



Examination of the Birmingham Development Plan
Objectively Assessed Housing Need
Supplementary Report

Peter Brett Associates

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APPENDIX

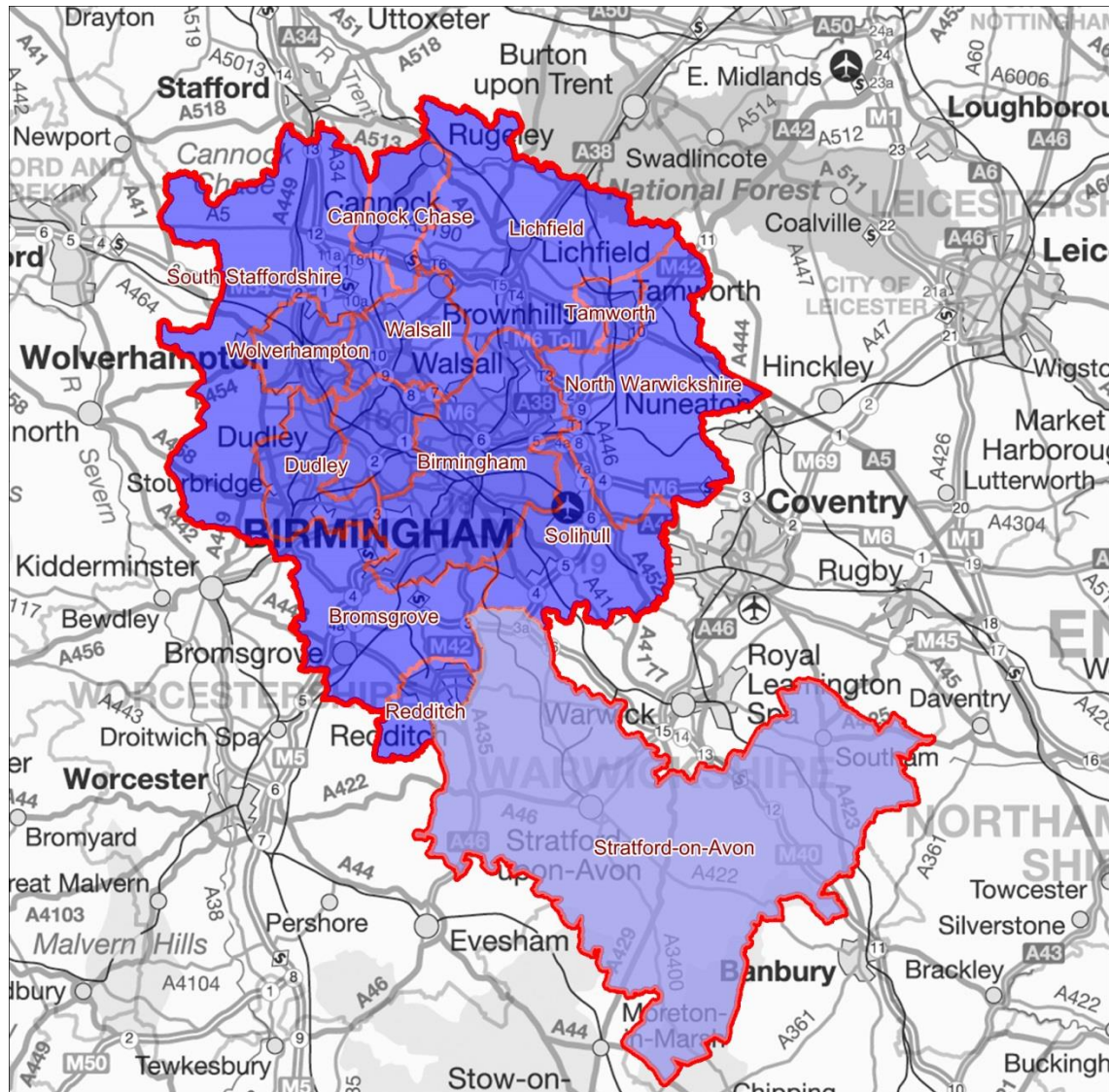
ONS REPORT ON UPC

1 INTRODUCTION

- 1.1 This report is being submitted to the examination of the Birmingham Development Plan on behalf of Birmingham City Council. It provides evidence on objectively assessed housing need to supplement the Council's earlier submissions, as specified in two documents:
- A proposed work programme submitted by PBA in November 2014 (EXAM 109)
 - The 'Inspector's Interim Findings following the hearing sessions' (January 2015, EXAM 131).
- 1.2 The Inspector endorsed PBA's proposed work programme and added further elements that he would like to see covered. Overall he requested that we cover four topics, which are discussed in turn in Chapters 2-6 below:
- i Detailed explanation of why the 'index' method of projecting household representative rates (HRRs) is considered appropriate in the Greater Birmingham context, including a review of the recommendations of the Derbyshire Dales Local Plan Inspector;
 - ii Further consideration of the consequences, in terms of accuracy, of excluding Unattributable Population Change (UPC) from the household projection, particularly for Birmingham City;
 - iii Future employment scenarios that align with the preferred demographic projections in the Greater Birmingham, Solihull and Black Country Strategic Housing Needs Study (SHNS); and analysis of past provision and market signals, to determine any uplift that should be made to the demographic projections, in line with National Planning Practice Guidance (PPG);
 - iv Summarise the conclusions on affordable housing in the Birmingham City Strategic Housing Market Assessment 2012 ('the SHMA'), explain why they remain relevant in the light of the PPG and consider whether the City's housing target should be increased to help meet affordable housing need in line with the PPG.
- 1.3 The Inspector specified that these different analyses should relate to different geographies. In relation to the first two points he wished us to consider the Greater Birmingham HMA, comprising the local authority areas of Birmingham, Bromsgrove, Cannock Chase, Lichfield, Redditch, Solihull, Tamworth, North Warwickshire, Stratford-on-Avon, Dudley, Sandwell, Walsall, Wolverhampton and South Staffordshire (The area is shaded blue in the map below¹). In relation to the last two points, the inspector noted that the relevant factors were more local and therefore directed us to cover Birmingham City only.

¹ Stratford-on-Avon is coloured a lighter shade, because as noted by the Inspector it is only partially in the HMA. But the analysis covers the whole district.

Figure 1.1 The Greater Birmingham HMA



- 1.4 The Inspector has also requested that we review the alternative assessment provided by Barton Willmore (BW) with regard to the above issues², and that we draw clear conclusions on objectively assessed housing need in Birmingham City and the wider Housing Market Area. Below, we comment on BW's assessment as part of the conclusions to each chapter, and our conclusions on objectively assessed need are in Chapter 7.
- 1.5 Finally the Inspector advised that, should the 2012-based CLG household projections be published before our work was complete, he would expect relevant sections of both SHNS Stage 2 and the present report to be reviewed as necessary. In the event the new projections were published on 27th February, followed by a methodology

² Barton Willmore (on behalf of a consortium of developers), Representer ID 821373, *Response to Matter A; Housing need and housing trajectory (BDP Policies PG1, TP28 an TP30)*, including Appendix ('The BW Addendum')

report and more detailed data in early March. The new release has implications for several of the topics discussed below and we comment on it accordingly.

2 HOUSEHOLD REPRESENTATIVE RATES (GREATER BIRMINGHAM)

The issue

- 2.1 The Inspector's observations and questions on HRRs (household headship rates, household formation rates)³ are set out below.

'12... there is a critical assumption built into [the SHNS demographic projections] in respect of Household Representative Rates [HRRs]. [The study] assumes that HRRs will follow the trend assumed in the 2011-based household projections until 2021, and then revert to the rate of change projected in the 2008-based household projections, but without regaining the actual levels projected in that 2008-based series. This is known as the "index" method of calculating HRRs, which I endorsed in my interim conclusions on Stage 1 of the South Worcestershire Development Plan examination....'

13 In the BW Addendum, an alternative approach to HRRs is taken after 2021, in which the rate of change accelerates more rapidly than in the "index" method, so that by 2031 HRRs have returned to the actual levels predicted by CLG in the 2008-based household projections. This is described by BW as the "Full Return" approach, and it largely accounts for the much higher average rate of household growth projected by BW for Birmingham compared with ONS/PBA 2012 – 5,416 dwellings per annum [dpa] and 4,317 dpa respectively – despite both projecting very similar levels of population growth. BW claim that a return to the 2008-based rates recently found favour with the inspector examining the Derbyshire Dales Local Plan, although that is not entirely clear from the evidence before me.

14 Despite having found the "index" method to be appropriate in the circumstances of South Worcestershire, I would find it useful to see a more detailed explanation than is given in the material before me, of the reasons why it is considered to be appropriate in the present context of the Greater Birmingham HMA⁴. That explanation could also usefully include an examination of the evidence before the Derbyshire Dales inspector, which should help throw a clearer light on what his recommendation on HRRs actually means in practice.'

- 2.2 Below, we begin with a general discussion of methods for projecting HRRs (household formation). We then focus on Birmingham specifically.

³ The HRR is the probability that a person in a given demographic group (combination of age, sex and relationship status) is a household representative (formerly known as head of household). Given that the number of representatives equals the number of households, the average household size varies inversely to the overall HRR.

⁴ See paragraph 2a-016-20140306 of the PPG, which advises that adjustment may be required to reflect factors affecting local demography and household formation rates which are not captured in past trends.

HRRs in general

Recent trends and CLG projections

The CLG interim 2011-based projection⁵

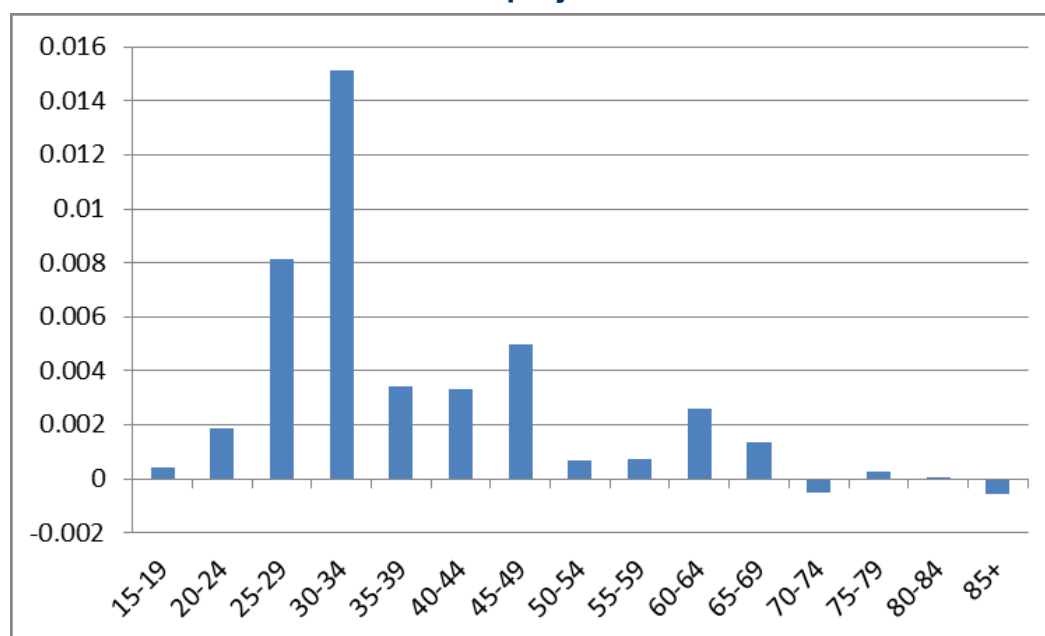
- 2.3 When early results from the 2011 Census became available, they showed that the overall HRR for England was lower than predicted by the latest official projections – which at the time were the 2008-based CLG projections ('CLG 2008'). Consequently the average household size was larger than had been projected, so that a given population grouped into a smaller number of households. For England, average household size in 2011 was almost exactly the same as in 2001, the first time for at least 100 years it had not fallen between censuses. The downturn in household formation had started before the recession: it had already been detected by the Labour Force Survey (LFS) by the time the CLG 2008 projection was being prepared.
- 2.4 In its 2011-based household projections, CLG naturally aimed to take account of this downturn. But it had little information to go on, because at the time HRRs from the 2011 Census were only available in aggregate, not broken down by demographic group (age x sex x relationship status). To estimate HRRs for England by demographic group, therefore, CLG supplemented the Census with additional data, mainly from the LFS - which provided HRRs by age and suggested that the downturn mainly related to males aged 25-39.
- 2.5 At sub-national level the 2011-based projection was even more challenging, because the LFS is based on a relatively small sample and hence does not provide robust data for local authorities. To step down the national trends in HRRs to local level, therefore, CLG used an estimation process that was almost entirely based on the 2008-based projections.
- 2.6 Contrary to what is sometimes claimed, the CLG 2011 projections were not based on the period 2001-11 alone; rather, they carried forward the long-term trend as measured by Censuses since 1971, just as CLG 2008 had done. Nevertheless, when data for 2011 were added to those from the previous two Censuses the result was a marked reduction in future HRRs, and hence in projected housing need.
- 2.7 But these 2011 data are subject to major caveats, both for England and even more so for local authorities – where the level of HRRs relative to national averages was estimated mainly from old projections, as opposed to recent real-life evidence. These caveats apply equally to the 2011-based projection - no doubt one of the reasons why it was badged interim and only went forward to 2021. The new 2012-based household projection aims to provide a more robust starting point, with major implications for the future as we show in the next section.

