The changing role of household projections: exploring policy conflict and ambiguity in planning for housing

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Abstract

Household projections have been a critical tool in establishing top-down hierarchical frameworks through which planning systems impose new housing requirements on localities. This paper re-assesses the role of household projections in the context of two recent factors. The first is the emergence of increasingly localised spatial governance arrangements that enhance the scope to challenge household projections data. The second is the gradual emergence of the economy from recession and its impact on interpretation of household projections data. A case study of planning for housing in Wales explores the ambiguities and conflicts that arise as a result of these changes.

Introduction

Planning plays an important role in 'governing growth', particularly for housing (Murdoch and Abram, 2002). Household change and planning's role in shaping additional housing supply remain central concerns in the United Kingdom, continental Europe, the United States, and Australasia (Barker, 2014; Bramley, 2013; Gurran and Phibbs, 2013; Schwartz, 2015). In these countries, central governments use established tools for ensuring that planning systems support housing delivery. In the United Kingdom, planning for housing has been characterised by top-down and centralised direction, contrasting with wider decentralising and deregulatory trends in planning (Murdoch and Abram, 2002; Cowell and Murdoch, 1999). The United Kingdom's planning systems' focus on national housing numbers and 'targets' has been particularly criticised (Meen and Andrew, 2008; Whitehead, 1997).

Population and household projections are a critical tool in holding together this framework of housing governance (Gallent and Tewdwr-Jones, 2007; Holmans, 2012). The role of projections in planning for housing is contested, especially in England (Holmans, 2013; Rees et al., 2015; McDonald and Williams, 2014). Critiques of the use of household projections in planning – trend-based population projections derived from demographic assumptions to indicate future household formation - paint a complex

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picture. Some accounts highlight the constraining function of household projections in a hierarchical system of planning for housing where regional and local stakeholders have "very little scope for negotiation around the overall numbers" (Murdoch and Abram, 2002, p. 5). This view has persisted despite the recognised 'crudeness' of national household projections (Gallent, 2007; Golland and Gillen, 2004). Government has argued that household projections are 'guidelines' rather than 'targets', yet stakeholders report that the scope to challenge these 'guidelines' is limited (Cowell and Murdoch, 1999). There are contrasting accounts that argue population and household projections are not so restrictive. Gallent and Tewdwr-Jones (2007, p. 152), for example, state that projections "lose much of their initial potency as they become just one factor among many". Planning systems in England and Wales have arguably become less top-down in character over the past decade (Allmendinger and Haughton, 2011). The machinery tying planners into a layered, hierarchical system of planning for housing has recently been dismantled, reinforcing a trend towards the increasing localisation of planning for housing (Vigar et al, 2000; Valler et al, 2012; Gallent et al., 2013).

This paper explores the role household projections play within localised and market-driven governance frameworks (Haughton and Allmendinger, 2014), and an environment increasingly characterised by high levels of ambiguity. There are several important sources of ambiguity, including the impact of economic recession on the role household projections play in identifying housing land requirements. We argue firstly that in an increasingly localised system, where government policy promotes local interpretation of household projections, there remains considerable uncertainty about local planning authorities' ability to depart from household projections interpreted as 'housing targets'. The paper secondly argues that this uncertainty is compounded by the effect on household projections of financial crisis and economic recession, creating a high policy conflict environment. In doing so, we contribute to the policy implementation literature by exploring how change in policy ambiguity can result from a change in, and stakeholders' interpretation of, an externally derived referential goal.

The paper introduces a conceptual framework for exploring ambiguity and conflict in policy implementation, followed by an account of changes in spatial governance focusing on the emergence of pro-market localism and political devolution (Haughton and Allmendinger, 2014). The paper then introduces household projections as a critical tool holding together spatial governance of housing, and identifies the implications of using household projections in a more localised system. The empirical sections identify how these various elements come together in a case study of planners' use of household projections in Wales. Key features of the case study include the ways that stakeholders interpret national planning policy, as well as how they navigate uncertainties created by a multiplicity

of alternative projections and economic recession. A concluding section identifies the wider lessons for planning for housing and policy implementation.

Ambiguity and conflict in policy implementation

Household projections act as a key, yet contested reference point when planning for housing. We draw on Matland's (1995) influential work on policy implementation in public administration to understand the role projections play in planning for housing, and how they are interpreted and acted upon in policy making processes. His 'Ambiguity-Conflict in Policy Implementation' model has reframed debates on policy implementation in various fields, including social policy (Hudson, 2006; Ellis, 2015), economics (Arnaboldi and Lapsely, 2009), and education (Hordern, 2015; Bialik, Gibton, and Dror, 2016). Matland's work linked two key characteristics, ambiguity and conflict, which need to be analysed together to understand policy outcomes. Matland's work challenged the prevailing assumption that policy ambiguity results in low levels of conflict as it allows flexibility in interpretation. He argued that it is possible for high levels of conflict to co-exist with high levels of policy ambiguity.

