**Exception and rule: how the ‘Standard Method’ fails to govern England’s housing requirement**

**Introduction**

There is a growing literature on the calculative practices that underpin how various governments seek to control housing supply through the assessment of a society’s housing requirements. Important work in this regard can be found in some of the cities and nations where the related issues of housing unaffordability and under-supply have become a prominent political concern, including Australia, Canada and the USA (Li and Shan, 2020; Palm and Whitzman, 2020; Rowley et al., 2017).

A prime example of a nation that has sought to use assessments of housing requirement to govern the supply of new dwellings is England. The history of the English approach to understanding variations between housing supply and requirement has been documented thoroughly (see for example, Bradley, 2020; Bramley, Karley and Watkins, 2005; Bramley et al., 2010; Bramley, 2012). However, it is clear that despite various methods of assessing housing requirement the gap between the supply of new dwellings and demand has remained significant. The question, “why aren’t we building enough homes?” has now been posed by a wide range of industry commentators (Bentley, 2016; Johnston, 2015; Hannah, 2017; Stokel-Walker, 2015; Morton, 2012; UK Construction Online, 2020) with little appreciable effect: the rate at which the supply of new homes has grown consistently has consistently lagged behind forecast requirement. For example, Wilson and Barton (2018: 3) reported that in 2017/18 around 222,000 new homes were built in comparison with estimates of annual housing requirement that ranged between 240,000 and 340,000. Research by the BBC in 2020 argued that the gap between demand for new housing and supply had grown to over 1 million dwellings (BBC, 2020).

It is against this backdrop that the Standard Method of assessing housing requirement in England was introduced in February 2019 as a technocratic measure to discipline the market into delivering the scale of new development that is believed to be required. Prior to the introduction of the Standard Method, throughout the 20th and 21st Centuries, local authorities in England had been allowed significant freedom in determining the level of housing required in their jurisdiction. Much of this work was out-sourced to private planning consultancies in the form of Strategic Housing Market Assessments (Ferrari et al., 2011). But, in 2019, this most fundamental feature of planning practice – the overall regulation of housing supply – was refocused with the introduction of the Standard Method, shifting practice from private consultancies to a simple, open-source, nationally prescribed calculation. The Standard Method, therefore, contrasts starkly with other forms of calculative practice that determine built environment outcomes, such as the evaluation of development viability by the house building industry, that are variable in content and process, often opaque in the interests of corporate confidentiality and consequently restricted to industry ‘experts’ (McAllister, Street and Wyatt, 2016). The Standard Method, by contrast, represents an attempt to exert central governmental control over housing supply by circumscribing the terms of local authority decision making through the instrument of a calculative process.

This shift in practice could be understood as emblematic of the thoroughly chronicled but unpredictable metamorphic twist in neoliberalism (see essays in Cahill et al., 2018). From this perspective the roll-back neoliberalism (Peck and Tickell, 2002) of the 1990s and 2000s that allowed the private development industry and its agents to define the contours of local housing markets, managing supply through locally brokered cooperation (Christophers, 2013) can be understood as being replaced by a (re)turn to an authoritarian strand in neoliberalism that resituates the state as a more active agent of market control when the roll-back phase has conspicuously failed to deliver. This hands-free/hand-on binary has been understood to be a hallmark of some aspects of the neoliberal project that mirrors the pre- and post- conditions of the global financial crisis (Peck and Theodore, 2019). The recession-prone nature of the house-building industry, therefore, perhaps makes it particularly suitable for the imposition of the Standard Method as a means to exert central control over local outcomes.

As an instrument the Standard Method comprises two components: a demography-based assessment of household growth using Office for National Statistics (henceforth, ONS) population projections (e.g. ONS, 2018a, 2018b) and an affordability ratio that considers median house prices relative to median work-place-based incomes. The result is a target number of dwellings for each Local Planning Authority (henceforth LPA) which, when taken together, determines how the production of new dwellings will be distributed across England. The approach is fundamentally driven by the underlying logic that if each LPA were to meet their local target the aggregated national picture would represent a supply side re-alignment to meet demand. In this way the national government uses the Standard Method to discipline LPAs to plan for a prescribed component of national housing requirement.

