Objectively Assessed Need and Housing Targets

Technical advice note

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1 INTRODUCTION

1.1 The National Planning Policy Framework requires that local planning authorities identify the objectively assessed need for housing in their areas, and that Local Plans translate those needs into land provision targets. Like all parts of the plan, such housing targets should be informed by robust and proportionate evidence. This note offers practical advice to planning authorities and others in preparing that evidence and setting plan targets, in line with the Framework and the supporting Planning Practice Guidance (PG).

1.2 Our advice has no official status. It provides informal advice, which local authorities and others use at their own risk. It is based on existing good practice, our own experience and - most importantly – on the recommendations of planning Inspectors, both from formal reports and the many informal documents (letters, notes, preliminary observations etc.) associated with Local Plan examinations. We focus on total housing provision, leaving aside the mix and tenure of housing including affordable housing.

1.3 As pointed out in the PG, assessing housing needs is not an exact science. Many of the questions we address have no definitive answer, and answers may change abruptly if national guidance is updated, planning Inspectors and courts of law issue new decisions, or new information comes forward.

2 NATIONAL POLICY AND GUIDANCE

The NPPF

2.1 Our starting point is national planning policy, as set out in the National Planning Policy Framework (NPPF)[1]. Briefly summarised, a key objective of the Framework is to '*boost significantly the supply of housing'*. To that end, local planning authorities should make objective assessments of housing need, working jointly with neighbouring authorities who share the same housing market area. Local Plans should provide land to meet those needs in full, insofar as their areas have the sustainable capacity to so, as defined by other policies in the Framework. Where this capacity does not exist, need should be 'exported' to neighbouring areas. These neighbouring areas should accept it, as far as is reasonable and consistent with *their* sustainable capacity.

2.2 These are the principles that housing needs assessments should help translate into practice.

Planning Practice Guidance

2.3 The PG's section on *Housing and economic development needs assessments*[2] deals with housing in three sub-sections:

1. *The approach to assessing need*
2. *Scope of assessments*
3. *Methodology: assessing housing need*.

2.4 The first two sub-sections provide general guidance, covering both housing and economic development. The third is specific to housing. In paragraph 01 of the first sub-section the PG clarifies that the assessments it describes includes the Strategic Housing Market Assessment (SHMA) required by the NPPF. Thereafter it refers to the evidence base study as an 'assessment', with no further mention of the term 'SHMA'. Similarly in this note we use the term 'assessment' rather than 'SHMA', in order to avoid confusion with the 'old SHMA' that authorities were required to produce under the previous planning system. That 'old SHMA' was a different kind of study entirely, which focused on affordable need and tenure mix, as under the old planning system total need and plan targets were set by Regional Spatial Strategies.

2.5 The PG puts forward a '*standard methodology*' for assessing housing needs. It advises that other methodologies are possible, but the standard one is strongly recommended, and any authority that chooses to depart from it should explain why. In summary, the steps in the method are as follows.

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[1] Key paragraphs are 17, 47, 159, 179 and 182.

[2] Department for Communities and Local Government, *Planning Practice Guidance, Housing and economic needs assessments,* ID: 2a, Updated 06 03 2014 http://planningguidance.planningportal.gov.uk/blog/guidance/housing-and-economic-development-needs-assessments/

i **Define the housing market area (HMA)**

Where the housing market area covers more than one authority, the SHMA should relate to this larger area, not the individual authority.

ii **Refer to the CLG household projections**

The CLG projections (which in turn are derived from the ONS population projections) provide the '*starting point*' estimate of housing need.

iii **Adjust for factors that are not captured by the CLG projections**

This stage may include the following:

a) Update the projection to take account of the latest available information;

b) If using the latest CLG projection, which is the 2011-based interim projection and only extends to 2021, '*assess likely trends after 2021 to align with development plan periods*';

c) Adjust for other local circumstances, including exceptional or one-off events either past or expected, such as the building of an urban extension or a new university.

d) If market signals show that planning in the past has undersupplied need, adjust the CLG projection upwards;

e) If the demographic projection does not provide a sufficient labour supply to match the expected growth in jobs, adjust them upwards.

2.6 The PG notes that the CLG household projections are trend-based – that is, they carry forward past trends in population and household formation. Accordingly they cannot predict the impact of changes which are not captured in past trends, such as changing economic circumstances or government policy.

2.6.1. The PG's recommended method for needs assessment excludes any analysis of supply constraints that might restrict the delivery of new housing. Indeed in the previous section the guidance emphasises that constraints have no bearing on housing need – though they do of course bear on housing provision targets ('requirements'[3]) – bearing in mind how much affordable housing can be realistically paid for. [4]:

2.7 Chapters 3-8 below will consider each step of the PG's method in turn. But first, in the next section we discuss a prior question: the meaning of 'housing need'. This concept is fundamental to the NPPF and PG, but it is not defined in either document. This leaves room for confusion, because 'need' is a broad term, which means different things to different people. Without a shared understanding of what 'need' is, we may follow the standard assessment method mechanically. But where we come to a point that requires judgment (and there may be many such points) we may have no basis for that judgment.

[3] The NPPF and PG use 'requirement' to mean 'target' (what policy requires). This is often misunderstood, because in other contexts 'requirement' often means 'need' or 'demand' (what households or the market require). The misunderstanding is dangerous, because the NPPF makes a sharp distinction between targets and needs, as we discuss later.

[4] Ref ID 2a-003-2014036

What is housing need?

2.8 Appendix A below discusses the meaning of 'housing need'. Here, we summarise the conclusions of that discussion. We propose a pragmatic definition of total housing need (the OAN) as follows:

'The housing that households are willing and able to buy or rent, either from their own resources or with assistance from the state'.

2.9 In this definition, 'need' is synonymous with 'demand', covering the affordable sector as well as market housing. Total need, or demand, equals the total housing that would be provided across both sectors, if land supply was not constrained by planning. This is why the assessed total need is often described as a policy-off estimate.

2.10 But in practice this unconstrained demand is difficult or impossible to measure, because planning generally does constrain housing development, and has done so for many decades. When we assess future demand by projecting forward past trends, we also project forward the effect of those past constraints. Therefore total housing need, as measured in practice, will generally underestimate the unconstrained total need. Rather than policy-off, it is a policy-neutral, or policy-same, estimate.

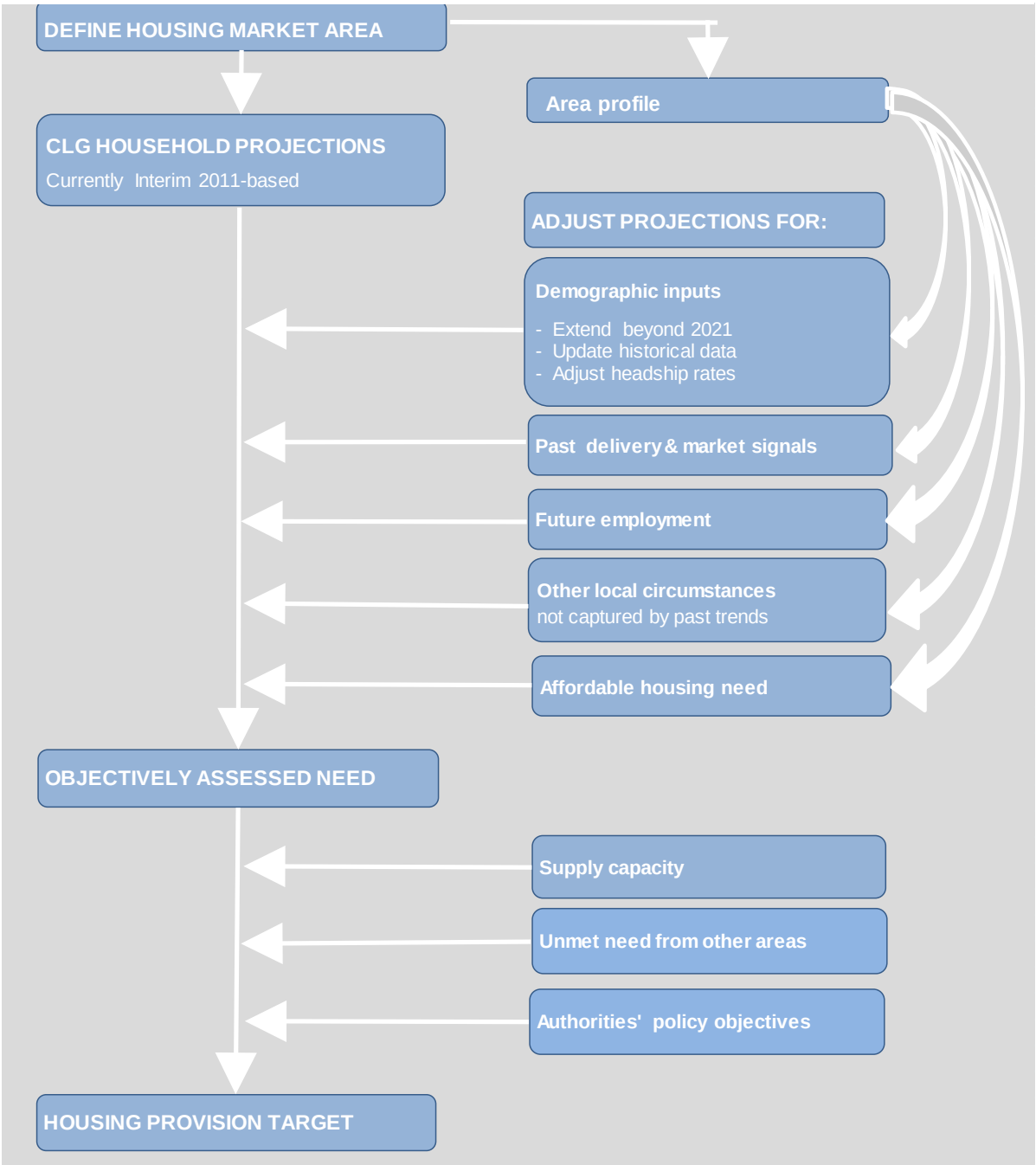
2.11 Our proposed definition of the OAN does not appear in Government policy or guidance. Hopefully it approximates the implicit thinking behind that policy and guidance. It is helpful in our view because it seems consistent with the NPPF and PG, and also, most importantly, with Inspectors' interpretation of those documents.

2.12 Affordable housing need is a different kind of number from total need (the OAN), so the two numbers are not directly comparable and cannot be added together. The main measure of total need is one based on demographic projections, plus various adjustments. Affordable housing need is calculated separately through a different method, and the resulting numbers typically exceed what can be realistically delivered in practice – because the amount of affordable housing delivered is constrained by financial resources, regardless of the planned land supply. Therefore, affordable need should not be treated as a component of the OAN but as an adjustment to the main OAN calculation, just like other factors that are not captured by the demographic projections. Chapter 7 below sets out a method for this.

3 METHOD OVERVIEW

3.1 Figure 3.1 pictures the process of housing needs assessment and target-setting. It covers the elements set out in the PG, while aiming to clarify the sequence and logical relationships between them. We have added some elements not discussed in the PG, including how to go from objectively assessed need to plan target.

Figure 3.1 Housing needs assessment: overview



3.2 Below, we discuss each element of the process in turn. Our advice is based on the NPPF and PG and should be read in conjunction with these documents.

4 THE HOUSING MARKET AREA

Introduction

4.1 Both the NPPF and the PG advise that, where a housing market area extends beyond the local authority area, authorities should work together to assess needs across the HMA as a whole. (Where Local Plans are at different stages of production, authorities can build on the existing evidence of other authorities in the HMA, but they should co-ordinate future assessments so they happen at the same time).

4.2 The rationale behind HMAs is discussed in Appendix B below. Here, we focus on practical advice on drawing the boundaries of HMAs.

Drawing the boundaries

Sources

4.3 As discussed in Appendix B, the purpose of an HMA is to bring together those places which households consider close substitutes for one another. Therefore to define HMAs we need to look for evidence of household preferences, as manifested through household behaviour and market signals.