⁵ This section is based on: Department for Communities and Local Government, *Updating the Department for Communities and Local Government's household projections to a 2011 base: methodology report*, April 2013.

The CLG 2012-based projection⁶

- 2.8 The new CLG 2012-based household projections ('CLG 2012'), published on 27th February 2015, still do not have the benefit of real-life Census data on HRRs by demographic group. These data are non-standard due to inconsistencies in the definition of household representatives. CLG commissioned them specially from ONS, but on receiving them found they looked inconsistent and '*raised issues... which need to be investigated further*'. Pending such investigation, CLG has not published the commissioned data (they will follow in a secondary publication later this year '*after further interrogation*') and it has not used those data for its 2012-based projection. Rather, to estimate 2011 HRRs for England by age, sex and relationship status CLG applied a method that combines standard Census data with the LFS. To estimate those HRRs for local authorities, it stepped down the national figures through the same process as CLG 2011.
- 2.9 At the national level, the new method should be an improvement on CLG 2011, because it uses additional Census data which became available in the meantime, but still it is not based on real-life information about HRRs by age, sex and relationship status. At local level, each authority's HRRs relative to the national average is still based mainly on the 2008 projections rather than real data from the Census.
- 2.10 The impact of the new method for England is illustrated at Figure 2.1 below.

Figure 2.1 Difference in HRRS by age band in 2021 between 2012-based and 2011-based CLG household projections



Source: CLG

- 2.11 The 2012-based rates are higher than the 2011-based ones for almost all age groups, but especially for those aged 25-34. The reason for the increase, stated

⁶ This section is based on: Department for Communities and Local Government, *Household Projections 2012-based: Methodological Report*, February 2015.

clearly in the CLG's Methodology Report, is the revised HRRs for 2011. It is nothing to do with the projection method, which did not change between the two projections. The greater projected growth for England of course feeds through to individual authorities, including those in Greater Birmingham as we discuss later.

- 2.12 The CLG methodology paper advises that '*further work [will include] more detailed analysis of Census 2011 data on household formation. In the meantime, the [2012-based] projections provide the most up to date and nationally consistent estimates*'.
- 2.13 Contrary to what might be expected, it seems there are no plans to produce a revised version of CLG 2012 once real-life HRRs from the 2011 Census are available. The report that presents the 2012-based projection says that the next household projections will follow the next ONS sub-national population projections, presumably the 2014-based release to be produced in 2016. For now, the PPG has been amended to recognise CLG 2012: it now advises that '*the (CLG) 2012-2037 Household Projections were published on 27 February 2015, and are the most up-to-date estimate of future household growth*'.

Understanding recent trends

- 2.14 Academic demographers have tried to understand the causes of the downturn in household formation. Holmans⁷ looked closely at the national deficit of 375,000 households between the 2008-based CLG projections and the number recorded at the Census. He estimated that, of this deficit, 200,000 was due to new young international migrants living at higher household sizes than other people and the other 175,000 was due to the recession and credit crunch. Holmans expected that the former effect would be long-lived: as young migrants aged, either leaving the country or reverting to HRRs more like the rest of the population, they would be replaced by new cohorts of young migrants. But the recessionary effect would wear off as the housing market recovered. Holmans went on to plot a course for this partial recovery, in which HRRs return towards the levels projected in CLG 2008 but never reach these levels. In effect this is the index method, which we discuss in the next section.
- 2.15 Simpson, in a more recent paper⁸, broadly agrees with Holmans, although taking a different view of the impact made by international migrants. He notes that a downturn in household formation was already apparent before the recession was included in the DCLG 2008 projection. Hence the 2008-based projections were presented at the time not as a solid trend, but as insecure, because recent evidence suggested a breaking of the long-term trend shown by earlier Censuses from 1971 to 2001. He explains this break as a result of wider social changes rather than international migration:

⁷ A Holmans, *New Estimates of Housing Demand and Need in England, 2011 to 2031*, Town & County Planning Tomorrow Series Paper 16, TCPA, September 2013

⁸ L Simpson, *Whither Housing Projections?*, in *Town and Country Planning*, December 2014

'In the 2000s there was a sustained increase among young people not leaving home, and in those returning home. The increased number living with their parents began at the turn of the millennium; the increase did accelerate after 2008.

The introduction of student fees from 1998, and the increase in precarious employment, including the rapid growth of part-time work, could both change in the future. But they appear at the moment as fixed circumstances of the policy and economic environment.'

- 2.16 Simpson concludes of future household formation as follows:

'The societal changes that created smaller households in Britain since the 1960s have now affected 50 years of those reaching adulthood. However, the experience of the past two decades, and not just the economic crisis of the late 2000s, does suggest that we are not in a position to expect further increases in household formation rates of the same kind. Household size in England cannot continue to reduce indefinitely, although it has not reached a limit and is not as low as elsewhere in Northern Europe. The future in the UK is likely to be a continuation of precarious household formation. It will probably be lower than once projected and carry more uncertainty until further structural shifts occur.'

- 2.17 The studies discussed above both pre-dated the CLG 2012 projection. Holmans' research in particular may be revised in the light of this latest release and any further related data that may be published by CLG.

Alternative projection methods

- 2.18 Alternative projections methods were developed by independent demographers in response to the findings of the 2011 Census and the resulting 2011-based interim projections. These alternatives comprise two main approaches, which we discuss in turn below.

The index method

- 2.19 As noted earlier, the index method for projecting HRRs is a halfway house between the relative optimism of CLG 2008 and the relative pessimism of CLG 2011. The method was proposed by Alan Holmans on the grounds that roughly half of the reduction in HRRs between the two projections was a recession effect, which would be reversed in due course, and the remaining half was a permanent change due to continuing international migration. Other modellers, including PBA, were already using the 'index' method in their own projections ahead of the Holmans paper.
- 2.20 In technical terms, to project HRRs for 2011-31 the method (also known as 'tracking') starts from the CLG 2008 Stage 1 HRRs (by sex, 5-year age group and relationship status) and adjusts them to the CLG Interim 2011 HRRs at 2021, e.g.:

$$H(31, M, 25-29, C) = H08(31, M, 25-29, C) * H11(21, M, 25-29, C) / H08(21, M, 25-29, C)$$

Where $H(31, M, 25-29, C)$ is the projected HRR at 2031 for males aged 25-29 living in a couple; $H08(\dots)$ and $H11(\dots)$ are HRRs from the CLG 2008 and Interim 2011 projections respectively.

- 2.21 In this method, HRRs follow the CLG 2011 projection until its end date of 2021. From that year onwards they change at the same proportionate rates as in CLG 2008. Thus in the indexed projection HRRs do not catch up with the ones projected by CLG 2008; they follow a parallel but lower trajectory. The resulting HRRs at 2031 are higher than the CLG 2011 rates extrapolated to 2031, but lower than the CLG 2008 rates.
- 2.22 There are other methods that trace a midway path between CLG 2008 and CLG 2011. Thus, 'midpoint' projections first extend CLG 2011 to 2031 and then average the result with CLG 2008; the final result is usually close to indexed projections. 'Partial return to trend' makes different assumptions for different age groups, with varying results.

The full return method

- 2.23 A more optimistic alternative to indexed and other 'midway path' projections is 'full return to trend'. In this method HRRs still follow CLG 2011 until 2021, but thereafter they grow faster, gradually converging with the CLG 2008 rates, so by 2031 they are equal to those CLG 2008 rates. This is the approach proposed by BW, which we discuss later in this chapter.

Inspectors' findings

- 2.24 Inspectors examining Local Plans have taken different views on projecting HRRs. In the Derbyshire Dales (July 2014) Mr Holland's Initial Report favoured the full return to trend method (which he referred to as 'blended'):

'It seems clear that the lower household formation rate in recent years has been, at least in part, a consequence of the economic downturn. With the recovering economic situation it would be prudent to assume that the low 2011 headship rates are unlikely to remain in place over the whole plan period. It would be sensible to work on the basis that the household formation rate will gradually return to higher levels as the economy recovers. I therefore consider that a "blended" rate that assumes the 2011 rate until 2020 and the higher 2008 rate thereafter is appropriate. Whilst this may be a relatively unsophisticated approach, it is a practical one in the light of the uncertainties about future household formation rates. In any event the situation should be monitored and the approach refined if and when necessary.'

- 2.25 This advice was clearly based on the Inspector's general view about economic prospects, as opposed to specific evidence about the Derbyshire Dales. That general view - that there is likely to be some recovery from the 2011-based rates - is compatible with either the indexed or full return projection method. However, the evidence in front of the Inspector⁹ did not include an indexed projection, but only 2011-based and full return ones. Had the Derbyshire Dales Inspector been offered the option of an indexed projection, his reasoning suggests that he might well have chosen that option.

⁹ Atkins for Derbyshire Dales District Council, *Derbyshire Dales Housing and Economic Needs Assessment*, February 2014

2.26 Other Inspectors have taken different views. Thus, in Cheshire West and Chester (January 2015) Mr Ward accepted 2011-based HRRS - acknowledging that there was a case for household formation increasing as economic conditions improve, but also noting that low real wages and changes to higher education funding may affect household formation for younger age groups. At West Northants (October 2014), Mr Payne supported an indexed projection (labelled as 'tracking') prepared by colleagues of Alan Holmans at the Cambridge Centre for Housing and Planning Studies. At Mendip (October 2014), Mr Yuille supported 'midpoint' HRRs, which as mentioned earlier approximate to the index method. At Eastleigh (February 2015), Mr Emerson opted for a partial return to trend projection. At Durham (February 2015) Mr Stephens supported the 'midpoint' method, as:

'A logical approach, as it seeks to avoid taking forward extremes in the economic cycle, whether that be an economic boom encapsulated in CLG 2008 or the effects of recession in CLG 2011.'

2.27 All the Inspectors' advice above of course pre-dates the CLG 2012 projection.

Implications of CLG 2012

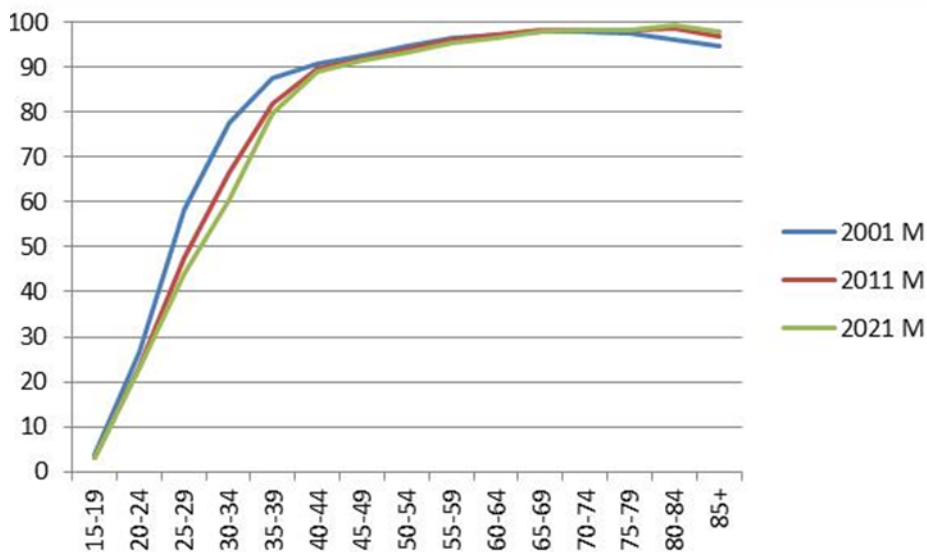
2.28 As noted earlier, both the index and full return methods were variations on the CLG interim 2011-based projection. Specifically, their purpose was to correct the relatively pessimistic view of future household formation embodied in that projection. Neither method is relevant to the new CLG 2012 projection. Indeed CLG 2012 takes a more optimistic view. For Greater Birmingham it produces very similar results to the index method, as discussed below.