The interaction between ambiguity and conflict varies depending on the situation, from high ambiguity/low conflict, low ambiguity/high conflict, high ambiguity/high conflict, and low ambiguity/low conflict. Matland (1995, 156) suggests policy *conflict* exists "when more than one organization sees a policy as directly relevant to its interests and when the organizations have incongruous views" and "Disputes over policy means can develop over jurisdictional issues or over the substance of the proposed means for reaching the goals". In planning for housing, while the overall goal might be to deliver additional housing, local authorities, developers, and other stakeholders might disagree as to the amount of housing and its location. In contrast, policy *ambiguity* can be divided into ambiguity of goals and ambiguity of means. Ambiguity of goals results when there is confusion or uncertainty about the objective of a policy, while ambiguity of means results from uncertainty about the role of different groups in the implementation of policy, or when actors do not know "which tools to use, how to use them, and what the effects of their use will be" (Matland, 1995, 158). Our case study below identifies household projections as a referential goal. Referential goals are those whose importance is interpreted differently by stakeholders as well as those directly involved in policy implementation, leading to conflicts of interpretation.

Matland (1995) argues the role of professionals becomes more important when conflict exists, as they attempt to interpret the goal through their disciplinary lens. Conflict becomes even more pronounced when professionals of different backgrounds become involved, as there "are likely to be long and bitter" disagreements over how to interpret goals (Matland, 1995, 169). Matland argues these

disagreements are likely to be solved through coercion or bargaining, rather than problem solving or persuasion.

High levels of ambiguity and conflict lead to varied outcomes as goals are interpreted by coalitions of varying strength, thereby localising and structuring the final outcome. In order to understand these processes "identifying the competing factions at the local level, along with the micro-level contextual factors that affect the strengths of competing factions, is central to accurate explanations of policy outcomes" (Matland, 1995, 170). The high ambiguity/high conflict pairing is not static and can shift throughout the policy implementation process (Ellis, 2015). Studies of policy implementation movement from one pairing to another are, however, limited. We explore through our case study the ways in which household projections are interpreted in local plan-making, the roles of professionals and other stakeholders, and the effect of national and local interventions to resolve ambiguity and reduce conflicting interpretations of household projections. The following contributes to an improved understanding of how such shifts occur through the actions of different actors in variable local contexts. The next section identifies recent changes in planning for housing in the UK that have resulted in greater levels of ambiguity and conflict as power has been decentralised.

Changes in spatial governance

Spatial planning's role in housing delivery is influenced by its wider governance context (Haughton et al, 2010). The planning systems in the UK gradually developed in the 1980s and 1990s into a system of performance monitoring and accountancy (Vigar et al. 2000). As a result, the lack of ambiguity provided by household projections became a nearly undisputable component of planning for housing. Government utilised numbers as an instrument to exercise power and cascade housing requirements from the national level to localities (Rose, 1991). Planning for housing became increasingly focused on household projections, with gradual refinement of the projections and their methods (Bate, 1999; Gallent, 2007; Gallent and Tewdwr-Jones, 2007). Recent changes in governance establish a basis for reassessing the key mechanisms used in planning for housing, and especially household projections.

Haughton and Allmendinger's (2014) analysis of England identifies six phases of spatial governance between 1979 and 2010. They also identify a seventh, embryonic paradigm around pro-market localism, characterised by deregulation of controls, abolition of regional strategies and erosion of hierarchies and cascade functions (pp 14-18). Haughton and Allmendinger highlight several transformations driving spatial planning discourse in the UK, Europe and beyond. These include the reconfiguration of spatial planning to complement economic growth objectives, objectives intricately connected with housing supply. Allmendinger and Haughton (2010) also identify a burgeoning of new

planning spaces and practices, and new models for understanding spatial relationships. Alongside these changes in spatial governance, public policies have developed beyond the nation state, driven by economic interdependencies between countries and growing recognition of transnational problems (Knill and Tosun, 2012), as well as devolution of powers. This devolution and 'hollowing out of the state' results in policy being developed closer to those directly affected (Richards and Smith, 2002). Of course, "devolved governments do their own thing" (Rhodes et al, 2003, p.165) leading to divergence in policy, involvement of different actors at different spatial scales, and across different policy spheres (Dorey, 2005). In addition, successive UK governments have pursued different policies to shape the powers of local government, the weight given to strategic regional planning, and the emphasis placed on localism (Haughton and Allmendinger, 2014). More localised policy making is claimed to have practical advantages, by developing policy networks and producing policies through participatory governance that better reflect the aspirations of local communities (Fung and Wright, 2001).

