H6.1

Review of consultation submissions regarding *H*6 – *Exploring the Computation of Housing Need in Wirral 2020*

University of Liverpool

Centre for Sustainable and Resilient Cities

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SaRC includes over 40 research active experts covering topics such as population modelling, housing economics, urban design, environmental assessment, development economics, planning practice, architecture, regional governance and local economic development.

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1.0 Introduction

- 1.1 This report reviews a number public submissions in response to *H6 Exploring the Computation of Housing Need in Wirral 2020* (Lord et al., 2020). Some of the submissions include references to, and critique of, previous work undertaken by the Centre for Sustainable and Resilient Cities at the University of Liverpool to support the compilation of evidence to inform the plan making process in Wirral. This report, commissions made in relation to *H6 Exploring the Computation of Housing Need in Wirral 2020*.
- 1.2 It is necessary to recognise early in this report that we hold no brief to defend the *standard method for assessing local housing need*¹ (hereafter *Standard Method*), which government guidance mandates that local authorities should use when calculating housing need in most circumstances². The *Standard Method* is currently under review by the *Ministry of Housing, Communities and Local Government* (MHCLG) and there is an ongoing consultation in relation to proposed changes to the method³.
- 1.3 There are many aspects of housing need that are not addressed by the *Standard Method*, such as tenure, type, availability and cost (e.g. Maclennan et al., 1998; Bramley and Watkins, 1995); the quality of the existing housing stock (e.g. Whitehead, 1991); the geography of housing need and submarkets (e.g. Baker and Watkins, 2009); the prevalence and geography of concealed households (e.g. Powell et al., 2015; Bramley et al., 2018); and the potential impact of dynamic planning on the geography of housing need (e.g. Lord and O'Brien, 2017). Nevertheless, despite its limitations, at the time of writing, local authorities remain under a requirement to use the *Standard Method* unless 'locally exceptional circumstances' can be evidenced.
- 1.4 Credible alternative methods for analysing housing need have been demonstrated in practice by the authors (e.g. Dunning et al., 2020; Dunning et al., 2013). However, whilst it is possible to envisage a different assessment of housing need than the current *Standard Method*, the focus of Lord et al., (2020) and this report is on whether there is a credible and realistic evidence base to justify deviating from the *Standard Method* <u>as</u> <u>permitted under current guidance</u>. This was the remit of the document *H*6–

¹ The 'standard method for assessing local housing need' is the method identified by MHCLG in its guidance for local authorities. In this and previous reports we use the term '*Standard Method*' to refer to this. The details of the *Standard Method* can be found here: <u>https://www.gov.uk/guidance/housing-and-economic-development-needs-assessments</u>

² The government explicitly permits alternatives to the *Standard Method* in 'exceptional circumstances', but within the guidance does not define what constitutes 'exceptional circumstances'. (MCHLG, 2019, Paragraph: 003 Reference ID: 2a-003-20190220)

³ The consultation document was released alongside the White Paper, *Planning for the Future*, on 6th August 2020:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/90 7215/200805_Changes_to_the_current_planning_system_FINAL_version.pdf

Exploring the computation of housing need in Wirral, which set out to address questions in relation to two areas:

i. "To what extent are circumstances in Wirral adequately captured by the standard method by which housing need is calculated? To what extent is there a case for the identification of 'exceptional local circumstances' in Wirral?

ii. How can variations in housing need be understood when different ONS base years are employed?" (Lord et al., 2020)

- 1.5 Some of the public submissions responding to *H6 Exploring the Computation of Housing Need in Wirral 2020* raised points outside the remit of that work. For example, specifically excluded from all previous evidence provided by the *Centre for Sustainable and Resilient Cities* for Wirral MBC, is any evaluation of the mix, type, tenure or location of housing required in Wirral. Hence, in this report we do not offer any evaluation of the relative merits or demerits of arguments advanced in public submissions regarding, for example, the share of any future development that should be apportioned to brownfield or greenfield sites.
- 1.6 It is also important to note that in Lord et al., (2020) we considered Wirral's position relative to all other English local authorities to evaluate what might qualify as 'exceptional local circumstances', given the absence of a clearly defined and legally accepted definition of this term. Since no local authority has successfully challenged the requirement to use the *Standard Method* our presumption is that the criterion of exceptionalism would require a local authority to demonstrate circumstances that are unique or shared by a very small number of other authorities. Ultimately, however, the final arbiter of what would qualify as an exceptional circumstance will be the Inspector appointed to examine Wirral MBC's Local Housing Plan.
- 1.7 The public submissions are wide-ranging and, in some instances, make similar points with regard to specific questions. In this response, as per the terms of our engagement, we limit discussion to the points made in the public submissions that are directly related to the *Standard Method* inputs and process. For this reason, we organise this response in 6 sections that addresses the aggregate of 7 questions which summarise the relevant points raised in the public submissions:
 - i. Why should 'locally exceptional circumstances' be understood solely in relation to the inputs to the *Standard Method*? (Sections 2 & 3)
 - ii. Should Wirral be compared to all other English local authorities or just a sub-set? (Section 3)
 - iii. Why not use an alternative projection, such as the more recent 2018-based numbers from ONS, when extrapolating future household formation? (Section 4)