4.4 The PG provides a long list of possible indicators, comprising house prices, migration and search patterns and contextual data including travel-to-work areas, retail and school catchments. With regard to migration, it explains that areas that form an HMA will be reasonably self-contained, so that a high proportion of house moves (typically 70%) occur within the area[5]. In practice, the main indicators used are migration and commuting.

4.5 One problem in drawing boundaries is that, if each local planning authority were to draw an HMA centred on its area, there would be almost as many HMAs as local authorities. This is because the largest migration flows in and out of any individual authority are usually those linking it with immediately adjacent authorities. But each of these adjacent authorities will most probably find that *their* largest migration flows link them to *their* immediate neighbours, and the chain continues indefinitely.

4.6 Thus, if each authority works independently to define an optimal HMA each authority may draw a different map, centred on its own area. To define HMAs we can start with a top-down analysis, which starts by looking at the country as a whole rather than a given local authority.

4.7 Such an analysis is provided by *Geography of Housing Market Areas,* a study commissioned by the former National Housing and Planning Advice Unit (NHPAU) and published by CLG in 2010[6]. The study, led by the Centre for Advanced Urban Studies (CURDS) at Newcastle University, created a consistent set of HMAs across

[5] Reference ID: 2a-011-20140306

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

England, based on migration and commuting data from the 2001 Census. Although the analysis has not been updated following the 2011 Census, the CURDS study is the best available starting point for drawing HMAs.

4.8 The results of the CLG study are hosted on the CURDS website[7]. It defines a three-tiered system of HMAs – strategic, local and single-tier. In our view the most useful for housing need studies is the single-tier 'silver standard' geography, which is mapped at http://www.ncl.ac.uk/curds/assets/documents/6.pdf and listed at http://www.ncl.ac.uk/curds/assets/documents/28.xls . Alternative geographies and further explanations are at http://www.ncl.ac.uk/curds/research/defining/NHPAU.htm .

4.9 The NHPAU geography is **only a starting point** and should be sense-checked against local knowledge and **more recent data**, especially on migration and commuting. These data are available on the ONS website[8]. If they identify local authority areas which are outside the proposed HMA but are closely linked to it, or conversely areas which are in the proposed HMA but are only weakly linked to it, **boundaries should be adjusted accordingly**. In short, more recent data should always 'trump' this geography.

4.10 Alternatively, authorities could define HMAs based on pre-existing relationships or partnerships between authorities, including Local Enterprise Partnerships (LEPs) and joint planning units. Any such HMAs should be sense-checked against the NHPAU geography and recent migration and commuting data and boundaries should be adjusted accordingly, as described in para 4.9 above.

4.11 It is best if HMA boundaries do not cut across local authority areas. Dealing with areas smaller than local authorities causes major difficulties in analysing evidence and drafting policy. For such small areas data availability is poor and analysis is complex. There may also be 'cliff edge' effects at the HMA boundary, for example development allowed on one side of a road but not the other. These complications are not offset by the benefit of greater accuracy.

HMAs and functional economic areas

4.12 The PG advises that the need for land to accommodate economic development should be assessed in relation to functional economic areas, just as the need for housing land should be assessed in relation to HMAs.

4.13 Just as an HMA is an area in which households search for housing, a functional economic area is an area in which businesses search for sites and premises. Much of the demand for land for business uses can be met by sites either side of an

[7] http://www.ncl.ac.uk/curds/research/defining/NHPAU.htm

[8] Migration origin-destination matrices for 2010-2011 are at http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-269805
And for 2009-10 at http://www.ons.gov.uk/ons/rel/migration1/internalmigration-by-local-authorities-in-england-and-wales/2009-2010/internal-migration-by-localauthorities-in-england-and-wales.zip.
Commuting for 2010 and 2011 is at http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-300966#tab-all-tables

administrative boundary, so long as these sites are in the same functional economic area.

4.14 As mentioned earlier, HMAs may be defined on the basis of migration self-containment, or 'closure' – which means that a high proportion of all house moves occur within the area. Similarly, as noted in the PG, functional economic areas may be defined as labour market areas, which are areas of commuting closure – meaning that a high proportion of all journeys to work occur within the area.

4.15 One would expect HMAs and functional economic areas to be geographically similar, because in broad terms both are largely determined by the reach of a daily return trip. Just as households' location decisions are largely driven by access to jobs and services, business location decisions are largely driven by access to the workers that fill those jobs and the customers who consume those services.

4.16 For this reason, and also for convenience, it is useful to combine the HMA and functional economic area into a single boundary. This makes both analysis and policy-making manageable: the alternative of working with two larger-than-local areas, one for housing and one for economic land uses, adds layers of complexity. It also makes it possible to plan for alignment of jobs and workers – something which is very difficult to do at the level of individual authorities, precisely because labour markets are larger than local. Chapter 6 below discusses how this should be done.

Pragmatic decisions

It is difficult to draw HMA boundaries, because in reality there is a hierarchy of housing market areas, depending on the degree of self-containment that is sought. Recognising this, the NHPAU study defines a five-fold hierarchy of HMAs, from local to strategic areas. It also notes that there is no single correct way to define HMAs:

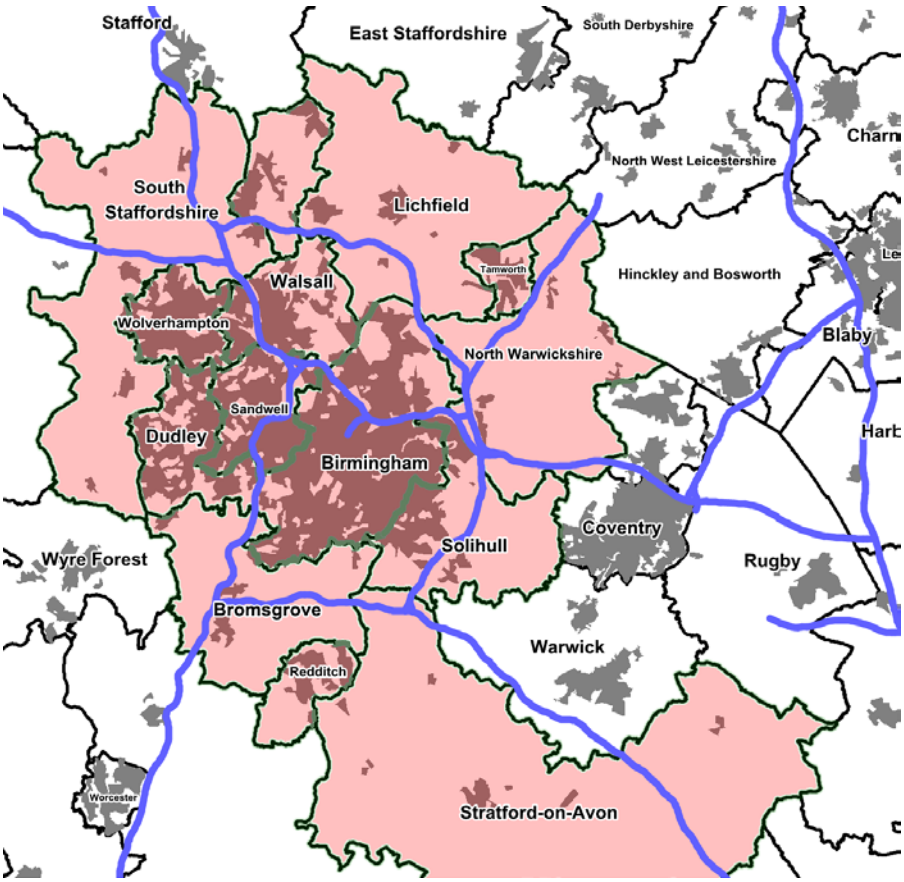
'Ultimately the selection of the levels of closure is a purely empirical question, with the most useful… boundaries identified by assessing the results in different types of area across the country.'

4.17 The PG does not specify which level of the hierarchy authorities should choose, nor have Inspectors taken a consistent view. Authorities should make a pragmatic choice, drawing areas that seem both reasonable and manageable.

4.18 Wherever the boundary is drawn, the resulting HMA will not be perfect, because no market area is perfectly self-contained. Some areas, probably just beyond the HMA boundary, will be closely linked to parts of the HMA.

4.19 To illustrate by example Figure 4.1 below shows the HMA centred on Birmingham, as identified by the NHPAU research mentioned earlier. Of the local authorities that border on the HMA, some have strong migration and commuting links with those districts within the HMA which they adjoin, albeit not with the HMA as a whole. Examples include Coventry, Warwick and Wyre Forest. Although they are not in the HMA, these adjoining districts are closely related to parts of it.

Figure 4.1 The Birmingham HMA



Source: CURDS, PBA

4.20 The housing needs assessment should identify such related districts. It should briefly review the balance of housing need and planned supply in these districts, by reference to adopted and emerging plans and evidence bases, to see if they might import unmet need from parts of the HMA, or alternatively export some of their own unmet need to parts of the HMA.

4.21 Another limitation of HMAs is that local authority areas may be closely linked to places which are physically remote. For example, much of England has long been the recipient of large net migration flows from London, as households move out for more space and cheaper housing. Those flows may be direct (much of Crawley's growth has been migration out of London) or they may operate indirectly through ripple effects (much of Horsham's growth has been migration out of Crawley). A continuation of past migration is built into the official demographic projections which are the starting point of housing assessments. But recent evidence for the London Plan suggests that London may not have the capacity to meet its projected needs. The GLA has been writing to authorities across Southern England, asking them to plan for possible overspill from London.

4.22 Similar issues arise in other major conurbations, including Brighton and Hove and Birmingham. Inspectors' advice has confirmed that Local Plans should seek to accommodate such 'long-distance overspill', where this is possible and reasonable.

Area profile

4.23 The housing needs assessment is a mostly forward-looking analysis driven by demographic projections. But to understand the projections and take an informed view of the future we need to understand the present and the past. It is helpful, therefore, that the housing assessment includes a brief pen portrait of the area's residents and its economy. This contextual information shows broadly what kinds of people are generating demand and need for housing in different parts of the area and why they want to live there.

4.24 We would suggest the analysis address three main topics, as set out below. In relation to each topic, the report might first look at the HMA as a whole, then move on to contrast and compare individual authorities.

i Socio-economic profile

How many people live in the area and its main settlements? What is the mix of occupations and educational qualifications, and what are residents' average earnings, compared to national and regional benchmarks? This information is available from the ONS's Nomis website, http://www.nomisweb.co.uk/, which brings together data from many official sources into 'Local Authority Profiles'.

ii Population change

How has the population changed in the past and how much of that change is due to migration as opposed to natural change? How has net migration varied over time and what was its age profile? What are the main origins and destinations of net migration flows?

This information, including the origin-destination matrices that we have already referred to, is on the ONS website. It is helpful to focus on change since 2001, because published data for 2001 and 2011 are taken from Censuses, and hence more reliable than those for inter-censal years, which are based on estimates. 2012 is the date of the latest ONS Mid-Year Population Estimates (MYEs), which are close to the 2011 Census and therefore should be relatively robust.

iii The labour market

How many jobs are located in the area (workplace jobs)? How has this number changed in the last 10 years or so, compared to national and regional benchmarks? What is the balance of workplace jobs and resident workers (net commuting)? What are the main origins and destinations for net commuting? Job numbers are on the Nomis website mentioned earlier[9]; BRES (http://www.ons.gov.uk/ons/guide-method/method-quality/specific/labour-market/business-register-and-employment-survey--bres-/index.html) provides more detail. Commuting data are available from ONS, as we also noted earlier (Footnote 8).

4.25 This historical analysis is not mentioned in the PG, so it must be considered optional. But it provides valuable contextual information in assessing future housing need. By

[9] For total jobs as opposed to employee jobs and a long time-series, refer to the Nomis table headed 'job density'. The BRES website provides more detail but users need a licence.

looking at past change we can judge whether future projections and forecasts are broadly credible. If we understand what kinds of people live in an area, who moves in and out and why, we can understand where new housing should be located so it provides what people want. This is important intelligence that will help inform every part of the needs assessment.