Planning in the UK is multi-scalar - plans and policies are developed by different bodies at different scales. Devolution to Wales in 1999 enabled the emergence of new territorial approaches to spatial planning, exemplified by the Wales Spatial Plan (Haughton et al, 2010). There has also been a renaissance of interest in regional scale governance, transcending local government boundaries (Morgan, 2007; Jessop et al, 2008). In Wales, city-regional spaces have emerged, emphasising collaborative approaches to policy. These developments resonate with Haughton et al's (2010) call to attend to 'soft spaces and fuzzy boundaries' to complement the 'hard spaces' of governmental activity. Planning for additional housing in response to projected household growth has adapted to fit within this framework of evolving spatial planning, political devolution, more local and inclusive policy making, and soft governance spaces. Various UK governments have for more than a decade been promoting growth strategies, including a key role for housing in supporting growth in the national and local economy (Office of the Deputy Prime Minister, 2003). High-profile reviews have reinforced a focus on the delivery of additional housing, through identifying the barriers to delivery and arguing that the location of new housing should support economic development (Barker, 2004). Following the Barker Review in 2004 a shift towards an emphasis on housing affordability emerged resulting in a more explicit inclusion of market impacts into land-use planning for housing (Bramley, 2013), and an evolving role for household projections within this process. The skills needed within the built environment professions to support growth have also been explored (Egan, 2004). These various initiatives to deliver new housing were explored in terms of the creation of 'sustainable communities'. However, promoting growth inevitably led to tensions between local communities over the extent of development, as well as resource constraints limiting additional housing supply. The economic

recession of 2007-8 may have reduced development conflicts on the ground yet, as shown in the next section, many of these issues persist.

The role of household projections

Household projections are a deterministic method for identifying housing land requirements. Their long-range, supposedly impartial, and technical character appeals to a traditional survey-analysis-plan mentality (Bramley, 2013). Gallent (2007) provides detailed explanation of the methodological principles underpinning household projections data. His analysis quickly reveals that they are based on assumptions that are vulnerable to considerable uncertainty, especially in key components of household projections data, such as population growth, household size, and migration (Barker, 2015; King, 2016). Migration and household formation are usually the source of greatest levels of variation due to limited data and sensitivity to short-term economic fluctuations (Nicol, 2002; Abadi et al., 2010). Several factors also lead to a 'circularity' of planning using household projections (Bramley and Watkins, 1996). The provision of housing land impacts on factors that influence the household projections, such as migration patterns (Nygaard, 2011). Additionally, household projections focus on future need derived from past trends and not current market demand, and so neglect some of the impacts of market adjustments, or changes in policy - such as interventions to improve housing affordability - that could alter household formation rates (Meen, 2011).

These 'strategic problems' with household projections are compounded by a series of 'usual statistical difficulties', including local disaggregation and projections over extended time-frames (Bate, 1999, p. 370). Murdoch and Abram (2002) highlight the significance of trend planning to calculating household projections. The projections, put simply, are a projection of a recent trend into the future, a future assumed as a continuation of the past (Adams and Watkins, 2002). Consequently, changes in socio-economic circumstances are not always reflected in the household projections (Baker and Wong, 1997). Variables used in household projections are particularly sensitive to short-term economic fluctuations, meaning longer-term trends can be crowded out (Bate, 1999; Mykyta and Macartney, 2010). Short-term economic fluctuations, when projected forwards, mean that "authorities are then uncertain whether shorter-term departures from trends are just blips or the start of a change in the trend" (Bate, 1999, p. 374). This is important in our case study of Wales, in which considerable debate arises over how to interpret successive household projections post-recession. This echoes difficulties in England during the 1990s when household projections to inform regional planning guidance followed recession (Baker and Wong, 1997).

There is also a practical challenge when using household projections to prepare development plans. Statutory plan-making in England and Wales is characterised by long preparation times and patchy coverage of up-to-date plans (Barker, 2006). Yet population and household projections are issued at regular intervals of three to four years. Plans are typically prepared on longer timescales than the cycle of revised projections with the possibility of "one set of projections being superseded by a more recent set whilst the plan is being compiled" (Nicol, 2002, p. 56). This can lead to claims that a plan is based on out-of-date information, protracted debate at examination on the data used, and undermine the credibility of the plan (see Baker and Wong, 1997). The problems created by cycles of revision are compounded when the latest household projections are very different to preceding ones (Nicol, 2002). Barker (2015) documented extreme variations at regional level in England of projected households over relatively short time-frames. This challenge features prominently in our research on Wales below.

Household projections and localisation

The calculation of household projections is a complex, statistical exercise. Calculating housing land requirements based on population and household projections is therefore sometimes cast as a 'technical' and apolitical exercise. The planning system is nevertheless a framework for deliberation over future development, where the political confronts the technical (Cowell and Owens, 2006). Gallent and Tewdwr-Jones' (2007) case studies of regional planning guidance in England highlight that 'objective' trend-based household projections rapidly descend into subjective political debates about housing allocations. In contrast, Haughton et al's (2010) case study of the Wales Spatial Plan documents Welsh Government's reluctance to prescribe housing numbers to individual local authorities, preferring collaborative working with individual authorities to identify housing requirements. Haughton et al (2010, p. 150) concluded that, despite early stages of the process, "Given its smaller size and the national emphasis on improving joint working across government agencies at all scales, this is something of a litmus test for how Wales can show that it can produce a distinctive policy regime" (Haughton, et al.,2010, p150). A distinctive part of this regime is a localised, collaborative system of exploring household projections data when calculating housing land requirements. This section explores some of the issues arising from use of household projections in a localised system.

