire to form HMA 43.

2.7 In short, if we want to draw a 'silver standard' HMA boundary, which does not divide local authorities, the NHPAU analysis suggests two broad options. We can either identify Telford & Wrekin as an HMA it its own right, provided that it remains reasonably self-contained despite being separated from the former Bridgnorth district. Alternatively, if Telford & Wrekin on its own is not self-contained enough, we could combine it with Shropshire into a single HMA – though this would include three districts which are not well related to Telford & Wrekin, and one which is not even well related to the rest of Shropshire, but more closely linked to Herefordshire.

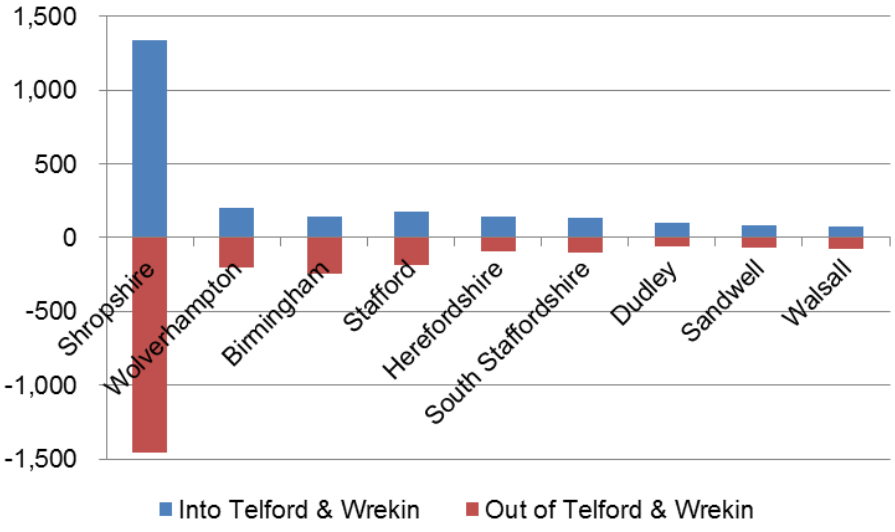
2.8 So the next step in our analysis is to test whether Telford & Wrekin on its own is self-contained enough to qualify as an HMA. For this, in the next two sections we examine migration and commuting in turn.

Migration

Main origins and destinations

2.9 The chart below shows the 10 local authority areas that in the year before the 2011 Census had the largest combined migration flows in and out of Telford & Wrekin. The blue bars (positive numbers) show migration into the borough and the red bars (negative numbers) migration out of the borough. The chart excludes people moving within Telford & Wrekin, which number 12,600 – almost double the total of cross-boundary moves.

Figure 2.1 Cross-boundary migration to and from Telford & Wrekin, 2010-11, top 10 origins and destinations, persons



Source: ONS

2.10 The largest flows by far are to and from Shropshire. All four Black Country authorities are on the list; but even so, their combined flows total less than a third of Shropshire's. Flows to and from other areas are far smaller.

2.11 In short, the analysis confirms the NHPAU finding discussed earlier, that Telford & Wrekin's closest migration links by far are with Shropshire. But are these links so strong that Telford on its own does not qualify as an HMA?

The 70% test

2.12 To answer this question we test Telford's containment against the PG criterion, that around 70% of all house moves excluding long-distance migration should occur within the HMA. The PG does not specify this criterion clearly, so for more precise guidance on how to test it we refer to the original source behind the PG, which is an advice note published by CLG in 2007[3]. The note's introductory comments on this are already familiar, because they are repeated in the PG (quoted earlier):

'Analysis of migration flow patterns can help to identify these relationships and the extent to which people move house within an area. The findings can identify the areas within which a relatively high proportion of household moves (typically 70 per cent) are contained. This excludes long distance moves (e.g. those due to a change of lifestyle or retirement).

2.13 But later the 2007 advice note goes on to provide more specific guidance, which is not repeated in the PG:

*'**Identifying suitable thresholds for self-containment**: The typical threshold for self-containment is around 70 per cent of all movers in a given time period. This threshold applies to both the supply side (70 per cent of all those moving out of a dwelling move within that same area) and the demand side (70 per cent of all those moving into a dwelling have moved from that same area).'*

2.14 The table below shows these measures of containment for Telford & Wrekin. In this calculation:

- Migration data, as before, are taken from the 2011 Census and relate to persons moving house in the year ending on Census day.
- This time the analysis includes moves within the borough, which were excluded from Figure 2.1.
- As well as the 'supply-side' and 'demand-side' ratios defined above, we have calculated an overall containment ratio that combines the two. This overall measure is the ratio of moves that originate or end in the borough, but do not cross the borough boundary, to the total of all moves that originate or end in the borough.
- Total moves comprises moves within England and Wales only, excluding those whose origin or destination is in other countries of the UK or overseas. We

[3] Communities and Local Government, *Identifying sub-regional housing market areas, Advice note, March 2007*

exclude this category because they are long-distance moves, as defined by the PG following the 2007 advice note.

- This is a conservative definition of long-distance moves, because in practice many moves within England and Wales also qualify as long-distance, regardless of how 'long-distance' is defined.

Table 2.1 Migration self-containment, Telford & Wrekin, 2010-11, persons

From	To		
	Telford & Wrekin	Rest of England & Wales	Total
Telford & Wrekin	12,563	5,644	18,207
Rest of England & Wales	5,331	-	
Total	17,894		

All moves to T&W	18,207
All moves from T&W	17,894
All moves to and from T&W	36,101
Moves that do not cross the T&W boundary	25,126
Destination containment ('demand-side ratio')	**70.2%**
Origin containment ('supply-side ratio')	**69.0%**
Overall containment	**69.6%**

Source: ONS, PBA

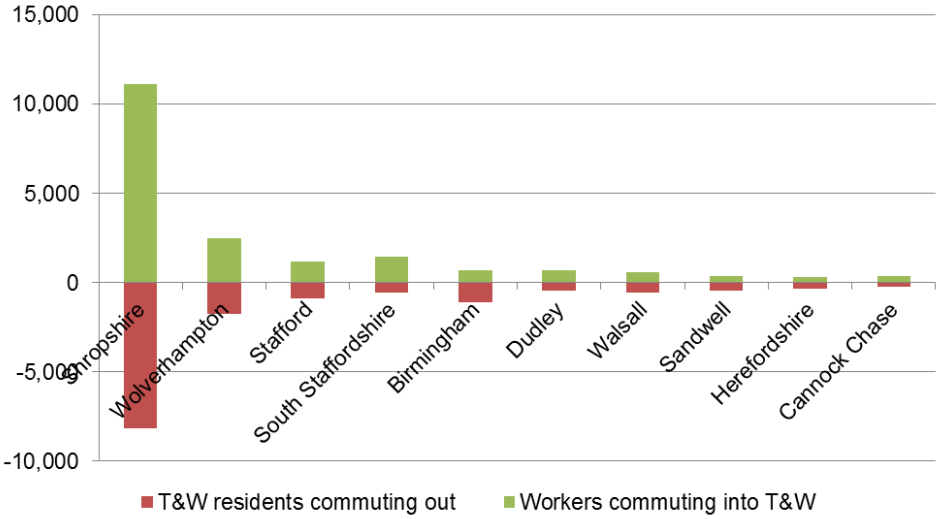
2.15 The resulting ratios (shown at the bottom of the table) are minimum estimates of containment as defined in the PG, because they are based on this conservative definition of long-distance migration. Nevertheless, all three ratios are within one percentage point of the 70% threshold specified in the PG[4]. This shows that Telford forms a housing market area on its own, as defined in the PG.

Commuting

2.16 Figure 2.2 below shows the main origins / destinations of cross-boundary commuting to and from Telford & Wrekin. The data are from the Census, as before. We have selected the 10 local authority areas with the largest combined flows into and out of Telford & Wrekin. Again the largest flows, in both directions, are to and from Shropshire. All four Black Country authorities are on the list, and the sum or their combined flows roughly equals that for Shropshire. Smaller flows go to and from two Staffordshire districts and Birmingham.

[4] The overall containment ratio is a weighted average of the two others.

Figure 2.2 Cross-boundary commuting to and from Telford & Wrekin, 2011, top 10 origins and destinations, persons



Source: ONS, PBA

2.17 The table below shows containment ratios for commuting, using the same method as for migration containment (paragraphs 2.13-2.14 above).

Table 2.2 Commuting self-containment, Telford & Wrekin, 2011, persons

Live in	Work in		
	Telford & Wrekin	Rest of the world	Total
Telford & Wrekin	48,871	17,986	66,857
Rest of the world	23,268		
Total	72,139		

Workers resident in T&W	66,857
Workplaces in T&W	72,139
Workers and workplaces in T&W	138,996
Work trip that do not cross the T&W boundary	97,742
Destination containment ('demand side ratio')	**67.7%**
Origin containment ('supply side ratio')	**73.1%**
Overall containment	**70.3%**

Source: ONS, PBA

2.18 The borough's containment ratios for commuting are around 70%, similar to those calculated earlier for migration. In relation to commuting neither the PG nor the 2007 CLG advice identify a threshold to help define market areas. But such a threshold is provided in the ONS definition of Travel to Work Areas:

'The current criterion for defining TTWAs is that generally at least 75% of an area's resident workforce work in the area and at least 75% of the people who work in the

area also live in the area… However, for areas with a working population in excess of 25,000, self-containment rates as low as 66.7% are accepted.[5]

2.19 Telford & Wrekin satisfies this criterion, since it does have a working population in excess of 25,000. Again, this evidence suggests that the borough is a labour market and housing market in its own right[6].

Conclusion

2.20 The evidence of migration and commuting shows that Telford & Wrekin forms a separate housing market area as defined in the PG. Therefore it is consistent with national policy and guidance to assess housing need for the borough on its own. We do so in the rest of this report.

2.21 However, as the PG and Inspectors' advice are clear that the Duty to Co-operate does not stop at the HMA boundary, it may be that the borough will be required to accommodate unmet need from areas beyond the HMA so far as is reasonable and sustainable. We return to the question of cross-boundary unmet need in Chapter 5. But first, in the next two chapters, we provide an objective assessment of housing need for Telford & Wrekin on its own.

[5] Office for National Statistics, *Guidance and Methodology*, *A Beginner's Guide to UK Geography,* http://www.ons.gov.uk/ons/guide-method/geography/beginner-s-guide/other/travel-to-work-areas/index.html. The TTWA geography was developed by the same team as the NHPAU geography discussed earlier.

[6] The PG and 2007 CLG note mention TTWAs as a consideration in defining housing market areas. In our analysis of Telford & Wrekin we cannot use TTWAs directly, because the TTWAs based on the 2011 Census have not yet been defined, and in any case they will cut across local authority areas, which makes them unhelpful for present purposes.

3 THE DEMOGRAPHIC EVIDENCE

Method

Previous official projections

3.1 In line with the PG, the starting point of our objective assessment of housing need is the official household projections from the Department for Communities and Local Government (CLG), which are derived from the sub-national population projections (SNPP) produced by the Office for National Statistics (ONS). The SNPP show future population by local authority area and are normally released at two-year intervals, with additional releases in response to new data – recently the 2011 Census. The CLG translates the population into households. The projected growth in household numbers, with a small adjustment for vacant and second homes, is used as the measure of housing need.

3.2 The official projections, like all projections, are trend-driven – that is, they roll forward (project) past trends into the future. Accordingly, still following the PG, we test and amend them through alternative projection scenarios that adjust for:

- Technical flaws in the official modelling, including:
  - Superseded or otherwise inaccurate historical data - projections are only past trends rolled forward, so a projection based on the wrong trends will be inaccurate);
  - Anomalies in the modelling – the official models are very complex, mainly because they cover hundreds of local authorities; even if the models are accurate 'on average', they will not necessarily be accurate for every single authority in every single year.
- External (non-demographic) factors that bear on demographic change but are not captured in the projections, because they are likely to differ in the future from what they were in the past – in particular the macroeconomic climate.