HRRs for Greater Birmingham

CLG 2011

- 2.29 The chart below shows male HRRs by age for Greater Birmingham at three dates
- 2001 from the Census of that year;
 - 2011 from the CLG 2011-based projections (as explained earlier actual rates for 2011 are not yet available);
 - 2021 from the CLG interim 2011-based projection.

Figure 2.2 Male HRRs, Greater Birmingham, 2001, 2011 and 2021, %

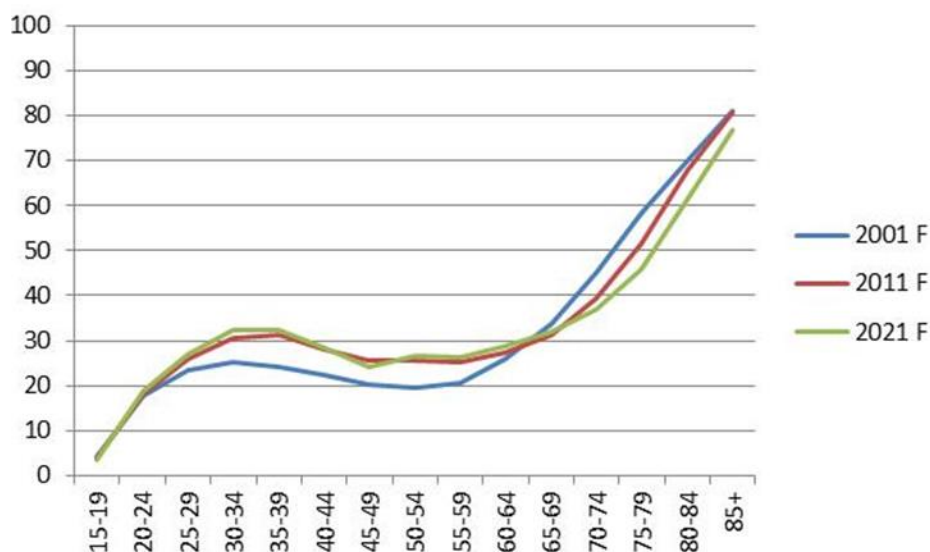


Source: CLG

2.30 The main difference between 2001 and 2011 is the decline in the rates at age groups between 25 and 39. There is also a small uplift in the rates at the highest ages. The CLG interim projection to 2021 continues the decline for the younger ages, but at a much reduced rate.

2.31 The chart below shows the same data for females. We include these for completeness, although they have a much smaller impact on overall household growth than male HRRs. This is because the CLG definition of the household representative person (formerly known as head of household) favours males, so that generally a woman in a mixed-sex relationship cannot be a household representative. Hence HRRs for females are much lower than males, especially for young adults and the middle-aged.

Figure 2.3 Female HRRs, Greater Birmingham, 2001, 2011 and 2021, %



Source: CLG

2.32 At higher ages female HRRs decline over time, because male life expectancy rises and hence numbers of widows fall. At younger ages female HRRs rates increase, as wider social changes lead to more women being single.

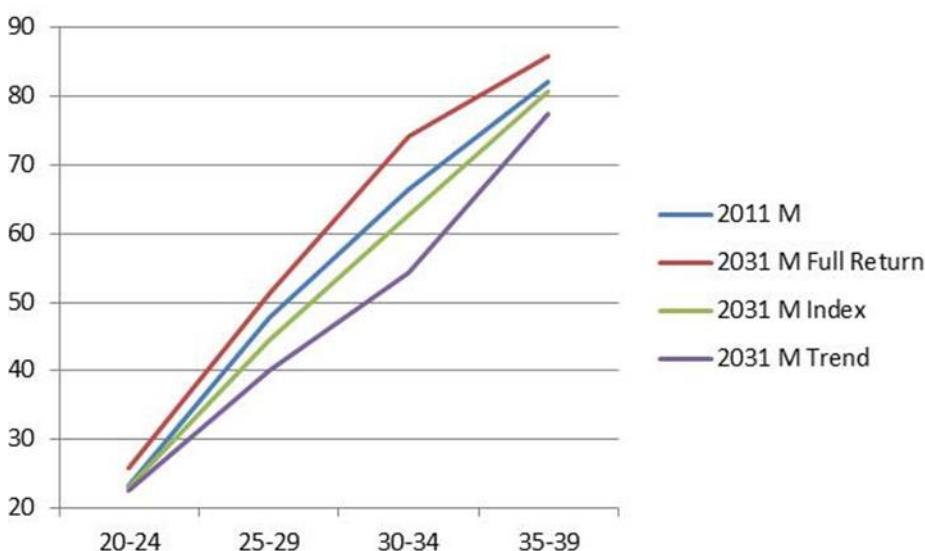
Alternative projections to 2031

CLG 2011, indexing and full return

2.33 In the chart and tables below, the blue line shows 2011 HRRs by age for Greater Birmingham, from the CLG 2011 projection. The other lines show three alternative projections for Greater Birmingham to 2031, based on:

- Full return to CLG 2008 HRRs (red)
- The index method (green)
- CLG 2011 extended to 2021, labelled 'Trend' (purple)

Figure 2.4 Male HRRs at ages 20-39, Greater Birmingham, 2011 and projections to 2031, percent



Source: CLG, PBA

Table 2.1 Male household representatives at ages 20-39, 2031, Greater Birmingham, three projections

| | 20-24 | 25-29 | 30-34 | 35-39 | Total |
|-------------|--------|--------|--------|---------|---------|
| Full return | 30,048 | 59,152 | 88,076 | 106,942 | 284,217 |
| Index | 26,844 | 51,384 | 74,625 | 100,412 | 253,266 |
| Trend | 26,186 | 46,303 | 64,620 | 96,456 | 233,565 |

Source: PBA

2.34 In Table 2.1 the three sets of male HRRs at ages 20-39 are converted to household representatives by applying them to the results of the ONS 2012-based population projection, in order to assess the difference. As expected the full return HRRs offer the highest number of household representatives - 284,200 – and the extrapolation of

2011-21 trends shows the fewest – 233,600. The index method is in between at 253,300.

Table 2.2 Household numbers by sex of representative, 2031, Greater Birmingham, three projections

| | Male | Female | All |
|-------------|-----------|---------|-----------|
| Full return | 1,066,921 | 481,216 | 1,548,137 |
| Index | 1,034,997 | 462,947 | 1,497,944 |
| Trend | 1,015,138 | 451,226 | 1,466,364 |

Source: PBA

- 2.35 Table 2.2 shows that applying the three complete sets of HRRs for both males and females of all ages produces a range from 1,015,000 to 1,466,000 households at 2031. Most of the differences are due to the younger males as shown in Table 2.1. The full return projection produces some 50,000 more households than the indexed one, which in turn produces 32,000 more households than the Trends projection based on CLG 2011.

CLG 2012

- 2.36 The table below shows housing need in 2011-31 derived from the CLG 2012 projection and compares it with the ONS/PBA scenario from the SHNS study – which is based on the same population but applies different (indexed) HRRs to that population.

Table 2.3 Housing need in the Greater Birmingham HMA: two projections

| New dwellings per annum 2011-31 | CLG 2012 | ONS/PBA 2012 | Difference CLG - ONS/PBA |
|------------------------------------|-------------|-----------------|-----------------------------|
| Birmingham | 4,420 | 4,450 | -30 |
| Rest of HMA | 6,104 | 5,904 | 199 |
| Total HMA | 10,524 | 10,355 | 169 |

Source: CLG, PBA

- 2.37 Both for Birmingham and the rest of the HMA, the projections show virtually the same housing need.

Conclusion

- 2.38 The main question addressed in this chapter has been why we consider that the index method is appropriate, and the full return method inappropriate, as a way of projecting HRRs (household formation) for Greater Birmingham. Both indexing and full return are methods for adjusting the CLG 2011 household projection, therefore we discuss them in the next section in the context of that projection. In the following section we briefly consider the implications for HRRs of the new CLG 2012 projection.

Indexing versus full return

- 2.39 In recent years there has been a break in the long-term trend of rising HRRs (falling household sizes, rising household formation) that had prevailed across England since at least 1971. The interim CLG 2011 projection, carrying forward that trend into the future, showed considerably lower HRRs, and hence lower housing need, than previously expected.
- 2.40 The evidence suggests that two kinds of factors account for the downturn in household formation. The first is the last recession, which has been exceptionally severe in its housing market impact, and whose effects may be expected to wear off as the economy recovers. Secondly, there are longer-term social trends that predate the recession and may be expected to continue regardless of the economic cycle. These long-term factors include more international migration, more precarious employment especially for the young and student fees.
- 2.41 The index method responds to this dual explanation for the downturn in HRRs. The thinking behind it is that the CLG 2011-based HRRs are too low because they are heavily affected by the last recession, whose impact is bound to wear off in future; but the 2008-based rates are too high, because they wrongly carry forward into the indefinite future past trends which are permanently broken. The index method strikes a balance between these two extremes, as noted by the Durham Inspector quoted earlier.
- 2.42 In contrast, to use the full return method advocated by Barton Willmore would assume that the whole downturn in HRRs incorporated in the CLG 2011 projection is due to the recent recession and will wear off in time. This assumption is wrong, because as discussed earlier the downturn is partly due to long-term factors that were already at work before the recession and will not disappear in the recovery.
- 2.43 BW's evidence has no regard to these considerations. Its argument in favour of full return HRRs comprises two points:
- i *[The full return method] is clearly preferred as it is the long term trend and it would not be appropriate to address housing needs on the basis of trends which have been heavily influenced by the recent very dramatic recessions.*
 - ii *The figure [produced by the full return method] is much more likely to ensure that affordability can be improved, which will in turn alleviate worsening overcrowding and concealment, which are major problems in Birmingham.'*
- 2.44 The first point has already been answered in paragraph 2.42 above. All the projection methods we have discussed, including the indexed one and indeed CLG 2011, are based on long-term trends since 1971. But the full return method gives too much weight to the early parts of this long base period, taking no account of long-term societal trends which have become apparent in the 21st century.
- 2.45 With regard to BW's second point, it is correct that if more houses are built in Greater Birmingham overcrowding might reduce and affordability might improve – provided of course that the additional houses are made available to the right people. This is a general argument in favour of more housebuilding. It tells us nothing about how

HRRs should be projected, nor does it justify any particular provision target for the Local Plan.

- 2.46 If the planned supply of housing land exceeds future demand, much of the land provided will remain vacant, many of the planned homes will not be built, and the social benefits that the extra homes would generate will not happen. This is why the NPPG and PPG advise that planned land supply be based on a realistic view of future demand, based largely on projections of past trends. The evidence suggests that such a realistic view is provided by an indexed approach to household projections; while a full return approach would significantly overstate future demand.
- 2.47 In the particular case of Greater Birmingham, from the very limited evidence available we estimate that over the plan period 2011-2031 the difference between the indexed and full return projections is of the order of 50,000 dwellings; BW's estimate is slightly lower at 32,000 dwellings. Both estimates suggest that accepting the full return projection would likely result in a large overprovision of land against likely demand and need.

CLG 2012

- 2.48 As noted earlier, both the index and full return methods were variations on the CLG interim 2011-based projection. Specifically, their purpose was to correct the relatively pessimistic view of future household formation embodied in that projection. Neither method is relevant to the new CLG 2012 projection – which in any case takes a more optimistic view, predicting higher HRRs for the future.
- 2.49 CLG 2012 has been endorsed in national planning guidance and provides the best view of future HRRs that is available at present, just as the indexed method provided the best view of future HRRs that was available at the time we prepared the SHNS. Both for Birmingham City and the HMA in total, these alternative methods show virtually the same household growth and housing need for the plan period 2011-31.

3 UNATTRIBUTABLE POPULATION CHANGE (GREATER BIRMINGHAM)

The issue

- 3.1 The Inspector's Interim Findings notes that the CLG 2012-based household projections will not take account of the UPC, and this '*lends support to the SHNS projection referred to as "ONS/PBA 2012", which is based on the 2012-based SNPP and attempts as far as possible to mirror the process likely to be used by CLG to derive housing projections from them*'. Nevertheless the Inspector asks for further analysis on the UPC:

'Notwithstanding the position likely to be taken by CLG, both SHNS Stage 2 and the 2012 SHMA argue that account may need to be taken of UPC when projecting future household growth, particularly in Birmingham. I would therefore welcome a further consideration of the consequences, in terms of accuracy, of excluding UPC from the projections¹⁰. (I would not expect this to require any projections to be produced over and above those already published in SHNS.)'

- 3.2 Below, we address this question in two stages. The next section discusses UPC in general and the following section focuses on Greater Birmingham.

UPC in general

What is UPC?