5 DEMOGRAPHIC PROJECTIONS

The official projections

5.1 The PG advises that housing needs assessments should start from the CLG household projections, which in turn are based on the ONS population projections. Appendix C below describes the method behind both sets of projections[10].

5.2 In summary, the projections by local authority area are released in two separate publications: the ONS sub-national population projections (SNPP) and the CLG household projections, which normally appear some months later and translate the ONS's population into households. These numbers of households, with a small adjustment for vacant and second homes, are used as a measure of housing demand or need.

5.3 The official projections are trend-driven: they roll forward rates of birth, death, migration and household formation from a past period (the 'base period') into the future. There are three main reasons why the resulting household numbers may not provide a true picture of future housing demand.

- The projections might be technically flawed. Often this is due to inaccurate historical data: the projections may not have caught up with the latest available data, or even these latest data may be open to doubt (an example is the Unattributable Population Change, discussed later). Sometimes there are other technical anomalies, which mean that the projections for individual places do not look credible.
- The projections in effect assume that the external (non-demographic) factors that drive demographic change will be the same as they were in the past (base period). But in reality these factors might change in future. For example, the macroeconomic climate might improve; there might be more local job opportunities; or planning policy in neighbouring areas might become more restrictive - shifting demand across administrative boundaries to the subject area.
- If used as a measure of demand, the projections in effect assume that in the base period the demand for housing land was fully met. But in practice it may be that past planning policy constrained housing development in the area, so the planned land supply fell short of demand. In that case, the projections will roll forward that constraint, so they will understate future demand.

5.4 As shown in the PG, to overcome these problems as far as possible the projections may be adjusted to produce alternative scenarios. We discuss these alternatives in this and the next chapter.

[10] In this note we use 'demographic' to refer to both population and households, as demographers themselves do. The NPPF and PG use 'demographic' slightly differently, to refer to population only.

Building alternative scenarios

5.5 Alternative demographic projections are produced by models similar to the official ONS / CLG ones, technically known as cohort progression models. PopGroup and Chelmer are well-known examples. As well as the basic mechanics of the official models, these alternative projections share most of their data inputs and assumptions. But they alter selected inputs and assumptions - to update historical information and take account of additional factors, as discussed earlier, and also to extend the time horizon of the official projections[11].

5.6 At present the most recent population projection is the 2012-based SNPP published by ONS on 29th May 2014 ('ONS 2012'). This projection takes full account of the 2011 Census results. But it has not yet been translated into households by CLG.

5.7 Until CLG 2012 is published, probably later in 2014, there are two sets of official household projections. The first of these projections is CLG 2008, which by now is very out of date. The second is CLG 2011, which is badged 'interim', is derived from a now-superseded population projection that did not take full account of the Census, and only ran to 2021. Therefore, for the time being housing assessments have to rely on bespoke household projections – which should take account of the ONS 2012 population projection, subject to the problems discussed below. Below, we discuss what assumptions these projections might use.

Migration

Unattributable population change

5.8 Alongside natural change and migration, the ONS data on the components of population change in 2001-11 include an element called unattributable population change ('UPC'). Positive UPC occurs when the 2011 Census found more persons than could be traced back to previous population, natural change or migration. In other words, there are more people in an area than expected and the ONS cannot tell how the additional people got there (assuming they were actually not there in 2001). Conversely, where UPC is negative there are fewer persons in the area than previously expected, and the ONS cannot tell where the missing people went (assuming they were actually there in 2001).

5.9 At national level the aggregate UPC is positive at 103,700 persons[12], though for some local authorities it is negative. In some areas, especially large urban areas, the UPC is an important component of population change. Thus, to pick one of countless possible examples, for Oxfordshire between 2001 and 2011 it amounted to 1,700 persons per year – more than total net migration, which was 1,400 persons per year.

5.10 It has been suggested that UPC is due to miscounting of the population in the 2001 or 2011 Census, or both. But a more likely explanation is that the UPC is migration,

[11] Another difference is that, while the official projections use multi-area models – producing consistent numbers across the country as a whole – independent projection models are generally single-area.

[12] Office for National Statistics, *2012-based Subnational Population Projections for England, Report on Unattributable Population Change,* 20 January 2014

probably international migration, which was unrecorded or recorded to the wrong places. This view seems supported by a recent ONS report, which shows that in the middle of the last decade it greatly underestimated in-migration from the EU, due to bad survey design[13].

5.11 However the ONS 2012 sub-national population projections ignore the UPC. In other words, they do not include it in the historical migration trend that is rolled forward ('projected') into the future. In effect, this assumes that the UPC did not happen – it does not measure real population change, but rather counting errors in either 2001 or 2011. For many places, especially large urban areas, this makes a large difference to the projected housing need, usually in a negative direction. In such places, whether a projection that ignores the UPC is credible is a matter of judgment. Planning authorities and others may wish to test alternative scenarios, which do take account of the UPC, and take a view accordingly. In due course Inspectors and judges may pronounce on how the UPC should be dealt with.

Alternative base periods

5.12 To predict migration between local authorities within the UK, the ONS population projections carry forward the trends of the previous five years. This choice of base period can be critical to the projection, because for many areas migration has varied greatly over time. This is illustrated below with two examples, showing contrasting migration histories in the 10 years to 2011.

5.13 In both examples migration was lower in the second half of the decade than the first (numbers of housing completions, not shown on the graphs, unsurprisingly followed very similar time paths to migration). The results of a demographic projection for (say) 2011-31 will be highly sensitive to the reference period that the projection carries forward. If we use a five-year reference period, as the ONS does, the projection will almost certainly show much lower future migration than if we use a 10-year reference period. As more migration leads to greater population, which in turn leads to more households, the projected housing need will also be higher with a 10-year than a five-year reference period.

5.14 Which of these projections should be used in assessing housing need? It depends on the causes of historical change in migration – which are specific to each place and need to be investigated.

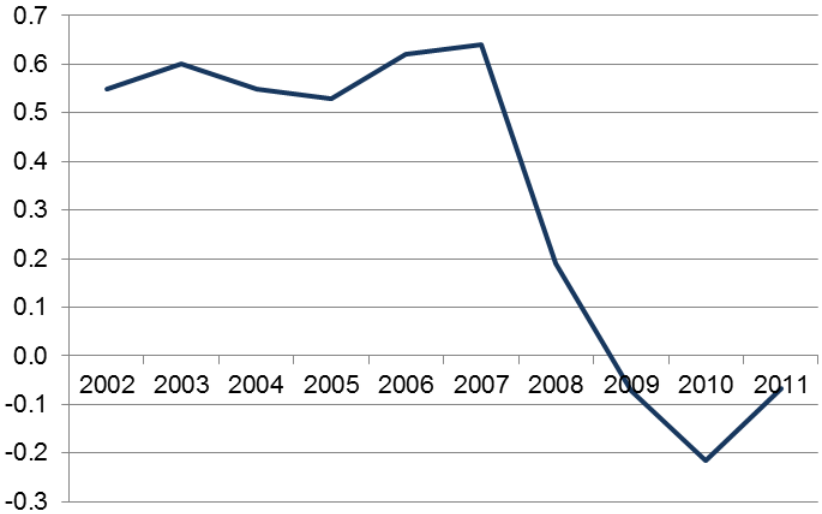
5.15 In District A, the sharp fall from 2007 onwards and the slight recovery in 2011 may be due to falling demand in the recession – though we cannot be sure until we have also investigated supply-side factors. This makes the last five years an untypical period. In assessing demand or need over the next 20 years we should be projecting forward a longer base period, which includes both parts of the economic cycle. If we simply project forward the recession, we will be underestimating future demand.

[13] See Office for National Statistics, *Quality of Long-Term International Migration estimates from 2001 to 2011,* released 10 April 2014, http://www.ons.gov.uk/ons/rel/migration1/long-term-international-migration/quality-of-long-term-international-migration-estimates-from-2001-to-2011/sty-quality-of-ltim.html

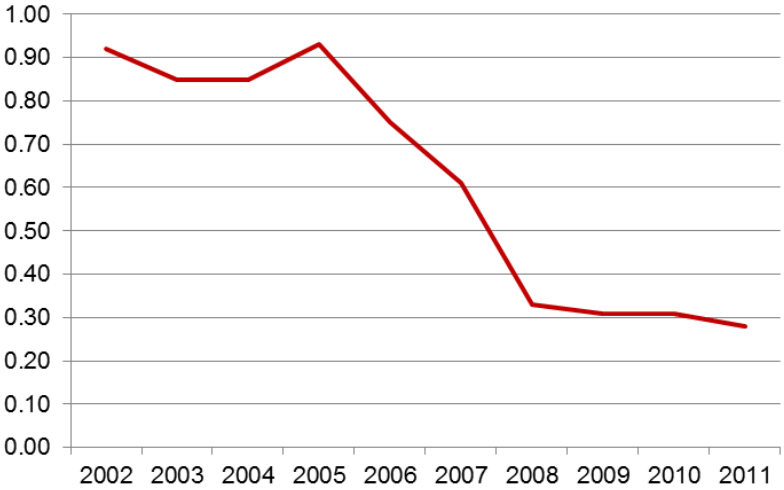
5.16 By contrast, in District B migration has been falling since 2006 – two years ahead of the economic downturn; it fell much more steeply in the boom than the recession, and showed no signs of recovery as the recession ended. Unless demand fell for some specific local reason, it seems that supply-side factors were at work.

Figure 5.1 Net migration in two districts, thousands

District A



District B



Source: PBA

5.17 Thus, closer investigation might show that in the second half of the decade planning in District B was blocking the supply of housing land. It could be that an old Local Plan became time-expired, the development sites it had allocated ran out, and there was delay before a Core Strategy brought new allocations. Alternatively, it could be that there was a moratorium on releasing new sites, perhaps because policy aimed to steer development to brownfield sites, which proved unviable.

5.18 In these circumstances, projecting forward a five-year reference period would underestimate District B's future housing need. A 10-year-based projection should be used, but even this might understate future need - though to a lesser extent -

because the 10 years included about five years in which land supply was blocked. In the terms of the PG, planning in district B has been undersupplying need in the reference period, and the projections should be adjusted upwards to compensate. This important aspect of the guidance is discussed further in a later section.

5.19 There may be other explanations for District B's history, which would have different implications. For example, the high level of house building in the early years of the decade, and the resulting high in-migration, might be due to a one-off uplift in planned land supply – such as an urban extension. In such cases, if the high level of delivery was due to an exceptional event the PG advises that that the five-year-based projection will overstate future need. Indeed, even the 10-year-based projection might need adjusting downwards, as it includes about five years of exceptionally high supply.

5.20 On the other hand, it may be that the urban extension was not an exceptional event. Perhaps District B is well placed to accommodate further extensions in the plan period, as the adjoining city continues to overspill its tight boundary. If so, the 10-year-based projection might be the correct measure of housing need.

5.21 So, in the urban extension scenario, the choice of projection is a matter of spatial policy and development capacity as much as demographic analysis. The difference between with-extension and without-extension projections is not about demand or need; it is about supply and policy. The needs assessment should probably conclude that the OAN lies within a range - where the minimum is a projection that tries to exclude the impact of the extension, while the maximum includes it. Between those limits, it would be for the policy-maker to set a target.

Household size

5.22 As discussed in Appendix C, the 2011 Census showed fewer households across England than previously expected, which on average were larger than previously expected. The reason was that household reference rates (HRRs) were lower than previously expected.

5.23 HRRs, also known as headship rates or household formation rates, are the factor that translates population into households. They show the proportion of people in each demographic group (combination of age, sex and relationship status) that are a household reference person, or head of household. The higher the HRRs, the more people have their own households (as opposed to living in other people's households) and the smaller will be the average household size.