However, it is clear that there are both practical and conceptual issues with this approach. Two significant problems with the method include, firstly, the difficulty of overlaying this top-down target driven method of identifying housing requirement onto a development industry that is private and driven by its own business models and, secondly, the omission of a significant number of variables that have a significant bearing on housing requirement. It is, therefore, perhaps unsurprising that research by the planning consultancy, Lichfields, found that the response to the introduction of the Standard Method by many local authorities was not what government had intended:

The Standard Method was introduced in order to provide a simpler, quicker and more transparent approach that would speed up and simplify plan making and ensure delivery of sufficient homes throughout the country. However, certainly in the short term, local authorities’ response to the Standard Method has resulted in local housing requirements being significantly reduced, rather than increased, undermining the Government’s aim to boost housing delivery to 300,000 dpa (*dwellings per annum*). (Bickerdike, 2019: 1, parentheses added)

The situation described above represents a complex context where the determination of new development is set by multiple competing interests interacting in a space characterised by markedly contrasting approaches to the economics of the question. Private real estate developers responding to market pressures may argue, in line with the quotation above, that the Standard Method’s account of housing requirement underestimates levels of demand. Similarly, LPAs are charged with implementing local policy to meet a nationally specified target but are also under pressure from anti-development councillors and citizens who have the right to submit evidence to contest the target in an attempt to reduce the amount of new development, particularly in areas of environmental quality. It is perhaps little wonder that this odd assimilation of command economy-style targets, local democracy and a demand-driven private development industry has not successfully delivered the housing the country is said to require.

In this paper we seek to systematically unpack the Standard Method for the assessment of housing requirement. In so doing, our aim is to dismantle this purportedly objective assessment of housing requirement in order to reveal the normative principles buried within. In so doing we seek to show how the performance of the calculation reveals contradictions and ambiguities. Furthermore, we argue that the Standard Method actually propagates established patterns of uneven geographic development that are in conflict with the government’s stated objective of building 300,000 new homes per annum with a preference for this development to take place on previously developed urban land. To make this case we begin by setting out the Standard Method and the principle that only in the presence of ‘exceptional local circumstances’ can local authorities deviate from its use. Following this discussion, we provide an analysis of what might count as an evidence base for thinking of LPAs as ‘exceptional’ solely in the terms of the inputs to the Standard Method. We conclude that the range of local authorities that might be understood as experiencing exceptional local circumstances in relation to one or more of these inputs is very significant indeed. We go on to provide a statistical analysis of the Standard Method which reveals the normative decision for some inputs to be weighted more strongly than others. In conclusion we note that it is these normative aspects of the Standard Method that result in a distribution of housing requirement that follows a well-worn path: significant levels of development identified as required in London and the South East and low levels elsewhere, particularly in the deprived ex-industrial towns of the north and midlands.

**The mechanics of the Standard Method**

The Standard Method is a housing requirement model that comprises a demographic projection model and an adjustment to account for affordability (which includes a cap to prevent a major uplift in the housing requirement in any single local authority). The decision about what to include/exclude in a housing requirement model is an indication of a normative position about the relative importance of different variables. As such calculations performed in line with the Standard Method are calculative practices that are politically performative. A substantial literature has emerged to understand calculative practices that materially determine planning and development outcomes (e.g. McAllister, Street and Wyatt, 2016; Crosby and Henneberry, 2016; Murphy, 2019), but to date there has been no analysis of the Standard Method from this perspective.

The Standard Method displays normative assumptions about a large number of issues. In short, the assumptions within the model relate to every step of the calculative process and include assumptions about who should share a single dwelling, whether market and economic factors impact on housing requirements and whether other policy considerations should be included. The Standard Method, therefore, defines what is ‘normal’ housing requirement. As the guidance from MHCLG puts it: “The standard method uses a formula to identify the minimum number of homes expected to be planned for, in a way which addresses projected household growth and historic under-supply.” (MHCLG, 2019: 1).

National Planning Policy Guidance places a requirement on LPAs to adopt the housing number implied by the Standard Method. Whilst exceeding the target that results from the Standard Method is permitted, an LPAs capacity to argue for a lower target is proscribed unless it can be demonstrated that there is clear evidence of ‘exceptional local circumstances’:

‘Where a strategic policy-making authority can show that an alternative approach identifies a need higher than using the standard method, and that it adequately reflects current and future demographic trends and market signals, the approach can be considered sound as it will have exceeded the minimum starting point.

Where an alternative approach results in a lower housing need figure than that identified using the standard method, the strategic policy-making authority will need to demonstrate, using robust evidence, that the figure is based on realistic assumptions of demographic growth and that there are *exceptional local circumstances* that justify deviating from the standard method. This will be tested at examination’. (MHCLG, 2019; emphasis added).

In what follows we seek to set out the mechanics of the Standard Method before exploring this concept of exceptionalism and the degree to which it could be a meaningful claim for a number of LPAs.