- iv. Should the 2014-based projected figures for Wirral be regarded as incorrectly calculated? (Section 4)
- v. Is the projected increase in population and households at odds with local evidence suggesting lower rates of growth? (Section 4)
- vi. Are there not possible grounds for identifying locally exceptional circumstances with regard to the demographic inputs to the *Standard Method*? (Section 4)
- vii. When comparing Wirral to other local authorities why did we look at each individual component of the *Standard Method* rather than an aggregate of all inputs? (Section 5)

2.0 Background

- 2.1 The Centre for Sustainable and Resilient Cities has produced four reports for Wirral MBC over the past two years (Williamson, Lord and Dunning, 2018; Simpson, 2018; Lord, Williamson and Dunning, 2019; Lord et al., 2020). These reports were designed to provide evidence on specific questions and consequently took correspondingly specific and prescribed terms of reference.
- 2.2 With respect to our most recent report for Wirral MBC (Lord et al., 2020), some of the public submissions express disappointment that our analyses did not extend further. For example, one submission argues that the report should have considered whether there were exceptional local circumstances to go above the minimum figure derived from using the *Standard Method*. From a different perspective, another argues that our report defines 'exceptional circumstances' in a very narrow way based purely on a limited number of demographic variables which are 'inputs' to the *Standard Method* for calculating housing need.⁴
- 2.3 It would not have been appropriate to address these questions as they lie outside the terms of the commissioned study: our brief was to consider the degree to which deviation from the minimum housing requirement resulting from the application of the *Standard Method* would be justified on grounds that 'exceptional local circumstances' could be identified with respect to the inputs that comprise the *Standard Method*.
- 2.4 In this report we seek to reaffirm the rationale for considering Wirral in relation to the full set of English local authorities with respect to the inputs that comprise the *Standard Method*. In so doing we reprise findings from our previous work for Wirral MBC and engage with the alternative approaches to assessing housing need proffered in some of the public submissions.
- 2.5 As this brief is, therefore, wider than our previous studies we offer a report in three parts. First, in section 3 we argue that Wirral MBC was correct to

⁴ Lord et al., 2020 is not restricted to the demographic inputs to the *Standard Method* but covers all its aspects including the affordability ratio.

request a comparison of Wirral relative to the full set of English local authorities with regard to the input variables to the *Standard Method*. Second, in section 4, we explain why we focused on the use of 2014-based demographic projections and provide a review of those submissions that argue for alternative assessments of demographic change. Third, we consider the validity of some of the criticisms of the *Standard Method*, and our application of it in Lord et al., 2020, presented in some of the public submissions.

3.0 Conducting comparative analyses

- 3.1 In our most recent report for Wirral MBC (Lord et al., 2020) we were asked to consider the degree to which exceptional local circumstances might be said to exist in Wirral that would justify a departure from the *Standard Method*.
- 3.2 The government guidance on the *Standard Method* states that different methods will be tested at examination and indicates four key points: that data limitations may require an alternative; that alternative approaches producing a higher housing need figure will be considered sound; that use of the 2016-based household projections is not "an appropriate basis for use in the standard method" and that any alternative that produces a lower housing need figure than the *Standard Method* will be tested at examination (MHCLG, 2019, Paragraph: 015 Reference ID: 2a-015-20190220). The guidance is relatively limited in its explanations of robust evidence and what constitutes exceptional circumstances in the production of a lower housing need figure. It states:

"Where an alternative approach results in a lower housing need figure than that identified using the standard method, the strategic policymaking 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, Paragraph: 015 Reference ID: 2a-015-20190220)

- 3.3 As noted in both Lord et al., (2020) and this document, there is no legal definition of 'exceptionalism'. However, the concept itself entails comparison, since it is only possible to be 'exceptional' relative to a more commonplace 'norm'. As the *Standard Method* applies to all local authorities in England the question, therefore, requires a comparative analysis of the degree to which Wirral is exceptional relative to all other local authorities in England, with regard to the inputs to the *Standard Method*.
- 3.4 Any comparative analysis that deviates from the full set of English local authorities must entail selection criteria which are clearly specified and robustly defensible.
- 3.5 A comparative approach to determining whether Wirral is exceptional is undertaken in one of the public submissions based upon a small number of

local authorities – Birmingham, Central Bedfordshire, Cheshire West and Chester, Liverpool, Sunderland, Uttlesford and Wirral. Where such a selection is made an account is generally needed to justify the criterion/criteria employed. However, in this instance no methodological note is provided to justify the selection of the chosen authorities.