5.24 The evidence suggests that the higher-than expected household sizes are partly a demand-side effect of the last recession – so that due to falling incomes and the credit crunch fewer people could afford to form or maintain separate households. In the CLG 2011 projection, the resulting trends in HRRs are rolled forward into the future. In effect, CLG 2011 assumes that in the recession the long-term trend in household formation took a permanent turn for the worse. As noted in a recent report from Cambridge University:

'The 2011-based projection also does not make any allowance for a potential return towards the previous trend. Indeed, it assumes a growing divergence from that trend… [It] envisages that a smaller and smaller proportion of 25-34 year olds set up households, not just that the proportion remains at the 2011 level.'[14]

5.25 It is a matter of judgment whether, and how soon, household formation will return to its pre-recession long-term trend. The forthcoming CLG 2012 projections will take a view on this, which will become the new standard. Meanwhile, local authorities and others that create their own projections need to take a view about HRRs. Useful guidance has been provided by the Inspector examining the South Worcestershire Development Plan.

5.26 In line with the Cambridge research quoted above, the Inspector advised that up to 2021 to assess housing need the plan-makers should use the interim 2011-based assumptions. Thereafter they should assume that rates of change in HRRs ('headship rates') should return to the earlier trends, as projected in CLG 2008. This method is known as 'indexed' or 're-based'. It assumes that after 2021 headship rates return to the pre-recession rates of change used in the CLG 2008 projection. But they do not catch up with the levels in CLG 2008. In other words, the pre-recession trends are interrupted by the recession and resume after a long pause.

5.27 While we await CLG 2012, housing needs assessments should consider demographic scenarios based on the 'indexed' method.

Supply-constrained and nil-migration scenarios

5.28 Supply-constrained ('dwelling-led') or 'zero-migration' demographic scenarios should not be used as the basis for needs assessments (though they are useful for assessing the impacts of given levels of housing provision).

5.29 Supply-constrained scenarios do not tell us anything about demand or need. As discussed earlier, in line with the NPPF and PG supply capacity has no bearing on the OAN. But supply capacity does bear on provision targets, and modelling supply-constrained scenarios is useful in showing the implications of possible targets ('If we provide for xx dwellings the workforce will grow by yy').

5.30 Zero-migration projections (whether 'zero net' or 'zero gross') can provide useful context, because they show the contribution of migration to total population and household change. But considered as a potential future they are unrealistic, because local authorities have no means of controlling migration. Considered as a measure of demand or need they are non-compliant with national policy, because the NPPF makes it very clear that objectively assessed need includes migration[15].

5.31 It is important to understand that in the NPPF and PG migration in line with past trends is part of each area's objectively assessed need. An area that has been a recipient of net in-migration in the past is expected to accommodate such migration in the future, unless it lacks the deliverable sustainable capacity to do so.

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[14] Mc Donald and Williams, op cit

[15] Paragraph 159

Past supply and market signals

Planning Practice Guidance

5.32 In line with the PG, 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.

5.33 This advice is a new element in national planning guidance. The relevant sections of the PG merit close reading[16]. Paragraphs 15 and 19 explain the rationale. Paragraph 19 goes on to suggest the market indicators (market signals) that should be used to gauge the balance of demand and supply. The list includes house prices and rents, land prices, affordability ratios, rates of development and overcrowding. Paragraph 20 discusses how these market indicators should be analysed, recommending comparison with longer-term trends, similar areas and national averages. The same paragraph considers how the projections should be adjusted but does not provide specific guidance, merely advising that adjustments should be *'reasonable'* and *'in line with principles of sustainable development'*.

5.34 The guidance on past supply and market signals is sometimes misinterpreted, because readers take 'under-supply' and 'under-delivery' to mean that house building was below policy targets. But in the present context these words mean something quite different - that house building was less than demand or need. In many places delivery is in line with targets, but the targets themselves are far below need or demand; in other words, planning constrains the amount of housing development. This constitutes under-supply within the meaning of the PG.

5.35 The impact of under-supply works not only through suppressed household formation, but also through suppressed migration. The latter effect is very common, as we can see from the close correlation between housing completions and net migration. If housing land, and hence housing, is in short supply, households will be prevented from moving into the area or will be priced out or forced out of the area.

5.36 Suppressed migration is harder to detect than suppressed household formation. While overcrowded and hidden households in an area can be counted, would-be in-migrants into the area and out-migrants forced out of it cannot, because by definition they live elsewhere. But we can identify suppressed migration indirectly, by looking at historical changes in net migration and relating them to housing completions and planning policy.

Reading the signals and adjusting the projections

5.37 It is important to note that the PG focusses on relative, not absolute, under-supply. As discussed earlier, it is not unusual for planning to under-supply housing demand; in much of the country a planning constraint is the norm rather than the exception. But

[16] Reference ID: 2a-015-20140306 - 020-20140306

the guidance suggests that the demographic projections should be adjusted upwards only if in the base period the constraint was unusually tight compared to other times, to other places, or both.

5.38 An especially useful indicator of both is change in the average house price. Unlike other indicators recommended by the PG, house prices are well documented, with robust information and long historical time periods readily available for any geographical area. Proportional price change is generally a better indicator than absolute price, because a comparatively high price may indicate either comparatively high demand (an attractive area, better housing stock) or low supply (possibly due to planning). But if prices in an area are rising faster than elsewhere, this suggests that supply is tightening compared to other places – unless for some reason the area is becoming more desirable over time.

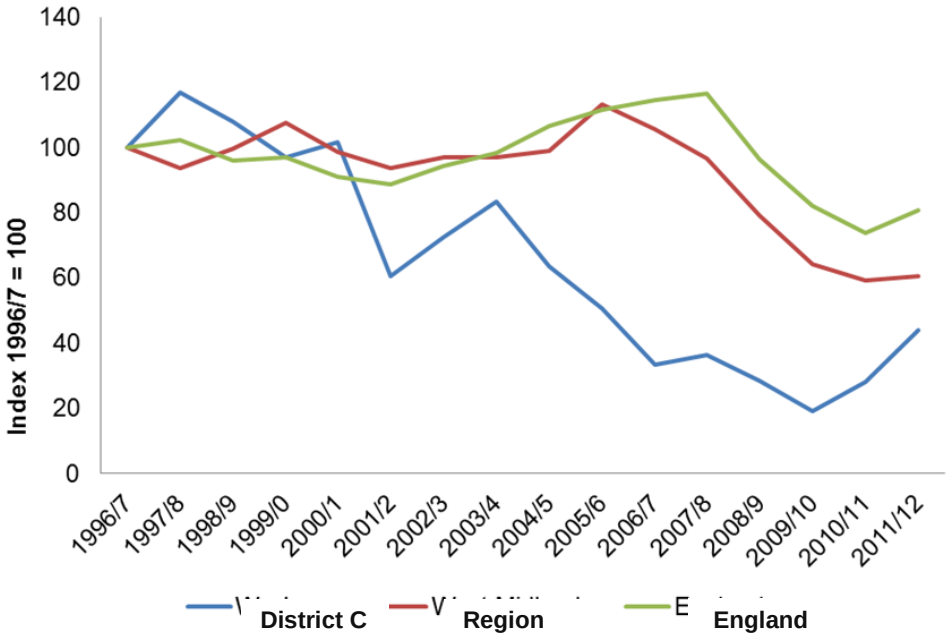
5.39 The above suggests that an area with above-average growth in house prices may be an area where planning constraints are exceptionally tight or tightening. But the converse is not true. In an area where house price trends are only average, it may still be the case that planning is increasingly undersupplying demand. Depending on how buyers and sellers respond to price changes (‘elasticities’), a local constraint may only show as a reduction in the volume of development, with little or no impact on local prices.

5.40 Partly for this reason, the level of housing completions is a good indicator of the severity of planning constraints – not considered by itself, but against wider benchmarks and past planning policy. This is illustrated in the example below, where completions in District C are plotted against national and regional totals:

- Both in England and the region completions stayed broadly flat throughout the long boom, turned down sharply in the recession and then turned up slightly in 2011/12, the first year of the recovery.
- By contrast, in District C completions were on a steep downward trend throughout the boom and started an equally steep recovery in 2010-11. That recovery came one year ahead of the country and region and was considerably more marked, so in the last two years of the series completions more than doubled.

5.41 In summary, housing development in District C fell through the boom and rose in some of the recession, against national and regional trends. While these wider trends were clearly driven by the demand for housing, for District C the counter-cyclical time path shows that other factors were at work. A look at the area’s planning history shows that these were supply-side factors, and specifically planning constraints.

Figure 5.2 Housing completions, District C, 1996/7 - 2011/12



Source: District Council, CLG, PBA

5.42 From the late 1990s planning placed ever tighter restrictions on development in District C:

- National and regional policies steered development away from the district towards the main urban areas.
- The old Structure Plan set restrictive housing targets which deliberately undersupplied demand.
- These targets were over-delivered in the early years of the plan, resulting in a further tightening as the Council attempted to compensate in later years, so that development over the plan period would not exceed the target.
- At the end of the period the planning constraint was abruptly loosened, as the Council found itself unable to demonstrate a five-year land supply, and therefore allowed substantial development on windfall sites. This explains the sharp upturn in the last two years of our series, against national and regional trends.

5.43 In short, for all but two of the last 15 years planning was tightly and increasingly under-providing housing demand or need in District C. A projection based on that past would underestimate housing demand, and in line with the PG should be adjusted upwards.

5.44 As noted earlier the PG does not say how this adjustment should be calculated. A 10-year period, in which planning policy went through different phases, often looks reasonable. But in the case of District C this is not a good solution, because as we have seen planning policy was highly restrictive for as many years as we have data for. To estimate a reasonable number we might have to look at a longer historical period and use judgment rather than formal modelling. Such a broad-brush adjustment should be acceptable to Inspectors as ‘reasonable’, given that the PG does not provide specific guidance.

6 BALANCING JOBS AND WORKERS

Future jobs and demographic projections

6.1 The PG advises that housing needs assessments should have regard to future employment. See paragraph 18 of the Housing and economic development needs assessments: http://planningguidance.planningportal.gov.uk/blog/guidance/housing-and-economic-development-needs-assessments/methodology-assessing-housing-need/.

6.2 From Inspector's advice, for example in Bath and North East Somerset (BANES)[17], it is clear that future labour market requirements cannot be used to cap demographic projections. In other words, if demographic projections do not provide enough resident workers to fill the expected workplace jobs they should be adjusted upwards until they do. But if the demographic projections provide more workers than are required to fill the expected jobs, they should not be adjusted downwards. If both a job-led projection and a trend-led demographic projection have been prepared, the higher of the two resulting housing numbers is the objectively assessed need. The rationale for this, as explained by the BANES Inspector among others, is that much of the demand for housing is not driven by job opportunities, and people who do not work also need somewhere to live.

Geography

6.3 The PG does not say what geography should be used when aligning jobs with housing. In our view it is important to consider the functional economic area (labour market area) as a whole, rather than individual authorities. Many people travel to work across administrative boundaries, so planning for each district in isolation cannot produce the most efficient and sustainable relationships between the location of houses and jobs.

6.4 When planners seek to align jobs and housing for individual authorities, they typically assume fixed commuting patterns – so if, for example, District E has 70 workplace jobs for each 100 workers (economically active residents), that ratio is carried forward into the future. This may be a reasonable starting point for analysis, but it does not allow for the labour market to change and adjust.

6.5 It may be that District E is a largely residential area with few attractive employment locations, which cannot easily attract enough jobs for its growing population. Conversely, in adjoining District F job numbers are increasing fast as established employment areas intensify from industrial to office uses, but there is no land for new development. The two districts should be working together, so that E's new housing balances F's new jobs. There is nothing unsustainable about this increased cross-

[17] Bath and North East Somerset Core Strategy Examination, *Inspector's preliminary conclusions on strategic matters and way forward – June 2012* , http://www.bathnes.gov.uk/services/planning-and-building-control/planning-policy/core-strategy-examination/examination-documen

boundary commuting. On the contrary, journeys to work could become shorter in future, because F's main employment areas are located on the boundary with E; so that much of E's population lives closer to those areas than to E's main commercial centres.

Realism

6.6 In planning for the economy and employment, some authorities use highly ambitious employment numbers, based on policy aspiration rather than economic forecasting or business-as-usual expectation. This may be the right approach to economic planning, but only if authorities face up to the implications for housing.