1. Setting the baseline

The projected increase in the number of households over the next ten years sets the baseline (e.g. projected number of households in the local authority in 2030 minus the projected number of households in the local authority in 2020). Whilst it was originally planned that the projections would be updated every two years, using the most recently available data, this decision was rescinded as the use of the 2016 data resulted in a much lower national housing requirement assessment than the government’s national house building target. This points to two important features of the Standard Method’s development. Firstly, it is clear that the computation of the Standard Method represents normative prescriptions - the calculative method is adjusted to fit the target rather than a purely objective process that allows the assessment of housing requirement to fluctuate with the choice of inputs. Secondly, it points to the significance and vagaries of a demography-based model. Extrapolations based on data sets released just two years apart can have a significant effect on the assessment of housing requirement if demography is strongly weighted.

The ONS’ household projections are based on a cohort component method that requires an estimate (and then projection) of a local authority’s population. This approach essentially takes a snapshot of the population and then rolls forward recent trends for each age-sex group within that population to arrive at a projection of the population. In order to get to the snapshot/first point in time, the ONS use data from the latest Census (i.e. 2011) and the recorded live births, recorded deaths, fertility rate, crude death rate, recorded absolute in- and out-migration from within the local authority area and estimates of international in- and out-migration in the intervening period (e.g. nine years between 2011 and 2020). This step allows an estimate of the population predicated on the accuracy of each of the inputs. To convert the population estimate into a household estimate a household representative rate (based on the trend in recent population counts, i.e. 2001 and 2011 censuses) is applied to each population cohort. This gives an estimate of households for each cohort.

From the estimate of the population the projection adds in the number of people that have been added to each cohort according to recent trends (normally the last five years of recorded data). This approach is, therefore, contingent upon the accuracy of the records of births, deaths, in- and out-migration in the last five years for each cohort in the age-sex structure of the local authority. The same household representative rate can then be applied (or trend) to convert this population change to a household change.

The difficulty of using trend-based projections in predicting housing requirements has been highlighted regularly throughout the history of assessing housing requirement. For example, Baker and Wong (1997: 76) note that:

“As the household projections are trend-based forecasts, any new changing socio- economic circumstances that affect the components in the model may not be reflected in the current projections. On the one hand, this retrospective approach means the assumptions sometimes lag behind events (Shaw, 1994). On the other hand, if unusual changes in the very recent socioeconomic trends such as the 1989 recession are picked up, they can exaggerate the effect of changes because the projections are carried out by applying decreasing weightings to the more historical data points in the time series.”

Over time, the accuracy of household projections has been predicated upon stability in the type and formation of households (Holmans, 2012). As household types changed over the 20th century as a result of increases in trends such as divorce, co-habitation and multi-generational households, the historic household projections became less accurate. As such, the 2014-based ONS household projections will be more accurate if household types look similar in 2030 to the backward trends prior to 2014. Any changes in birth rates, death rates and household types in the intervening period will lead to inaccuracy.

Household projection-based estimates of housing requirement have also been criticised for an over simplistic account of the role of finance and the economy in determining the housing market and issues of equity in housing provision (Bramley, 2018; Barker, 2019).

Three normative positions within this step can be identified. First, future household types should conform to previous household types as projected in the ONS statistics. Second, it is assumed that there are the same number of adequate dwellings as the number of households at the beginning of the projection period (i.e. all housing is adequate, regardless of either housing quality or household size). Third, the 2014 household projections are assumed to be a better reflection of the government’s desire to minimise the impact of constraints in household formation than later projections, even when affordability has been taken into account.

1. An adjustment to take account of affordability

The second stage in the Standard Method is to inflate the household projection to account for existing housing requirement that is the result of housing unaffordability, as measured through the ratio of local median house prices relative to local median income. To reflect the argument that housing supply needs to be greater in areas that are less affordable, the Standard method employs an indicator of affordability to increase the housing requirement number in the least affordable local authorities. The MHCLG guidance justifies this adjustment on the grounds that:

“household formation is constrained to the supply of available properties - new households cannot form if there is nowhere for them to live; and people may want to live in an area in which they do not reside currently, for example to be near to work, but be unable to find appropriate accommodation that they can afford. The affordability adjustment is applied in order to ensure that the standard method for assessing local housing need responds to price signals and is consistent with the policy objective of significantly boosting the supply of homes. The specific adjustment in this guidance is set at a level to ensure that minimum annual housing need starts to address the affordability of homes” (MHCLG, 2019).

This adjustment accounts for the ratio between average house prices and median work placed incomes and is defined by:

The local affordability ratio is determined by dividing median house prices by median gross annual workplace-based incomes for the local authority.