- 3.6 A common approach would be for a justification on the basis of typicality the argument that reasons exist to believe the local authorities being compared are particularly similar. This would require the use of typology such as the Office for National Statistics (ONS) area classification that groups local authorities with similar attributes. The ONS typology includes six categories:
 - Major Urban: districts with either 100,000 people or 50% of their population in urban areas with a population of more than 750,000.
 - Large Urban: districts with either 50,000 people or 50% of their population in one of 17 urban areas with a population between 250,000 and 750,000.
 - Other Urban: districts with fewer than 37,000 people or less than 26% of their population in rural settlements and larger market towns.
 - Significant Rural: districts with more than 37,000 people or more than 26% of their population in rural settlements and larger market towns.
 - Rural-50: districts with at least 50% but less than 80% of their population in rural settlements and larger market towns.
 - Rural-80: districts with at least 80% of their population in rural settlements and larger market towns.
- 3.7 Table 1 lists the ONS Area Classification details for the seven selected local authorities that comprise the public submission:

Table 1: Local authorities selected for comparison in public submission with ONS Area Classification

Local Authority	ONS Area Classification
Birmingham	Major Urban
Central Bedfordshire Cheshire West and	Rural-50
Chester	Significant Rural
Liverpool	Major Urban
Sunderland	Major Urban
Uttlesford	Rural-80
Wirral	Large Urban

Source: ONS, 2016

- 3.8 If the ONS Area Classification is used, as Table 1 shows, to consider the public submission's comparison it is clear that the comparison neither relates to all classification types nor all local authorities within the same classification (i.e. 'Large Urban' local authorities for Wirral). Instead, the analysis compares Wirral to single cases from all three categories of rural authority and three cases of 'Major Urban'. Further justification for the selection of local authority comparators would be needed to draw a meaningful conclusion⁵.
- 3.9 An alternative approach would be to compare Wirral to those local authorities to which it is most similar in the Large Urban category. However, any form of selection can only support the identification of exceptionalism *within* the chosen sub-set of authorities. This type of conclusion would not have fulfilled the terms of our commission with Wirral MBC. The requirement was to understand how the use of the *Standard Method* in Wirral compared to its use in every other English local authority, rather than to a particular sub-set of authorities.

4.0 Demographic inputs to the Standard Method - is it always best to use the most recently available data?

- 4.1 The analysis presented in Lord et al. (2020) runs the *Standard Method* using 2014-based demographic projections for every local authority in England. Using the 2014-based statistics is a requirement of the *Standard Method*. Some public submissions argue that a different base year would be more appropriate. However, as our goal was to test the degree to which Wirral could be understood to experience exceptional local circumstances relative to the rest of England with regard to the mandated inputs to the *Standard Method* it would not have been appropriate to repeat this exercise for a different base year that is explicitly not one of the required inputs: extrapolating demographic trends from 2016 or 2018 data represents a departure from the stipulations of the *Standard Method*.
- 4.2 Earlier work conducted on behalf of Wirral MBC (Simpson, 2018) illustrates that employing a different base year results in different demographic projections. The demographic modelling work set out in that document remains academically valid. However, the interpretation of this work to support the conclusion that 'the most recent data is always best' would be an overstatement. For example, when data for 2020 becomes available it will produce a different demographic forecast. However, this data will reflect the impact of the Covid-19 pandemic. It will be the most recently available data, but it would be hard to argue that the abnormalities of 2020 provide a better guide to extrapolating future demographic trends and, hence, housing requirements, than the trends observed in the years immediately preceding the pandemic.

⁵ Later, in an appendix to the same submission, some population projections by age are presented for what are said to be 104 authorities. It is not clear how this selection has been made. Moreover, some of the authorities listed require clarification. For example, 'London' is listed but there are no details regarding which London boroughs have been included or omitted.

- 4.3 Misgivings about the suitability of 2016 and 2018 statistics led government to mandate the use of the 2014 ONS data in the *Standard Method*. Evaluating the validity of this policy prescription was not a requirement of the brief for Lord et al. (2020) understandably so as this would be a second order question. Deviation from the *Standard Method's* use of the 2014 data could only be justified if the first order question of locally exceptional circumstances could be identified that pertained specifically to the use of these 2014-based statistics in Wirral.
- 4.4 Some of the submissions to the consultation on Wirral MBC's emerging Local Plan challenge the use of the official 2014-based population and household projections in the calculation of housing need for Wirral in a variety of ways. In summary, the critiques offered are that (a) an alternative projection, such as the more recent 2018-based projection, should be used; (b) the 2014-based projected figures for Wirral were not calculated correctly; (c) the projected increase in population and households is at odds with local evidence suggesting lower rates of growth (incorrect inputs); (d) there are other possible grounds for claiming exceptionalism in Wirral, whether to support a case for an increase or reduction in the number of households projected. Considering each in turn:

Choice of projection

4.5 Every two years the ONS releases an updated household projection for the Wirral. The three most recent projections are illustrated in Figure 1.