3.3 For any geographical area, the change in housing numbers is the outcome of three components: The first two factors, natural change (equal to births minus deaths) and migration (UK and international[7]) impact on population change. The third factor is the ratios that turn population into households, known as household reference rates (HRRs, also known as headship rates or household formation rates). Alternative scenarios are mostly based on varying assumptions about migration and household formation. In contrast to natural change, these factors are difficult both to measure for the past and even more difficult to predict for the future.

3.4 Until recently the two most recent official household projections were:

[7] 'Migration' in the present context means all moves that cross a local authority boundary, whether within the UK or internationally.

- The CLG 2008-based projections ('CLG 2008'), derived from the 2008-based SNPP population projection ('ONS 2008');
- The CLG interim 2011-based projections ('CLG 2011'), derived from the 2011 interim SNPP ('ONS 2011').

3.5 Both these projections have serious technical weaknesses. The 2008 projections are based on historical trends that by now are very old, and in many cases their predictions have been invalidated by the 2011 Census. The interim 2011 suite has a short time horizon, only covering 10 years to 2021. It also has a serious technical flaw: the historical migration, birth and death rates it is based on are pre-Census estimates, which for many places were shown by the Census to be seriously inaccurate.

3.6 A more general problem with the official projections is that future migration follows trends rolled forward from a five-year base period (for ONS 2011, that period is 2006-11)[8]. In principle, it seems doubtful to base a prediction for 20 years or longer on a past as short as five years. In this particular case, the previous five years are likely to be untypical of longer-term trends, because four of them coincide with an economic recession, and an exceptionally severe one at that. Projections based on 2012, whose reference period is 2007-12, share the same weakness.

3.7 Another weakness, specific to the 2011-based projection, is that its household formation carries the imprint of the recession. Across England the 2011 Census showed that there were substantially fewer households than previously expected and on average those households were substantially larger. The evidence suggests that this is partly a demand-side effect of the recession – when, due to falling incomes and the credit crunch, fewer people could afford their own homes. CLG 2011 carries forward this effect into the future.

PBA projections

3.8 To correct the weaknesses discussed above, we created two alternative scenarios for 2011-31, called PBA Trends. These scenarios use our in-house suite of demographic models; the models are described at Appendix A below and the results at Appendix B. The base date our projections is 2013 - the latest date for which we have factual demographic data, from the ONS Mid-Year Population Estimates, which is informed by the 2011 Census. They mirror the methods and assumptions used in official projections – except of course for the alternative assumptions we are testing, as described below.

i PBA Trends 2003-13 projects the migration trend from the period 2003-13. Unlike the 2011 official projections, it takes full account of the Census findings. Unless there are special circumstances that make this 10-year base period untypical, it should also provide a more robust projection than the five-year base used by ONS/CLG. As regards household formation, Trends 2003-13 uses the 'indexed' (re-based, blended) method supported by the South Worcestershire EiP inspector

[8] In the case of international migration, these five-year-based figures are controlled to national totals that reflect longer-term trends and expert judgment.

among others, which assumes that after 2021 headship rates revert to their pre-recession trend as projected in CLG 2008 – though without catching up the 'shortfall' accumulated earlier.

ii PBA Trends 2008-13 is based on five-year migration trends, 2008-13[9]. In principle, as discussed earlier, one would expect this to be less reliable than a ten-year base period, and also less aligned with long-term trends because of the recession. It purpose is to help compare our scenarios and the official ones, which as noted earlier always use a five-year based period for migration. For household formation, Trends 2008-13 again uses the indexed method – assuming a return to the pre-recession trend after 2021.

2012-based official projections

3.9 In late May 2014 ONS produced a new, 2012-based release of the SNPP. This ('ONS 2012') is a fully-fledged population projection, which supersedes the interim ONS 2011. On 26th February 2015 this was followed by the CLG 2012-based household projection ('CLG 2012'), which translated this population into households. At that time the present report was already in draft.

3.10 One possible technical flaw in 2012-based official projections relates to an error term in the official population statistics known as unattributable population change (UPC). UPC occurs when area's population change between the two last Censuses, 2001 and 2011, cannot be accounted for by recorded births and deaths, together with estimated migration. The UPC may be due to population counts in one or both of the Censuses being wrong, or to ONS estimates of past migration being wrong. The ONS 2012 population projection ignores the UPC – in effect assuming that the UPC results from miscounting in one or both Censuses. In places where the UPC is large, this can make a major difference to the estimated past migration that demographic projections roll forward into the future. But for Telford & Wrekin this is not the case, as the annual average UPC over the inter-censal period is a gain of just 62 persons.

3.11 More difficult issues around the 2012-based household projection relate to household formation. In the new CLG 2012 projection household representative rates (HRRs, headship rates, household formation) are higher than CLG 2011 for all age groups, but especially males aged 25-34. Consequently for any given population CLG 2012 shows higher household growth and housing need than CLG 2011. Though arrived at through a different method, for many areas CLG 2012 produces the same answer as the indexed method used in our Trends projections.

3.12 This increase in HRRS between CLG 2011 and CLG 2012 is not due to methods for projecting HRRS, which has remained unchanged between CLG 2011 and CLG 2012. Rather, its cause is that CLG revised upwards its estimates of historical HRRs at 2011. But the new 2011 HRRs, like the old ones, are only approximations. Real-life information from the Census on HRRs at 2011 is still not available; although work is in progress to retrieve and process that information, household projections using

[9] The base period has been rolled forward one year from ONS/CLG 2011, because our projections had the benefit of more recent data, following publication of the 2012 ONS mid-year estimates.

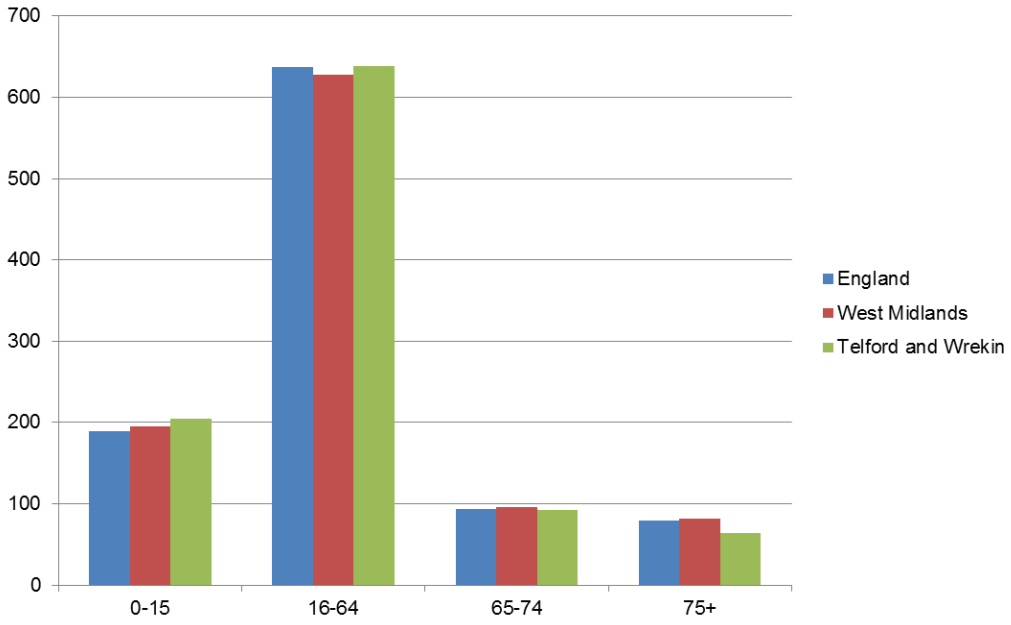
based on it are not expected until 2016. However, despite the technical problems with CLG 2012 a new amendment to the PPG has endorsed it as the most up-to-date evidence available at present.

Results

Background

3.13 Telford & Wrekin's population, as shown in the ONS 2013 Mid-Year Estimates, is 168,500[10]. The borough's age profile is very similar to both the West Midlands region and England as a whole (Figure 3.1), though with fractionally more children, more people in the working age groups (specifically in their 40s) and fewer over 75s.

Figure 3.1 Telford & Wrekin broad age profile, 2013, persons per 000

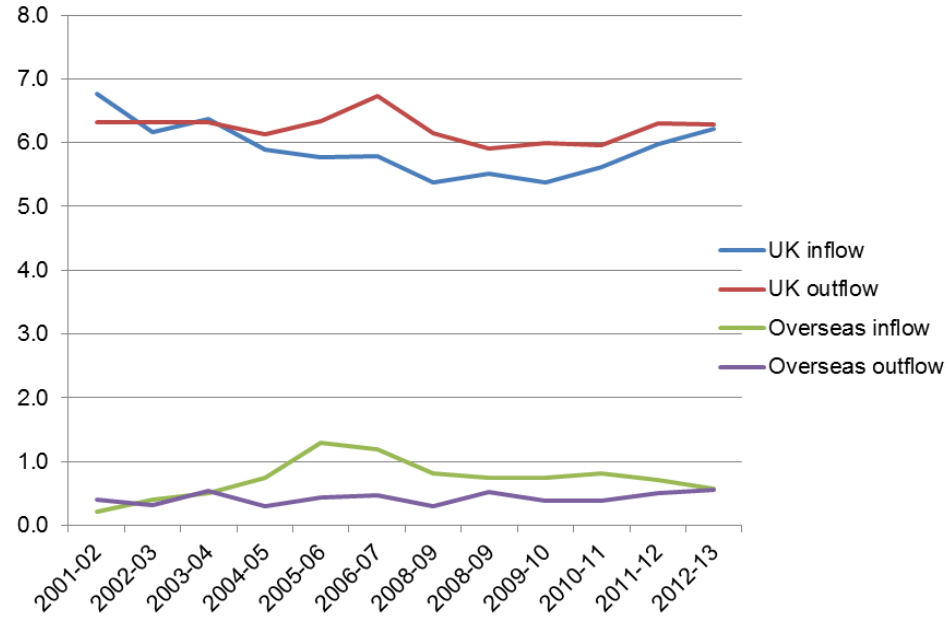


Source: ONS

3.14 From mid-2001 to mid-2013 the borough's population increased by 9,900, just over 6%. The bulk of this growth, 9,500, was due to natural change. Migration, both net and gross, was dominated by domestic (UK) flows – with Shropshire the most important origin and destination by far, as discussed in Chapter 2 above.

[10] Numbers mentioned in the text are rounded. Unrounded numbers are in the tables.

Figure 3.2 Telford & Wrekin past migration flows, thousands



Source: ONS

3.15 Net migration, as shown in the ONS Mid-year Estimates (see Appendix A), is a loss of 294 persons. The UPC (discussed at paragraphs 3.11-3.13 above) amounts to a gain of 669 persons. Thus, if the UPC was unrecorded migration, then total migration was a gain of 375 persons (669 minus 294). Which of these histories is correct is a matter of judgment, as discussed earlier.

Projections

3.16 The table below summarises the five demographic projections, showing change over the plan period 2011-31, together with past change from 2001 to 2011.

3.17 With regard to population (shown in the first section of the table), the ONS 2008 and ONS 2011 projections have been overtaken by events. The Census showed that ONS 2008 under-estimated the population at 2011, and hence past growth since 2001, by around 3,300 persons. The interim ONS 2011 projection is also compromised, mostly because the Census shows that was based on substantially over-estimated past rates of natural change.

3.18 Due to these weaknesses, the first two scenarios shown in the table do not provide credible evidence on future population. We only show them for reference, and because they still may still provide useful information about household formation, as discussed later in this chapter.

3.19 Turning to more recent projections, the two PBA Trends scenarios show similar population growth over the plan period, at 838 and 785 persons per year respectively. By contrast, in the ONS 2012 scenario growth is considerably lower, at just 583 persons per year. The difference between PBA Trends and ONS 2012 is mostly due to future migration.