The Office for National Statistics produces the median house price data for each LPA. This is the annual median house price within a local authority for all dwellings sold and registered with the land registry in any year. The data is very close to the entire population of transactions and is updated annually (indeed it is available quarterly), providing a high degree of certainty, regularity and comparability between local authorities. However, it is possible that median sold house prices are a poor reflection of the housing market if there is a discrepancy between the local authority geographic boundary and housing markets that sometimes straddle administrative geographies.

The median workplace-based incomes are taken from the Annual Survey of Hours and Earnings, which comprises an annual snapshot of full-time earnings, annualised from the workplace. This is a national survey and is standardised, thus presenting a high degree of comparability between local authorities. However, there are some limitations to it for understanding housing related incomes. This approach does not factor in the distribution of earnings from part-time employment, from non-workplace-based earnings (e.g. pensions) or the composition of households, which relates to household income and the ratio between household income and household housing costs.

Thus, for stage two of the Standard Method it is possible to conceive of exceptional circumstances as referring to median house prices, median workplace-based incomes, or the affordability ratio.

There are also two clear normative positions within this part of the process by which the Standard Method is calculated. First, housing requirements should reflect the level of affordability within the local authority. Second, that median house prices and median work-based incomes reflect the goals of housing provision and that increasing housing supply will result in housing becoming more affordable. This includes the assumption that there is a single housing market in operation within the local authority and that house price changes will be affected across the market through supply in any location within the local authority’s spatial boundaries.

1. Capping the level of any increase

The combination of stages one and two could result in a significantly different assessment of housing requirement than the local authority’s existing assessment in the local plan, which would remain current so long as it was adopted in the last five years. As such the Standard Method enables the local authority to limit the impact on the ability to provide sufficient land supply by limiting the increase to 40% above the existing requirement figure.

The MHCLG guidance also suggests that other considerations can be appropriate in relation to the cap. This can include considering any difference between previous estimates of housing requirement and that resulting from the Standard Method. Capping any increase at 40% is permissible under MHCLG guidance. This admission of housing requirement assessments produced under a completely different methodology represents a normative position in that it allows local historic planning policy to be considered. This suggests that exceptional circumstances refer not just to the degree of housing requirement identified in stages one and two of the Standard Method, but the circumstances of previous local plans too.

An important aspect of this debate on the mechanics and use of the Standard Method is the fact that, although the National Planning Policy Guidance specifies the requirement for ‘exceptional local circumstances’ to be demonstrable in order to deviate from the Standard Method, there is no formal legal definition of what ‘exceptional local circumstances might comprise. So, what counts as exceptionalism and how could it be measured? To address this question we present a statistical analysis for all 326 local planning authorities in England to explore the circumstances under which local authorities might be able to claim some degree of exceptionalism.

**Is exceptionalism the rule?**

To explore the question of what counts as exceptionalism in the context of the Standard Method we must first establish the full distribution of housing requirement for all 326 local authorities in England determined by the Standard Method. Figure 1 sets out this distribution with some illustrative examples identified.

**FIGURE ONE ABOUT HERE**

One of the first observations to make is that this distribution does not take into account any aspect of local context. The median authorities in the set of 326 local authorities in England are Oxford and Bracknell Forest with an annual housing requirement of 603 dwellings per annum. These are immediately surrounded by Norwich and Mendip (below) and East Hampshire and Taunton Deane (above). The Standard Method requires each authority to produce a similar quantity of new housing per annum (599 for Mendip – 606 for Taunton Deane). However, these are contextually very different local authority areas. One way of understanding this variation is in relation to a local authority family typology (originated by Vickers, 2003 but updated most recently in Lord et al. 2020) which is designed to group similar authorities together into six family types: Commuter Belt, Established Urban Centres, Rural Towns, Rural England, Urban England and Urban London. This places these six authorities clustered around the median in four of the six different family groupings: two in the ‘Commuter Belt’ category (Bracknell Forest and East Hampshire), two in ‘Rural England’ (Mendip and Taunton Deane) one in ‘Urban England’ (Oxford) and one in ‘Established Urban Centres’ (Norwich).

Beyond these important contextual differences between authorities there is no understanding in the Standard Method of the scale of new development required relative to the existing housing stock. For example, Leeds is in the top decile on the absolute measure of housing requirement resulting under the Standard Method (2805 new dwellings; 319/326 - throughout the paper all rankings are reported in the order low-high). Less than 3% of English LPAs have to accommodate a larger absolute number of new homes. However, for this large urban authority this translates as just 8 new dwellings for every 1000 that already exist. In the overall rank of English LPAs this places Leeds at 116/326. By contrast, for the authority with the highest level of housing requirement in Figure 1 (Tower Hamlets, 4425 new dwellings per annum) this also represents the most significant proportionate addition to the existing housing stock of all local authorities in England (36 new dwellings per 1000). These statistics are represented in Figure 2.