- 3.3 Unattributable Population Change (UPC) is one of the factors of change included in the detailed change analyses of the ONS mid-year population estimates between 2001 and 2011. The local authority 2001 mid-year estimates (MYEs) were adjusted after the results of the 2001 Census were fully analysed to account for errors and omissions in the Census processes. The 2011 mid-year estimates were based on the 2011 Census results and, because of the improvements in enumeration and post-enumeration processing and quality assurance of the results, are considered to be of high quality. ONS has indicated that neither the 2001 or 2011 mid-year estimates are to be further amended and nor are the revised estimates for 2002 to 2010.
- 3.4 In many local authorities it was not possible to completely tie in ONS's original estimates of gross UK and international migration flows affecting each area with the births, deaths and other adjustments for armed forces, prisoners, etc., to match the total annual changes across the decade implied by the estimates revised in light of the 2011 Census. The UPC is a component of change introduced to reconcile the estimates. ONS has said that it results from either errors in population counts (in either census or MYEs), in estimates of migration, or both.

¹⁰ See PPG paragraph 2a-017-20140306.

- 3.5 For England the UPC amounts to a gain of over 103,000 persons in 2001-11. At this level, insofar as the UPC is due to mis-recorded migration rather than errors in population counts, it is more likely to relate to international migration rather than cross-border movements within the four countries of the UK. This view is supported by ONS in its 2014 review 'Quality of International Migration Estimates from 2001 to 2011', which showed that in the 11 calendar years considered net international migration to the UK may have been originally underestimated by over 340,000. This was mainly caused by the failure in mid-decade of the International Passenger Survey (IPS) to cover the arrivals of budget airline flights from Eastern Europe at regional airports. These airports are now covered by IPS.
- 3.6 At the local authority level within England the UPC is more complicated. The national total of 103,000 is the net outcome of positive UPC in some authorities and negative UPC in others. Therefore, although the initial problem may have been in counting international migrants, further issues arise in relation to the correct assignment of these migrants to local authorities. Incorrect initial assignments are compounded when new immigrants to the UK change address and their move is picked up by the NHS and translated by ONS into its estimates of internal migration.
- 3.7 As an example, if ONS assumes, based on IPS responses, that a new immigrant settles in Birmingham but in fact that person first registers with the NHS in Walsall, the next mid-year estimate will have one resident too many in Birmingham and one too few in Walsall, as until recently first NHS registrations from Overseas were not used in the MYE calculations. If in a subsequent year before the next Census that person moves to Wolverhampton and changes GP, or registers a new address with the original GP, that move will be picked up by the NHS and be translated by ONS as a move from Walsall to Wolverhampton. But that person was never considered by ONS to be a resident of Walsall. Therefore Walsall 'loses' a resident it never officially had and its MYE will now be two short. Birmingham will still be plus one as will Wolverhampton (correctly). These issues can only be fully corrected once the MYE are reset after the following Census.
- 3.8 UPC, therefore, is at least partly a correction for failings in the combination of measuring and assigning international migrants at the local authority level. This correction should not be needed in future, because ONS has now amended its processes to better distribute international immigrants to their first true area of settlement (where they register with the NHS) rather than where they may first live temporarily.
- 3.9 Although it has already improved its methods, we understand that ONS has a provisional plan for revised MYEs back to 2011 to be published in 2016, using any new methods arising from its current research into international and internal migration. This implies that its current annual estimates of migration since mid-2011 are not sacrosanct. This further emphasises the need for caution in using past migration trends as the springboard for future projections.

UPC and the official population projections

- 3.10 ONS decided not to adjust its 2012-based subnational population projections (ONS 2012), so that the UPC is excluded from the past migration flows which the projections carry forward. Accordingly the CLG 2012 household projections, which are derived from ONS 2012, also exclude the UPC. An ONS Questions and Answer document¹¹ gives two reasons for its decision:
- UPC is unlikely to measure a bias in the trend data that will continue in the future, and
 - It would be methodologically difficult to adjust for, because it is unclear what proportions of the UPC are due to errors in the Census population counts as against errors in the migration estimates.
- 3.11 In an earlier consultation document, reproduced at Appendix B below, ONS expands on the first point, noting that, insofar as the UPC is due to international migration *'it is likely that the biggest impacts will be seen earlier in the decade [2001-11] and will have less of an impact in the later years, because of improvements introduced to migration estimates in the majority of these years'*.
- 3.12 Among respondents to the consultation was the GLA Intelligence Unit, which has particular expertise in demography and a particular interest in the issue, because the UPC was relatively large for a number of London boroughs. The GLA paper¹² questions whether the MYE population counts should be corrected for distortions related to UPC, recognising that these distortions are likely to impact on the 2012-based projections. But its answer to the question is that correcting the MYEs *'would be a very large undertaking and is probably unrealistic at this time'*. The GLA then asks if projected migration should be corrected through *'a mechanism such as rolling forward the UPC'*, but answers that this *'would likely prove unsuccessful and generate confusion'*. Therefore the paper advises that *'the GLA agrees with [the ONS's] decision... not to attempt to incorporate the UPC component within the projections'*.

UPC in Greater Birmingham

History

- 3.13 In England, where it is assumed to be related to incorrect estimation of international migrants, UPC occurred mainly the early and middle parts of the decade. However, for Greater Birmingham annual UPC stayed at around 6,000 almost throughout the period; it was only in 2010-11 that there was a small dip to some 5,000. This suggests that, while ONS did improve the measurement of the total international flow, it still had difficulty in the correct assignment within England to local authorities.

¹¹ Office for National Statistics, *Questions and Answers: 2012-based Subnational Population Projections*, May 2014

¹² GLA Intelligence, *Response to the ONS 2012-based Subnational Population Projections consultation*, February 2012

- 3.14 By far the largest UPC was for Birmingham, where it totalled nearly 25,000 in the 10 years. UPC was also positive and high in the Black Country authorities and Redditch. Negative UPC only occurred in four authorities and only exceeded 1,000 in one authority, Stratford-on-Avon.
- 3.15 As part of the SHNS study we examined the historical data closely, but found no evidence to help us disentangle the causes of UPC in the Greater Birmingham HMA.

Projections

- 3.16 Since the Inspector specified that no additional projections should be prepared to assess the impact of UPC on projections, in order to estimate the impact of UPC, we use the two preferred projections from the strategic housing needs study (SHNS). The analysis covers all 14 local authorities in the Greater Birmingham HMA as defined in the Inspector’s Interim Findings. Results are in the table below.

Table 3.1 Impact of UPC

| Net new dwellings per annum 2011-31 | ONS / PBA 2012 | | |
|--|----------------|----------|---------------|
| | Without UPC | With UPC | Impact of UPC |
| Birmingham | 4,450 | 5,230 | 780 |
| Rest of HMA | 5,483 | 6,670 | 1,187 |
| Total HMA | 9,933 | 11,900 | 1,967 |

Source: PBA

- 3.17 We estimate that including the UPC in the ONS/PBA 2012 scenario would increase projected housing need across the HMA by 1,967 dpa. For Birmingham City on its own the estimated increase is 780 dpa.

Conclusion

- 3.18 The UPC is a discrepancy in the official statistics regarding population change between 2001 and 2011. In short, it is population change between the two Censuses that is unaccounted for by ONS’ estimates of births, deaths and migration. Nationally the UPC is positive at some 103,000 persons. For individual local authorities the UPC may be proportionally much greater, because the national total is the net balance of positive and negative amounts in different local authorities.
- 3.19 The causes of the UPC may be errors in the Census population counts, misrecorded migration, or more likely a combination of the two. At national level there is strong evidence that under-recorded international migration has played a part. At local level the causes of UPC are more complicated and are likely to include misallocation of migrants between local authority areas. In the absence of more detailed analysis by ONS, it is impossible to apportion the UPC between its different causes.
- 3.20 Following research and consultation, ONS decided not to take account of UPC in its 2012-based population projections. The CLG 2012 household projections, which are derived from these population projections, also exclude the UPC. The key reason for the ONS’s decision is that it would be methodologically difficult to make an

adjustment for the UPC, because it is unclear how much of it is due to errors in population count as against migration estimates.

- 3.21 For the Birmingham HMA the UPC is large and positive; therefore, if the UPC is included in past migration the projected housing need is larger than if the UPC is excluded. Across the HMA, including the UPC adds some 1,900-2,400 dpa to the projected housing need, depending on the scenario used. For Birmingham City on its own, including the UPC adds 770-980 dpa. We have looked closely at the historical data on the UPC in Greater Birmingham and have found no evidence that would help disentangle the causes of the UPC. Carrying UPC forward into future projections of housing need would compound these uncertainties.
- 3.22 To sum up, in technical terms there is no basis on which to adjust the projections to take account of UPC. At national level the ONS has decided against such an adjustment, and CLG in the 2012-based household projections has followed suit. The recent amendment to the PPG (see paragraph 2.13 above) endorses these projections and thus supports the ONS's decision. For the Birmingham HMA we have not found any evidence to help disentangle the causes of UPC and hence we have no basis on which to make an adjusted projection. Therefore the City Council is satisfied that the unadjusted household projections are the best measure of housing need available at this time. The BW paper takes the same view.

4 FUTURE EMPLOYMENT (BIRMINGHAM CITY)

- 4.1 The PPG advises as follows on the relationship between future employment and objectively assessed housing need'

*'Plan makers should make an assessment of the likely change in job numbers based on past trends and/or economic forecasts as appropriate... Where the supply of working age population that is economically active (labour force supply) is less than the projected job growth, this could result in unsustainable commuting patterns (depending on public transport accessibility or other sustainable options such as walking or cycling) and could reduce the resilience of local businesses. In such circumstances, plan makers will need to consider how the location of new housing or infrastructure development could help address these problems.'*¹³

- 4.2 Planning Inspectors and others have interpreted the last sentence above to say that Local Plans should provide enough housing to support the employment growth that is expected in the area¹⁴. Therefore plan-makers should test whether the housing need calculated from demographic projections would provide enough workers to match future numbers of new jobs. If the demography-based need figure fails this test, it should be adjusted upwards accordingly. (Alternatively, the PG suggests that transport infrastructure should be improved so more people can travel to work from other areas, presumably by agreement with other local planning authorities under the Duty to Co-operate.)
- 4.3 To test the demographic projections for Birmingham City, we have used two economic forecasts by Experian, based on different assumptions about future population. (The resident population is one of the factors influencing employment, because the more people live in an area the greater will be the demand for services such as retail, leisure, education and health). The first is Experian's standard forecast (December 2014), which assumes future population growth as shown in the ONS 2012-based projection, and hence is consistent with the ONS 2012 demographic scenario which is our minimum estimate of housing need. The second is a bespoke forecast that assumes population growth in line with our Trends 01-11 scenario, which is our maximum estimate of housing need.
- 4.4 In the ONS 2012 forecast scenario Birmingham's workplace jobs in 2011-31 increase by 124,360 (24%), equal to 6,218 jobs per annum. Job growth is faster than for the UK (21%) and the West Midlands (20%) (both these forecasts are also based on ONS 2012 population projection).
- 4.5 In the ONS 2001-11 scenario, by 2031 Birmingham's population is 93,000 above the ONS 2012 scenario (1.322m instead of the 1.228m in ONS 2012) and the resident labour force is 42,000 above ONS 2012. But Experian forecasts only 3,700 additional

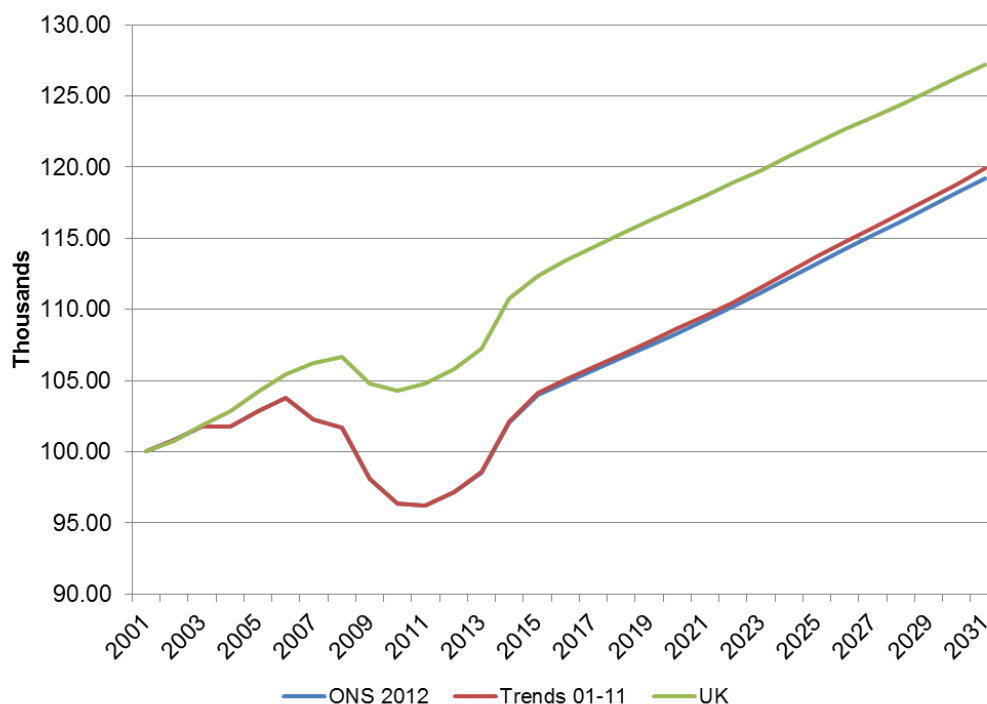
¹³ Paragraph 2a-018-20140306

¹⁴ 'This principle applies to local authority areas, HMAs or 'functional economic areas'.

workplace jobs over and above the ONS 2012 scenario. The rest of the additional labour force is absorbed into reduced net in-commuting, reduced double-jobbing and increased unemployment – though the model cannot forecast these different adjustments. Experian advises that there are two reasons why the additional labour force does not result in many additional jobs:

- On the demand side, due to Birmingham’s place at the top of the urban hierarchy, a high proportion of its consumer services and public services are consumed by people who live outside the city boundary. Therefore an increase in the city’s population does not have a proportionate impact on the demand for these services.
- On the supply side, Experian’s modelling suggests that Birmingham’s economy is not constrained by its labour supply, nor will it be so constrained in the forecast period to 2031.