Table 3.1 Demographic projections for Telford & Wrekin, five scenarios

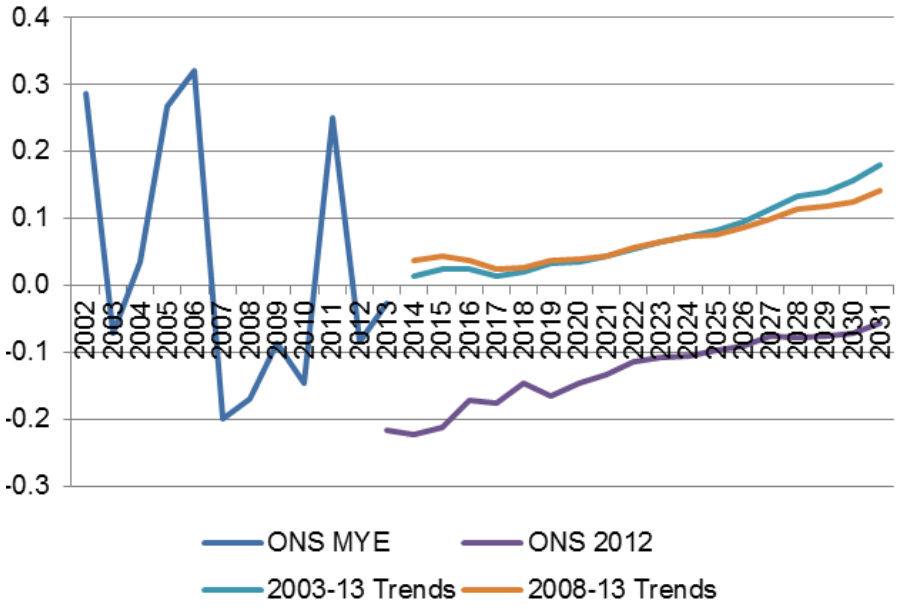
		CLG 2008	CLG 2011	2003-13 Trends	2008-13 Trends	CLG 2012
Population						
2001	**thousands**	158.6	158.6	158.6	158.6	158.6
2011	**thousands**	163.5	166.8	166.8	166.8	166.8
2021	**thousands**	169.3	176.6	175.5	175.4	173.6
2031	**thousands**	174.5		183.6	182.5	178.5
2001-11	**thousands**	4.9	8.3	8.3	8.3	8.3
2011-31	**thousands**	11.0		16.8	15.7	11.7
p.a.	**persons**	550		838	785	583
Households						
2001	**thousands**	63.8	63.8	63.8	63.8	63.8
2011	**thousands**	68.5	66.7	66.7	66.7	66.7
2021	**thousands**	73.9	71.9	70.9	71.0	71.6
2031	**thousands**	78.2		75.5	75.2	75.6
2001-11	**thousands**	4.7	2.9	2.9	2.9	2.9
2011-31	**thousands**	9.7		8.8	8.5	8.9
p.a.	**households**	485		439	426	446
Dwellings						
2011-31	**thousands**	10.0		9.1	8.8	9.2
p.a.	**dwellings**	501		453	439	461

Source: ONS, CLG, PBA

3.20 As shown in Figure 3.3 below, the PBA scenarios show similar migration in the future to the average of past years; this makes sense, because projections continue past trends. By contrast, in the ONS 2012 scenario the future looks radically different from the past, with a sharp break in the first year of the projection 2014. Therefore, we

think the ONS version has an anomaly in the calculation. The algorithms used in the ONS model are very complex because of the large number of local authorities and age groups that are taken into account, so although it is good on average across authorities it sometimes fails for particular authorities. We think this is one of those cases and we consider the Trends scenarios more credible.

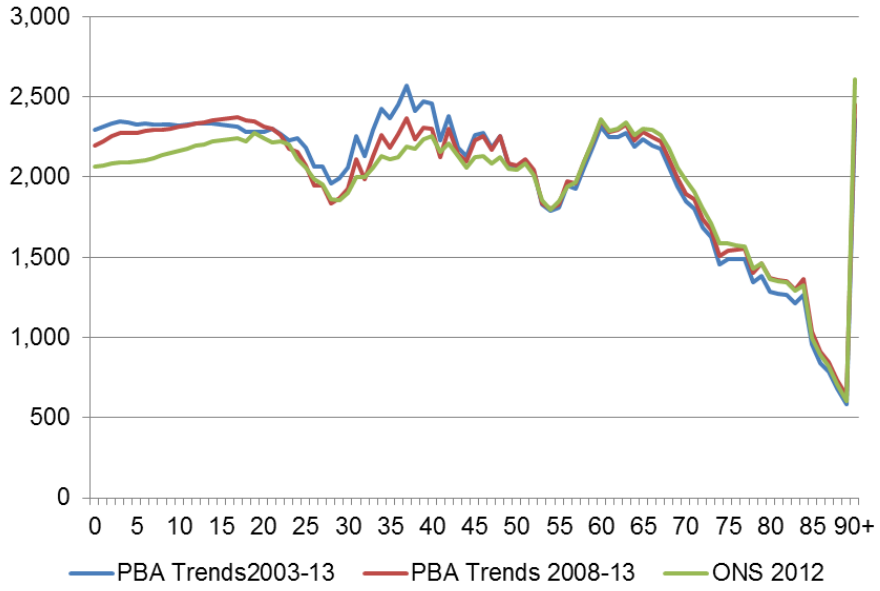
Figure 3.3 Telford & Wrekin net migration, history and three scenarios, thousands



Source: ONS, PBA

3.21 In regard to household numbers, pictured in the second section of Table 3.1, the two PBA Trends scenarios again are very similar, showing annual growth of 439 and 426 households respectively. Assuming that unoccupied household spaces vacant and second homes) stay at 3.1% as shown in the Census, this would require 453 or 439 net new dwellings per annum (dpa). CLG 2012 shows virtually the same result, at 446 households and 461 dwellings per annum.

Figure 3.4 Telford & Wrekin age profile, 2031, three scenarios, persons



Source: ONS, PBA

3.22 At first sight it seems surprising that CLG 2012 shows as many new households as the Trends scenarios, although it shows much less population growth. The explanation is that in ONS 2012 the population has an older age profile, with fewer children and fewer adults under 50 (Figure 3.4). Consequently in ONS 2012 the average household size is also smaller, because those age groups tend to live in larger households (have lower headship rates) than older people.

Objectively assessed housing need

3.23 The analysis above produced two broad measures of housing need in the plan period 2011-31:

- The PBA Trends scenarios show 439-453 dpa, to accommodate annual population growth of around 800.
- Alternatively the CLG 2012 scenario shows 461 d.p.a., to accommodate annual population growth of just under 600.

3.24 In terms of housing need the difference between these two views is insignificant. In terms of resident population that difference is greater, amounting to some 4-5,000 persons over the plan period. Since labour supply depends on numbers of residents rather than households, the choice of scenario has a greater bearing on the balance of the labour market (which will be considered in our next report) than on demographically projected housing need.

3.25 The choice between the two projections is not straightforward. PBA Trends is more robust in terms of population numbers, for reasons discussed earlier. CLG 2012 is more up-to-date in terms of household formation, and endorsed by the PPG as such, though in technical terms it is still provisional. Therefore following the publication of CLG 2012 we have prepared a new set of our own projections, PBA Trends Adjusted,

which applies the CLG 2012 HRRs to the PBA trends population. The resulting housing need over the plan period is:

- PBA Trends Adjusted 2008-13: 483 dpa
- PBA Trends Adjusted 2003-13: 497 dpa.

3.26 Of the two Trends projections we would normally expect Trends 2003-13 to be more robust, because a longer reference period should provide a better indication of long-term trends, less affected by year-to-year fluctuations.

3.27 On the demographic evidence, therefore, our objective assessment of housing need over the plan period is 497 dpa. In Chapters 4 and 5 below we will consider whether this initial assessment should be adjusted in the light of other evidence. But first, in the next section we define a higher, policy-led scenario – which has no bearing on Telford & Wrekin's objectively assessed housing need but should help inform the Council's thinking on the policy target.

The 750 dpa scenario

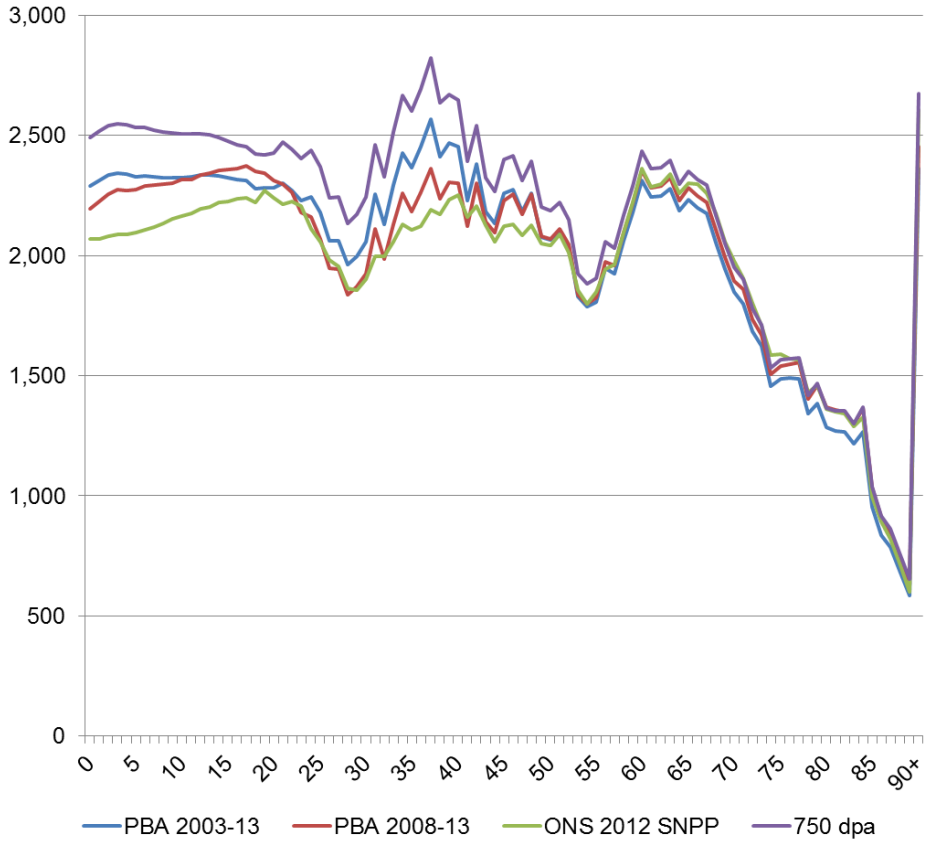
3.28 The NPPF and PG make it very clear that plan targets cannot undershoot the objectively assessed housing need, unless an authority can demonstrate that it lacks the sustainable capacity to meet that need. But there is nothing in national policy or guidance to say that targets should not *exceed* the OAN. On the contrary, the NPPF's objective *'to boost significantly the supply of housing'*, its presumption in favour of sustainable development and its emphasis on positive planning all show that national policy favours high housing targets, the higher the better so long as development remains deliverable and sustainable.

3.29 Bearing this in mind, there are at least two ways in which a housing target above the OAN could serve the Council's own policy objectives. Firstly, if more market housing were developed it could help finance affordable housing, for which Telford & Wrekin has a very large need as discussed in the next chapter. Secondly, in the particular circumstances of Telford & Wrekin greater housing growth could make for healthier and more sustainable communities. Original plans for Telford envisaged a population up to 225,000, while at the 2011 Census the whole borough had just under 167,000 residents. We are advised by Council officers that the borough has the physical capacity for considerable growth, and such growth may benefit its main settlements, especially Telford, by creating the critical mass to support better services and facilities.

3.30 For this reason we have modelled the demographic implications of providing 15,000 net new dwellings (750 dpa) over the plan period. This number is based on officers' estimate of the borough's sustainable and realistically deliverable supply capacity over the plan period. If this number of dwelling units were built, and assuming no change in the percentage of vacant and second home, we estimate that the borough's population would grow by 1,522 person per year, almost twice as many as our preferred scenario.