Figure 1 Wirral Household projections

Source: Office for National Statistics Sub-national Household Projections

- 4.6 It is clear that the choice of projection used will make a difference to the housing need figure around which the Local Plan is based. For example, the 2014-based projection is for the number of Wirral households to increase to 156,500 households by 2035, 4.3% (6,450 households) higher than for the 2016-based projection and 2.0% (3,050 households) higher than for the 2018-based projection published in June 2020.
- 4.7 Respectively the 2014-based, 2016-based and 2018-based projections for 2035 represent a 12%, 8% and 11% increase in households compared to 2010.
- 4.8 It is clear that the 2018-based household projection is more closely aligned to the 2014-based projection than the 2016-based projection. This is unsurprising, because the 2014- and 2018-based projections both incorporate a similar end population size and a broadly similar age structure. The fact that the two projections still differ, in 2035, by some 3,050 households (2%), reflects the sensitivity of the projected number of households to the precise age structure of the projected population, the use of differing household formation rates and to differences in the projection starting point (the 2014-based projection assumes a 2010 household total some 1,100 more than the 2018-based projection).

- 4.9 As a number of the public submissions to Wirral MBC note, these are not the only official projections available. The ONS also publishes a series of variant projections in recognition of the uncertainty that surrounds inputs such as rates of household formation and rates of internal and international migration.
- 4.10 A previous report (Simpson, 2018) has also suggested that, applying Standard ONS projection techniques, the most plausible household projection, led to a lower figure than that suggested by the 2014-based projections. From some of the submissions received it would appear that we have been perceived as recanting this view. In fact, the opposite is true. From a demographic viewpoint there is nothing unusual about the period following 2014 that would make the substitution of the 2014-projection for a more up-to-date projection preferable. However, the official projection methodology reflects only trends in observed household formations, and takes no account of unmet housing need which these trends may mask. Simpson (2018) does not address the potential scale of unmet housing need in Wirral as this was not part of the brief for that report - and it is concerns over unmet housing need that have led to the mandated use of the 2014based projections, reflecting a view in government that the affordability ratio adjustment on its own fails to adequately capture levels of unmet housing need. Further, it is important to recognise that the projections put forward by Simpson (2018) do not provide legitimate grounds for challenging the Housing Need figure arrived at via the Standard Method. This is because Simpson (2018) makes no attempt to demonstrate that Wirral is 'exceptional' with regards to the way in which any shortcomings of the mandated Standard Method play out.
- 4.11 One respondent, rightfully recognising the uncertainty inherent in population and household projection, has suggested substituting the 2014-based household projection with the average of a wide range of plausible household projections. This suggestion reflects the current state-of-the-art in projection modelling, as used in forecasting the day-to-day weather, longterm climate change and global population totals, amongst other applications. There are, however, two barriers to implementation of this suggestion. First, agreement has to be secured regarding which projections are sufficiently plausible to be included in the 'ensemble' projection. The second, and more significant barrier, is that deviation from the officially mandated 2014-based projection is only permitted if Wirral can be shown to experience exceptional local circumstances. A suite of plausible projections would, therefore, need to be constructed for all local authorities and used to demonstrate that the ensemble projection for Wirral differs from the its 2014based projection much more than is the case for almost all other authorities.
- 4.12 All things being equal, when applying the current *Standard Method*, one might expect housing need to be based on the latest official principal population and household projections, since these use the most up-to-date data and methods. However, the government mandates that when calculating housing need the 2014-based projection should be used unless

exceptional local circumstances apply which would warrant adoption of an alternative projection⁶.

- 4.13 The stated reason for this is that the government feels that the 2014-based projection provides a better reflection of the overall 'unmet' housing need than the subsequent 2016- and 2018-based projections. The argument is that projections are based on rolling forwards recently observed trends in household formation, known as 'expressed' demand. This takes no account of household formation that might have been suppressed due to an inadequate local housing supply.
- 4.14 The adoption of the 2014-based projection as the required input for the *Standard Method* can be criticised on a number of grounds. For example, the *Standard Method* already attempts to take account of unmet housing need by inflating the projected household number by a factor which is influenced by local levels of housing affordability the more unaffordable the housing, the greater the inflation. In this sense the use of outdated 2014-based projections alongside a housing affordability factor in the calculation of housing need could be seen as a form of double-accounting. A series of academic and other studies, including by the Bank of England (Miles and Monro, 2019), have also argued that cheap credit rather than inadequate housing supply is the main factor behind increased housing affordability. Submissions made to the authority have offered further critiques (e.g. regarding the failure of projected trends in household size to match observed trends).
- 4.15 However, unless a criticism of the 2014-based inputs to the *Standard Method* can be demonstrated to affect household projections for Wirral far more than for most other authorities in the country, then they do not constitute 'exceptional circumstances' which would give Wirral grounds to deviate from using this input.
- 4.16 In the remainder of this section we consider whether the projection methodology has been applied correctly; whether incorrect inputs have been used; and whether there is any evidence of locally exceptional circumstances with regard to the demographic inputs to the *Standard Method* in Wirral.