Figure 4.1 Job forecasts



Source: Experian

- 4.6 We conclude that both our demographic scenarios pass the PPG ‘future jobs test’ set out at paragraphs 4.1-4.2 above. On the evidence of the Experian modelling, our preferred demographic projections will provide enough workers to meet the expected demand for labour, consistent with healthy job growth above the national benchmark. Therefore there is no need to adjust the demographic projections to match expected job growth.
- 4.7 We have briefly reviewed Barton Willmore’s analysis of future employment. BW do not say that our demographic scenarios fail the future jobs test, so on this topic they have not put forward a case for us to answer. But an interesting point is that, in testing their own scenario, BW’s expected job growth is only 3,396 jobs per annum –

based on the average of forecasts from the three main forecasting houses, of which Experian is by far the highest. This lends weight to our own preferred demographic projections, because it shows they will provide enough workers to support even the most optimistic of the three main economic forecasts.

5 PAST PROVISION AND MARKET SIGNALS (BIRMINGHAM CITY)

The issue

- 5.1 In line with the PPG¹⁵, the official housing projections should be adjusted to reflect any past underprovision of housing land. Where planning has underprovided land against demand or need, past development – and hence past population and household growth – will also have fallen short of that demand or need. By the same token, since projections roll forward that past growth into the future, they will understate future demand or need – and therefore should be adjusted upwards. The PG provides a list of market signals, or indicators, that may be analysed to determine whether this is the case. As the Inspector notes, the SHMA did not analyse those indicators, because it pre-dated the PPG. We make good that omission below, starting with past housing delivery.

Past housing supply

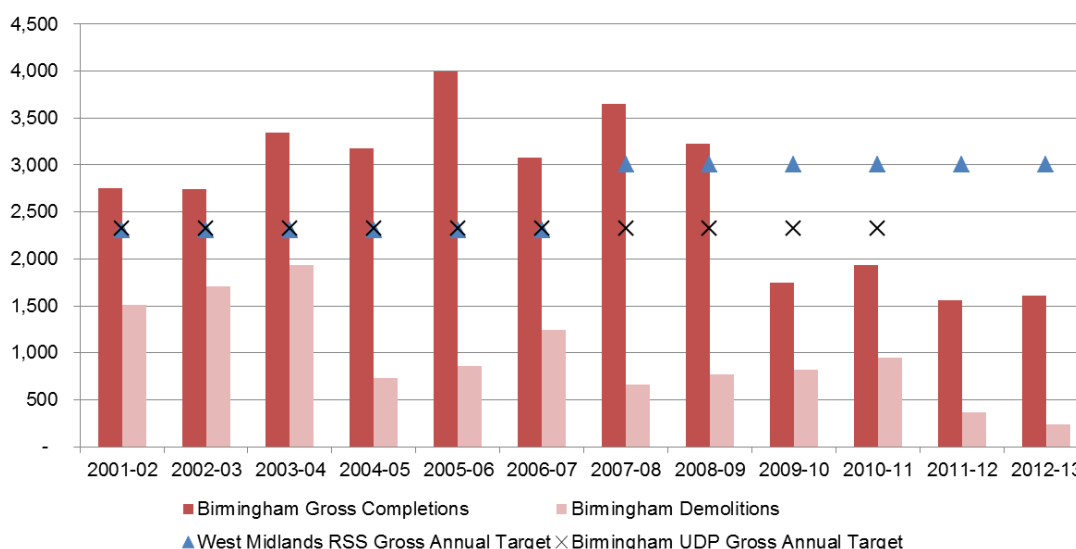
- 5.2 To analyse past supply in Birmingham, it is necessary first to understand what development plans over the past 10 to 15 years set out in terms of targets and allocations.

Past delivery

- 5.3 Figure 5.1 shows gross housing completions from 2001-02 to 2012-13 against the plan targets applicable at the time.
- 5.4 Two similar targets run from 2001-02 to 2006-07: the Birmingham UDP gross annual target, which covered the period 1991 to 2011, and the West Midlands RSS gross annual target, which covered the period 2001 to 2021. From 2007-08 the West Midlands target increased to 3,000 dpa.
- 5.5 As the targets are gross, to illustrate the amount of the net additional dwellings completed, we have included demolitions alongside gross completions.

¹⁵ See paragraphs 2a-015-20140306 and 2a-019-20140306

Figure 5.1 Birmingham gross completions and demolitions, 2001-02 to 2012-13



Source: Birmingham AMRs

- 5.6 The chart above shows that between 2001-02 and 2008-09 Birmingham met their gross targets.
- 5.7 In the early part of this period, demolitions were significant (above 1,500 a year) and thus reduced the number of net additional dwellings; after 2003-04, demolitions reduced in comparison with the early part of the decade and broadly remained stable under 1,000 per annum.
- 5.8 Although gross targets were exceeded between 2001-02 and 2008-09, Figure 5.2 shows that the Council did not meet the targets for the remainder of the of the RSS period up to its revocation and the remaining two years of the UDP plan period.
- 5.9 The Council attribute this to the recession. One particular issue that contributed to this decrease was the lack of demand for apartments; this had a major impact on city centre developments, which were a large contributor to the supply in the 2000s. For example, between 2005-06 and 2008-09, gross completions in the city centre were broadly 1,500 per annum. But from 2008-09 to 2012-13 gross completions varied between 200 and 600 per annum.
- 5.10 Despite not meeting the annual target of the RSS once the recession took hold, the Council delivered in excess of the UDP and RSS housing targets overall.

Figure 5.2 Birmingham performance against housing targets

| Plan / Year | | Gross Dwellings | Demolitions | Net Dwellings | % of Net Target Delivered |
|---|----------|-----------------|-------------|---------------|---------------------------|
| Unitary Development Plan 1991-2011 (20 years) | Target | 46,500 | 23,100 | 23,400 | 110% |
| | Delivery | 49,361 | 22,942 | 25,658 | |
| Regional Spatial Strategy 2001-2012 ¹ (11 years) | Target | 28,800 | 13,200 | 15,600 | 126% |
| | Delivery | 31,200 | 11,539 | 19,671 | |
| Regional Spatial Strategy 2001-2014 ² (13 Years) | Target | 34,800 | 15,600 | 19,200 | 118% |
| | Delivery | 34,807 | 12,166 | 22,641 | |

Source: Birmingham 5-Year Land Supply 2014-19 (September 2014)

¹ Whole years prior to revocation

² Including post-revocation

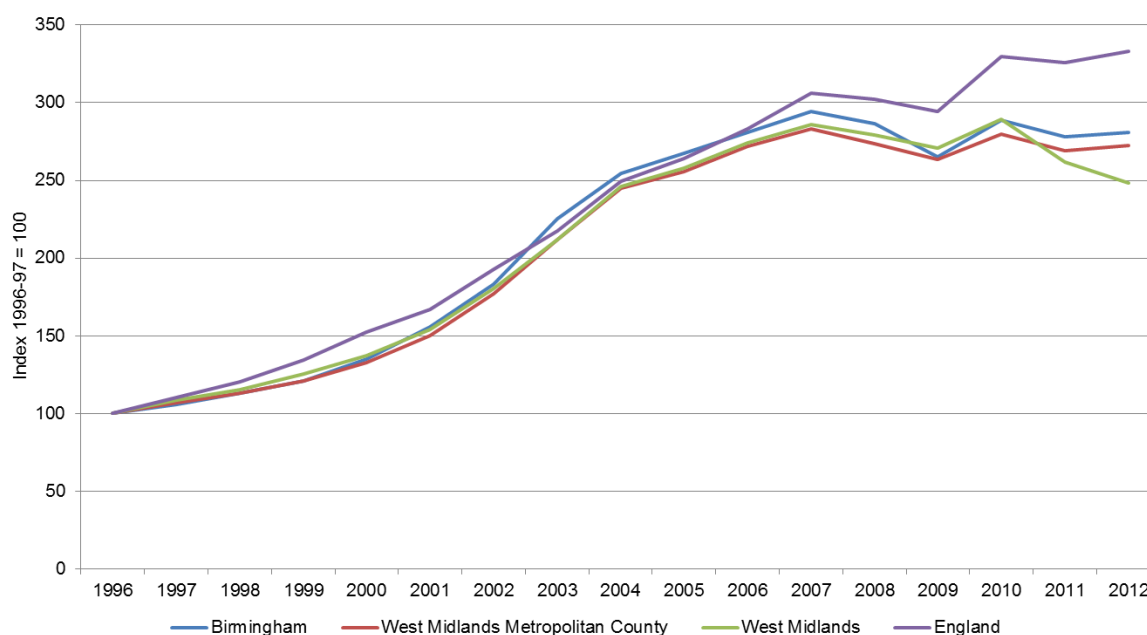
5.11 Figure 5.2 shows that, measured against the UDP, the Council delivered 110% of the target, and against the RSS, 118%.

House prices

5.12 With reference to Land Registry data, in October 2014 the average house price in Birmingham was £117,604. For comparison, the average house price was £135,378 in the West Midlands and £177,377 in England and Wales. So prices in Birmingham are below the West Midlands average and much cheaper than the national average.

5.13 Figure 5.3 below shows the change in mean house prices in Birmingham compared with the West Midlands (county and region) and England.

Figure 5.3 Mean house prices, 1996-2012



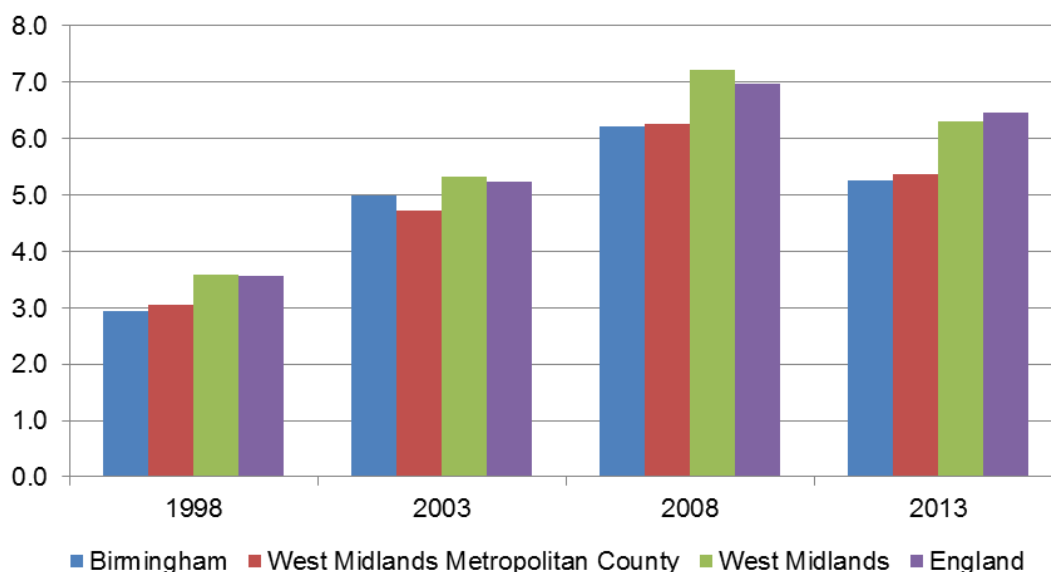
Source: CLG live table 581

- 5.14 Throughout the period, Birmingham's trend closely paralleled the regional and county trends. From 2007 onwards, these house prices significantly underperformed the national trend, with steeper falls in the recession and a weaker recovery. There is nothing here to suggest that demographic projections should be adjusted upwards to reflect a particular shortage of housing land.