3.31 In the 750 dpa scenario the population is younger than in the other scenarios, as shown in the chart below. Compared to Trends 2003-13 the additional population is concentrated in the age groups under 55, and even more so in the groups under 40. This is because the additional population comes from net in-migrants, who are younger on average than the rest of the population.

Figure 3.5 Telford & Wrekin age profile, 2031, four scenarios, persons



Source: PBA

3.32 In Chapter 5 below we will test the implications of the 750 dpa scenario for the balance of the labour market.

4 PAST PROVISION, MARKET SIGNALS AND AFFORDABLE NEED

Introduction

4.1 As advised in the PG, while demographic projections should be the starting point in assessing housing need, they should be supplemented by further evidence. If market signals show that planning has undersupplied housing demand in the past, then the projections will understate that need and should be adjusted upwards. If the projections do not show enough new housing overall to meet affordable need, again Councils should consider an upward adjustment. We discuss these two issues in turn below.

Past provision and market signals

Past land supply

4.2 To see if planning in Telford & Wrekin has underprovided housing land in the period on which our projections are based, we first examine the history of housing development in the borough. We then look at various house prices, affordability, rents and finally overcrowding.

Planning background

4.3 To make sense of the history of housing delivery in Telford, we need first to understand the planning context as it changed over recent years.

4.4 In 2000, the Council adopted the Wrekin Local Plan. Its housing target was based on the Shropshire Structure Plan[11]. This required 17,752 net dwellings between 1989 and 2006, equal to 1,044 dwellings per annum (dpa)).

4.5 The Wrekin Local Plan covered the period from 1995 to 2006. Between 1989 and 1995, approximately 6,138 dwellings were completed; this left a residual of 11,614 dwellings to be completed by 2006, equal to 1,056 dpa.

4.6 The Local Plan noted that 97% of the land required to meet this target had already been identified, leaving only 3% to be allocated in the plan. To fill this gap the plan allocated two sites: Land East of Ketley (415 dwellings) and Land at Grooms, Wellington (100-120 dwellings). However it noted that it was unlikely that the land at Ketley would be ready for building before 2000, and most houses would not be completed until after the end of the plan period (2006).

4.7 In 2007, the Council adopted the Core Strategy, with housing targets set by the Regional Spatial Strategy (2004) – which required a maximum of 1,330 dpa in 2001-

[11] In 2002, the Shropshire and Telford & Wrekin Structure Plan was adopted. This had a plan period of 1996 to 2011 and an annual target of 1,180 dwellings – similar to the previous structure plan target.

2011 and 700 dpa in 2011-2021. These were policy-led, aiming to support urban renaissance and reverse the outflow of population to rural areas.

4.8 The Core Strategy covered a shorter plan period than the RSS, from 2006-07 to 2015-16 only. The maximum target from 2006 to 2011 was 1,330 dpa, and from 2011 to 2016, it was 700 dpa. By the standards of past delivery, the former target was ambitious and an inflated housing growth aspiration, as there had been only three years since 1978 in which delivery had exceeded 1,200 units.

4.9 To meet the increased housing target, the Core Strategy identified strategic HCA sites at Lightmoor, Lawley and East Ketley. The sites were not formally allocated, because under the 2004 planning system Core Strategies did not make allocations, but they were in the pipeline at the time the CS was adopted. These HCA sites were to provide to 4,850 dwellings (Lawley – 3,300; Lightmoor – 800; Ketley (Telford Millennium Community – TMC) 750). Outline permission at Lightmoor was granted in 2002, whilst Lawley and TMC were permitted in 2004.

4.10 The Core Strategy trajectory also included allocations from the Wrekin Local Plan, which amounted to 1,800 dwellings. To provide further land after 2011, when the HCA sites would be largely completed, it also proposed to adopt a Land Allocations DPD. Later the DPD was abandoned, because the Council decided to prioritise the Central Telford AAP – which was adopted in 2011 and allocated land for 2,500 dwellings to be delivered to 2016 and beyond.

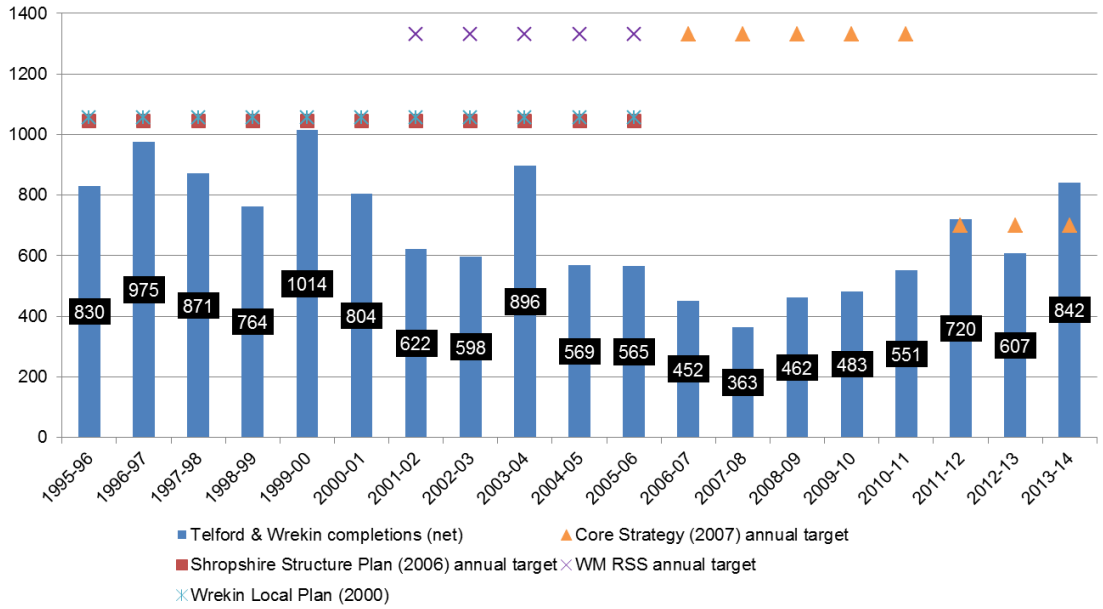
4.11 In summary, since the 1990s or earlier and until 2010-11 strategic planning set ambitious housing targets for Telford & Wrekin. Under the Shropshire Structure Plan the borough was required to deliver 1,044 dpa, and the RSS raised the figure to 1,330 dpa with effect from 2006/07. The evidence suggests that Telford & Wrekin at all times has had a large planned land supply, broadly in line with these targets. However development failed to meet the targets, as we show in the next section.

Housing delivery

4.12 The chart below shows net housing completions from 1995-96 to 2012-13 against the plan targets applicable at the time.

4.13 Two similar targets run from 1995-96 to 2005-06: the Structure Plan target, which covered 1989 to 2006, and the Wrekin Local Plan target which was the residual Structure Plan target for the period 1995 to 2006. In 2001-02, the West Midlands RSS started, and in 2006-07 the Core Strategy target started (the same as the West Midlands target).

Figure 4.1 Telford & Wrekin net completions, 1995-96 to 2012-13



Source: Telford & Wrekin Council

4.14 Housing delivery did not reach the required annual target once in the remainder of the Structure Plan period, and at the start of the 2000s, delivery dropped off in comparison with the delivery in the 1990s. As a result, allocations from the Local Plan were carried over into the Core Strategy trajectory.

4.15 The drop at the start of the century was partly due to English Partnerships (now HCA) carrying out a review of its sites[12], which caused a temporary hiatus. In addition, demolitions contributed to reducing the net dwelling completions. Between 2001 and 2006, 600 dwellings were demolished[13].

4.16 In 2006, the strategic sites at East Ketley and Lawley started, and the first phase of Lightmoor was near completion. But in 2008 the economic downturn affected delivery at the sites and as a result phasing was delayed and build out rates were slow. For example, Lawley had problems with viability because of it being a brownfield site on a former opencast mine.

4.17 The recession affected the delivery of strategic sites between 2007 and 2010, so completions never got near the RSS annual requirement of 1,330 dwellings. Despite this, the Council had a bank of 8,000 dwellings with planning permission in the pipeline. So there was no issue with demonstrating a five year supply; the obstacles to delivery were on the demand side.

4.18 From 2010 onwards, completions – particularly on the strategic sites – increased as economic conditions and hence demand for housing improved. In this most recent period completions broadly met the annual target, which had gone down to 700 dpa. In 2013-14 demand was boosted further by the Government's Help to Buy scheme,

[12] Telford & Wrekin Annual Land Statement (2002-03)
[13] Telford & Wrekin Land Statement (2006)

which came into force in April 2013: from the launch of the scheme to 31st January 2015 Telford was 12th of 316 local authorities in the number of equity loans provided.

Conclusion

4.19 From at least the late 1990s and until 2010-11 Telford & Wrekin had ambitious housing targets, in excess of 1,000 dpa. These targets were set in larger than local plans – first the Structure Plan and then the RSS – and driven by strategic objectives rather than market demand.

4.20 Housing delivery always fell far short of the targets. The reason is not that planning was underproviding land. On the contrary, in the period we have reviewed the borough always had a large land supply broadly in line with the targets, and much of that supply had planning permission. Rather, it seems that the constraints on housing development were lack of effective demand and poor viability, partly due to the high costs associated with brownfield sites. It may be also that reliance on large strategic sites, which by their nature have long gestation periods, led to delayed development.

4.21 In addition to the past land supply, we now consider further market signals to understand whether planning has undersupplied housing demand in the past, as required by the PG.

House prices

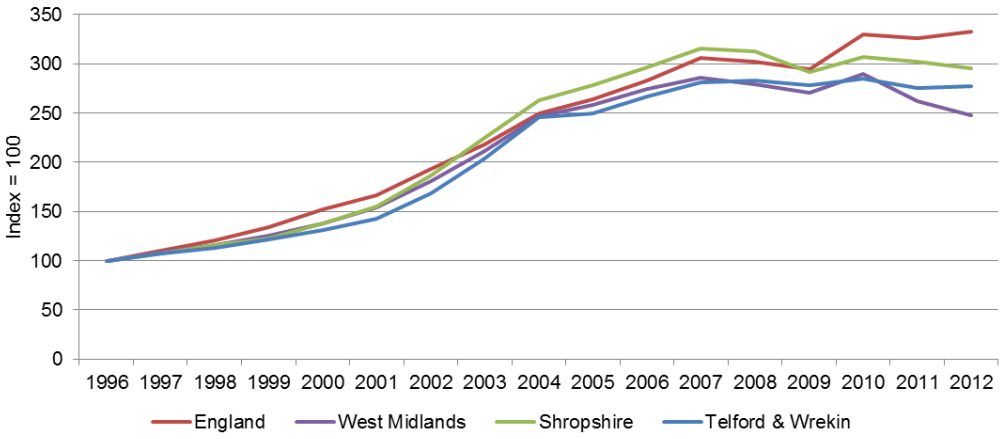
4.22 In this section, we review past change in house prices, affordability, private rents and overcrowding. Firstly, we look at average house prices.

4.23 With reference to Land Registry data[14], the average house price at December 2014 in Telford & Wrekin was £156,091. For comparison, the average house price was £189,162 in Shropshire, £184,338 in the West Midlands, and £242,006 in England. So prices in the borough are well below the West Midlands average and much cheaper than the national average.

4.24 Figure 4.2 shows changes in average house prices in the borough and comparator areas since 1996.

[14] http://www.rightmove.co.uk/house-prices.html

Figure 4.2 Mean house prices, 1996-2012



Source: CLG live table 581

4.25 Long-term change in the borough has closely paralleled the regional trend for the West Midlands, which in turn has slightly underperformed the national average. Over the last two years of the series there has been a slight relative improvement against the regional average, but still the borough continued to underperform the national average.