Correct application of the household projection methodology

- 4.17 One submission questions whether the household projection methodology was correctly implemented with regards to the conversion of population into households using headship rates.
- 4.18 In the household projection methodology, the projected population is converted into a number of households by applying a 'household headship rate'. For example, the average persons per household (average household

⁶ Furthermore, the guidance explicitly discounts the use of the 2016-based household projections for use with the *Standard Method*, as such an alternative assessment of housing need would be required. (MHCLG, 2019, Paragraph: 015 Reference ID: 2a-015-20190220)

size) is a 'headship rate' which can be used to convert a population into households. If the population is 100 and there are 2.5 persons per household, then the number of households = 100 / 2.5 = 40 households.

- 4.19 The official projection approach is more sophisticated in two main ways. First, it does not apply a 'one size fits all' headship rate. Instead, it applies headship rates which vary by age and sex, in recognition of the fact that household size varies over the life course. For example, young children tend to live in 3 or 4-person households, whilst elderly females tend to live in 1 or 2-person households. Second, a projection is made of how the headship rates will evolve over time, based on past trends.
- 4.20 Historically household sizes have been shrinking, not only overall, due to an ageing population, but also within each age-sex group, due to reduced fertility, increased divorce and other changes in social norms. Hence the headship rates are projected to continue falling into the future, but only up to a certain point in time, after which it is assumed that headship rates will remain constant (i.e. unchanging).
- 4.21 One submission has argued that this method had been applied incorrectly, because in official projections for Wirral the average household size is projected to decrease, even after the headship rates have supposedly been frozen at a constant level. However, this argument overlooks the fact that a constant rate applied to a changing population age structure can still lead to a change in average household size. This is illustrated in Table 2, where the headship rate is kept constant over time at 4 persons per household for young people and 1 person per household for old people. For example, the 200 young persons present in the year 2010 equate to 50 households (200 / 4), whilst the 100 young persons present in 2035 equate to 25 households (100 / 4).
- 4.22 The key point to note from Table 2 is that, despite both the overall population size and the age-specific headship rates remaining unchanged over time, the change in the age structure leads to an overall increase in the number of households from 150 to 225 and hence to an overall decrease in average household size. In short, a constant headship rate (by age and sex) can still lead to changes in average household size over time if the age structure changes. As with most of England, the Wirral population is projected to age over time. Hence even constant age-sex specific headship rates could lead to a decrease in mean household size.

Table 2 Illustrative application of constant headship rates

	Young	Old	Total
Year	P	ersons	
2010	200	100	300

2035	100	200	300

	Headship rate		
2010	4	1	
2035	4	1	

	Households		i	Mean household size
2010	50	100	150	300 / 150 = 2.0
2035	25	200	225	300 / 225 = 1.3

Source: Authors' own

Incorrect inputs

- 4.23 A number of submissions sought to highlight the disparity between the 2014based projections and the trends in births, deaths, migration or household formation observed since 2014. The observed trends were drawn from a range of official sources, including subsequent mid-year estimates and population projections, plus analysis of the Labour Force Survey and local datasets such as patient registers, school and electoral rolls. Collectively the evidence suggests that household growth in Wirral between 2014 and 2020 is unlikely to have been as rapid as that suggested by the 2014 household projection. This in turn brings into question the plausibility of the household total projected at the end of the Local Plan period.
- 4.24 Projections are by their very nature uncertain estimates of future outcomes. It is no surprise, therefore, to find a mismatch between the 2014-based projections and observed trends since 2014. To some extent the same will be true for all authorities. Hence, to provide a secure basis for varying from the use of the 2014-based projection in the *Standard Method*, it would have to be demonstrated that the Wirral mismatch is exceptional relative to that observed elsewhere.
- 4.25 Extending the analyses to local datasets such as patient registers, electoral and school rolls to cover all local authorities would be a major undertaking. As well as drawing the relevant datasets together, it would also have to take account of issues of data quality and population coverage within Wirral, as well as the issue of differences in data quality between authorities. As such, it falls outside the scope of this report.
- 4.26 An analysis of local trends on household size, as captured by the Labour Force Survey, whilst intuitively appealing, would be open to the challenge on

the grounds that any discrepancies observed between authorities could be artefacts due to local differences in housing supply and, hence, levels of suppressed household demand.