The planning system provides a useful local forum for testing housing figures as household projections are given spatial form, made less ambiguous, and therefore more contestable (Murdoch and Abram, 2002). Vigar et al's (2000, p. 112) case studies show that "within the strong structuring of the housing land policy discourse and practices provided at the national level, there was significant variation in

local interpretation and politics". Their research suggests that the locality is an arena for challenging top-down discourses of planning for housing, although local opposition to 'technical' figures is sometimes labelled as 'emotional' or based on 'interests' when expressed in formal arenas for testing plans (Cowell and Murdoch, 1999; Adams, 2011).

A localised system that departs from a cascade system of housing numbers openly invites stakeholders to develop alternative projections. Previous studies demonstrate that developers submit wide variations on household projections and housing land requirements at development plan examinations, explained by political play as much as preference for different calculation methods (Murdoch and Abram, 2002; Vigar et al., 2000). Multiple projections by different stakeholders can prove problematic as "data can be found to support almost all views" (Nicol, 2002, p. 56). The variability of technical expertise and resources across local authorities also presents challenges, which may severely constrain the ability of localities to develop their own household projections (Murdoch and Abram, 2002). There are also concerns that local stakeholders may be poorly equipped to enter 'technical' debates on housing numbers (Cowell and Murdoch, 1999). The Welsh case study materials outlined below reveal the wide variation in figures, and how these are contested.

Planning for housing is a complex arena where "the technical process can be hidden behind political choices" (Nicol, 2002, p. 57). We also argue conversely that attempts are made to hide political choices behind supposedly technical calculations. This is evident in our case study of Wales. Essentially, given that technical matters are still influential in identifying housing land requirements, and carry significant weight in formal arenas for plan examination, political strategies are based on claims that later need to be supported by evidence. Scrutiny can then reveal that political strategies are unsupported by technical evidence (Vigar et al. 2000). We now relay our case study of the conflicts, ambiguities and challenges of using household projections data in a more localised and post-recession planning system.

A case study of ambiguity and conflict in the use of household projections

Debate on household projections' role in planning practice has focused principally on England. Several factors explain this, including the extent of household change in England, and the role intermediary regional planning mechanisms previously played in directing housing onto localities (Pugalis and Townsend, 2013). There are nevertheless some accounts of planning for housing in Wales (Gallent and Tewdwr-Jones, 2007). Wales has its own planning policy context and an increasingly distinctive governance and legislative framework (Heley, 2013). Welsh Government provides strategic direction

for the planning system, including through its national planning policy document Planning Policy Wales. Twenty-five local planning authorities each prepare a Local Development Plan. Local development plans must quantify the amount of market and affordable housing needed for their area. Planning Policy Wales identifies a range of issues local planning authorities must consider and states 'The latest Welsh Government local authority level Household Projections should form the starting point for assessing housing requirements' (Welsh Government, 2016).

A unitary local government system means regional intermediaries for cascading housing numbers have been absent in Wales. Wales has not therefore witnessed the cascading of housing numbers that until recently characterised planning in England (Swain et al, 2013). Local planning authorities in Wales historically 'apportioned' housing requirements via collaborative mechanisms, yet this work had limited status at plan inquiries. Apportionment has been abandoned and local planning authorities now prepare Local Development Plans using *local authority level* population and household projections. Recent changes nevertheless suggest increasing central direction over the planning system. A new National Development Framework to be prepared by Welsh Government, and Strategic Development Plans in parts of Wales, may play a future role in determining housing requirements. This could challenge the presently localised system of identifying housing requirements through Local Development Plans.

This research draws on stakeholder interviews, a call for evidence, desk-based analysis of three case study areas, and a focus group. It included 11 semi-structured interviews with key stakeholders, lasting approximately 45 minutes each, from divisions of Welsh Government, Local Planning Authorities, professional bodies and interest groups, The Planning Inspectorate, as well as planning consultancies. The project invited all 25 local planning authorities to submit evidence, producing 11 detailed responses, and collective responses from three National Park Authorities and five North Wales local planning authorities. This was complemented by three detailed Local Development Plan case studies, each including a study of examination libraries and complemented, where possible, by an interview with a senior planning officer. Finally, a focus group of six key stakeholders was convened to debate research findings[1].

The 2011-based household projections were in place when the research was conducted, and differed markedly from the 2008-based projections. The 2011-based data utilised more accurate data from the 2011 Census, while the 2008-based household projections relied in part on the 2001 Census. More importantly for this study, the 2011-based projections were derived from a period of economic

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[1]All interviewees, representations, and focus group participants gave permission for their comments to be used and attributed to their organisation in publications.

recession. Consequently, every local authority in Wales except for two showed a reduced household projection figure compared to the 2008-based projections, with over half seeing more than a 50% reduction in projected households (Welsh Government, 2010; 2014a). This created an uncertain environment in which to calculate housing requirements. As a result, Welsh Government issued a Policy Clarification Letter on use of the 2011-based household projections. Policy Clarification Letters are used to 'provide *urgent clarification of policy* or procedure issued by the Minister or Planning Division' (Welsh Government, 2014b, emphasis added), suggesting a role in managing ambiguity. The letter stated the 2011-based household projections had been 'significantly affected by recent past economic conditions resulting from the global economic crisis' and 'it is not prudent for a Plan, looking 15-20 years ahead to replicate a period of exceptionally poor economic performance' (Welsh Government, 2014b, p. 1). The paper now explores how actors responded to this ambiguity, which evolved into a fuller discussion of the role of household projections data in identifying housing land requirements.