4.26 There is nothing in this evidence to suggest that planning has placed particular restrictions on housing supply in Telford & Wrekin as compared to other areas.

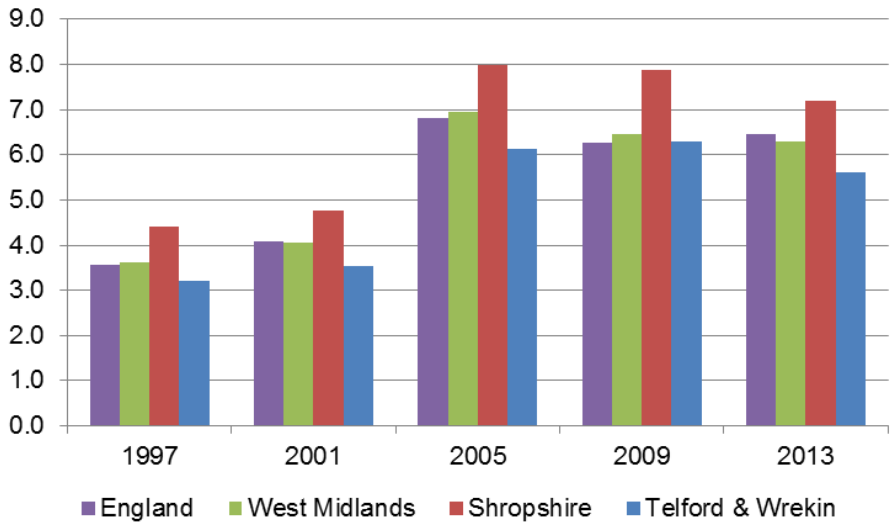
Affordability

4.27 Figure 4.3 shows that housing affordability increased significantly for all the areas analysed between 2001 and 2005. Affordability, as defined by CLG, is the ratio of lower-quartile house prices to lower-quartile earnings. A high ratio indicates low affordability, where the cheapest dwellings are less financially accessible to people on the lowest incomes.

4.28 The ratio was similar in 1997 and 2001 but increased between 2001 and 2005; from 2005 to 2013, the ratio stayed broadly the same but decreased slightly. Despite the large increase between 2001 and 2005, Telford & Wrekin's ratio has been lower than England's, West Midlands' and Shropshire's in the five years shown in the chart. In contrast, Shropshire's ratio is the highest of the four areas.

4.29 The chart therefore indicates that Telford & Wrekin has relatively good affordability compared with the regional and national benchmarks, and even more so compared with its closest neighbour, Shropshire.

Figure 4.3 Ratio of lower quartile house price to lower quartile earnings

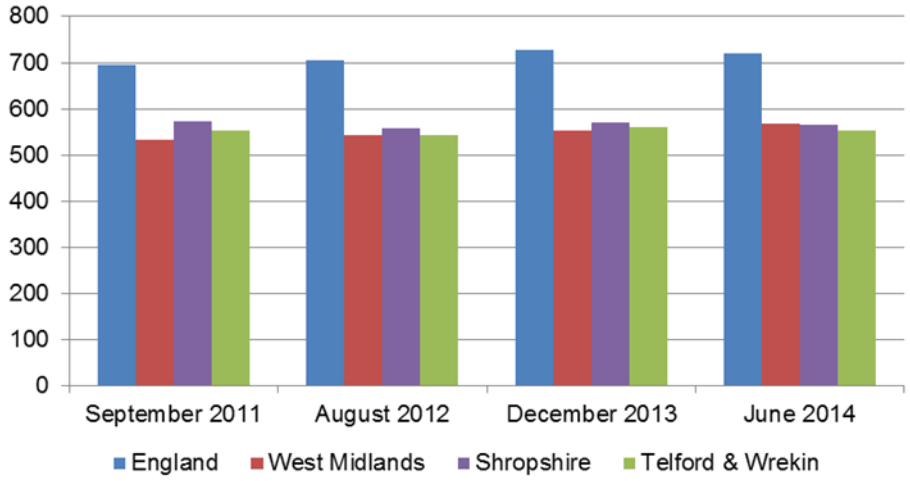


Source: CLG Table 576

Market rents

4.30 Unfortunately data on market rents are only available for a short period, 2011-14. Throughout this period, average rents in the borough have been close to those for the West Midlands and Shropshire, some £100-200 a month below the national average (Figure 4.4); therefore indicating that rents are relatively stable in Telford & Wrekin and the region.

Figure 4.4 Market rents, 2011-14, £ per month

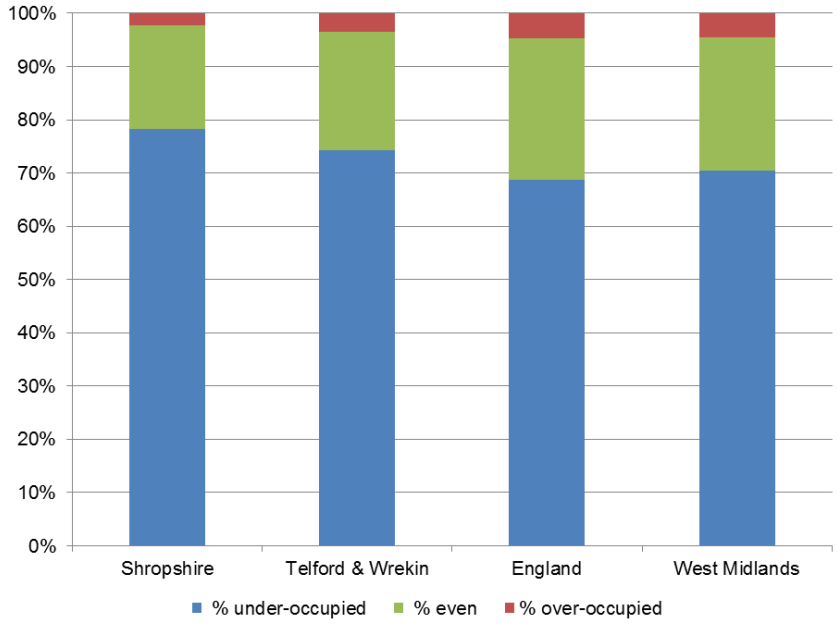


Source: VOA Private Rental Market Statistics

Overcrowding

4.31 The chart below shows occupancy ratings, as defined by the ONS and calculated from Census data. Starting from the base of the columns, the chart counts the percentages of dwellings that are under-occupied, correctly occupied and over-occupied according to ONS definitions, which are based on numbers of bedrooms.

Figure 4.5 Occupancy rating, 2011



Source: ONS

4.32 On these definitions, the majority of dwellings in all areas are considered under-occupied. The proportion of over-occupied dwellings is small, at around 4.5% for England and the West Midlands, and even smaller in Telford & Wrekin (3.4%) and Shropshire (2.3%). Therefore, overcrowding in Telford & Wrekin is below average.

Affordable housing

4.33 In this section we summarise the findings of the Telford & Wrekin SHMA (2014) in regard to affordable need, and consider their implications for the borough's overall housing need (the OAN) and housing targets over the plan period.

4.34 Our analysis is supported by the more general discussion Appendix C below, which proposes a method for assessing needs and setting targets that takes account of both market and affordable needs. That Appendix is necessary because the Planning Practice Guidance (PG) provides two methods for assessing housing needs, relating to overall need and affordable need respectively, but does not make it clear how these two calculations relate to each other or how they should be combined to determine objectively assessed need and planning targets.

Affordable need

4.35 The SHMA's findings on affordable housing need from 2011 onwards are summarised in the table below. The SHMA assumes that the accumulated backlog need of existing households is met in the first five years of the plan period, in keeping with the previous SHMA Practice Guidance (2007). But the Practice Guidance was withdrawn earlier this year, to be replaced by the Planning Practice Guidance (PG), which does not specify how long it should take to absorb the backlog, so authorities are free to spread delivery over the whole plan period if they wish. Therefore we have also estimated an alternative assessment where the backlog need is met over 20

years. These alternative numbers are illustrative. They assume that the annual rates of change shown in the SHMA continue unchanged over 20 years.

Table 4.1 Affordable housing need, Telford & Wrekin, 2011-16 and 2011-31

	Period over which backlog need is met	5 years	p.a. 5 yrs	20 years	p.a. 20 yrs
1	Backlog need of existing households, gross	8,611	1,722	8,611	431
2	Need of existg h/hs falling into need, gross	3,850	770	15,400	770
3	Total need of existing households, gross	12,461	2,492	24,011	1,201
4	Affordable supply (re-lets etc)	4,421	884	17,684	884
5	Need of existing households, net	8,040	1,608	6,327	316
6	Of which net backlog for exstg h/hs with no settled or permanent home of their own	4,928	986	3,878	194
7	Of which net backlog for exstg h/hs already housed	3,112	622	2,449	122
8	Future need for new h/hs, net	1,255	251	5,021	251
	Main results				
9	Tota affordable need	9,295	1,859	11,348	567
10	Of which net new homes	6,183	1,237	8,899	445

Source: Telford & Wrekin SHMA, 2012

4.36 The SHMA calculates that that at 2011 the accumulated gross need of existing households (those living in the area at the base period) was 8,611 dwellings. A further 770 existing households fall into need every year, but this growth in numbers of existing households in need is slightly more than offset by a gross supply of 885 dpa coming forward from re-lets and re-sales. Nevertheless the total number in need grows over time, because the net new households projected to form in the borough or move into it will generate an annual need for 251 affordable dwellings.

4.37 Overall, for existing and new households combined and assuming the backlog is absorbed over five years, the SHMA calculates the borough's affordable need at 1,859 dpa. If the backlog is spread over 20 years the annual need falls substantially, to 567 dpa.

4.38 The SHMA also calculates overall housing need over the plan period, which is derived from the CLG 2008-based household projections and shows 533 dpa. The overall need estimated in our interim report, based on more recent projections supported by a number of sensitivity tests, is slightly lower at 497 dpa. So both versions of the annual affordable need shown below are greater than the projected overall need for housing, regardless of which projection is chosen.

4.39 One reason for this apparent inconsistency is that we are not comparing like with like, As explained in Appendix C, overall housing need is the need for net new homes, which are occupied by net new households, By contrast, much of the affordable need relates to existing households, and for the most part the needs of these existing

households are not for net new dwellings. Except for those who currently have no home at all, if they move into suitable housing they will free an equivalent number of market dwellings, to be occupied by people for whom they are more suitable.

4.40 Taking account of this point, the SHMA also estimated that part of the affordable need that is for net new dwellings, as opposed to a change in the tenure mix of the existing stock. This amended version of affordable need equals 1,237 dpa if the backlog is spread over five years and 445 dpa if it is spread over 20 years.

4.41 Even the latter number is a very high proportion of the overall housing need – 84% of the overall need estimate in the SHMA and 98% of that in our interim report. As discussed in the Appendix, the reason why affordable need is so high in relation to overall need is that they are different kinds of need. The former relates to need-as-entitlement, or what ought to happen, while the latter is need-as-effective-demand, or what is likely to happen on the evidence of past trends. The gap between entitlement and reality is of long standing, which is the reason for the large backlog of accumulated need that makes the total affordable need so high.

Objectively assessed need and plan targets

4.42 To assess the implications of the above number, we follow the approach set out in Appendix C. This starts from the principle that affordable need, as calculated in the SHMA, is not part of the objectively assessed need (OAN). The OAN is the overall housing need estimated as per paragraphs 015-020 of the PG, which at this stage we have estimated at 497 dpa – subject to future job growth, which we consider in Chapter 5 below. Affordable housing need is one of the policy considerations that should be taken into account, alongside the OAN, in setting housing provision targets.

4.43 For this, as also discussed in the Appendix, the Council needs to consider how much of the affordable need could be delivered as new affordable housing, given the developer contributions that can be viably generated from market housing developments.

4.44 In Telford & Wrekin the ratio of affordable to housing completions has varied over the years, as shown in the table below.