- 4.27 More readily achievable, at least at first sight, would be a comparison of the mismatch between the 2014-based and 2014-2018 trend data that informed the 2018-based household projections. But even here differences could be, albeit with less probability, attributable to local differences in the quality of data reporting, most notably in terms of migration flows as captured by the NHS Patient Register and the International Passenger Survey.
- 4.28 A simpler task, which might act as a proxy for the above comparisons, is to compare the outcomes of the 2014- and 2018-based household projections. If the outcomes differ significantly more for Wirral than for most other authorities, this might suggest that Wirral is exceptionally affected by differences in the pre-2014 and pre-2018 trends in births, deaths, and migration and to the change between 2014 and 2018 in the way that household formation rates were projected.
- 4.29 Figure 2 makes this comparison. As the graph shows, Wirral (marked in red) does not stand out as being exceptional in terms of either the percentage or absolute difference between its 2014-based and 2018-based household projections.



Figure 2 Difference between the 2018- and 2014-based projections of households by local authority in England in 2035 (Wirral is identified in red)

Source: Based on Office for National Statistics 2014-based and 2018-based subnational household projections

Claimed areas of Wirral exceptionalism

4.30 A number of submissions flag areas in which they think Wirral might be demographically exceptional. Below we explore the cases put forward regarding birth rates and net internal migration rates, first offering some comments on the appropriate basis for comparison.

Basis of comparison

4.31 A number of submissions compare Wirral to a subset of other local authorities. Whilst comparison with other local authorities does indeed provide a way of checking for Wirral exceptionalism, as we discussed above this only works if the comparator authorities have been chosen on a basis that stands comparison – for example comparing Wirral to all other authorities, or to all other metropolitan boroughs or all other authorities in the same ONS geodemographic class. Comparison to a selection of local authorities requires clear justification that would stand the scrutiny of public examination for any safe conclusions to be drawn for the purposes of identifying housing need.

Birth rates

- 4.32 One submission has suggested that Wirral stands out as being exceptional in terms of its Crude Birth Rate in other words, the number of births per thousand population. The problem with this argument is that the Crude Birth Rate is a poor measure of fertility because it takes no account of the underlying age structure of each authority. An authority with few women of child-bearing age would have few births per thousand people, even if each woman of child-bearing age in that authority gave birth to 4 children each, when the national average was just below 2. It is for this reason that age-specific fertility rates are used when calculating the population projection used as an input to the *Standard Method*.
- 4.33 The Total Fertility Rate is a measure of the average number of children a woman would have over her lifetime if she followed the currently observed age-specific fertility rates. (In fact, the Total Fertility Rate equals the sum of the current age-specific fertility rates.) Consequently, trends in total fertility rates over time provide a reasonable summary of trends in age-specific rates over time, albeit at the expense of glossing over potential divergences in trends between age groups.
- 4.34 Figure 3 presents recent trends in the Total Fertility Rate, comparing Wirral (red line) with that of all other local authorities in England. The graph covers the time period, 2013 to 2018, for which such data are readily available. As can be seen, the downwards trajectory in Wirral's Total Fertility Rate, from

1.92 in 2013 to 1.71 in 2019, is broadly in line with the trends observed elsewhere. This is strongly suggestive that Wirral's recent birth trends are far from being 'exceptional'.



Figure 3 Trends in Total Fertility Rates by Local Authority Source: Office for National Statistics (2020) Live births in England and Wales: birth rates down to local authority areas, NOMIS.

Natural increase

- 4.35 'Natural increase' is the difference between the number of births and deaths. For example, if an authority had a population of 100, and over the next year had a natural increase of 10 (10 more births than there were deaths), then natural increase over the year would equate to 10% of the start-of-year population.
- 4.36 A query submitted to Wirral MBC in response to our previous report suggested that we had masked a steep (and by implication, 'exceptional') decline in Wirral's rate of natural increase.
- 4.37 Figure 4 visualises the amount of natural increase in each authority as a percentage of the previous year's population. In 2010 Wirral is estimated to have had a small excess of births over deaths (natural increase of about 0.1%.). Eight years later an increased deaths (due to ageing) and decreased births (due to ageing and falling rates of fertility), meant Wirral is estimated to have had an excess of deaths over births.
- 4.38 Similar changes between 2010 and 2018 occurred elsewhere in England. In general, for authorities where there was a large excess of births over deaths

in 2010, this gap had narrowed by 2018. Similarly, in authorities where there was already an excess of deaths over births in 2010, the size of the excess increased by 2018. As a result, over the period 2010 to 2018 the general trend across English local authorities has been for lower rates of natural increase in 2018 than in 2010. This is relevant to the estimation of Housing Need requirements because the period 2010 to 2018 spans the years used to supply trend data to the official 2014-based and 2018-based population projections