Affordability

- 5.15 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.
- 5.16 The chart therefore shows that Birmingham is relatively affordable in comparison with regional and national benchmarks. In all areas affordability worsened up to 2008 as house prices rose, and improved since 2008 as prices fell in the recession before starting a partial recovery. Among these changes Birmingham's relative position was unchanged.

Figure 5.4 Affordability ratio: lower quartile house price to lower quartile earnings

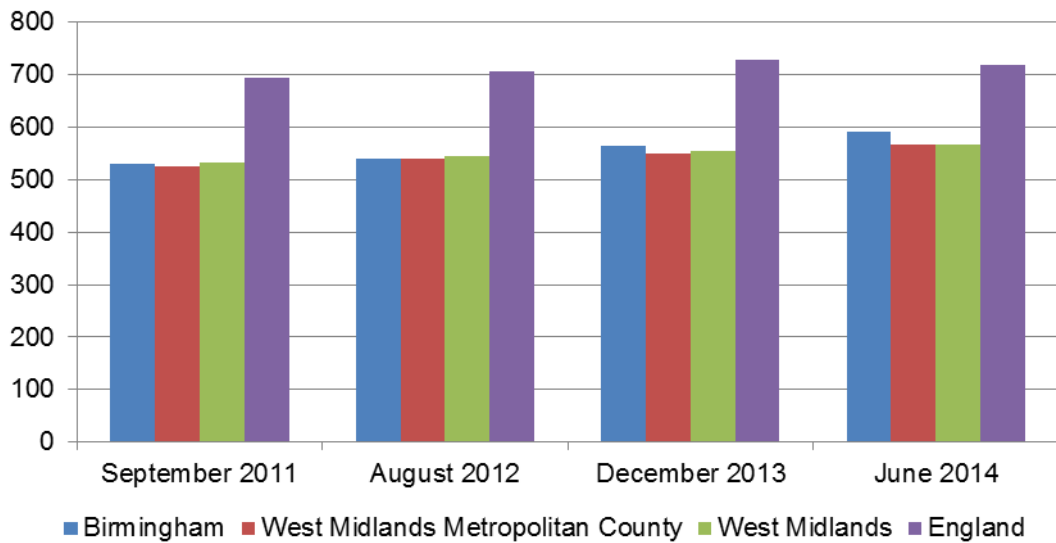


Source: CLG Table 576

Market rents

- 5.17 The VOA provide data on market rates, but only since 2011. Throughout this period average rents in the Birmingham have been close to those for the West Midlands and Metropolitan County, about £200 a month below the national average.

Figure 5.5 Market rents, 2011-14, £ per month

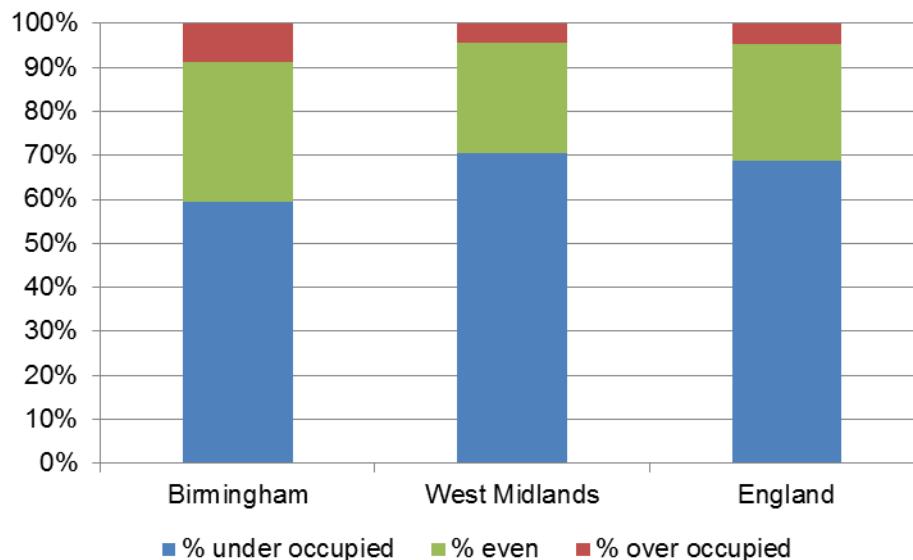


Source: VOA Private Rental Market Statistics

Overcrowding

5.18 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 5.6 Occupancy rating, 2011



Source: ONS

5.19 Using the ONS definitions, the majority of dwellings in all areas are considered under-occupied. The proportion of over-occupied dwellings is small, at around 5% for England and the West Midlands. But in Birmingham it is higher than these benchmarks. One likely reason for this is the high proportion of ethnic minorities in

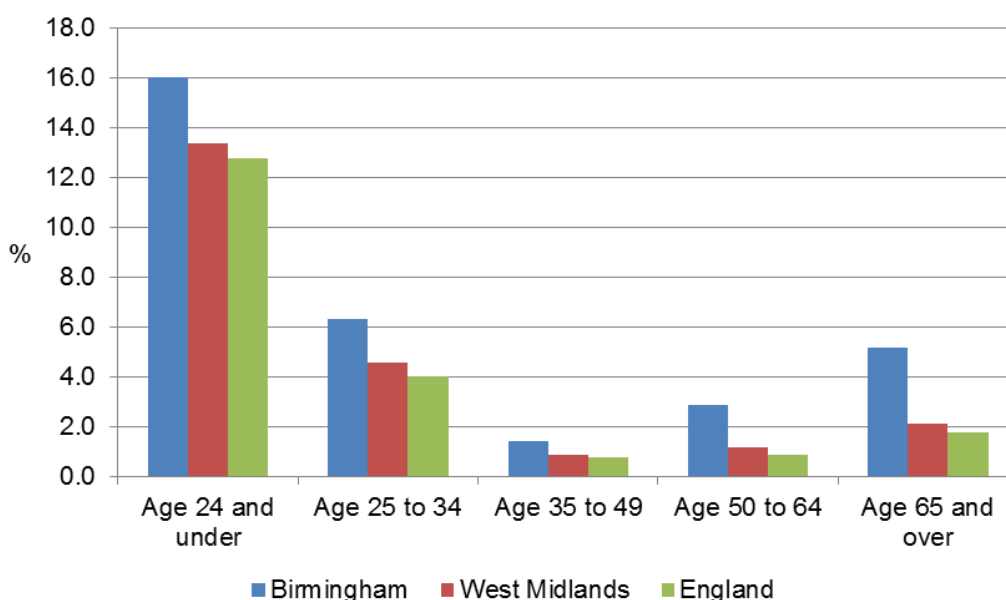
Birmingham, given that there is a strong correlation between ethnic origin and overcrowding – as confirmed by the 2011 Census, which showed that across England and Wales:

- Almost half (47.9%) of overcrowded households had a Household Reference Person (HRP) from a minority ethnic group (a group other than White British).
- The five local authorities with the largest percentage of overcrowded households in 2011 all had at least four out of five of their overcrowded households with an HRP from a minority ethnic group.
- Households with an HRP from the Bangladeshi ethnic group included a higher percentage (30.2%) of overcrowded households than those with an HRP of any other ethnic group¹⁶.

5.20 The 2011 Census provides data on concealed families. A concealed family is a couple or single parent family living in a multifamily household, where the Family Reference Person (FRP) is not the Household Reference Person (HRP). Concealed families include: young adults living with a partner and/or child/children in the same household as their parents; older couples living with an adult child and their family; and unrelated families sharing a household.

5.21 The chart below shows the percentage of concealed families by age of FRP at 2011. Across all age brackets, Birmingham’s percentage of concealed families is greater than the percentages for West Midlands and England. It is particularly high for those aged 65 and over and high for those aged 24 and under

Figure 5.7 Concealed families by age of Family Reference Person, 2011



Source: ONS

¹⁶ Office of National Statistics, *Overcrowding and Under-Occupation by Ethnic Group, 2011*, October 2014

- 5.22 A likely explanation for the incidence of concealed families in Birmingham is the high proportion of ethnic minorities. The ONS report on concealed families in the 2011 Census notes:

'There is considerable regional variation in the proportion of families concealed. London had the highest rate of concealed families in 2011: 3.3 per cent of all families in London, while the North East had the lowest proportion at 1.3 per cent. Concealed family proportions may be related to the ethnicity of the local population and also to the relative cost and availability of housing...

Concealed family proportions may relate to cultural differences in familial ties between ethnic groups. Within England and Wales, 'other households' are more than twice as likely to have a household representative person of non-white or mixed ethnic group (24 per cent) compared with all households (11 per cent). The ten LAs with the highest proportions of concealed families shown in table 2 also have the highest proportions of the population identifying with a non-white ethnic group; high proportions of the population of these areas identified as Indian, Pakistani or Bangladeshi. The high proportions of concealed families in these areas may be a result of closer familial ties in Asian cultures.'

- 5.23 Increased housing land provision will not change these facts.

Conclusion

- 5.24 In summary, there is no evidence to suggest that Birmingham's housing market in the past has suffered from particular pressure of demand against the planned land supply. On the contrary, housing delivery has been above RSS targets, house price growth has undershot the national trend and the affordability of market housing is better than average. All this suggests that there is no reason to adjust the demographic projections for past underprovision and market signals.
- 5.25 In contrast, Birmingham is worse off than national and regional averages in respect of two indicators, overcrowding and concealed families. The prevalence of concealed families is likely due to the high proportion of ethnic minorities. Overcrowding on its own in our view does not justify an upward adjustment: it affects a small minority of households and may be more effectively addressed by targeted intervention, including the affordable housing provision discussed in Chapter 6, rather than an increase in overall housing provision.
- 5.26 We have reviewed Barton Willmore's evidence on market signals and have found nothing to contradict the above findings. Rather than the evidence discussed in the PPG, BW's analysis focuses on the 'Barker Review benchmark', calculating how many dwellings should be provided if house price inflation is to be reduced to 1.1% p.a. In our view this analysis is irrelevant, for three main reasons. Firstly, the target reduction in house price inflation is arbitrary and not based on any current policy objective. Secondly, the Barker calculation relates to the national market as a whole: there is no evidence on how many houses should be built in Birmingham to reduce house price inflation to 1.1%. Thirdly, BW's approach is contradicted by the PPG,

which advises against precise calculations to gauge the impact of additional supply on prices or affordability:

*'Market signals are affected by a number of economic factors, and plan makers should not attempt to estimate the precise impact of an increase in housing supply. Rather they should increase planned supply by an amount that, on reasonable assumptions and consistent with principles of sustainable development, could be expected to improve affordability, and monitor the response of the market over the plan period.'*¹⁷

¹⁷ Paragraph: 020 Reference ID: 2a-020-20140306

6 AFFORDABLE HOUSING (BIRMINGHAM CITY)

- 6.1 As noted earlier the Inspector requested that we summarise the findings of the 2012 SHMA in relation to affordable housing and explain why they remain relevant in the light of the PPG. The outstanding issue relates to paragraph 029 of the PPG, which states that *'an increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes'*.
- 6.2 The SHMA (H2) identified an objectively assessed need for 84,000 dwellings. Of these, 31,900 (38%) are required as affordable homes. This level of affordable housing need was not challenged at the public examination. Whilst the objectively assessed need may be adjusted, the affordable housing needs assessment in H2 remains relevant. The reasoning for this is set out in EXAM 109 (at paragraph 2iv).
- 6.3 It was demonstrated during the examination that the required number of additional homes (irrespective of tenure) cannot be delivered in Birmingham and that some housing will need to be provided beyond the city boundary. Again this was not seriously challenged at examination, although there are differing views as to the amount of new housing that could be delivered within Birmingham by 2031.
- 6.4 The plan proposes that 51,100 dwellings be provided in Birmingham, and it remains the Council's view that this is the maximum that could be delivered in the plan period. The tenure breakdown of these 51,100 dwellings mirrors the proportion of tenures required to meet the full OAN, that is, 38% of these dwellings (19,400) should be affordable. Using the same proportion enables a range of housing to be provided in the city which will meet the needs of all members of the community without favouring any particular element and ensures that there is potential to create balanced communities within the city. Once again this tenure split was not challenged at the public examination.
- 6.5 The Housing Targets Technical Paper (H1) in section 7, addresses the delivery of these 19,400 affordable dwellings. The methodology was to consider the contribution that BMHT and RSLs were likely to make (9,173 dwellings) and then to consider the percentage which should be sought through the affordable housing policy taking account of the type and size of sites in the SHLAA¹⁸. This concluded that setting the affordable housing policy requirement at 35% on qualifying sites was sufficient to deliver the overall affordable housing target of 38%. The affordable housing delivery assumptions in H1 were not challenged at the public examination.
- 6.6 Since the assessment in H1 was undertaken, the City Council has revised its CIL charging schedule, reducing the charge for residential development to zero in all but the highest value market areas¹⁹ in order to further improve viability and to help sites deliver the full 35% affordable housing. This means that qualifying sites with a

¹⁸ Identified sites

¹⁹ The CIL in high value areas has been reduced from £115 to £69 per sq m.

combined capacity of just over 20,000 dwellings will be exempt from CIL. The CIL has now been submitted for examination on that basis.