Table 4.2 Affordable and total net housing completions, Telford & Wrekin

Year	Affordable dwellings	Total dwellings	% affordable
2006-2007	21	452	5%
2007-2008	73	363	20%
2008-2009	139	462	30%
2009-2010	184	483	38%
2010-2011	202	551	37%
2011-2012	275	720	38%
2012-2013	283	607	47%

Source: Borough Council

4.45 Officers have told us that the high and rising figures of recent years are helped by the presence of many 100% affordable sites, where Registered Providers were financially supported by the HCA. We understand that market-led housing developments in the Telford urban area achieve around 15% affordable.

4.46 At the average ratio of the seven years shown on the table, 31%, if 497 dpa were completed in line with the interim OAN this would produce 154 affordable dwellings per year. At the average of the last five years, 38%, annual affordable delivery would be 189 dwellings per year. These numbers fall far short of the affordable need estimated in the SHMA.

4.47 To pay for the lowest of the affordable needs discussed earlier, 445 affordable dwellings per year over 20 years, at the average ratio of the last five years, total housing development would have to be 1,171 dpa, some two and a half times the interim OAN or expected demand.

4.48 These illustrative calculations suggest that, if housing sites are provided in line with the OAN, affordable delivery will fall far short of the need assessed in the SHMA – unless large amounts of money come forward from other sources to pay for affordable housing. But the solution cannot be to adopt a housing target that is two or three times higher than the SHMA. As discussed in the Appendix this would be counter-productive, because providing land far in excess of likely market demand would result in some of that land not being taken up and reduce viability.

4.49 Rather, as suggested by the Eastleigh Inspector quoted in the Appendix, the Council should look for realistic opportunities to attract market demand and build housing over and above the interim OAN. One such could be to 'import' cross-boundary unmet need from the Greater Birmingham, Solihull and Black Country HMA, which has a large supply deficit; we will be assessing this option as part of the Stage 3 strategic housing study that will begin in January. If the borough could attract above-trend employment growth this could increase market demand, Also the Council should look hard for alternative ways to pay for more affordable housing, besides providing more land for market housing.

Conclusion

4.50 In this chapter we looked for evidence to show if planning had especially underprovided housing demand and need since the turn of the millennium. We first looked at the history of housing development and planned land supply in Telford & Wrekin and found that throughout the period the borough had a large planned supply of housing sites, broadly in line with ambitious targets which until 2010-11 exceeded 1,000 net new dwellings per annum. Actual delivery always fell short of these targets, but the evidence suggests that development was restricted by demand and viability rather than the volume of planned land supply.

4.51 The price signals we have analysed also suggest that the pressure of demand against supply in Telford & Wrekin is relatively low. House prices are below the national and regional benchmarks in absolute terms and have grown slightly more slowly over the long term – which also confirms that development viability may be a

problem, especially as development sites are typically brownfield and expensive to develop. Affordability in the borough is relatively good and overcrowding is below average. In short, there is nothing in the market evidence to suggest that demographic projections based on recent five-year or 10-year trends underestimate future housing need and should be adjusted upwards.

4.52 As a further consideration in assessing overall housing need, we also need to consider affordable need, which in line with the PG is the product of a separate calculation. The 2014 SHMA estimates the borough's affordable need at 1,859 or 567 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. These numbers relate to a different definition of' 'need' to the OAN.

4.53 To help pay for some of this affordable housing, the Council should be looking for realistic opportunities to attract market demand and build housing over and above the provisional OAN we have calculated. As noted in the conclusion to Chapter 5, this additional demand could be overspill from the Greater Birmingham, Solihull and Black Country housing market, and would likely require accompanying measures to create jobs and provide infrastructure.

5 FUTURE JOBS AND EMPLOYMENT LAND

Introduction

5.1 In line with the PG, as part of their housing needs assessments plan-makers should consider if the demographically projected housing need would provide enough workers to support the area's expected job growth. If the answer is no, they '*need to consider how the location of new housing or infrastructure development could help address these problems.* Planning Inspectors have interpreted this to say that, if demographic projections do not show enough workers to support the expected job growth, the projections understate housing need and should be adjusted upwards.

5.2 To see if this applies to Telford & Wrekin, we have commissioned from Experian an employment forecast based on our preferred demographic scenario, PBA Trends 2003-13. For any geographical area, the resident population is one of the factors that influence workplace jobs[15], because residents create jobs through their demand for local services such as retail, leisure, education and health. (Conversely, jobs influence population, as many people's residential choices are driven by job opportunities; it is because of this two-way relationship that the modelling of future jobs and future housing should be integrated.) This population assumption is the only difference between Experian's 'Trends scenario' and its standard 'baseline forecast' (December 2014), which assumes population change in line with the ONS 2012 projection. Otherwise the two forecasts share the same assumptions, reflecting Experian's standard view of macroeconomic conditions and other drivers of economic growth.

5.3 Below, we begin with an overview of employment and economic growth in Telford & Wrekin since 2001, before looking more closely at the alternative forecasts. Detailed figures are at Appendix D below.

Jobs and economic growth in the long term

5.4 Figure 5.1 shows long-term job growth in Telford & Wrekin from 2001 to 2031 and compares it with the UK. Past growth is as estimated by Experian and future growth is as predicted by the baseline forecast. The period falls into four sections:

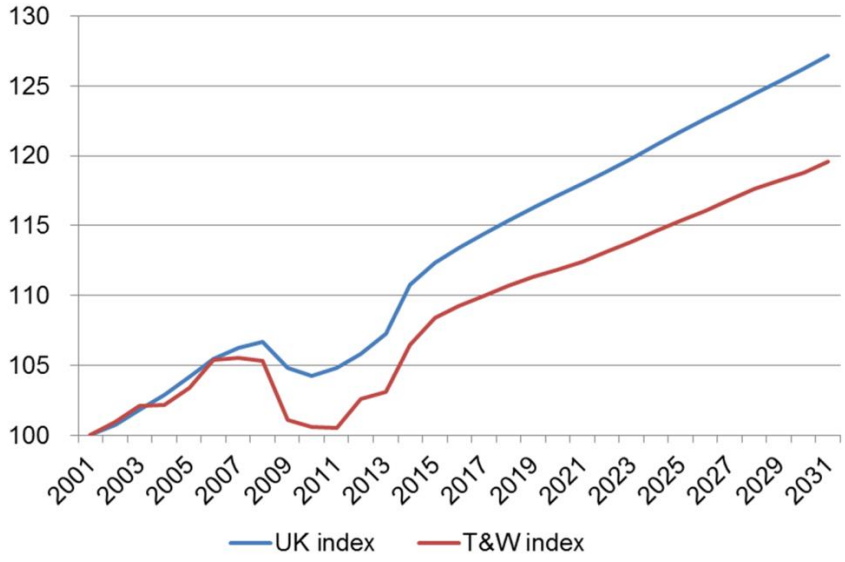
- In the long boom until 2008, both Telford and the national economy gained jobs steadily and on average at similar rates.
- In the recession Telford & Wrekin underperformed the UK as it started to lose jobs sooner, returned to growth later and its total loss was proportionally greater.
- From 2012 onwards there is a short sharp recovery, with above-trend growth both in the UK and the borough.

[15] Workplace jobs are the jobs based in an area, such as a local authority area. They do not equal the area's resident workforce, because many people do not live and work in the same local authority area.

- From 2014 or 15 job growth slows down to resume its long-term trend. Telford's growth rates lag very slightly behind the national benchmark.

5.5 Over the whole plan period, 2011-31, Telford's forecast job growth at 19% is close to those for the UK (21%) and the West Midlands (20%).

Figure 5.1 Workplace jobs 2001-31, baseline scenario
Index 2001=100



Source: Experian

5.6 Telford's slight underperformance against the UK in future is partly a sectoral effect, as Telford & Wrekin, like the West Midlands as a whole, has a high share of jobs in manufacturing (17% of all jobs against 8% in the UK) - sector which is losing jobs while growing output, due to fast-increasing productivity.

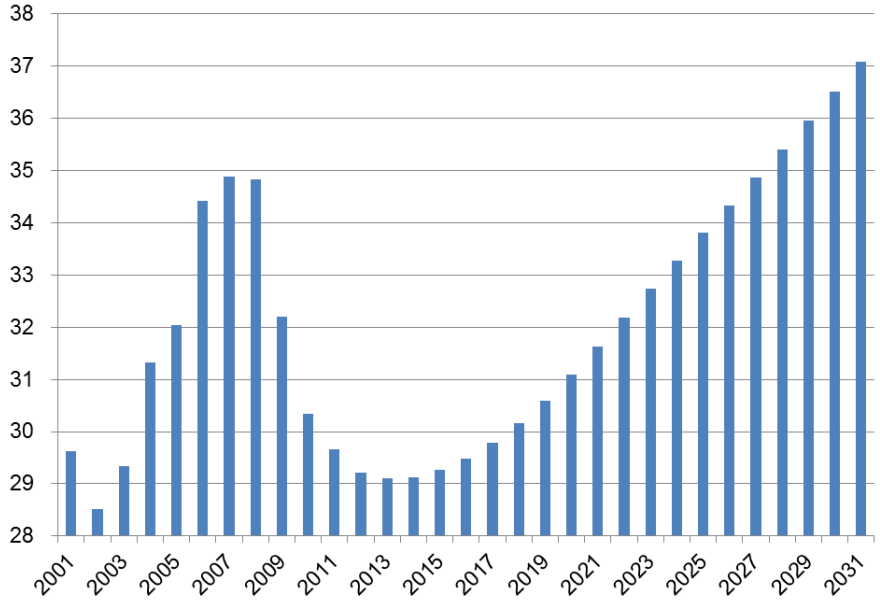
5.7 Indeed labour productivity is forecast to increase steeply in Telford & Wrekin, following national trends (Figure 5.2). Between 2001 and 2011 Experian estimates that productivity[16] for Telford & Wrekin was virtually unchanged, having risen steeply until 2008 but then fallen back in the recession, in line with the national trend. So far in the recovery productivity has been flat, but from the current year onwards Experian forecasts a return to rapid growth. Consequently from 2011 to 2031 the forecast growth of real output in the borough is 46%, against just 19% for total jobs and 17% for full-time equivalent (FTE) jobs.

5.8 A key factor behind this growing productivity is the strength of high-tech manufacturing in Telford & Wrekin, much of it represented by high-profile global firms. The high-tech sectors in which the borough has specialised, such as motor vehicles, aerospace, office machinery / computers and communications equipment, are likely to be major contributors to growing output (economic growth), but generally not to growing employment, as we show in more detail in the next section.

[16] Productivity is output (GVA) per full-time equivalent (FTE) job.