**FIGURE TWO ABOUT HERE**

The observations above point to some of the anomalies that are masked behind the headline measure of housing requirement provided by the Standard Method. To investigate this further we consider three specific inputs: fertility rate, net migration and household projections as at 2031 (extrapolated from a base year of 2014 as per the requirements of the Standard Method).

1. Net migration rate (2018)

To illustrate the nature of the inconsistencies that result from the Standard Method it is instructive to consider the position of one of the median authorities, Oxford. With respect to several of the inputs that comprise the Standard Method, Oxford can be understood as typical. For example, the 603 new dwellings that are required under the Standard Method represents 10 new dwellings per 1000 when considered relative to the existing housing stock which is unremarkable when placed in the wider context of all other English local authorities (175/326; the 53rd percentile). However, when considered in relation to the 2018 net migration rate Oxford occupies a very different position in the distribution (Figure 3).

**FIGURE THREE ABOUT HERE**

Ranked 7th out of the 326 local authorities in England fewer than 2% of English local authorities had a lower net migration rate. Surely this could be understood to make Oxford, the median authority on the Standard Method’s account of housing need, to be exceptional on this specific measure?

The anomaly is even greater for some London boroughs. These authorities are those with the greatest housing requirements in England yet with some of the lowest net migration rates in England. For example, Newham had the lowest net migration rate in England in 2018, yet also the second highest housing need requirement (3805 dwellings per annum) of all the local authorities in England – only Tower Hamlets had a higher requirement under the Standard Method. A similar state of affairs can be identified in the 2018 net migration rates recorded in other London boroughs: Haringey (2/326), Ealing (3/326), Brent (4/326) and Barking and Dagenham (5/326). The scale of the exceptionalism represented in the statistics above is extreme. One of the most significant inputs to the Standard Method results in authorities with some of the lowest (and *the* lowest) net migration rate recording housing requirements in the top decile.

1. Fertility rate (2018)

Another measure on which some London Boroughs might be understood to be exceptional is the 2018 fertility rate. For example, with an annual housing requirement of 2183, only 13 (4%) local authorities were required to accommodate a larger absolute amount of residential development than the London Borough of Lambeth. However, Lambeth’s fertility rate of 1.23 was the sixth lowest recorded by any local authority in England in 2018 – 98% of English local authorities recorded a higher fertility rate. Similar observations could be made for other London authorities with regard to the 2018 fertility rate: (Camden 1/326, Westminster 3/326, Islington, 5/326, Tower Hamlets, 9/326).

These examples point to significant internal inconsistencies that are masked by the headline statistics produced by the Standard Method. On this basis it would appear clear that some of local authorities with the most significant housing requirement numbers in the country could claim exceptional local circumstances on the basis of a very low fertility rate.

**FIGURE FOUR ABOUT HERE**

1. Household projections as at 2031 (2014 based).

Inconsistencies can even be found with regard to the household projections data. For example, Epsom and Ewell, 42% of which lies in the Surrey greenbelt (Atkins, 2017), has an annual housing requirement of 577 new dwellings per annum (152/326). However, the scale of the proportionate increase required relative to the existing housing stock is significant at 18 new dwellings per 1000 (310/326) - only 5% of English authorities’ housing requirement is greater relative to the existing housing stock. Yet Epsom has a forecast household formation as at the year 2031 of just 37,967 (37/326) - only 11% of authorities have a lower forecast rate of household formation.

**Unpacking the statistics of the Standard Method: a log-log model of housing requirement** **elasticity**

The analysis presented above reveals a scale of ambiguity resulting from the Standard Method that is perhaps more likely to result in legal contestation of local authorities’ housing requirement assessments than new development. Even the Ministry of Housing, Communities and Local Government has come to acknowledge the Standard Methodology’s deficiencies and has signalled a review of the approach:

“Reviewing the formula for calculating Local Housing Need – we will introduce a new approach which encourages greater building within and near to urban areas and makes sure the country is planning for the delivery of 300,000 new homes a year” (MHCLG, 2020: 5).

If the goal is, as the statement above suggests, to favour urban brownfield (previously developed) land for new development the Standard Method is not the appropriate method to achieve this. Many of the towns and cities in the north and midlands of England which have significant brownfield sites and would potentially welcome new development as part of a suite of measures to encourage urban regeneration have housing requirement figures that are low (bottom decile) relative to the rest of England both in absolute terms and proportionate to the size of the existing housing stock. Many of these towns are precisely those that have been caricatured as ‘left behind’ –Blackburn with Darwen, Blackpool, Darlington, Hartlepool, Redcar and Cleveland.