Household projections 'as a starting point'

Welsh Government planning policy identifies household projections as the 'starting point' for assessing housing land requirements[2]. This section explores the considerable ambiguity and varying interpretations that stakeholders read into this statement. Welsh Government explained how its policy should be interpreted, arguing that while household projections provide a 'starting point', plan-makers had to consider other factors:

> "they're a starting point…it's not a complete mathematical, scientific solution.…because they're trend based, whatever you've aligned in the past will affect their direction in the future. That's the nature of any projections".

Welsh Government officers stated local planning authorities *can* depart from the household projections, and "if a local authority wishes to move away from those figures, it has evidence to justify that - you've just got to explain why". The crucial reference is to evidence to justify departure from

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[2] The research was completed in 2016 when Welsh Government planning policy identified that Welsh Government household projections formed a 'starting point' for identifying housing land requirements. The phrasing of the policy was revised in 2017. The effect of the revision is – at least in policy terms – to further downgrade the significance of the household projections. The paper continues to reflect on the phrasing and interpretation of the policy at the time the research was conducted.

the projection. We later identify impediments to local planning authorities presenting this evidence. Welsh Government planners highlighted that household projections cannot substitute for effective planning:

> "people get transfixed on the projections, which is, I think the wrong end of the stick to start with…planning is…about knowing where you want to get to and why, and then numbers follow that"

Private sector planning consultants endorsed Welsh Government's interpretation. One local planner's views also aligned closely with the Welsh Government's argument – echoing also Whitehead and Williams' (2011) position on the desirability of past trends - that trend-based projections inform, but do not substitute for, effective planning:

> "[they're] short term, trend-based projections. So, you've got to decide as an authority at the start whether or not you're prepared to base long-term planning on short term trends… Past policies might influence the trend, but that past policy might not be what you want to do in the future" [local planning authority A]

The Planning Inspectorate closely echoed this point, stressing the importance of the household projections as a referential point, but also the possibility that planning authorities can depart from the figures:

> "everything is done in the context of their household projections, but if a local authority has gone away and done a robust piece of work looking at that figure, coming up with different alternative options and choosing the one it considers the most appropriate, that is what would carry more weight because it's a refinement of the original projection"

Some interviewees identified limitations to Welsh Government's policy. A consultant argued that "there isn't a strict level of guidance there, other than saying it's a starting point". He recognised "[policy] doesn't need to be overly prescriptive", but planning policy could usefully set out how to move beyond the 'starting point' of household projections, including how to develop variant projections and alternative scenarios [planning consultant B]. This is evidence of a call for additional guidance to resolve ambiguity in how to identify a housing land requirement. The Planning Inspectorate also identified potential for policy to elaborate on stages after the 'starting point':

> "Then what happens after that? That's I suppose where the vagueness might come in. Maybe vague isn't the right word, but nevertheless…it's probably true that there is quite a bit of scope for authorities to determine how they should adjust for household projections"

One Welsh Government planner defended the policy against the accusation of lack of clarity, arguing that "I do struggle to see how much more blunt you have to be. I do struggle when people say they don't understand what they think they need to do". An opposing view is that the household projections *are* prescriptive, and that they effectively present a 'housing requirement'. One local planner explained how household projections were interpreted:

"it's not necessarily the starting point, it's kind of the requirement. Welsh Government provide guidance and a strong suggestion as to what direction we should be going in. The impression we had was that it's more than a starting point it, was more of a requirement" [local planning authority B].

One explanation for local planners interpreting household projections as a housing requirement is they do not have the skills and expertise to interpret and refine household projections data:

"a lot of local authorities don't have the technical expertise to produce their own projections. They've either taken the projections and just used them because they haven't got the internal capability to manipulate the figures, and they don't necessarily understand the figures." [LPA A]

Planning consultants also noted the decline in local planning authorities' in-house capacity to model population data – driven by local government reform and exacerbated by declining resources - and that consultants were increasingly used for input. External expertise is useful, yet has disadvantages over in-house expertise. In-house expertise allows development of multiple, iterative options and scenarios, and encourages greater local 'ownership' of a plan. The absence of in-house expertise also raised concerns about local planning authorities defending their plans as "you need to understand what it is that's been done, it can't just be a black box" [LPA A]. The absence of in-house expertise was therefore recognised as restricting the capacity to 'fight the figures', and constrained a more localised approach to identifying housing requirements. A lack of in-house expertise also undermined local planning authorities' capacity to effectively manage conflicts with other parties over housing land requirements.