Figure 5.2 Labour productivity, Telford & Wrekin, 2001-31, baseline scenario

Output per FTE job at constant 2010 prices. £000



Source: Experian

Employment forecasts

The baseline forecast

Job growth

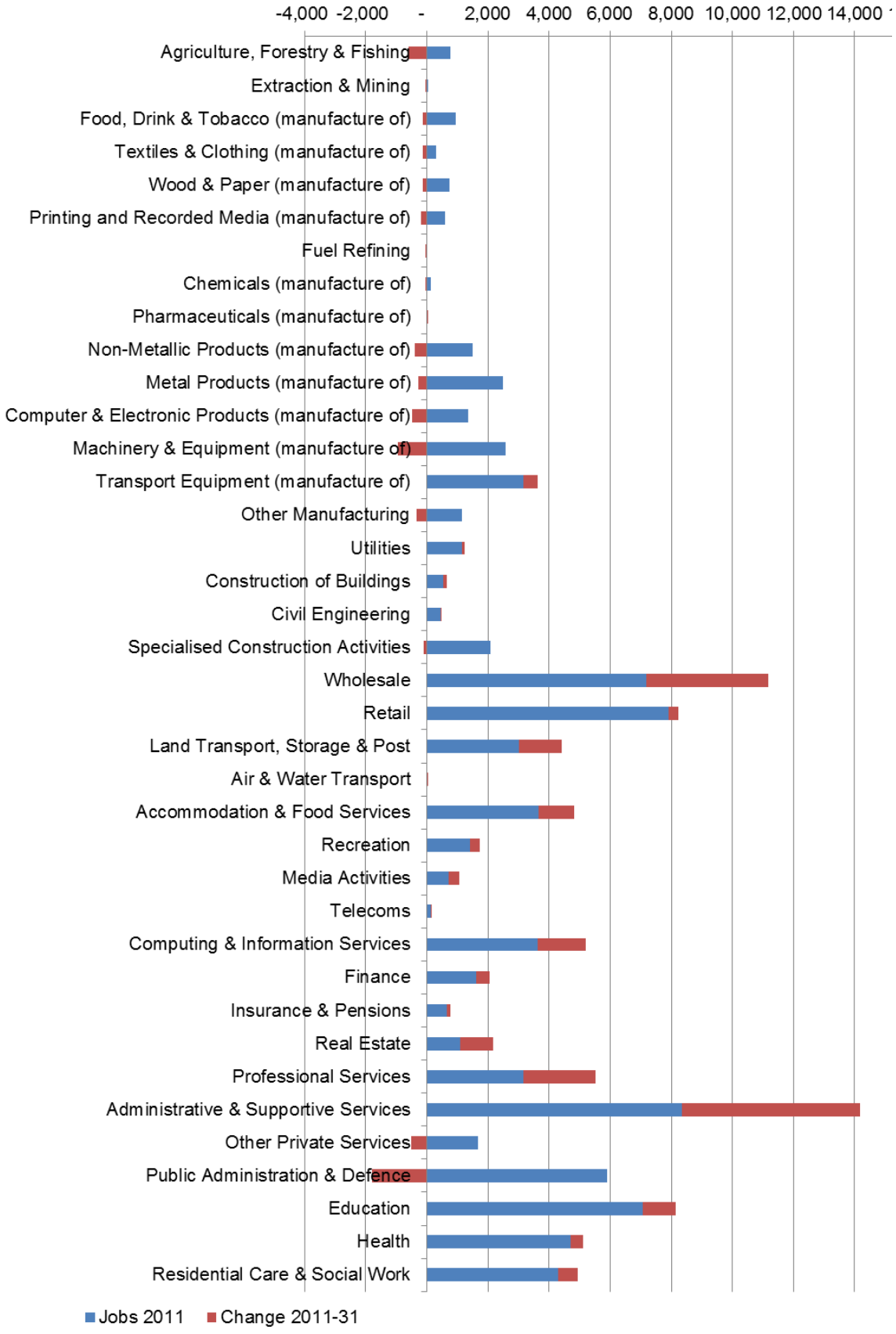
5.9 In the plan period 2011-31 Experian's baseline forecast shows numbers of workplace jobs in the borough rising by some 16,300[17], from 86,100 to 102,400. This average gain of 810 jobs p.a. compares with

- 655 jobs p.a. in the boom period 2001-2008;
- 78 jobs p.a. in 2001-11 – when nearly all jobs gained in the boom disappeared again in the recession;
- A forecast of 590 jobs p.a. in 2011-31, produced by Cambridge Econometrics for the B Marches LEP.

5.10 In terms of economic sectors (Figure 5.3) job growth is driven by the service sector, specifically private market services, while manufacturing loses jobs. This broad sectoral pattern is in line with long-established trends and with alternative forecasts.

[17] Numbers in the text are rounded.

Figure 5.3 Job growth 2011-31, Telford & Wrekin, baseline scenario by sector



Source: Experian

5.11 The largest numbers of new jobs are in Administrative Support Services (5,800 jobs), Wholesale Distribution (4,000), Professional Services (2,400) and Computing and Information Services (1,600). Manufacturing industries lose jobs with the sole exception of Transport Equipment, which gains just 480 jobs. Public services show little change, as losses in Public Administration and Defence[18] are balanced by gains in Education, Health and Residential Care & Social Work.

Labour market balance

5.12 Table 5.1 shows the forecast labour market balance, reconciling future jobs with future labour supply.

Table 5.1 Labour market balance, 2011-31, baseline scenario

Row	Change 2011-31, thousands		Notes
0	Working-age population	4.9	Persons aged 16-64 resident in T&W
1	Resident labour force	4.3	Economically active residents (= working + unemployed)
2	Unemployment	-4.2	Unemployed residents
3=1-2	Resident-based employment	8.5	Working residents
4	Net commuting	3.6	Net inflow from other local authority areas
5=3+4	Workplace-based employment	12.1	People working in Telford
6	Double-jobbing	4.3	People filling more than one job in Telford
7=5+6	Workplace jobs	16.3	Jobs in Telford

Source: Experian

5.13 Over the plan period, the 16,300 additional jobs in Telford & Wrekin are filled by:

- An increase of 4,300 in the borough's resident labour force, the outcome of 4,900 net new working-age residents and a virtually unchanged economic activity rate overall;
  - (Activity rates are forecast to increase in the older age groups, due largely to the rising State Pension Age. But this is offset by the exceptionally rapid ageing of the borough's population, with rising proportions in the older age groups, who despite this increase have lower activity rates.)
- A reduction in unemployment of 4,200, as the unemployment rate falls from 9.7% to 4.3%;
- An increase of 3,600 in net in-commuting (from 11.5% to 13.1% of the labour force);

[18] In February 2015 it was announced that MoD Donnington would become the defence logistics hub for the UK, with 1,000 jobs at the base safeguarded and up to 700 new jobs created. Since the forecasting model does not directly take account of individual projects, it may be that this development will be additional to the borough's forecast job growth. If so many of the jobs involved will count as private sector services rather than Public Administration and Defence, because the new jobs will be provided by the contractor Leidos and firms in its supply chain (Source: press reports).

5.14 An additional 4,300 jobs are filled by 'double-jobbers', i.e. people with more than one job.

5.15 These components of change are broad approximations – especially the double-jobbing figure, because it includes an 'errors and omissions' term to reconcile data from different sources.

5.16 For our present purpose, the key result from the modelling relates to the overall balance of labour demand against supply. In the early part of the plan period labour supply in Telford & Wrekin is not forecast to be a constraint on economic and employment growth in the borough. But from 2019 onwards the forecast shows a deficit of labour demand against supply. That deficit is very small, rising gradually to 610 by 2031. The numbers involved are too small to be taken literally. But they do suggest that with population growth in line with ONS 2012 the borough by the end of the plan period would be in a borderline situation, with a labour market operating at or close to capacity; so job growth is just at the margin of being restricted by the availability of labour in the borough and neighbouring areas.

5.17 In summary, if over the plan period the population of the borough and neighbouring areas grows as per the ONS 2012 projection, the model estimates that workplace jobs in the borough will grow by 16,300 and the availability of labour may just be on the brink of constraining the borough's economic potential – so if population were to be any lower the constraint would become significant. Since Experian's baseline local forecast is integrated across the UK, the modelling also suggests that this balanced growth in Telford & Wrekin is consistent with expected futures for neighbouring areas.

The Trends 2003-13 scenario

5.18 In our preferred demographic scenario, Trends Adjusted 2003-13 ('Trends'), as discussed earlier the borough's population at 2031 exceeds the baseline scenario by 4,800; and its age profile is younger, so all the additional people over and above the base scenario are under 65. In the Experian forecast this higher population translates into labour force growth of 17,400 over the plan period, 3,100 above the main scenario.

5.19 According to Experian's econometric modelling, the 4,800 additional residents shown in the Trends scenario over and above the baseline scenario result in an additional 740 workplace jobs at 2031. The additional resident population and resident workforce lead to additional workplace jobs through two separate effects:

- A demand-side effect: the additional residents consume more local services, such as retail and education, but this only results in 130 extra jobs over the base scenario.
- A supply-side effect: now that more workers are available, they fill the deficit of labour supply against demand which arose in the baseline scenario (610 jobs, see paragraph 5.16). Therefore labour supply is no longer a constraint on job growth in the borough. In other words, the borough provides enough workers to meet demand.

5.20 Comparing the Trends scenario with the baseline scenario, therefore, the borough has an extra 3,100 resident workers but only an extra 740 workplace jobs. The remaining 2,360 extra workers are absorbed in other adjustments, namely slightly higher unemployment and slightly lower in-commuting at 2031 than in the baseline scenario. Despite these differences, in the Trends scenario between 2011 and 2031 unemployment still falls steeply, from 9.7% to 4.8%, and net in-commuting still increases, albeit fractionally.

5.21 Again these calculations are only broad approximations. The important message from the economic modelling is that our preferred demographic scenario is compatible with a healthy economic future, in which Telford's jobs grow in line with the national trend and labour supply does not constrain economic growth. Hence the Trends scenario does not need a 'jobs adjustment' and remains our preferred measure of future housing need.

The 750 dpa scenario

5.22 Finally we consider the labour market implications of the 750 dpa scenario, in which the borough delivers housing over and above the objectively assessed need of 497 dpa. We have used our demographic model to project the resident population that would result if these 15,000 dwellings were developed and occupied over the plan period. We have also translated that population into a resident labour force, by applying to the projected population the age-specific activity rates forecast in Experian's main scenarios. Results are in the table below.

Table 5.2 Population and labour force in the 750 dpa scenario

Age	0-15	16-64	65 plus	Total
Population, thousands				
2011	34.3	108.2	24.3	166.8
2031	40.5	115.9	41.5	197.9
Change	6.2	7.7	17.2	31.0
Economic activity rate %				
2011	-	73.5	8.1	
2031	-	75.7	19.2	
Labour force, thousands				
2011	-	79.6	2.0	81.6
2031	-	87.7	8.0	95.6
Change	-	8.1	6.0	14.1

Source: PBA

5.23 In the 750 dpa scenario the population increases by 31,000 over the plan period, equal to annual growth of 1,550. Labour force growth over the plan period equals 14,100. Compared to the Trends scenario, at 2031 the population is greater by 14,300 and the workforce is greater by 6,700.

5.24 Contrary to the baseline and Trends scenarios discussed earlier, we did not ask Experian to forecast the impact of this scenario on workplace jobs. From the earlier analysis (see paragraph 5.19 above) we know what such a forecast would show:

- On the demand side there would be only a small impact, creating just hundreds of extra jobs in local services above the Trends scenario. This is because Experian's analysis suggests that in the particular circumstances of Telford & Wrekin additional residents create little demand for extra jobs.
- On the supply side the forecast would show no additional jobs above the Trends scenario. This is because, as noted earlier, the Trends scenario already provides enough workers to meet demand, so labour supply is not a constraint on growth.
- Hence most of the increase in resident workers over and above the base scenario would be absorbed in changes to unemployment, commuting and possibly double-jobbing (economic activity rates might also fall, although for simplicity our calculation has kept them equal to the Trends scenario).

5.25 The modelling is not sophisticated enough to forecast these separate adjustments with any precision. All it can tell us is that providing extra resident workers by itself is unlikely to result in a commensurate number of extra jobs in the borough.

5.26 This is not to say that Telford and Wrekin cannot create enough workplace jobs to employ the additional resident workers in the 750 dpa scenario, or some of them. Rather, the message from the forecasting is that this would require 'super-growth', over and above the forecaster's standard expectations.

5.27 In the Experian forecast, like all local economic forecasts, economic and employment growth is driven by macroeconomic prospects, the local area's sector structure and the past growth of each sector relative to its national or regional counterparts. In regard to the last of these factors – Telford & Wrekin's relative performance in the past – the forecast in effect shows a business-as-usual future. To achieve economic growth over and above that future would need major change in the local factors that drive local economic performance. This cannot be expected to happen by chance. It would require positive policy intervention.

5.28 To sum up, the 750 dpa scenario shows around 6,700 more resident workers than our preferred Trends scenario. Other things being equal, this increase in the resident workforce will not result in a commensurate increase in workplace jobs. Therefore to absorb the extra workers would require

- A positive economic development strategy to increase job growth in the borough over and above Experian's business-as-usual expectation;

  And /or

- A reduction in net in-commuting, either from more people commuting out of the borough, fewer people commuting into the borough or (more likely) a combination of both.