Natural increase as a % of previous year's population

Figure 4 Change in natural increase as a percentage of previous year's estimated population by local authority in England for 2018 and 2010 (Wirral identified in text)

Source: Based on ONS 2018-based Mid-Year Estimates, Table MYE B3 (English Local Authorities only)

- 4.39 In both 2010 and 2018 Wirral was ranked at around the 25th percentile in the distribution of local authorities by % natural increase i.e. in both 2010 and 2018 about one in four authorities (25%) had a lower rate of natural increase than Wirral and three in four (75%) had a higher rate.
- 4.40 In 2010 the rate of natural increase associated with the 25th percentile was around +0.05%. By 2018 the rate of natural increase associated with the 25th percentile had fallen to -0.16%. The fall in the rate of natural increase the Wirral experienced over this period was in fact slightly less than that.
- 4.41 From this evidence, Wirral's rate of natural population increase in both 2010 and in 2018 does not seem to be 'exceptional' relative to other English authorities; nor does the decline in Wirral's rate of natural increase over this period.

The role of internal migration

- 4.42 One public submission highlighted the unusual dominance of internal migration on changes in population projections for Wirral. We have replicated the analysis in that submission, but have done so using the 2014-based population projection for comparison as it is the starting point for the *Standard Method.*
- 4.43 For each local authority in England we calculated:
 - Projected change in population, 2014 to 2035
 - Total projected net internal migration, 2014 to 2035 (including crossborder but within-UK migration)
 - Total projected net international migration, 2014 to 2035
 - Total projected natural increase (excess of births over deaths), 2014 to 2035
- 4.44 We then controlled for differences in local authority size by converting each total into a ratio of the overall change in population, as measured by summing the natural increase, net internal and net international migration components, and multiplying by 100.
- 4.45 Due to rounding issues in the data supplied by ONS, the sum of population changes due to natural increase, net internal and net international migration do not exactly equal the reported overall change in projected population. However, our basic findings remain the same regardless of whether we used the originally supplied population change figure, or the one we calculated by summing the component parts.
- 4.46 Finally, we excluded from the analysis three local authorities with calculated ratios > 1000 caused by small numbers of births, deaths or migrations.

- 4.47 On the basis of these calculations, for each 100 person increase in Wirral's population over the period 2014-2035, there were 116 net internal migrants, offset by a loss of 13 international migrants and a natural decrease of 3. This reflects the view helpfully highlighted in the public submission that net internal migration is a key driver of population increase in Wirral's population projections. As ever, however, the issue of whether or not Wirral is exceptional in this regard is the substantive point with regard to whether deviation from the *Standard Method* would be likely to be upheld at examination. This question is explored in Figures 5 and 6.
- 4.48 Using the 2014 population projections, Figure 5 confirms that net international migration makes an unusually low contribution to Wirral's overall projected population change. It also suggests that net internal migration makes a relatively high contribution to overall projected population change. In fact, Wirral is in the bottom 5% of authorities in terms of the contribution to population change made by net international migration, and in the top 20% for contributions to population change arising due to net internal migration.



Figure 5 Relative contributions of net internal and international migration to population change, 2014 to 2035

Source: Based on ONS 2014-based sub-national population projections

4.49 However, the story is not quite this simple, as population change is the sum of natural increase plus net internal and net international migration. Hence

the relative contribution of net internal migration might be high in relative terms simply because the contribution of another component, such as natural increase, is low.

4.50 This is confirmed by Figure 6, which reveals a clear trend, across all local authorities in England, for the relative contribution of net internal migration to increase as the relative contribution of natural increase falls. Wirral is squarely in line with this trend.



Figure 6 Relative contributions of net internal migration and natural increase to population change, 2014 to 2035

Source: Based on ONS 2014-based sub-national population projections

- 4.51 In short, whilst this analysis confirms that projected changes in Wirral's population are heavily dependent upon the assumed rate of net internal migration, they also confirm that the projected contribution of net internal migration is in line with other local authorities, given Wirral's projected rate of natural increase. Even taken on its own, the relative contribution that net migration makes to Wirral's projected population ranks only in the 20th percentile. This is high, but appears far from exceptional when one in five local authorities are projected to experience higher relative contributions from net internal migration.
- 4.52 One way in which Wirral does stand out is with regard to having a net outflow, rather than inflow, of international migrants. Falling in the fifth percentile, only

one in twenty authorities experience a lower relative contribution to population change from international migration.