So why does the Standard Method produce such an anomalous distribution of housing requirement?

In order to understand the mechanics of the Standard Method we present an analysis of the contributions made by the input variables to the variations in the Standard Method’s assessment of housing requirement experienced across local government in England. To achieve this goal we use a log-log model comprising two levels of analysis. Firstly, we analyse the relative impact of the two components that constitute the Standard Method, the projected growth in households in a local authority area and the affordability ratio. Second, we use the same log-log method to unpack the individual variables that comprise these two components of the Standard Method.

1. First Level Analysis: the log-log approach with respect to household projections and the affordability ratio

The Standard Method’s estimation of future housing requirement is a result of household projections (extrapolated from 2014-based data) multiplied by an affordability adjustment. This can be expressed mathematically as:

where the is in function of affordability ratio.

The Standard Method models housing requirement using an equation of nonlinear form (i.e. z=xy) in which both the projected growth in household formation and the affordability adjustment (as well as the affordability ratio) are positively and nonlinearly associated with housing requirement. In this context the significance of one input variable’s effect on the outcome cannot be rigorously isolated from the other input variables. Furthermore, the units and ranges of the variables are very different (e.g. housing requirement varies from 0 to thousands of dwellings whilst the affordability ratio varies within 3 to 35) and are incomparable when discussing the contributions/weights to the variations in housing requirements. These features of the Standard Method’s construction mean that it is necessary to take a natural logarithmic transformation which can be written in a log-log regression as:

In principle, a log-transformation is used to translate a non-linear model into a linear model. The log-transformation does not change the underlying relationship between the dependent and independent variables but it does allow for an interpretation of the relative significance of input variables with respect to variations in the output variable. For example, following the log-log transformation the interpretation of the coefficient can be understood as an expected percentage change in the housing requirement figures attributable to a given percentage change in the projected household growth variable. A similar interpretation also applies to the coefficient with respect to the affordability ratio. This concept is commonly referred to as ‘elasticity’. Following this terminology, we refer to the coefficients of the log of household growth projection and the log of the affordability ratio as the corresponding elasticity measures of the Standard Method for housing requirement. An outcome variable is typically said to be elastic (inelastic) to the change in an independent variable when the coefficient is equal to or greater than (less than) one.

To estimate the value of the unknown parameters in the log-log model we can undertake an Ordinary Least Squares (OLS) regression from the above log-log model which yields coefficient estimates (p-value = 0.00) and (p-value = 0.00). Both the log of the household growth projection and the log of affordability ratio are positively (and linearly) associated with the log of assessed housing requirement. By holding all other inputs constant, a 1% increase in the household growth projection will increase the assessment of housing requirement by 0.88%. Similarly, by holding all other inputs constant, a 1% increase in the affordability ratio increases the assessment of housing requirement by 0.34%. The Standard Method’s assessment of housing requirement is more responsive (elastic) to the projection of household growth than the affordability ratio.

The relationship between the assessment of housing requirement with the projected growth in households and affordability ratio can be illustrated in a two-by-two matrix as set out in Figure 5. The matrix considers low and high levels of the affordability ratio in the row vector and low and high levels of projected household growth in the column vector. It follows that the Standard Method of housing requirement will be relatively high when the growth in projected households and the affordability ratio are high in combination (denote H-H). Conversely, assessed housing requirement will be relatively low when both the projected growth in household formation and the affordability ratio are low (L-L). When affordability ratio is low but household projection growth is high (L-H), or the other way around (H-L), the housing requirement prediction will be moderate. Moreover, since the assessment of housing requirement is more responsive to the change in the projected growth in households than to changes in the affordability ratio, those local authorities that experience (L-H) state on average might yield higher housing requirement than those where (H-L) prevail.

**FIGURE FIVE ABOUT HERE**

1. Second Level Analysis: the log-log approach with respect to the input variables to household projections and affordability ratio

To dissect the Standard Method further we must consider the range of variables that individually comprise the two general categories that define the Standard Method. The two constituents of the Standard Method (the projected growth in household formation and affordability ratio) are themselves comprised of a number of socio-economic variables. The affordability measure is determined by a ratio of median house prices to median workplace-based earnings. The projected growth in households is comprised of various inputs including population projections, net-migration rate, births, deaths, fertility rate and the crude death rate. In order to assess how important each of these constituent variables is to the variations in assessments of housing requirement we model the housing requirement prediction by the log-log model using each of the input variables that comprise the affordability ratio and the projected growth in household formation: median house prices, median workplace-based earnings, population projection (2014-based), net-migration rate, total fertility rate and crude death rate[[1]](#footnote-1). The log-log model is formulated as:

The result of the log-log regression is reported in Table 4. This shows that the logarithmic values of median house prices, the population projection, net-migration rate and the total fertility rate are all positively (and linearly) associated with the log of the Standard Method’s assessment of housing requirement, while the logarithmic values of median work place-based earnings and crude death rate have a negative (and linear) association. Considering the two component variables of affordability ratio, the coefficient estimates of the median house price and median earnings are and respectively, indicating that the assessment of housing requirement is more elastic to the change in the median house price than the change in the median work-place based earnings. On the other hand, among the four component variables considered in the household projections, the coefficient estimate of population projection is indicating that the assessment of housing requirement is close to being unit elastic to the change in population projection. The coefficient estimates of fertility rate and crude death rate are 0.312 and -0.278 respectively, indicating that the Standard Method’s assessment of housing requirement is not very responsive to a change in either the fertility rate or the crude death rate. Lastly, the coefficient indicates that the Standard Method’s assessment of housing requirement is almost non-responsive to the change in net-migration rate.

Table 1 Regression result from log-log model of housing requirement on layer 2 inputs

|  |  |
| --- | --- |
| Input variable | Coefficient estimate (p-value) |
| Log of median house price | 0.799 (0.00) |
| Log of median WPB earnings | -0.398 (0.00) |
| Log of population projection | 1.050 (0.00) |
| Log of net-migration rate | 0.059 (0.09) |
| Log of total fertility rate | 0.312 (0.46) |
| Log of crude death rate | -0.278 (0.25) |
| Adjusted | 73.1% |

The housing requirement elasticity analysis demonstrates that the input variables that comprise the Standard Method actually have a differential impact on explaining the outcome statistics - the level of new housing required in each LPA.

By far the most significant determinant of the output statistic is the projected growth in household formation which is 2.6 times as elastic as the affordability ratio with respect to the assessment of housing requirement. For those local authorities where these two features combine (the H-H category from Figure 5) the result is some of the greatest housing requirement figures. The best examples of this are the London authorities. Indeed, nine of the top ten local authorities with the greatest absolute levels of housing requirement under the Standard Method are in London (Tower Hamlets, Newham, Southwark, Barnet, Enfield, Hackney, Haringey, Lewisham, Croydon, Islington) where both the projected rate of household growth (ranked between 297 - 326) and the affordability ratio (rank between 203 - 319) are high. In other areas where the projected rate of household formation is lower but house price inflation has far outstripped median incomes it is still possible for a significant scale of housing requirement to result - such is the case with the example of Epsom discussed earlier.

When we look more deeply into the input variables of the Standard Method changes in house prices, earnings and population-led estimates of household formation contribute most to variations in housing requirement. By contrast, changes in housing requirement are not very responsive to changes in fertility rate, crude deaths and net-migration rate. Yet, many could claim exceptional circumstances that would warrant higher housing targets if the mathematics of the Standard Method accorded different variables a greater degree of significance. For example, some authorities are exceptional in ways that are not valorised by the Standard Method – Blackburn with Darwen has the sixth highest fertility rate in England, but has one of the lowest overall levels of housing need in England 157 dwellings per annum; 16/326). Fylde District Council has the 8th highest rate of net migration in England but is assessed to require just 271 new dwellings per annum (52/326) under the Standard method. Both these are variables that are shown by our analysis to be much less significant in the Standard Method than the demography of household formation and affordability.

But is a Standard Method that is so heavily biased towards demography and affordability accurately portraying housing requirement or does it just perpetuate existing developmental path dependencies? Indeed, there is an extensive academic critique of housing models that are dominated by demographic growth projections that extrapolate from historic records (e.g. Ferrari, Leahy Laughlin and Watkins, 2011; Bramley and Watkins, 2016). The vagaries of the demographic basis of the Standard Method are writ large in the instruction to local authorities to use 2014-based ONS projections when more recent data exists. The reason for this is that when the ONS 2016 population figures were released, the use of this data resulted in a significant reduction in housing requirement in many local authorities, in some cases a reduction of around 35% in the target number of dwellings. The analysis in this paper shows this to be unsurprising. The Standard Method is so responsive to changes in the projection of household formation that even subtle changes in this input variable can have a considerable impact on the assessment of housing requirement. However, rather than concluding that this might signal a problem with the Standard Method itself, government has simply required local authorities to revert to the 2014 base year, in so doing revealing a political, rather than calculative, context for the assessment of housing requirement. Similarly, the bias towards affordability represents a normative understanding that the primary locus of the ‘housing crisis’ can be found in London and the South East of England. However, the degree to which housing will be made more affordable as a direct result of an increase in the supply of new dwellings resulting from the Standard Method’s target-orientated approach is highly questionable. It will take time for new development proposals to come forward and for them to navigate proper planning control as well as the impact of a wide variety of other macro variables such as the availability of mortgage finance, the decision making of international investors and the effects of other shocks such as the UK’s withdrawal from the European Union or the impact of the Covid-19 pandemic.