- 6.7 The Council is therefore confident that the city's affordable housing requirement can be met and that there is a realistic prospect that the 19,400 affordable homes will be delivered within Birmingham.
- 6.8 In any event the Council does not consider that an increase in the OAN will lead to an increase in the delivery of affordable housing within Birmingham for the following reasons.
- In terms of direct delivery by RSLs or the BMHT, the constraint on delivery levels is funding. This will not be influenced by an increase in the overall requirement.
 - It is accepted that there is insufficient capacity within Birmingham to meet the full OAN as currently calculated. An increase in the overall requirement will not therefore result in an increase in the number of new homes built within the city boundary and will not result in the potential for additional affordable housing in Birmingham through the S106 mechanism.
- 6.9 In summary, the Council is confident that the affordable housing requirement can be delivered and there is no evidence that an increase in the OAN would make this more likely. Barton Willmore did not consider this issue.

7 CONCLUSIONS

7.1 Our answers to the Inspector's questions are briefly summarised below.

The index method (Greater Birmingham)

7.2 The thinking behind the index method is that the CLG 2011-based HRRs are too low because they are heavily affected by the last recession, whose impact is bound to wear off in future; but the 2008-based rates are too high, because they wrongly carry forward into the indefinite future past trends which are permanently broken. The index method strikes a balance between these two extremes, as noted by the Durham Inspector quoted earlier.

7.3 In contrast, to use the full return method advocated by Barton Willmore would assume that the whole downturn in HRRs incorporated in the CLG 2011 projection is due to the recent recession and will wear off in time. This assumption is wrong, because as discussed earlier the downturn is partly due to long-term factors that were already at work before the recession and will not disappear in the recovery.

Unattributable Population Change (Greater Birmingham)

7.4 We have looked closely at the historical data on the UPC in Greater Birmingham, but have found no evidence that would help disentangle its causes. Therefore we have no basis on which to adjust the projections to seek to take account of UPC. At national level the ONS has decided against such adjustment, and CLG in the 2012-based household projections has followed suit. The recent amendment to the PPG endorses these projections and thus supports the ONS's decision. Therefore the City Council is satisfied that the unadjusted household projections are the best measure of housing need available at this time. BW agrees with this analysis.

Future employment, past provision and market signals (Birmingham City)

7.5 On the evidence of the Experian modelling, our preferred demographic projections will provide enough workers to meet the expected demand for labour in Birmingham, consistent with healthy job growth above the national benchmark. Therefore there is no need to adjust the demographic projections to match expected job growth.

7.6 There is no evidence to suggest that Birmingham's housing market in the past has suffered from particular pressure of demand against the planned land supply. On the contrary, housing delivery has been above RSS targets, house price growth has undershot the national trend and the affordability of market housing is better than average. All this suggests that there is no reason to adjust the demographic projections for past under-provision and market signals.

- 7.7 By contrast, Birmingham is worse off than national and regional averages in respect of two indicators, overcrowding and concealed families. The prevalence of concealed families is likely due to the over-representation of ethnic minorities. Overcrowding on its own in our view does not justify an upward adjustment: it affects a small minority of households and may be more effectively addressed by targeted intervention, including the affordable housing provision discussed in Chapter 6, rather than an increase in overall housing provision.

Affordable housing need (Birmingham City)

- 7.8 The Council is confident that the affordable housing requirement can be delivered and there is no evidence that an increase in the OAN would make this more likely.

Objectively assessed need

- 7.9 In Chapters 1-6 above we have provided additional analysis in response to the Inspector's questions, considering in turn household formation, Unattributable Population Change, future employment, market evidence and affordable housing need. None of this analysis gives us reason to reconsider the Council's position that the Birmingham Development Plan should be based on an objectively assessed need of 89,000 net new dwellings in 2011-31, based on the SHNS's ONS/PBA 2012 scenario. (The corresponding need for the Greater Birmingham HMA, as defined by the Inspector, is 198,680 dwellings.)
- 7.10 Since the SHNS was completed the CLG has released new household projections, published on 27th February 2015. These new official projections partly supersede our calculations, because they include a revision of the historical data for 2011 on which all demographic projections are based. If those data and the new projections had been available at the time of the SHNS we would have used them as our starting point.
- 7.11 At the present stage in the development of the BDP, however, it would not be appropriate to restart our analysis on the basis of the new projections. This would require disproportionate effort and would greatly delay the plan-making process, because we would need to test the new projections through extensive analysis and alternative scenarios. The PPG aims to avoid such disproportionate effort and delay, advising that, although plans should be kept up to date, it does not automatically follow that housing assessments are rendered outdated every time new projections are issued. This advice is highly relevant in the present case, because the new projections produce virtually the same housing need figures as the SHNS, both for Birmingham City and the HMA as a whole.

APPENDIX ONS REPORT ON UPC

2012-based Subnational Population Projections for England

Report on Unattributable Population Change

20 January 2014

Introduction

The Subnational Population Projections (SNPPs) are produced using assumed future trends in the components of population change. These trends are calculated using the best series of data from the most recent 5 or 6 years up to the base year of the projection. The revised back series of population estimates from mid-2002 to mid-2011 contains an additional component of population change known as Unattributable Population Change (UPC). ONS recognises that the UPC component can have a significant impact at some age/sex groups in some local authorities. Work has taken place to investigate the impact of UPC (Appendices A & B) and how an adjustment may be made for it (Appendix C).

It is proposed that no adjustment be made in the 2012-based Subnational Population Projections for the unexplained component of population change in the revised population estimates series. This paper describes what UPC is and why we are not making an adjustment for it in the 2012-based Subnational Population Projections.

What is Unattributable Population Change?

Following the 2011 Census, the intercensal population estimates were rebased so that the mid-year estimates (MYEs) for the period mid-2002 to mid-2011 were in line with the 2011 Census. After making allowances for methodological changes and estimated errors in the components during the decade, the remaining difference between the rolled forward 2011 MYEs and the 2011 Census based MYEs for England was 103,700. This is referred to as Unattributable Population Change (UPC) in this paper. In order to produce the revised series of population estimates for the last decade, the UPC was apportioned across each of the 10 years using the cohort method which takes account of the fact that individuals age as the decade progresses. This method was applied to both the national and subnational MYEs. An example of how this method works can be found in the paper on the methods used to revise the subnational MYEs at www.ons.gov.uk/ons/guide-method/method-quality/specific/population-and-migration/population-statistics-research-unit--psru-/latest-publications-from-the-population-statistics-research-unit/index.html.

Some of the difference between the rolled forward 2011 MYEs and the 2011 Census based MYEs for England has been explained by the following:

- EU8 immigration adjustment
- Republic of Ireland migration revisions
- Migrant switcher revisions
- Visitor switcher revisions
- Armed forces adjustment
- Cross-border migration correction
- Mid-2009 asylum seekers and visitor switchers correction
- Removal of historic processing adjustments

The migration data used in the 2012 SNPPs include the adjustments described above that were made to the population estimates revised after the 2011 Census.

Appendix A shows how the UPC is distributed both nationally and by local authority. At the national level, the UPC of 103,700 affects some age groups more than others. At the subnational level, the UPC affects some local authorities (LAs) more than others. However, the age distribution of this difference at national level is not always the same as that observed subnationally.

Potential sources of Unattributable Population Change

The UPC is likely to be due to a combination of sampling variability, or other issues, in the following:

- International migration estimates
- Census estimates, both 2001 and 2011
- Internal migration estimates (at subnational level only)

Further detail on how these components may have caused the UPC can be found in Appendix B.

How UPC was handled after the 2001 Census

The final unattributable population change after the 2001 Census (including adjustments made to mid year estimates to correct for census deficiencies) was 209,000. Initially the figure was higher and a UPC adjustment in the mid year estimates was made to the mid-2002 estimates. The final level of 209,000 (just 20,000 a year) was considered too small to make an adjustment for in the MYEs for the following decade. This UPC of 209,000 for England and Wales was double the UPC of 103,700 for England after the 2011 Census.

Justification for the decision not to make an adjustment for UPC in the 2012-based Subnational Population Projections

No adjustment is to be made in the 2012-based Subnational Population Projections for the unexplained component of population change in the revised population estimates series. An adjustment for UPC could only be made if it can be demonstrated that it measures a bias in the trend data that will continue into the future.

Quality assurance of the 2012-based Subnational Population Projections did not reveal any problems indicating that adjustments for UPC are necessary. The resulting projections generally appear to better reflect trends across all the LAs than recent sets of projections.

ONS decided not to make an adjustment for UPC in the 2012-based National Population Projections or in the series of population estimates based on the 2011 Census. This is because the UPC for England (103,700) is within the confidence interval for the international migration estimates. It is also within the sum of the confidence intervals for the 2001 and 2011 Census.

The UPC is unlikely to be seen in continuing subnational trends as:

- It is unclear what proportion of the UPC is due to sampling error in the 2001 Census, adjustments made to MYEs post the 2001 Census, sampling error in the 2011 Census and/or error in the intercensal components (mainly migration).
- If it is due to either 2001 Census or 2011 Census then the components of population change will be unaffected
- If it is due to international migration, it is likely that the biggest impacts will be seen earlier in the decade and will have less of an impact in the later years, because of improvements introduced to migration estimates in the majority of these years.

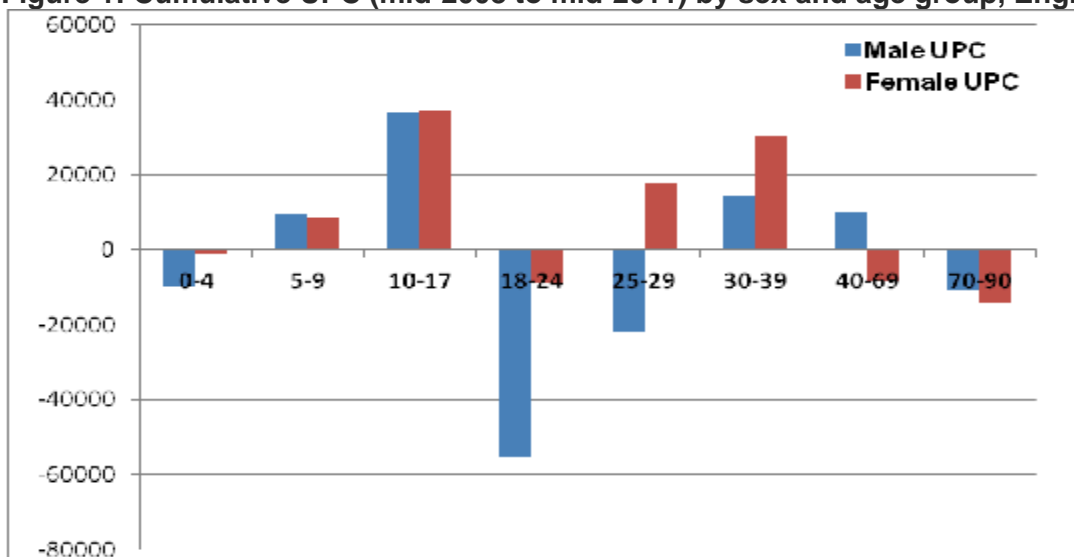
Therefore ONS propose that no adjustment be made in the 2012-based Subnational Population Projections for the unexplained component of population change in the revised population estimates series.

Appendix A - How the UPC is distributed

At national level

At national level (England) UPC can result from uncertainties in the population numbers at 2001 and 2011, as well as issues with estimation of cross border and international migration. Figure 1 shows how the cumulative UPC for England is distributed by age and sex. For ages 10 to 17, the positive UPC suggests an underestimation in the rolled-forward mid-year estimates (MYEs). This may be due to a possible underestimation in the 0 to 9 age group in the 2001 Census and/or an underestimate of international migration. Young men aged 18 to 29 show a negative UPC which means that there was an over estimation of young men in the rolled-forward MYEs. Those aged 30 to 39 have a positive UPC and so appear to be underestimated in the MYEs. The elderly age groups show a small negative UPC which suggests an overestimation in the MYEs.