6.7 A common mistake in this context is to make unrealistic assumptions on the relationship between housing, population and jobs. A number of housing assessments have been criticised by Inspectors for their assumptions about economic activity rates. The issue relates especially in relation to older people, where some studies expect the increases in state pension age to produce much increased activity rates over the next 15-20 years. This reduces the population growth, and hence the household growth, that is required to support a given number of new jobs. But unrealistic figures put the emerging plan at risk. Not only could the housing assessment be unsound in itself, but also it could be inconsistent with proposals for employment land, which are also based on expected future employment.

6.8 Another risky approach is to plan for recalling commuters, so the ratio of workplace jobs to resident workers – and hence to population and number of dwellings – is assumed to rise over the plan period. Like increasing activity rates, this assumption means that more jobs can be accommodated for a given number of dwellings, or a given number of jobs needs fewer dwellings. But for the shift in commuting ratio to be believable there would have to be supporting evidence, to show what economic factors or policy action will bring it about. In general such evidence is not provided and the assumption of reduced commuting relies on pure aspiration.

6.9 In any case strategies of recalling commuters should not be adopted unilaterally. For any area that does succeed in recalling its commuters, increasing its ratio of jobs to workers, there will be areas where the ratio falls, so for any given number of jobs more dwellings are needed. Such shifts in commuting patterns can be positive, as described in the last section in relation to Districts E and F. Alternatively they can be counter-productive, causing labour shortages in the recipient areas from which commuters are withdrawn. In line with the Duty to Co-operate authorities should seek positive outcomes for their neighbours, not just themselves. This needs joint working across labour market areas, as discussed earlier.

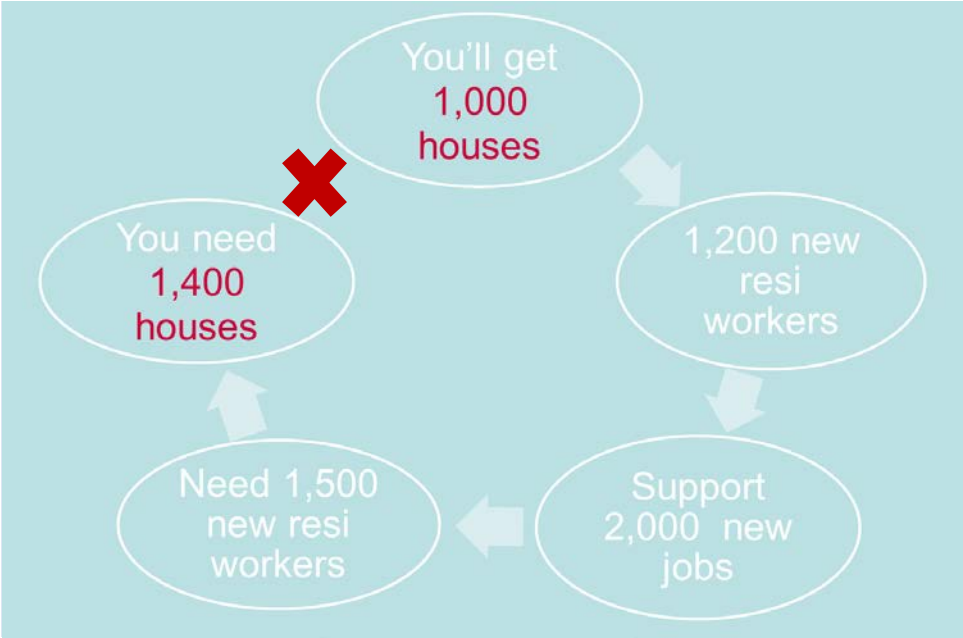
Employment forecasts

6.10 To predict future employment change, many authorities rely on econometric forecasts commissioned from specialist forecasters. Sometimes they use standard employment forecasts, which represent forecasters' preferred scenarios. Other times they use bespoke scenarios to reflect alternative macroeconomic expectations or policy aspiration, as discussed earlier.

6.11 In many cases this approach is deeply flawed. The problem and its solution are discussed in detail at Appendix 6 below. In short, population is both an input and an output to the process. The modelling uses the expected future population (usually taken from CLG projections) as an input, and it also produces future population as an output (Figure 6.1). The population assumed at the start is usually taken from the official projections, and already assumes a given amount of housing development. The population output at the end is used to calculate future housing need.

6.12 At best, the process is logically circular: the population that it outputs, and the resulting assessed housing need, simply repeat the assumptions that were input at the start. But generally the model is internally inconsistent, because the population that is output does not equal the population that is input. Either way, the results make no sense. In formal logic this approach is known as 'self-defeating prophecy'.

Figure 6.1 Self-defeating prophecy



6.13 For an approach that makes sense, it is necessary to integrate demographic projections and economic forecasting. See appendix D for a model structure. The model is used to test alternative assumptions and (at a later stage) alternative policy options, iterating between jobs and housing.

7 AFFORDABLE HOUSING NEED

7.1 Paragraph 029 of the PG[18] advises on how housing needs assessment should take account of affordable housing need:

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

7.2 This paragraph is difficult to follow. But it seems to confirm that the amount of affordable housing to be included in the OAN should reflect what can be delivered in practice, as a function of market delivery. Based on this, Inspectors' advice and existing good practice, we would suggest the following approach:

- i Assess total housing need or demand (the OAN) as shown in earlier chapters, ending with a preferred scenario and / or a range of uncertainty.
- ii Estimate how much of that total need could be delivered as new affordable housing, given the affordable housing contribution that can be viably generated from market housing developments.
- iii Assess affordable housing need, as shown in paras 022-029 of the PG.
- iv Compare this affordable need with the potential affordable supply at stage ii.
- v Consider if the resulting scenario would meet a reasonable proportion of the affordable need.
- vi If not, consider raising the total need figure so it includes more affordable housing.

7.3 At stage iv of this calculation, note that only part of the affordable housing need is a component of the OAN – that part which relates to net new households. As defined in the PG, affordable need also includes housing for existing households – including those that are currently in unsuitable housing and those who will 'fall into need' in the plan period (i.e. their housing will become unsuitable for them). For the most part the needs of these households are not for net new dwellings. Except for those who are currently homeless or 'concealed'. If they move into suitable housing they will free an equivalent number of existing dwellings, to be occupied by people for whom they are more suitable. If the affordable needs of existing households are included in the OAN, the resulting figure will too large.

7.4 At stage v, what is considered reasonable will depend on policy priorities. Stage vi requires a judgment on how much affordable housing can be realistically paid for. The planned quantity of affordable housing must be consistent with the developer contributions that can be viably delivered by the planned quantity of market housing. If that affordable housing number is too high, then the land intended for affordable provision will either remain vacant or be developed for market housing.

[18] Reference ID: 2a-029-20140306

8 FROM HOUSING NEED TO PLAN TARGETS

8.1 The objectively assessed needs produced by the above assessment may be a single figure, or it may be a minimum-maximum range – which if possible should include a preferred figure. Either way, the evidence base should set out the main uncertainties behind the assessed need and how they may be resolved through monitoring and future plan reviews.

8.2 The NPPF and PG make it clear that an authority's housing provision target, or requirement, does not necessarily equal its objectively assessed need. Two factors come between the OAN and the target (Figure 3.1). The first is the area's deliverable and sustainable supply capacity, defined with reference to constraints recognised in the Framework. The second factor is cross-boundary unmet need, which the authority should accept if that is possible, sustainable and reasonable. We have discussed both these factors in earlier chapters.

8.3 Additionally, it seems obvious that in setting targets the authority should also have regard to the impact of housing development on its wider policy objectives and priorities. This is not explicitly mentioned in national policy and guidance, perhaps because it is self-evident. What *is* clear from the NPPF is that an authority's objectives or values cannot justify undersupplying the OAN. But there is no reason why the authority cannot provide for housing development over and above the assessed need. The OAN is a minimum target, subject to supply constraints. There is no suggestion that it is a maximum.

8.4 Housing development impacts on community well-being. Just as too much housing in certain places can harm the environment and put undue pressure on infrastructure, too little housing can cause harm – for example from excessively ageing communities, rural depopulation, loss of critical mass to support town centres or rail stations, vacant shops and wastefully under-used schools. As part of the planning evidence base, authorities should test proposed housing targets to see if they deliver a good future to their communities.

8.5 For this, the first step is to model a 'supply-led' scenario to estimate the population totals and age profile that would result from a proposed housing target. Depending on the area's geography, the scenario might consider main settlements individually, rather than the district as a whole. A simple test is to look at the total population and the population in the main working age groups (e.g. 16-64). A fall in either total broadly suggests reductions in the vitality of local economies and the demand for services and facilities such as retail, leisure and public transport. More sophisticated tests would input the projected population data into assessments of future requirements for retail, leisure, public transport, education and other infrastructure provision.

8.6 As a final point on housing targets, the now revoked Regional Strategies are no longer relevant to housing need or housing targets. From legal judgments and Inspector's advice over the last year or so, it is clear that:

- Previous Regional Strategy housing targets are not an acceptable measure of housing need, partly because they took account of supply constraints – which as noted earlier have no bearing on need.
- The evidence that underpinned Regional Strategies is generally out of date and should be used with great caution, if at all.
- In assessing future need, authorities should not add any 'backlog', where past housing development under delivered RSS targets. Thus a recent High Court judgment noted:

  '… There was no methodological error in the way these competing estimates for the period 2011-2031 were drawn up by reason of the notional "shortfall" in housing delivery between 2006 and 2011 by comparison with the average annual figure for additional housing indicated in the South East Plan… There was no reason whatever for a person in 2011 seeking to draw up a current estimate of population growth and housing requirements looking into the future from that date to 2031 and using up-to-date evidence to do so, to add on to the estimated figures any shortfall against what had been estimated to be needed in the first phase of the previously modelled period included in the South East Plan..'[19]

[19] *Zurich Assurance Limited v Winchester City Council and South Downs National Park Authority*, [2014] EWHC 758 (Admin) 18th March 2014

9 KEY POINTS

What is the OAN?

9.1 Our definition:

'The housing that households are willing and able to buy or rent, either from their own resources or with assistance from the state'.

9.2 In this definition, 'need' is synonymous with 'demand', covering the affordable sector and market housing. Total need, or demand, equals the total housing that would be provided across both sectors, if land supply was not constrained by planning.

9.3 This is why the assessed total OAN is often described as a policy-off estimate. But in practice the OAN, as measured through projections and forecasts, carries forward the impact of past planning constraints. Rather than policy-off, it is a policy-neutral, or policy-same, estimate.

Housing market areas (HMAs)

9.4 In defining HMAs, start with the geography set out by the University of Newcastle and others for the NHPAU in 2010. You could also start with pre-existing partnerships between local planning authorities, including LEPs. Either way, test against the latest data, to ensure that the proposed area does not exclude areas which are closely linked by migration and commuting.

9.5 HMAs defined for housing assessment purposes should be formed of whole local authorities.

9.6 If possible, HMAs and functional economic areas, as defined for Local Plan purposes, should be coterminous.

9.7 The Duty to Co-operate does not stop at the HMA boundary. The housing needs assessment should therefore also briefly review the demand-supply balance for housing land in areas which lie outside the HMA but are closely linked to it or parts of it.

9.8 The housing needs assessment should also consider migration from major conurbations beyond neighbouring areas. Such migration flows may rise above previous trends, generating cross-boundary unmet need.

9.9 The housing needs assessment should include a brief demographic and socio-economic profile of the HMA and its constituent authorities. This should help understand what kinds of people live in the area, who moves in and out and why. Hence it should help decide where housing should be located so it provides what people want.

Demographic projections

9.10 Housing needs assessments should start from the CLG household projections, which in turn are based on the ONS population projections (SNNP).

9.11 These official projections roll forward demographic trends from the past ('the base period'). They do not necessarily provide a true picture of future demand, for three main reasons:

- Firstly, the projections might be technically flawed – for example because they are based on out-of-date information.
- Secondly, they do not take account of future change in the external factors that drive demographic change, such as the economy or land supply in neighbouring areas.
- Thirdly, they effectively assume that in the past planning met the demand for housing land in full; therefore, in places where planning constrained past demand, they will understate future demand.