Pro-market localism and political conflict

"Housing numbers…, particularly at a local level, are contentious things, hugely contentious things. Planning is almost the most intensely political issue that councillors get involved in" [housing association]

The allocation of housing land is often controversial, and can lead to residents' objections. These conflicts play out in the plan-making process. The 'politically neutral' household projections encounter local political challenge as abstract figures translate into a local housing requirement. Some authorities have 'gone blindly with the projections', perhaps as a result of lack of skills, yet most challenge the headline projections. All actors recognised the legitimacy of local politics in planning for housing, recognising that housing land provision "will come down to political decisions about certain impacts of various levels of growth on particular parts of an authority's area" [Planning Inspectorate]. Yet while stakeholders recognise a legitimate role for local politics and bargaining, they also support a rational, evidence-based plan-making process. Planning consultants argued that local planning authorities typically underprovide housing in draft plans as part of a 'housing numbers game':

"developers want the right number and they want a robust number, and they are generally concerned that the first cut of numbers coming out is often neither of those things, its often too low, its often based on evidence which…is back filling to get to an answer" [planning consultant A]

Welsh Government also criticised 'back-filling' of evidence, when a local planning authority has "chosen a number and then had to try and retrofit it". One local planner noted how earlier household projections had driven "a really huge step change in the amount of development that was going to be allowed for" [local planning authority C]. The scale of change lead to a defensive position, opening with a housing figure significantly below the household projections on the premise that the scale of development cannot be accommodated within the area's environmental constraints. Welsh Government echoed the above consultant's criticisms:

"I think it's either their inability professionally to do what they should be doing, or they are struggling to justify a political outcome that they are trying to achieve as an authority that can't be achieved"

The Welsh Government planner went on to defend the planning system against criticisms directed at the plan-making process or the household projections:

"at the end of the day it means homes, it means homes on the ground. And it means that some people won't like where they go, and I think that's the fundamental issue. It's not the LDP process…, and it's not the projections. The issue is people don't like the outcome"

Planning consultants also warned of local planning authorities trying to 'politicise' their research if it did not support the local planning authority's position or ambition to suppress the amount of housing provided in the plan. Consultants, developers and the Welsh Government also registered concerns about draft plans expressing ambitions for economic growth, without aligning that growth with housing provision:

> "there is for far too long 'a jobs are good, houses are bad' situation going on right across the country, whereby people say 'yeah, we want to create jobs, that's great, but we don't really want the houses that goes with that'… [councillors] are not going to vote for some more houses to go up…and it puts the plan in a very difficult position" [planning consultant A]

This illustrates a failure of localised governance arrangements to deliver development to support their communities. The risk is that plans are set up to fail, especially if there is limited evidence to support an alternative strategy, with serious consequences at plan examination stage. One developer acknowledged that "the political reality is if [local planning authorities] don't like the numbers - you know it's a fact of life - if you don't like the result you generally go out and try to find a better way of your own" [housing association]. The challenge is whether the resources and skills are available to justify a different outcome.

Recession, trend-planning and policy-driven ambiguity

Household projections are trend-based and reflect the preceding five-year period. To simply accept the projections is to plan for the future as a continuation of the past. The 2011-based household projections reflect a period of mixed economic fortunes, with economic recession reflected in the projected trend. Planning for housing has been complicated by varying interpretation of the effects of recession on the projections, with debate over whether household projections are a sound basis for calculating housing land requirements. One planning officer recounted:

> "when we had the 2008 projections they were very high because they were based on a period of economic boom, and then obviously when we had the 2011 based projections, they were very low because they were based on a period of decline [local planning authority A]"

Local planners noted the challenges created for plan-making by significant variations in successive household projections. They argued that Welsh Government presented the higher 2008-based projections as a starting point from which there would need to be strong justification to depart from.

Many local planning authorities therefore planned for high levels of projected household growth. Councils that planned positively for this now felt "penalised for having those really high figures in the plan; we are getting quite a lot of grief from local residents and our [elected] members because…more recent projections are much, much lower" [local planning authority B]. The reactions of some local planning authorities to the lower projections also prompted concerns from housebuilders:

"we saw an example…within a couple of weeks of the figures coming out, [the officers] took a report to committee looking to reduce the [housing requirement] figure by just over 2,000 houses…it was,…that knee jerk reaction to the data coming out" [housebuilding representative]

Welsh Government responded and tried to clarify the role of the recession-affected household projections, which acknowledges the significant ambiguity that the revised projections had created. The clarification, ironically, resulted in many stakeholders interpreting it as a revision of Welsh Government planning policy and creating further ambiguity. One local planner stated "I wouldn't say [the Welsh Government clarification letter] has confused matters, but it's certainly raised another dimension to the advice" [local planning authority C]. One local planner captured what he saw as Government's revised policy stance:

"There was definitely a view taken that when the [2008] principal projections were high…we were being encouraged [by Welsh Government] to ensure we had sufficient land to meet that level of growth. But the minute the 2011 projections come out we were being encouraged to ensure that we only used the population projections as a starting point" [LPA A]