Figure 1: Cumulative UPC (mid-2008 to mid-2011) by sex and age group, England



At subnational level

To illustrate how the average UPC is distributed across LAs for a selected sex and age group we can take look at an example. Figure 2 looks at males aged 20-24 and illustrates that the national pattern is not observed across all areas subnationally. It can be seen that there are LAs at both ends of the graph that have a larger UPC. This pattern can be seen for most age groups at the local authority level, with some LAs showing a positive UPC and some LAs showing a negative UPC.

However, the subnational distribution is not consistent with the distribution of UPC at the national level. For example, at the national level, the UPC shows that the 10-17 age group was underestimated in the MYEs and that the 18-24 age group was over estimated in the MYEs. However, at a local level, this under/overestimation does not always apply. There are many LAs where all age groups appear to be either over or underestimated in the MYEs. For example, in Leeds the UPC for males indicates an overestimate in the MYEs across all age groups and in Liverpool, the UPC for males suggests an underestimate in the MYEs across all age groups. This is illustrated by figure 3 below.

Figure 2: Average UPC (mid-2008 to mid-2011) for males aged 20-24

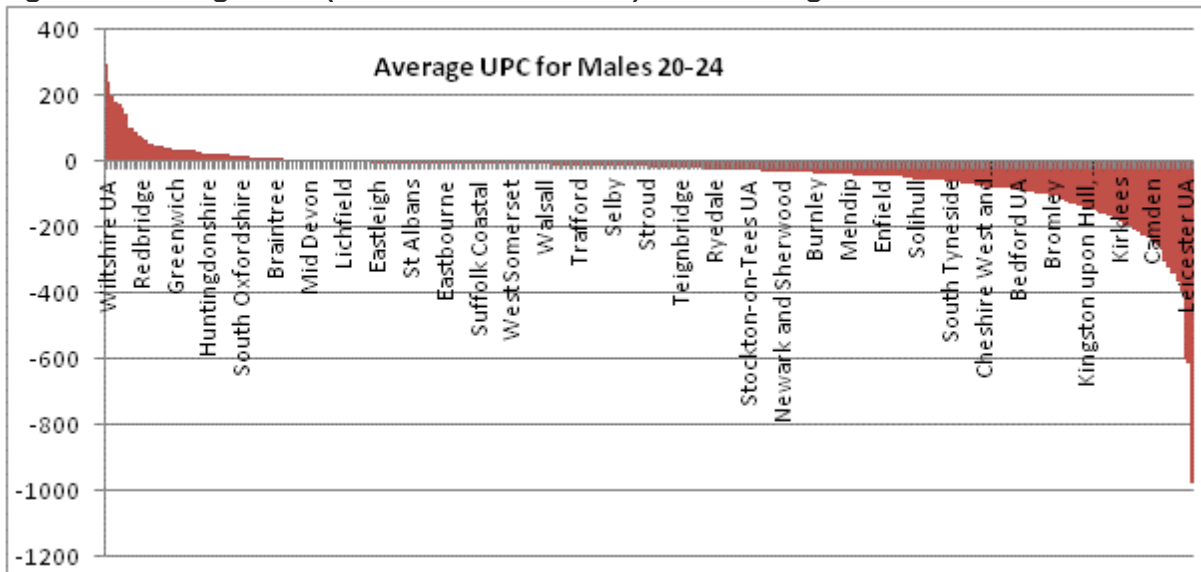
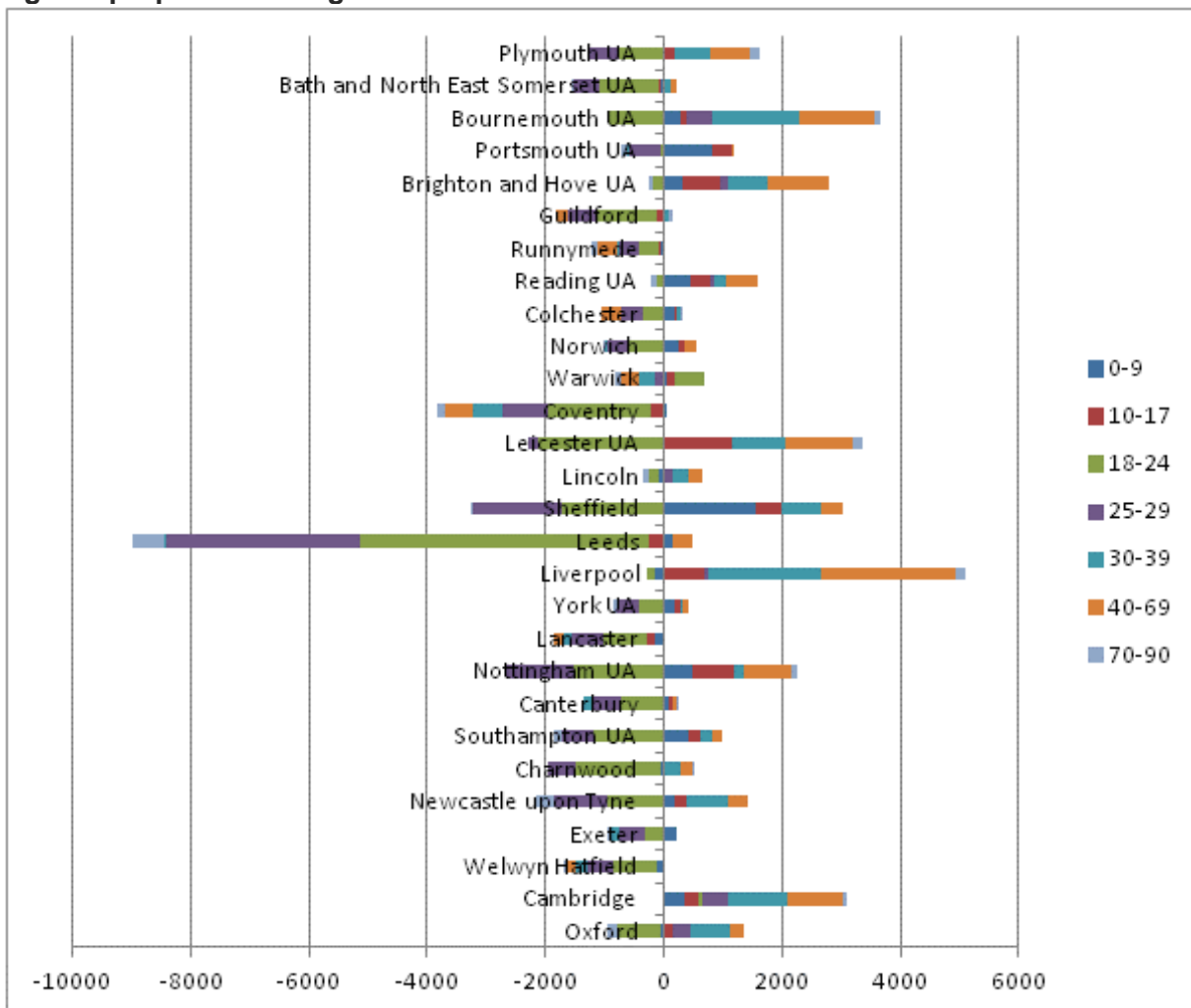


Figure 3: UPC for males (mid-2008 to mid-2011) by age group for LAs in England with the highest proportion of Higher Education Students



Appendix B - Possible causes for UPC

The UPC is likely to be due to a combination of reasons. These possible causes are summarised below:

2001 Census

The 2001 Census is the base for the population estimates over the decade. Although adjustments were made to these to improve the estimates, errors may still remain in the base estimates either due to sampling error from the census estimation process or from the adjustments made to improve the population estimates base following the 2001 Census.

2011 Census

The 2011 Census which is used as the benchmark for the mid-11 population estimates is subject to sampling error. Although the 2011 Census estimates are considered to be of high quality, the need to estimate the number of people who did not appear on a Census form means that each LA inevitably has some uncertainty around their estimate. There is also the potential for other unidentified biases to have occurred. However, any error in the 2001 or 2011 Census that is contributing to the UPC would not continue into the next decade. This is because the error would not be part of the components of change which are used in the trends for projecting the population.

International migration

Both the immigration and emigration estimates are subject to sampling errors. In addition, the new methods for distributing immigration down to LA level have only been applied to the years ending mid-2006 onwards. If it had been possible to apply the new methods to the earlier years in the decade, this would have led to different estimates for each LA. In addition to this uncertainty, applying an age and sex distribution to international migration estimates at the national level is subject to error.

Internal migration inaccuracies

Apart from changes to school boarder estimation and small revisions to cross-border flows, migration between LAs in the UK has not been changed in the back series. However, there is likely to be some level of inaccuracy in the internal migration estimates over the last decade as some moves are difficult to estimate accurately. For example, we know that the movement of young people finishing Further Education courses is difficult to capture. Previous research has found long time lags between moving and re-registering with a GP in the student age groups. This has resulted in moves being captured in the wrong time period but also at the wrong age, so there will be too few moves at younger ages (the age of moving) and too many moves at older ages (the age of re-registering). It is not known whether these known lags in internal re-registrations may change in the future. A further issue related to lagged moves is that in the years following the Census, a small minority of moves may be estimated which have already been accounted for by the taking of the Census.

Definition of a prisoner

The definition of a prisoner has changed. The mid-year estimates up to mid-2010 define a prisoner as someone who has already served at least six months in prison by the mid-year point. However, the mid-2011 estimates have moved to a new definition that a prisoner is someone who is on a

sentence of six months or more, regardless of when their sentence commenced. The overall impact of this is that more people will be defined as prisoners, which will increase the population of LAs with prisons, potentially by several hundred and slightly reduce it in other LAs. This will have a small effect in those LAs with a large prisoner population.

Appendix C – Research carried out to identify whether it would be possible to create an adjustment for UPC in the SNPPs

ONS are aware that some local authorities believed that UPC would be an issue in calculating trends for the SNPPs. Therefore, before data were available to produce the projections, ONS considered how an adjustment could be made within the limitations of the SNPP processing system. A possible solution was identified. However, more research would be required on the specific details of a method to put into production.

It was decided that the method used should not make an adjustment to any of the current migration components as this would not be transparent to users and would require evidence that the UPC was due to a particular component which is something that is not known.

Methodological Constraints

Any method to make adjustments for UPC in the 2012 SNPPs has to work within the constraints of the SNPP processing system.

Firstly, any adjustment would have to be processed through the now redundant visitor switcher flows in the system. The impact of this is that any adjustment made will have to remain constant over the whole projection period. The advantage of using this flow is that it can be separated out for creating outputs if required.

Secondly, as the SNPPs are constrained to the national population projections; and there is no UPC component in the national population projection, any adjustments made to the SNPPs will have to sum to zero across all local areas for every age and sex group. The impact of this is that any adjustment for UPC at the subnational level will just move population around from one LA to another. This means that if we add people to one LA, we have to take them out of another. As the UPC does not sum to zero across all local authorities in England, this would mean that any adjustment could potentially be biased.

Therefore the method to create adjustments by age and sex for each local authority must satisfy the constraint that the adjustments sum to zero, and will be constant for each year of the projection. A general approach has been considered on how these adjustments could be created. However, the finer detail on exactly how these methods would be used in practice has not, and would require further research.

Methodology

The general approach would be to create the adjustments using the UPC component from the revised population estimates, for the years from mid-2007 to mid-2011. The method scales the average UPC by age and sex for some LAs so that across all LAs, the UPC adjustment would sum to zero. This approach may be best applied to five-year age groups and then the average scaled UPC for each age group can be apportioned down to single year of age

As UPC by age does not sum to zero, in some areas all of the average UPC will be adjusted for and in others this will be only a proportion. Figure 2 in Appendix A shows the UPC for males aged 20 to 24 years old. It is clear the negative UPC is much greater than the positive UPC. The method would scale down the average in the areas where the UPC is negative, but the average in areas where the UPC is positive would be unchanged.

Even if it were accepted that there was an element of UPC in some age groups and in some LAs that would continue into the future it would not apply to all LAs; many LAs and some age groups are not impacted greatly by UPC. An alternative approach would be to restrict any adjustments to a subset of age groups or areas. However the overall approach would remain the same. It would be straightforward to adjust the method for a subset of age groups.

If the adjustment was to be made on a subset of areas then a criteria on selecting these areas would need to be set so that the method is applied consistently across LAs in England. The criteria would likely be set based on percentage of UPC in an area for a given age group. However it is very possible that the criteria only selects LAs with a negative UPC, in which case as the UPC has to sum to zero no adjustment would be possible.