9.12 To overcome these flaws as far as possible, the projections may be adjusted to produce alternative scenarios.

9.13 At present the latest official projections comprise:

- The ONS 2012-based population projection, published on 29 May 2014, which the CLG has not yet translated into households.
- The CLG interim 2011-based household projection, based on an earlier population projection, which is superseded by more recent data and only runs to 2021.

9.14 Until the new CLG household projections come out, due in late 2014, most housing assessments will have to rely on bespoke scenarios, starting from the ONS 2012-based population projection. In testing this projection through bespoke scenarios, possible alternative assumptions include:

- Including the Unattributable Population Change (UPC) in past migration;
- Projecting migration from a 10-year base period, rather than the five-year period 2007-12 used by ONS which may be untypical due to the recession.

9.15 To translate the projected population into housing, bespoke scenarios should consider the 'indexed HRRs' method developed by Cambridge University

9.16 In line with the PG, planning authorities should analyse market signals to see if planning in the past has constrained housing development. Where that was the case, demographic projections will carry forward that under-provision, and therefore should be adjusted upwards.

9.17 In identifying past under-provision, look at the following market indicators:

- changing house prices
- housing delivery

Rising house prices or falling completions, against national or regional trends mean it is likely that planning constraints were exceptionally tight. The demographic projections should be adjusted upwards, but the PG provides no guidance on the size of that adjustment. One possible answer is to base an adjusted scenario on a past period where the planning constraint on average was not exceptionally tight.

9.18 Supply-constrained ('dwelling-led) scenarios should never be used as the basis for needs assessments. Councils should first objectively assess their housing needs and then consider whether the area has the sustainable capacity to meet them. If that capacity is lacking, due to constraints recognised in the NPPF, they should seek to export their unmet need to other areas. These areas should accept them if they can do so reasonably and sustainably.

9.19 Zero-migration scenarios should never be used as a measure of the OAN, because objectively assessed need includes migration[20]. In the NPPF and PG, migration in line with past trends is part of each area's OAN.

Balancing jobs and workers

9.20 Authorities should work jointly to align housing and jobs across large-than-local functional economic areas (labour market areas).

9.21 To ensure that they provide enough housing to match expected job growth, many authorities use 'job-led' population and household projections, based on employment forecasts. In this it is important to avoid:

- Unrealistic assumptions about future employment growth, based on aspirational economic strategies – which inflate the assessed housing need and may also reduce the land supply available to meet that need, by over-allocating employment sites;
- Unrealistic assumptions about future increases in economic activity rates;
- Planning to recall out-commuters from other districts – unless there is evidence that this is a realistic strategy, and it has been agreed with the districts where the commuters work.

9.22 Another common problem with job-led housing assessments is that population growth is both an input (assumption) to the calculation and an output. It is necessary to integrate demographic projections and economic forecasting. See Appendix D.

Affordable need

9.23 Affordable housing need, as described in the PG, is a different kind of 'need' from the total housing need, or OAN. It is calculated separately, through a different calculation, and may be used to adjust that projection-based number. Paragraph 7.2 above suggests a method for that adjustment.

9.24 In that method, only part of the affordable housing need should count towards the OAN – that part which relates to net new households. The affordable need of existing households is not a need for net new housing. If it is included in the OAN the resulting figure will be an overestimate.

9.25 In line with the PG, the amount of affordable housing to be included in the OAN should take account of how much can be realistically paid for. Therefore the planned quantity of affordable housing should be consistent with the developer contributions

[20] Paragraph 159

that can be viably delivered by the planned quantity of market housing. If that affordable housing number is too high, then the land intended for affordable provision will either remain vacant or be developed for market housing.

From housing need to plan target

9.26 Work on the OAN is likely to produce a range of figures – if possible, include a preferred figure.

9.27 The plan target, or 'requirement', will not necessarily equal the OAN. Three considerations come between the OAN and the target:

- the area's deliverable and sustainable supply capacity;
- cross-boundary unmet need and;
- the authority's wider policy objectives.

9.28 The third factor is not explicitly mentioned in the NPPF or PG and can only be used to raise the target above the OAN, never to reduce it. Use the evidence base to test proposed housing targets to see if they deliver a good future to their communities. For example, delivering 'only' the OAN could lead to excessively ageing communities, rural depopulation, loss of critical mass to support town centres or rail stations, vacant shops or wastefully under-used schools. If such adverse impacts look likely, authorities should consider raising the housing provision target above the OAN.

9.29 The now revoked Regional Strategies are no longer relevant to housing need or housing targets.

APPENDIX A WHAT IS HOUSING NEED?

Meanings of 'need'

In everyday language, 'need' is generally used as a normative (prescriptive) term – referring to what *ought to* be (e.g. 'we need to provide a school place for every child'; 'to measure something we first need to understand what it is'). Therefore it might be thought that 'housing need' is the housing that the development plan ought to provide for, having regard to all relevant considerations, including market demand, social policy, environmental impacts, infrastructure capacity and so forth. This broad definition does linger in some minds when housing policy is being discussed. But it is far from the meaning of the NPPF. As we have seen, in the Framework as clarified by the PG 'need' is nothing to do with supply-side constraints like the environment and infrastructure. We are advised that planning must first assess need, and then look at supply-side constraints to determine how much of that need can be met in particular places.

A narrower interpretation of 'need' as 'ought' is more relevant. In that interpretation, 'need' is synonymous with 'social need': things that people ought to have but cannot afford without help (e.g. 'people in need', 'areas of need'). As applied to housing, this means the affordable sector.

The old planning system

This is precisely how government policy and guidance understood 'housing need' under the previous planning system. In that system, the term referred specifically to *affordable housing need*: the housing that people *ought to* have, but could not have without help from the State. The definition of that need was split between two documents, of which the first was Planning Policy Statement (PPS) 3:

'Housing need

The quantity of housing required for households who are unable to access suitable housing without financial assistance."[21]

The second part of the definition was the 2007 SHMA Practice Guidance, which defined 'suitable housing', i.e. what everyone *ought to* have (but not everyone can afford) by a series of standards. For example, a household was considered unable to afford suitable market rented housing, and hence in housing need, if rent was more than 25% of its gross income. Similarly ability to buy a home in the market sector was measured by ratios of house price to household income, set at 3.5 for single earners and 2.9 for two-income households. Other criteria included secure tenure, freedom from harassment and access to kitchens, bathroom and toilets[22].

The Practice Guidance set out a detailed method for calculating affordable need, which produced a consistent measure across local authorities and housing market areas. The

[21] *Planning Policy Statement 3 (PPS3): Housing,* third edition, June 2011, Communities and Local Government, London, Annex B : Definitions. The same text appeared in the two previous editions since 2006.

[22] *Strategic Housing Market Assessments Practice Guidance, Version 2, August 2007,* Communities and Local Government, London, p 41-42

numbers produced by that method are usually a very high proportion of total housing need as measured by demographic projections. They also exceed the amount of affordable housing that can be realistically delivered in practice. There are two main reasons for this, which are closely related:

- Firstly, while the Practice Guidance calculation measures an aspiration – what *should be* – the projected need carries forward reality – what *was*. And reality generally falls short of aspiration, not because planning constrains land supply, but because public finance restrictions constrain the production of affordable housing and hence the demand for land.
- Secondly, affordable need as defined by the Practice Guidance included a backlog of 'current need', representing households in unsuitable housing at the base date. The Practice Guidance assessment method assumed that these households should be provided with affordable housing within five years – closing the gap between aspiration and reality which had accumulated in past years. By contrast, demographic projections of course do not include a 'backlog', because they are nothing to do with aspiration.

PPS3 also provided a definition of housing demand, which was carefully distinguished from housing need, and related specifically to the *demand for market housing:*

'Housing demand

The quantity of housing that households are willing and able to buy or rent.'

In summary, under the old planning system government policy and guidance used two quite different concepts: 'need', which referred to affordable housing, and 'demand', which referred to market housing. As well as relating to different sectors, these two words also represented quite different kinds of concept. Need, as we have seen, was about what *ought* to be. Demand was about what *is* or *will / would be (i*n this case, the housing that *would* be delivered if planning provided enough land)[23].

The system described above is how superseded by new policy and guidance. PPS3 was cancelled in March 2012 on publication of the NPPF, and the Practice Guidance was cancelled in March 2014 on publication of the PG.

The new planning system

Affordable need

The PPS3 concept of housing need, understood as *affordable* housing need, has been carried forward into the new planning system. It is discussed in paragraphs 022-029 of the PG[24], which sometimes call it 'affordable housing need' and sometimes simply 'housing need'.

The new Planning Practice Guidance, like the 2007 SHMA Practice Guidance, lists the factors against which need should be measured, and these factors have remained broadly

[23] One difference between the two is that 'ought' concepts are meaningful only if supported by standards (norms, values), which tell us what ought to be. Under PPS3, these supporting standards were found in the Practice Guidance. 'Is' statements make sense without supporting standards, because they are to do with facts, not values.

[24] Reference ID: 2a-022-20140306-2a-029-20140306

the same. But there has been one important change: the new guidance no longer calibrates the criterion relating to housing costs.

As we have seen, under the 2007 guidance affordable need was defined with reference to fixed ratios of market rents and house prices to household income. By contrast, in the new guidance a household is considered to need affordable housing if market housing in the area is '*too expensive compared to disposable income*'. The implication is that each planning authority or planning partnership will make its own value judgment about how expensive is too expensive. Consequently there will no longer be a consistent basis for aggregating and comparing affordable need across local authority areas - unless common standards emerge over time, either from planning Inspectors' advice or by convention.

Total need

The use of 'housing need' to mean 'affordable housing need' is confined to paragraphs 022-029 of the PG. Elsewhere in the PG and in the NPPF, 'housing need' denotes something quite different – total housing need, covering both the market and affordable sectors, which is also known as objectively assessed need ('OAN').

Neither the NPPF nor the PG provide a definition of that total housing need. In the PG, the first sentence of the paragraph looks like a definition, but it is a circular statement, as becomes obvious if we focus on the words in bold below (our emphasis):

*'**Need** for housing in the context of the guidance **refers to the** scale and mix of **housing** and the range of tenures **that is likely to be needed** in the housing market area over the plan period – and should cater for the housing demand of the area and identify the scale of housing supply necessary to meet that demand.'* [25]

From this sentence we cannot tell how need relates to the distinct concepts of 'need' and 'demand', as previously defined in PPS3. It may be thought that the OAN is simply the sum of those two elements – affordable need as discussed above plus market demand as defined in PPS3. But cannot be correct, for at least three reasons:

- Firstly, affordable housing need is an aspirational concept. It is useful as a statement of the housing that ideally ought to be provided, but in practice is never fully met – not because planning constrains supply, but because lack of public money constrains demand.
- Secondly, affordable need is not necessarily a need for net new affordable housing: it can be met from the existing housing stock and from market housing both existing and new, for example by improving existing housing, taking measures against harassment and subsidising market rents through housing benefit.
- The third point is technical, though no less important for that. We do not have a method for assessing market demand in isolation. The prescribed method for objectively assessing need, which relies largely on demographic projections as we have seen, cannot differentiate between the market and affordable sectors.

In short, to add the demand for net new market housing to the need for affordable housing would be to add apples and pears. In most places the resulting total would include a large

[25] Reference ID: 2a-003-20140306

element of double counting. Partly for that reason, but more importantly because there is not enough public money to meet all the affordable need, it would probably far exceed the amount of housing that could realistically be developed in practice. To over-allocate land in this way cannot be an efficient or sustainable.

As a more reasonable and practical alternative, we would suggest the following definition of total housing need (the OAN):

'The housing that households are willing and able to buy or rent, either from their own resources or with assistance from the state'.

In our definition, 'need' is synonymous with 'demand' - a demand that, unlike the PPS3 definition, covers the affordable sector as well as market housing. Total need, or demand, equals the total housing that would be provided across both sectors, if land supply was not constrained by planning. This is why the assessed total need is often described as a policy-off estimate.