The housebuilding industry also commented critically on the clarification letter, asking "what's the point of producing a set of nationally accepted figures and then saying 'actually, they're sort of not worth the paper they're written on'?". These debates highlight the extent to which stakeholders focus on any perceptible changes in Government position. They also highlight the challenges of using trend-based projections, particularly when significant economic events impact on the period the trend is based upon. A Welsh Government officer reinforced the importance of local interpretation of household projections, arguing that:

"I'd much rather people plan for the place rather than plan for the projection…because [if] you're chasing a fluctuating projection you will end up with some really strange results"

This exhortation – to 'plan for the place and not the projection' – is unlikely to diminish the importance of household projections in plan-making, given the high stakes in the plan-making process.

Examination – resolving ambiguity and conflict

Local Development Plans are subject to independent examination. The examination is a critical arena for understanding the role of household projections as the examination 'tests' a plan's content and evidence base. Early stages of examination usually include discussion of planned housing figures, involving detailed examination of household projections data and other evidence. The processes at examination are an important determinant of the relative weight of vertical or localised governance arrangements. Some interviewees noted the value of examination in questioning the coherence of a plan's strategy:

> "the good thing about the Local Development Plan process is that it makes everything transparent…If there are tensions within what you're trying to do, those are exposed, then if you can't explain why you've made those choices,…that's usually when the wheels start to fall off…" [Welsh Government]

Welsh Government also argued that plan examination is an opportunity to ask 'basic questions' about housing and growth, such as 'why are you going for a very aspirational outcome of the plan, when it plans for very low population growth?'". Planning consultants and housebuilders also identified the value of Welsh Government asking 'basic questions' of local planning authorities. Housebuilders interpreted this as Welsh Government "support[ing] us in the sense that they also question the housing number, and we've seen it in the past where they've gone back to local authorities and said, you know, you need to aim for a higher housing figure". Other interviewees dissented from the view that examination was always an effective vehicle for discussing housing land requirements, as discussions on housing figures become particularly complex. One planner commented:

> "there was a lot of time spent on discussing household projections…the Home Builders Federation were arguing for higher housing requirements based on household projections…the argument can get so technical that it is very, very difficult for inspectors to take an informed view really. I think 90% of the people in the room are probably struggling to follow it" [LPA C]

A multiplicity of different housing figures being presented by developers at examination similarly created opportunity to exploit the process:

"developer A is saying this and developer B is saying that and developer C is saying this, and they're just all over the place, then a local authority will exploit that, those cracks and say, well they don't know so clearly we're right" [planning consultant A]

The examination is then characterised by a high degree of conflict, yet needs to resolve this ambiguity and conflict in approving a plan. Multiple housing requirement figures - a product of a more localised system open to a wider range of actors - can lead to original household projection figures taking on *greater* significance than an intended 'starting point'. Inspectors often revert to the household projections by default as there are so many different interpretations of what level of housing is required. A consultant portrayed the examination as an intrinsically uncertain process:

"you don't know what an inspector will come out with…you've got a number of competing numbers being kicked around, the council's and the developers', and often the developers aren't speaking with one voice. Therefore, you don't quite know what an inspector will say, so that leads to uncertainty" [planning consultant A]

These uncertainties create circumstances where the official household projections figure takes on considerable significance in the eventual figure accepted at examination. If participants cannot through localised governance arrangements reach an evidence-based consensus on what housing requirements are, then little progress is made beyond the 'starting point' of the household projections. The starting point becomes the end point, and negates the intentions underpinning a more localised system.

Discussion and Conclusion

Changes in the governance landscape for planning and the economy's emergence from recession provide a basis for reassessing household projections as a critical policy tool of centralised control over housing delivery. The use of household projections in planning for housing has shifted from a low ambiguity/high conflict environment towards a more localised and market-oriented focus on housing supply and demand (Matland, 1995; Bramley, 2013). This has been facilitated by an increase in policy ambiguity linked to other contextual factors that increase ambiguity in interpreting that policy, and diminution of the policy significance of household projections in identifying housing land requirements in development plans in England and Wales. This is evidenced by the research and other accounts (Gallent and Tewdwr-Jones, 2007, p.152). Using Matland's (1995, p. 168) argument, the increasing ambiguity of planning policy on household projections could be seen as an intended means of managing or diminishing the conflict that typically arises over housing numbers. The way that the policy is framed, and the ambiguity read by stakeholders into that framing, does however result in

what Matland anticipated as "a proliferation of interpretations" (p. 168). Household projections nevertheless remain a key feature of plan-making due to the simplistic familiarity they hold for planners and decision-makers. This highlights that even as central policy ambiguity rises local actors attempt to frame policy implementation debates in previous low ambiguity terms – that is, the projections are 'targets' and must be met - in an attempt to convince others of their given interpretation. Matland (1995, p. 168) identified too that symbolic policies in cases of high policy ambiguity and high policy conflict could either confirm new goals or reaffirm commitments to old goals. The apparent shift from a top-down and formal role for household projections as 'housing targets', towards a more ambiguous 'starting point' for identifying housing requirements within a localised system, presents a series of tensions which are not, at least within our case study of Wales, entirely resolved.