5.29 In real life as opposed to demographic modelling, if additional housing land is provided in line with the 750 dpa scenario but there are no more jobs it may be that the land is not taken up, because demand for housing is restricted by lack of local

jobs. Alternatively, if demand is forthcoming and the additional housing is built many of the occupiers may be out-commuters, who travel to jobs in Greater Birmingham for example.

Employment land need

5.30 To translate our preferred employment scenario into demand for employment space, we go through three stages:

i Sector to land use: to identify those jobs that are based in 'employment (or B-class) space – which means industry, warehousing and offices, plus uses which are physically similar such as car repairs and certain utilities;

ii Jobs to floorspace: multiply jobs by floorspace per worker (the inverse or employment density), to estimate the demand for floorspace;

iii Floorspace to land: multiply floorspace by plot ratios to estimate the demand for land. (The plot ratio is the ratio of floorspace to site area.)

5.31 For the first of these stages, we use a mapping system based on the Standard Industrial Classification of Economic Activities (SIC 2007), which is described in detail at Appendix E below. In short, we assume that:

- Industrial space is occupied by manufacturing (including printing), repairs, some construction activities and processing of sewerage and waste.
- Warehousing is occupied by a variety of transport and distribution activities.
- Offices are occupied by financial, business and professional services, computing, media (including publishing), real estate and some public administration activities.
- Other economic activities, including retail, leisure, hotels and restaurants, education and health services ('the non-B sectors') operate in other kinds of space and hence do not require 'employment land'.

5.32 Using these assumptions, in Telford & Wrekin in 2011 we estimate that 38% of jobs were in industrial/warehouse space, 16% in offices and the remaining 46% in non-B sectors.

5.33 To translate jobs into floorspace, we use the following ratios of jobs to gross external floorspace (GEA):

- Offices 15 sq m per job
- Industry and warehousing 67 sq m per job

5.34 The office ratio is based on the Home & Communities Agency (HCA) Employment Densities Guide (2010) – which shows 12 sq m net internal area (GIA) per job for 'general offices'. To convert this into gross external area, which is the measure of floorspace used in planning, we have assumed that net internal area is 80% of gross external area.

5.35 The industrial/ warehouse ratio of 67 sq m per job is taken from a detailed study produced by our firm[19] for the former Regional Development Agency Yorkshire Forward in 2010, which is reproduce at Appendix F below. The ratio is based on large-scale survey research in the Yorkshire & Humber region. But the study also looked at relative densities between regions and found that the figure for the West Midlands was very similar.

5.36 We consider that the evidence of the Yorkshire Forward study is more appropriate, mainly because it provides a combined ratio for industry (manufacturing and similar) and warehousing; whereas the HCA guide[20] provides four different ratios for different types of unit (two kinds of industry and two kinds of warehousing), and there is no basis for predicting the mix of these units in Telford & Wrekin (or indeed anywhere else).

5.37 In any case a ratio that combines industrial and warehouse units is helpful, because, as explained in the Yorkshire Forward report (Appendix F), the dividing line between industry and warehousing is extremely blurred; and furthermore planners, economic forecasters and the Valuation Office draw it in very different places. The evidence also suggests that industrial units and warehouses of the same size have very similar densities; the apparently lower densities in warehouses are because in many places warehouses are larger on average, and floorspace per job rises with unit size.

5.38 Finally, to translate jobs into floorspace we use plot ratios of 4,000 sq m per hectare for industry / warehousing and 6,000 sq m per hectare for offices. These plot ratios are supported by the available evidence, including the Yorkshire Forward study, but they are broad approximations only – especially for offices, where plot ratios vary widely depending on number of storeys and type of area (business park with parking and landscaping versus town centre site without either). Because plot ratios are so variable, in setting and monitoring planning targets it is advisable to use floorspace rather than land areas as the unit of account. The land areas we have estimated are only indicative.

5.39 The table below shows our assumptions and results. As a reality check, in the last column of the table we also show the annual average of net employment floorspace completed in the borough over the period 2005-13. These past completions are taken from the Council's Annual Monitoring Reports[21].

Table 5.3 Employment space needs, 2011-31

Net change	2011-31					2011-31 p.a.		2005-13 p.a.
	Jobs	Floorspace per job sq m GEA	Employment floorspace sq m GEA	Plot ratio	Employment land ha	Employment floorspace sq m GEA	Employment land ha	Employment floorspace sq m GEA
Industrial / warehousing	3,566	67	238,929	40%	60	11,946	3.0	8,832
Offices	6,202	15	93,031	60%	16	4,652	0.8	8,994
Non-B uses	7,255	-	-					
Total	17,024		331,960		75	16,598	3.8	17,826

[19] The firm was known at the time as Roger Tym & Partners (RTP).

[20] See Section 3 of the guide.

[21] Data for 2006 are missing.

Source; Borough Council, PBA

5.40 Our objective assessment is that over the plan period 2011-31 Telford & Wrekin will need employment and for net additional floorspace of:

- 238,929 sq m (11,948 sq m p.a.) of industrial/warehouse space
- 93,031 sq m (4,652 sq m p.a.) of office space.

5.41 As a broad indication, this could require 60 ha of net additional land for industry / warehousing and 16 ha for offices.

5.42 The industrial / warehouse figure exceeds the past annual average of 8,832 sq m by about one third. The office figure is only around half the past average of 8,994 sq m. But this average may be distorted by an exceptionally high figure in 2009 – when 42,267 sq m of offices were completed, of which 20,501 sq m were in International House, Stafford Park. If 2009 is excluded, net office completions in 2005-13 average 4,014 sq m per year.

5.43 In setting plan targets, for employment as for housing the need we have assessed should be considered a minimum. In line with the NPPF local planning authorities should not under-provide need unless they lack sustainable capacity. But there is nothing in national policy to discourage land provision in excess of need, as long as plans are deliverable and provision for housing, infrastructure and other land uses, is consistent with that for employment uses.

5.44 One reason for providing employment land in excess of the above figures would be to absorb some of the additional labour supply associated with the 750 dpa housing scenario. As discussed earlier, this would require a positive economic strategy to create 'job supergrowth' over and above the forecaster's business-as-usual expectations. Until such as strategy begins take shape it is impossible to say how many extra jobs it might create and in what sector. Therefore at this stage we cannot estimate the employment land implications of the 750 dpa scenario.

6 CONCLUSION

Housing needs

6.1 Our analysis of migration and commuting suggests that Telford & Wrekin borough is a housing market area in its own right - although it does of course have links with neighbouring areas, especially Shropshire and the Black Country. Therefore we have assessed housing need for the borough considered on its own.

6.2 In line with national policy and guidance, this assessment started from the official demographic projections, which it tested and adjusted to take account of the latest data and deal with technical anomalies. The result is a preferred demographic scenario that shows annual population growth of 838 persons per annum and a need for 497 net new dwellings per annum (dpa), equal to 9,940 dwellings over the plan period.

6.3 We have examined past housing development and other market signals, to see if there is any evidence that planning policy in recent years has undersupplied housing demand, and hence the projections should be adjusted upwards. We have found no such evidence. We have also our preferred demographic scenario seems compatible with a healthy economic future, in which Telford gains some 17,000 jobs over the plan period, in line with the national trend, and labour supply does not constrain economic growth.

6.4 We conclude that our preferred demographic projection is the best available measure of the borough's objectively assessed housing need (OAN) of 497 dpa over the plan period 2011-31.

Employment land needs

6.5 Our objective assessment is that over the plan period 2011-31 Telford & Wrekin will need employment and for net additional floorspace of:

- 238,929 sq m (11,948 sq m p.a.) of industrial/warehouse space
- 93,031 sq m (4,652 sq m p.a.) of office space.

6.6 As a broad indication, this could require 60 ha of net additional land for industry / warehousing and 15 ha for offices.

6.7 This assessment is consistent with housing development to meet the objectively assessed need discussed in the last section.

Plan targets

6.8 The objectively assessed needs discussed above set minimums below which the borough's housing provision target should not go, unless forced to do so by supply constraints. But they are only minimums. The NPPF and PG make it very clear that plan targets cannot undershoot the OAN, unless an authority can demonstrate that it lacks the sustainable capacity to meet it. But there is nothing in those documents to

say that targets should not exceed the OAN. On the contrary, the NPPF's objective *'to boost significantly the supply of housing'*, its presumption in favour of sustainable development and its emphasis on positive planning all show that national policy favours high housing targets, the higher the better so long as development remains deliverable and sustainable.

6.9 Bearing this in mind, there are at least two ways in which a housing target above the OAN could serve the Council's own policy objectives. Firstly, if more market housing were developed it could help finance affordable housing, for which Telford & Wrekin has a very large need. Secondly, greater housing growth could make for healthier and more sustainable communities. Original plans for Telford envisaged a population up to 225,000, while at the 2011 Census the whole borough had just under 167,000 residents. The borough has the physical capacity for considerable growth, and such growth may benefit its main settlements, especially Telford, by creating the critical mass to support better services and facilities.

6.10 However, these policy considerations must not lead the Council to oversupply housing land over and above achievable and viable levels of future demand. If Local Plan targets are too high, some of the allocated land will remain undeveloped and viability may suffer, if not in the borough then in neighbouring areas. So, before it decides to provide land for above-trend housing growth, the Council must consider where the additional demand would come from.

6.11 One source of above-trend demand could be unmet housing need in other parts of the West Midlands. In accordance with the NPPF, local authorities are required to accommodate cross-boundary unmet need where that is reasonable and they have the sustainable capacity to do so. As we demonstrated in Chapter 2, the areas most closely linked to Telford & Wrekin through migration and commuting are Shropshire and the Black Country.

6.12 For Shropshire there is no evidence of unmet need at present, as the Council has an adopted Core Strategy whose housing target is based on the RSS and above the CLG 2008 household forecast. On the other hand, we expect that the Black Country *will* seek to export some of its housing need, because it forms part of a wider housing market area that also includes Greater Birmingham and Solihull; and that wider area has a large deficit of capacity against need, as estimated by the Greater Birmingham, Solihull and Black Country Strategic Housing Needs Study (November 2014). The deficit originates in Birmingham, the outcome of a fast-growing population and severely & land supply.

6.13 Telford & Wrekin, which has grown historically as an overspill town for the Black Country, may be well placed to resume this role as unmet housing need ripples outwards from Birmingham. Importing need in this way could benefit both areas – the donor areas by relieving capacity constraints, and Telford & Wrekin by helping to make more sustainable settlements, pay for affordable housing and support necessary infrastructure. This option will be considered in Stage 3 of the Greater Birmingham, Solihull and Black Country Strategic Housing Study, which has just started.

6.14 If Telford & Wrekin is to attract above-trend housing demand and accommodate it in a sustainable manner, it should provide supporting infrastructure to match. It should also either attract enough additional jobs to absorb the extra resident workers or ensure that commuting adjusts without ill effects.

6.15 To explore this 'super-growth' option, we have modelled the impact of a 750 dpa scenario, in which 15,000 net new dwellings are built over the plan period. Our analysis suggests that in 2031 this would add 6,700 workers to the resident labour force over and above the Trends scenario; but other things being equal the number of workplace jobs would increase only by hundreds. Therefore, to absorb the extra workers would require

- A positive economic development strategy to increase job growth in the borough over and above Experian's business-as-usual expectation;

  And /or

- A reduction in net in-commuting, either from more people commuting out of the borough, fewer people commuting into the borough or (more likely) a combination of both.

6.16 In real life as opposed to demographic modelling, if additional housing land is provided in line with the 750 dpa scenario but there are no more jobs it may be that the land is not taken up, because demand for housing is restricted by lack of local jobs. Alternatively, if demand is forthcoming and the additional housing is built many of the occupiers may be out-commuters, who travel to jobs in Greater Birmingham for example.