But in practice this unconstrained demand is difficult or impossible to measure, because planning generally does constrain housing development, and has done so for many decades. When we assess future demand by projecting forward past trends, we also project forward the effect of those past constraints. Therefore total housing need, as measured in practice, will generally underestimate the unconstrained total need. Rather than policy-off, it is a policy-neutral, or policy-same, estimate.

Our proposed definition of total housing need does not appear in Government policy or guidance. Hopefully it approximates the implicit thinking behind that policy and guidance. It is helpful in our view because it seems consistent with the NPPF and PG, and also, most important, with Inspectors' interpretation of those documents.

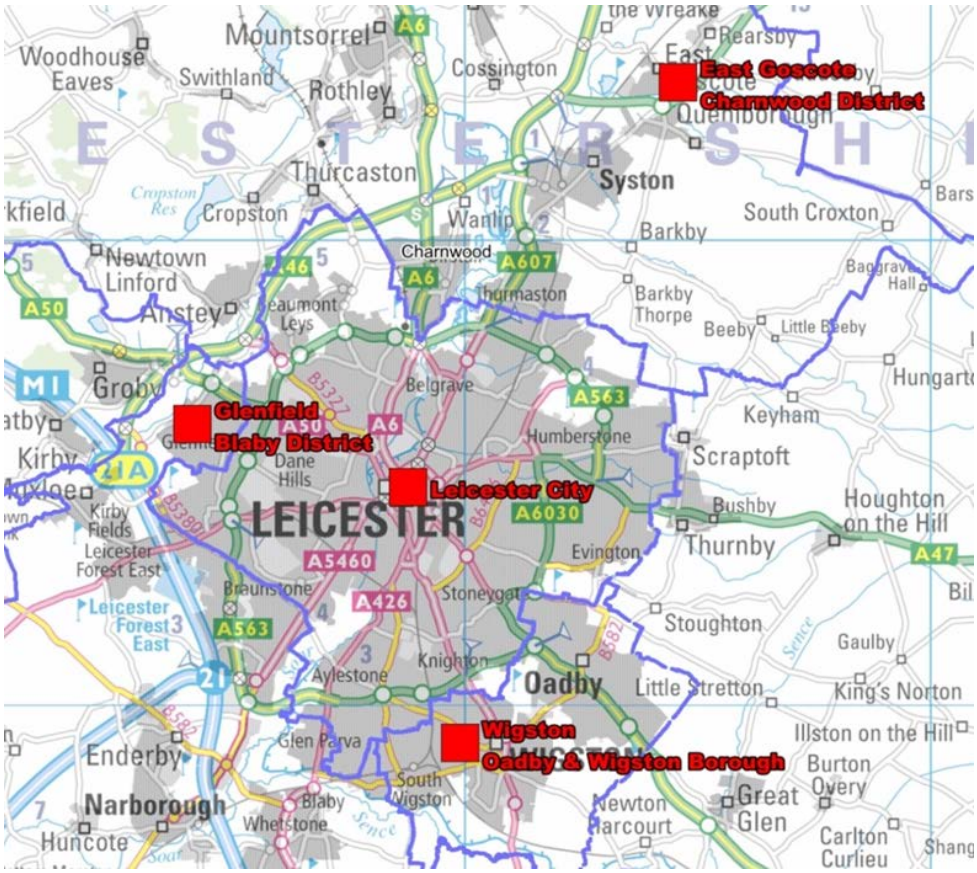
APPENDIX B HOUSING MARKET AREAS

Both the NPPF and the PG advise that, where a housing market area extends beyond the local authority area, authorities should work together to assess needs across the HMA as a whole. (Where Local Plans are at different stages of production, authorities can build on the existing evidence of other authorities in the HMA, but they should co-ordinate future assessments so they happen at the same time).

The underlying logic, hinted at in the PG, is that much of the need or demand is footloose across administrative boundaries. In effect a housing market area is an area of search – the area in which the typical household looks for a home. In deciding where they want to live, households are generally indifferent to local authority boundaries; their choices are driven by access to jobs, schools, friends and family and so forth. Hence, demand is not necessarily tied to specific local authority areas; it can be met by housing sites either sites of an administrative boundary, so long as these sites are in the same area of search.

To take an example, of the households who wish to live in the Leicester area (see map below) some may be keen to live in a specific neighbourhood in the City Council's area. Some might even insist on a specific street. But many no doubt would be equally happy to be in Glenfield (part of Blaby District), or Wigston (part of Oadby and Wigston borough).

Figure A1 The Leicester area



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These different micro-locations arguable form part of a single housing market area – a set of places which many households regard as substitutes for one another. Depending perhaps on where their jobs are, some households may even be content in places such as East Goscote, beyond the boundary of the urban area in Charnwood district. If many households feel that way, Charnwood district should also be included in the housing market area.

As this example illustrates, for small geographies – which includes all or most individual local authorities - need or demand is difficult to measure, and the smaller the area the greater the difficulty. For an area that is too small the very concept of demand or need will make little sense, because there will be too few people or households whose preferences are tied to that area specifically.

So, an HMA should bring together a set of places which households consider close substitutes for one another. In line with national policy, total housing provision across the HMA should meet demand or need. But within the HMA planning can guide development in line with supply capacity and policy constraints, to guide it to sustainable and efficient locations. Thus planning may prevent some households from living in the exact place that they would otherwise choose. But the damage will generally be small, because they will be able to live somewhere close and similar.

APPENDIX C OFFICIAL DEMOGRAPHIC PROJECTIONS

Versions

Official demographic projections for local authority areas are released in two separate publications. The first publication is the ONS sub-national population projections (SNPP). The second is the CLG household projections, which appears some months later and translates the SNPP into households. Numbers of households, with a small adjustment to account for vacant homes and second homes, are used as a measure of housing demand or need.

Both series are normally released every other year, based on the ONS mid-year estimates (MYEs) for two years earlier, and run for 25 years from the base date. But this regular pattern is sometimes broken, including because important new data have become available.

Thus, at present, the latest full set of regular projections is still the ONS and CLG 2008-based projections published in 2010 (we refer to these as 'ONS 2008' and 'CLG 2008'). In 2012 the ONS published a 2010-based release of SNPP ('ONS 2010'), following a major review of historical migration data – which found serious inaccuracies in the earlier estimates that underpinned previous projections. The underlying reason – which remains a problem for all projections – is that migration is very difficult to measure: unlike births and deaths, which are formally registered, migration is estimated from partial or indirect sources such as sample surveys and GP registrations. ONS 2010 was never turned into household projections by CLG.

Further to the 2011 Census, whose results have been released gradually from 2012 onwards, in 2013 both ONS and CLG published updated projections. These projections ('ONS 2011' and 'CLG 2011') are badged 'interim' because they take only partial account of the Census results (some important results came too late), and they only run for 10 years, until 2021. The 2011 Census revealed major inaccuracies the some of the historical data behind earlier projections, which are corrected in these interim projections, but only partially.

On 29 May 2014 the ONS published the 2012-based subnational population projections (ONS 2012'), which take full account of the Census. The CLG projections that translate those population numbers into households are expected later in 2014. In the meantime, the only way to get up-to-date household projections is to model bespoke scenarios.

In summary, the historical data (recorded facts) that underpin population projections are imperfect. Once every 10 years, the Census provides robust and comprehensive data on population and households. Between Censuses, only data on births and deaths are fully reliable; data on migration and household formation are estimates, which have not always proved accurate. Since projections are only past trends rolled forward, if past trends are incorrectly recorded the projections will be flawed. The official demographers are working constantly to repair these flaws in the light of the latest information. But such repairs take time, given that they must cover the whole country.

Consequently, at any given time the official projections will generally not incorporate the latest historical data. For individual local authorities and HMAs, adjusted scenarios can serve as early repairs, as we discuss later.

Method

Demographic projections are derived by rolling forward into the future ('projecting') past trends in the components of demographic change for different demographic groups.

In the SNPP:

- The components of change are natural change (equal to births less deaths) and migration – both domestic (within the UK) and overseas.
- A demographic group is a combination of age and sex - for example women aged 27.
- The projections rolls forward *rates, or propensities*, which are the proportion of a given group that gives birth, dies or migrates between given pairs of areas in a given year.
- Migration is far more difficult to project that natural change. The reason is that for most areas historical migration has varied widely from year to year; hence projected migration is highly sensitive to the period being rolled forward.
- The base period for domestic migration is the five years prior to the base date.
- For births, deaths and overseas migration projections are based on longer-term trends, moderated through expert judgment.

In the CLG household projections:

- A demographic group is a combination of age, sex and 'relationship status' – for example women aged 25-29 who are part of a mixed-sex couple.
- The factors that translate population into households[26] are called *household representative rates (HRRs)*. An HRR is the proportion of each group that are household representative persons, formerly known as heads of household[27].
  - HRRs are sometimes called headship rates or household formation rates.
  - For any given population, the HRR in effect is the inverse of the average household size; the higher the HRR, the smaller will be the average household and the more households there will be.
- *The projections roll forward past trends in HRRs, using much longer base periods:*
  - In CLG 2008 the base period was 40 years, using data from the four Censuses 1971-2001, plus the Labour Force Survey from 2001 onwards.
  - In CLG 2011 the 2011 Census was added, extending the base period to 50 years, but without complete HRRs (which were not yet available). As we show later, this had a large impact on the projections, considerably reducing expected household growth.

Rates of birth, death, migration and household reference vary greatly between age groups. Hence, regardless of geographical area, an important driver of the projections is the changing age profile of the population. For example, in an area where the population is ageing - so that proportionally there are more older people – all other things being equal

[26] Not all the population is translated into households. The projections slit the population into two groups, household residents and residents in communal establishments. The calculations described below only apply to household residents.

[27] The term 'head of household' is no longer in official use. It has been replaced with 'household representative person' in order to avoid sexist language.

average household sizes will fall. The reason is that older people typically live in smaller households – either as empty-nester couples or widows / widowers. The outcome is that, any given number of people will group into more households and will need more dwellings. Demographic projections can foretell this outcome many years in advance, because from the number of (say) 45-year-olds in the area today they can infer the number of 60-year-olds in 15 years' time.

In this example, the growth in household numbers is driven by changes internal to the demographic system ('endogenous' in the economics jargon). In other words, the projection foretells the impact of demographic variables (in this case, today's age profile) on other demographic variables (the number of households in 20 years' time). This is what projection models are designed for. Their main strength is that they can trace the impacts of changing age profiles through the complicated relationships that drive population and household change.

Missing factors

The economy

Conversely, what demographic models are not designed for, and cannot do, is foretell the impact of non-demographic (external, exogenous) changes on demography.

To take a topical example, the 2011 Census found that actual HRRs were substantially lower than shown in the latest official projections, CLG 2008. Consequently, across the country and in most local authority areas there were fewer households than previously expected, and their average size was larger than previously expected.

The graphs below show an example[28]. 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'[29.] The lower-then-expected HRRs are concentrated in the young adult age groups. Research from Cambridge University suggests that they are a demand-side effect largely due to the last recession, in which fewer of these young adults could afford their own homes and more were forced to remain with their parents or share with their peers[30.]

Even if the economists had foreseen the recession demographic projections could not have modelled its effect, because projection models know nothing about recessions. The inputs to a demographic projection's inputs are historical demographic data (past population and households); the mechanics of the projection model past relationships between these data. To generate future population and households, the projection rolls forward these past data and relationships. It does not use economic inputs and does not model relationships between the economy and demographic change. If we expect the economy to deteriorate and want it

[28] Though the differences in HRRs are fractional, they make a large difference to the growth in household numbers, because they are spread over the entire population.