**Conclusion: Re-thinking the Standard Method**

The analysis contained in this paper shows that the Standard Method for assessing housing requirement in England reveals contradictions and ambiguities. When the Standard Method is run for all 326 local authorities many could be understood to experience ‘exceptional local circumstances’ with respect to just the inputs that comprise the Standard Method. The statistical analysis conducted in this paper shows the origins of this ambiguity to be the normative features of the Standard Method that accord far greater significance to some aspects of how housing requirement is understood than others. Perversely, it is clear that the purported objectives of the UK government - the architects of the Standard Method - are not well served by it. If 300,000 new homes are to be built in, preferably, areas that have urban brownfield land available the Standard Method actively works against this aim: it produces assessments of housing requirement that make the least demands of precisely the authorities that might benefit most from housing-led urban renewal. As Revellino and Mouritsen (2015: 31) argue as, “engines, calculative practices trigger a process of mobilisation of knowledge and insight which become part of the innovation.” In this way, the top down imposition of the Standard Method has innovated a reflective process that uncovers its normative goals in the process of its calculative performance.

Through this process of dissection it becomes clear that the Standard Method represents an example of a calculative practice that is ostensibly objective and transparent but which, through its performance, is revealed to be deeply inscribed with normative judgements that reinforce an established pattern of development. The Method seeks to discipline local planning authorities to permit sufficient new housing to align with an *expected* national portrait of the geography of housing requirement. Yet in so doing it reveals the differences between housing contexts and begs the question of each local authority: in what ways might you be considered exceptional? The very question of exceptionality forces consideration of housing contexts, demographic character, housing market dynamics and broader economic and social projections. Far from disciplining markets into providing more housing, the construction of the Standard Method actually shines a light on the inherent differences in geography and housing markets that become manifest as ‘locally exceptional circumstances’ through the calculative act itself.

Furthermore, the process of establishing the Standard Method as a precept forces consideration of all those features upon which it is silent. For example, the Standard Method simply results in a number of ‘dwellings’ - but a one-bedroom shared ownership apartment and a four bedroomed detached house are not perfect substitutes. It might be desirable for an alternative assessment of housing requirement to be a great deal more specific on the type and tenure of the new homes that are required in each local authority. Furthermore, the Standard Method ignores significant social and behavioural changes in the matching of households to housing types. Under the Standard Method each local authority’s existing housing stock is simply assumed to be adequate. But many British towns and cities accommodate significant quantities of Victorian and Edwardian housing that is not uniformly of adequate quality alongside a large stock of three-bedroom semi-detached housing built in the 1930s and 1950s when average life expectancy was around 60 years. Even if all this housing is assumed to be of suitable quality (which is doubtful) the degree to which it meets the requirements of an ageing population that may be expected to increasingly require smaller, extra care homes is highly debatable. The conspicuous absence of such features from the Standard Method encourages further debate and yields further ways in which exceptionalism might be identified.

Understanding the role of the Standard Method in the failures of the turn towards a more authoritarian form of regulatory control of housing supply might best be understood by reference to the improvisational strain in neoliberalism. From this perspective the construction of the Standard Method, laden with its normative prescription to result in 300,000 new dwellings per annum that follows the existing spatial pattern of development in England, “speak(s) to the lurching and nonlinear (and yet still identifiably frontal) course of neoliberal programs and projects, and to their proclivity for “failing forward” into improvised institutional solutions typically sought and found within a politically and fiscally narrowed solution space” (Peck and Theodore, 2019: 258; Peck 2010).

The depiction of local authorities as individually unique and ‘exceptional’ is more apparent than real, a result of the Standard Method’s performance. However, the revelation of exceptionalism now (re)poses the question, how *should* housing requirement be assessed? The answer to this question will depend upon the next twist in the neoliberal governance of housing supply. One possibility is a modification to the Standard Method - of which there has been one abortive attempt already (MHCLG 2020; BBC 2020b). Alternatively the issue may be devolved back to local authorities, possibly with some behavioural carrot/stick to encourage the *a priori* desired outcome: 300,000 new dwellings per annum to conform with the existing and expected distribution of development.

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1. Nominal births and deaths are not considered in the regression to avoid multicollinearity as they are highly correlated with population (correlations are respectively 0.90 and 0.97). [↑](#footnote-ref-1)