The use of household projections in planning for housing has been criticised for its emphasis on trend-based planning and lack of engagement with economic factors which may not align to current needs or future plans (Murdoch and Abram, 2002; Adams, 2011). The Welsh case study highlights the danger of planning based on past trends and the difficulties that arise when drastically different household projections supersede previous ones, particularly during the plan-making process. In this case ambiguity initially increased due to the publication of updated household projections, rather than any change in top-down government policy resulting in goal ambiguity. This adds a new dimension to Matland's ambiguity conflict matrix, as the shift from one pairing to another occurred not through policy change but an external factor that acted as a key referential goal. This has wider implications for the use of household projections in planning for housing within a plan-led system. The lack of sensitivity to policy changes and the intentions of local plans must be addressed. Local plans risk failure, for example, if the household projections based on past trends do not align to the plan's ambitions for employment growth. Our interviewees were aware of the limitations of household projections, yet political and other pressures risked dictating the use of household projections to restrict housing growth that resulted in a disconnection between projections and plan. This highlighted further ambiguity of means as actors struggled to understand how best to use the revised household projections and their effects on their local plans. The fact that this was a common concern at plan examination highlights the tension between using household projections as a 'starting point' and the potential manipulation of them for other means.

The implementation of a more localised system, within a policy environment more open to interpretation and where localised variants are actively encouraged, also creates space for greater 'testing' of household projections data. This allows for greater levels of customisation, consideration

of local context, and potentially better fit between plan and housing provision, however it also can result in conflict when different stakeholders bring forward multiple household projections forward. As similarly argued by Baker and Wong (1997) for strategic housing land allocations, in local instances it also becomes important for the calculation of projections and the assumptions that lie behind them to be transparent and evidenced. This may however lead to a range of subjective and competing arguments about what is a valid and appropriately evidenced methodology for household projection calculation, and what forms of data are best to be relied on and lead to those 'long and bitter' debates amongst professionals that Matland (1995, p. 169) anticipated. This distorts the idealised image of the rational, technical process of household projections as a means of identifying housing demand as they are increasingly localised and contested.

Localisation of housing provision and an environment of contestation feeds into the 'housing numbers' game. Backed by a policy that allows the introduction of alternative projections and considerations planners, politicians, developers, and other stakeholders often develop positions and define an approach that supports the housing number they desire for inclusion in the local plan, but also with an awareness that such a figure will likely be contested regardless of the evidence provided. This incentivises the stakeholders in the process to typically choose housing numbers that are more extreme with the realisation that their competing interests will ultimately be moderated by the arguments put forward by others. The introduction of vastly different household projections resulted in further local emphasis on coercion and bargaining over problem solving or persuasion. In this environment official household projections often play a key role as a baseline from which the process is regulated. In an age of austerity local authorities are increasingly at a disadvantage in challenging housing numbers due to lack of resources and talent to develop alternative projections (Hastings et al., 2015). Emaciated local planning authorities must become increasingly innovative (Fuller, 2017) or risk falling back on official household projections.

Debates around the validity of varied localised household projections play out during plan preparation, however our research identifies a tendency for inspectors to 'fall back' on official household projections when consensus has not been achieved on housing figures. The prominence given to this deterministic rationality negates efforts towards a more decentralised approach to planning for housing. As a result, the previous low ambiguity framework continues to hold sway in the policy implementation process despite efforts to shift it towards a high ambiguity environment. While perhaps more locally contested, the use of household projections in identifying housing requirements has partially maintained the traditional predict-and-provide role identified decades ago. Household projections therefore continue to hold greater sway during the development and examination of local

plans than is warranted. Matland (1995, p. 171) argues that ambiguity should not necessarily be seen as a flaw of central policy, and could be read as an empowerment of local interests responsible for implementation of that policy. A key motivation for Matland developing his framework was to overcome the top-down/bottom-up models of policy implementation. Nevertheless, his framework acknowledges that the distinctions of those models do remain important. The critical challenge, to follow Matland's argument, is to forge sufficiently strong local coalitions that can work within the policy framed in more ambiguous terms by central government, or a policy that is made more ambiguous by contextual factors such as economic recession, and find ways of working through the conflict between different parties. We identified in the empirical material some evidence that developers saw the value of forming coalitions and collaborating on housing numbers, yet had not always managed this successfully. Similarly, we also found that skills and resources within local planning authorities were often not sufficient to respond to a wide range of differing interpretations over housing requirements. Policy outcomes in high conflict and high ambiguity contexts, Matland (1995, p. 168) stated, will be "determined by the coalition of actors at the local level who control the available resources". Ultimately, this research highlights not only the ambiguity in policy itself and its impacts on implementation, but also the previously unexplored importance of referential goals in policy implementation that are outside of direct government control, and how they act as a key instigator of ambiguity and object of contestation.

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