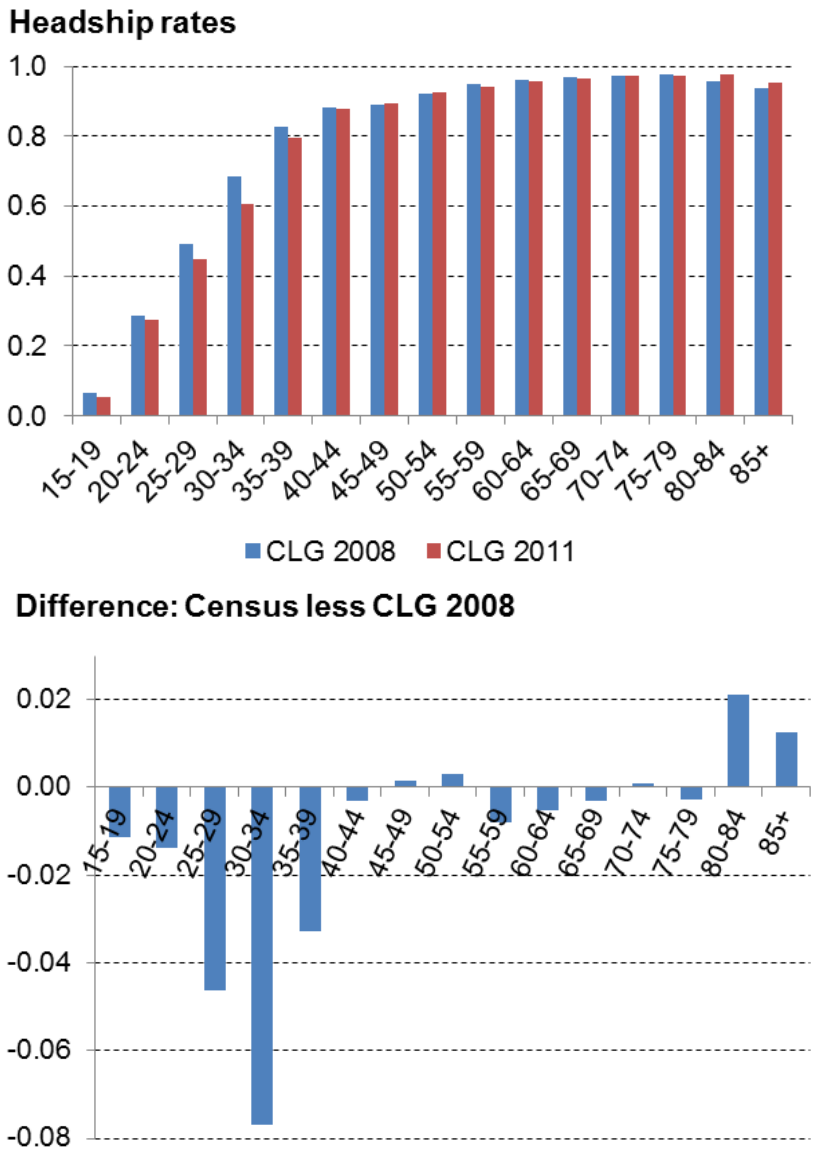
[29] N Mc Donald, P Williams, University of Cambridge, *Planning for housing in England: Understanding recent changes in household formation rates and their implications for planning for housing in England,* RTPI, January 2014

[30] See A Holmans, *New estimates of housing demand or need in England, 2011-13,* London, TCPA, 2013. The study finds that the other reason for larger-than-expected households was a higher inflow of overseas migrants, who on average lived in larger households.

incorporated this in the projections, all we can do is make judgments about the likely impact on migration and HRRs and adjust the model manually.

Figure A2 Male HRRs by age, 2011, District D

CLG 2008 projection and 2011 Census compared



Source: ONS, PBA

Without such manual adjustments, demographic projections in effect assume that the economic trends that drove demographic change into the past will continue in future. The projection model alone cannot tell us what will happen if economic trends change. For this we must supplement the projections with informal methods. Inevitably these methods are only broad approximations that rely on judgment, not just demographic modelling. In relation to the recession effect we have described, as discussed in the main report the preferred method is to project forward a blend of old and new HRRs.

Another economic factor that drives demographic change is the labour market, because people want to live in places where there are job opportunities. Yet again this is a factor that cannot be formally modelled into demographic projections. In effect, the model assumes that

the trends that drove local labour demand in the past will continue into the future. If that assumption is wrong, the projections should be adjusted accordingly. Again the demographic model alone cannot provide these adjustments.

Planning policy and cross-boundary 'unmet need'

Just as they do not know about the economy, projection models do not know about other external (non-demographic) factors that impact on demographic change. Among the most important of these factors is planning policy, both in the area under consideration and in neighbouring areas.

In any given local authority district (or HMA), population and household numbers depend partly on land supply in neighbouring areas. If supply is restricted in those areas, demand will transfer to the subject district. Accordingly, if planning in neighbouring areas does not provide housing land in line with their projections, then demand for housing in the district or HMA will exceed the projection. The NPPG and NPPF call this exported demand 'unmet need'. As noted earlier, Local Plans are required to accommodate cross-boundary need where possible and reasonable. It is not part of an area's objectively assessed need, but an additional element that should be taken into account when setting the provision target.

It is important to bear in mind that not all future inward migration is cross-boundary 'unmet need'. As par 159 of the NPPF makes clear, projected migration in line with past trends is part of objectively assessed need. In some areas, especially round cities and large towns, such in-migration is a major component of the OAN. Cross-boundary 'unmet need' is not that continuing trend; it is additional in-migration over and above trend. As mentioned earlier, for overspill areas around London it may be an important factor, because the capital may not have the capacity to meet its projected need. Other conurbations look to be in the same position.

Constrained supply

In relation to planning policy in any given area, as discussed earlier demographic projections are policy-same projections: they broadly assume that future policy will be the same as past policy. If past policy constrained housing development, so that supply fell short of demand, then the projection will also understate future demand. As discussed in the main report, the PG advises that projections should be adjusted upwards to

Conclusion

In summary, there are three main reasons why the official demographic projections might not provide a good measure of future housing demand:

- The projections might be technically flawed. Often this is due to inaccurate historical data: the projections may not have caught up with the latest available data, or even these latest data may be open to doubt (an example is the Unattributable Population Change, discussed in the main report). Sometimes there are other technical anomalies, which mean that the projections for individual places do not look credible.
- The projections in effect assume that the external (non-demographic) factors that drive demographic change in the future will be the same as they were in the past (base period). But in reality these factors might change in future. For example, the

macroeconomic climate might improve; there might be more local job opportunities; or planning policy in neighbouring areas might become more restrictive - shifting demand across administrative boundaries to the subject area.

- Interpreted as a measure of housing demand, the projections in effect assume that in the base period the demand for housing land was fully met. But in practice it may be that past planning policy constrained housing development in the area, so the planned land supply fell short of demand. In that case, the projections will roll forward that constraint, so they will understate future demand.

As shown in the PG, to overcome these problems as far as possible the projections may be adjusted to produce alternative scenarios. We discuss these alternatives in the main report.

APPENDIX D ALIGNING JOBS AND WORKERS

To predict future employment change, many authorities rely on economic forecasts commissioned from specialist forecasters. Sometimes they use standard employment forecasts, which represent the forecasters' preferred scenarios. Other times they use bespoke scenarios to reflect alternative macroeconomic expectations or policy aspiration, as discussed earlier.

In many cases this approach is deeply flawed. Typically the analysis proceeds as follows:

i The economic forecasters usually take future resident population from the official ONS projections. A hidden assumption behind those projections is that enough housing will be provided to accommodate that projected population.

ii The forecasters translate the population into a resident workforce. They then input both resident population and resident workforce into the model that forecasts workplace jobs.

iii (In the model, the size of the population impacts of jobs by creating demand for services (the more people live in an area, the more jobs there will be in local services such as retail, schools and medical care). In some models the size of the local workforce also impacts on jobs, as employers' location is driven by the availability of workers.)

iv The forecasters pass the workplace jobs forecast to the planners.

v The planners translate the jobs back into numbers of resident workers, then total population and finally resident households and hence 'housing need'.

vi The future population output at stage iv may occasionally equal the future population input at stage i. If this happens, it will be by chance. But normally the two numbers are different, because the economic forecasters and the planners use different estimates of the factors that link population to jobs – which are economic activity rates, unemployment and commuting. There is no reason why the two sets of assumptions should be consistent, because the forecasters and the planners do not discuss them (the planners do not know that the forecasters use them).

vii The planners (and the Inspector) cannot see the inconsistency, because they have not seen or have not noticed the population assumptions behind the jobs forecast.

In short, population is both an input and an output to the process. The modelling uses the expected future population as an input, and it produces future population as an output.

At best, the process is logically circular: the population that it outputs, and the resulting housing need, simply repeat the assumptions that were input at the start. But generally the model is also inconsistent, because the population that is output does not equal the population that is input. Either way, the results make no sense. In formal logic this approach is known as 'self-defeating prophecy'.

For an approach that makes sense, it is necessary to integrate demographic projections and economic forecasting. For this we have developed an integrated method, working with

economic forecasters and based on the model structure illustrated below. The model is used to test alternative assumptions and (at a later stage) alternative policy options, iterating between jobs and housing.

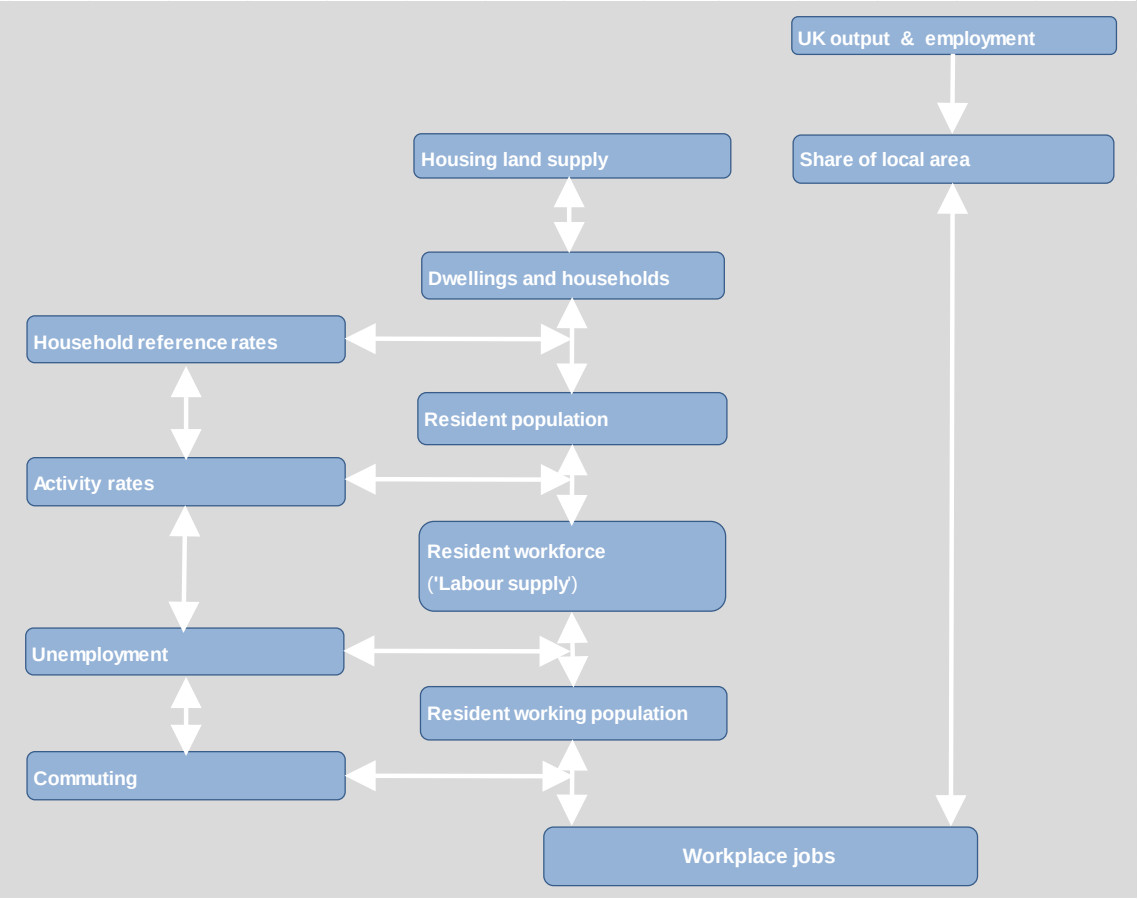



Figure A3 An integrated model