- 4.53 In this case, as Figure 7 reveals, there is no obvious relationship between the relative contributions of natural increase and net international migration. As the relative contribution of net international migration increases, the relative contribution of natural increase shows no clear tendency to increase or decrease. This is because net international migration generally makes up a far smaller component of overall population change than net internal migration and natural increase, hence leaving more 'space' for the contributions of net international migration and natural increase to vary independently of one another.
- 4.54 The relatively low contribution of net international migration to population change can be seen in Figure 7. The low contribution of net international migration to projected population change in Wirral does not indicate a significant under or overestimate in the household projection for the authority and is unlikely to be considered a robust rationale for exceptional circumstances.



Figure 7 Relative contributions of net international migration and natural increase to population change, 2014 to 2035

Source: Based on ONS 2014-based sub-national population projections

- 4.55 Many of the submissions made regarding *H6 Exploring the Computation* of Housing Need in Wirral 2020 to the Local Plan consultation identify shortcomings in the inputs and calculations used in the Standard Method which align with well-documented critiques of the calculation. However, whilst there is validity in many of these criticisms of the *Standard Method* itself, we remain unable to find any persuasive evidence that these shortcomings in the *Standard Method* apply to Wirral in a way that is exceptional compared to the way in which they also apply to other local authorities. On this basis, and under the current government guidance, we find it hard to envisage making a successful case for deviating from the *Standard Method* approach to estimating housing need using the official 2014-based projections as inputs.
- 4.56 Given this finding we turn in the next section to the other non-demographic inputs to the *Standard Method* with respect to Wirral.

5.0 Understanding Wirral in the English context with respect to the *Standard Method*

- 5.1 Lord et al., (2020) runs the *Standard Method* for every local authority in England and illustrates Wirral's position in this distribution for each of the inputs to the *Standard Method*.
- 5.2 The principal finding of this report is that the overall requirement that results from the application of the *Standard Method* places Wirral at the 61st percentile.
- 5.3 Lord et al., (2020) systematically produces a full national distribution for each of the inputs to the *Standard Method* and finds that Wirral is not markedly dissimilar to the median English experience on many of the measures.
- 5.4 The report itself seeks to provide a full account of all the inputs to the *Standard Method* and, for the sake of completeness, all the components of those inputs. We report the full range of statistics in this way so that the reader can see how each of the inputs to the Standard Method is determined. All measures, including their components, are reproduced as summary tables (Tables 1 and 2) at the end of the document.
- 5.5 One of the public submissions concentrates on this summary table and argues that it would be desirable to take all the data presented in Table 2 and "sum the scores for all the variables and look at the resulting histogram of 'typicality'. Moreover, the same submission argues that "if LU wanted to conclude *anything* from this kind of analysis they would have to repeat it for *all individual LAs* in the UK."
- 5.6 There are two reasons why this analysis and its conclusion are not right.
- 5.7 Firstly, the proposed approach of summing the inputs to the *Standard Method* would produce a composite measure of typicality. It would diminish

and obscure any individual aspect of the *Standard Method* where some form of exceptionalism might be said to exist.

- 5.8 By contrast, the analysis in Lord et al., (2020) dissects each of the individual inputs to the *Standard Method* and compares Wirral to the full set of English local authorities on each individual measure.
- 5.9 Secondly, simply summing the decile rank for each of the inputs to the *Standard Method* carries with it the assumption that each of the inputs to the *Standard Method* have an equal weight in determining the output statistics. But this is not the case.

The mechanics of the Standard Method

- 5.10 The *Standard Method* has three aspects. Firstly, it comprises a set of variables that seek to understand the demography of housing need. This includes population data published by the ONS which is used to estimate household formation alongside variables such as local authority death and fertility rates. Secondly, an affordability ratio is included that relates median work-place based earnings to median house price in local authorities. Finally, a constraint is included to limit the scale of required new development for any single local authority.
- 5.11 As acknowledged at the start of this document there are many variables beyond the inputs to the *Standard Method* that could be included in a more comprehensive understanding of the requirement for new dwellings. To a large extent the outcome statistic (the number of new dwellings) is dependent upon the construction of the *Standard Method* formula and the differing significance accorded to each of the input variables.
- 5.12 With regard to the current *Standard Method* approximately 36% of the variation in the outcome results from the known demographic inputs that comprise household projections. The affordability ratio accounts for 35% of the variation of the *Standard Method* (18% from house prices and 17% from earnings). Put another way, places where the ONS-based household projections combine with expensive housing and residents who are generally less affluent are assessed as needing most new housing because of the way the *Standard Method* is constructed. By contrast other inputs have much less of an impact on the outcome variable: the fertility rate represents just 7% of the variance in the outcome of the *Standard Method*, the net migration rate just 2%.
- 5.13 As a result, some London authorities, many of which have some of the lowest fertility and net migration rates (many arrive each year but many also leave), are assessed as having some of the most significant requirements for new housing under the *Standard Method*. By contrast, the *Standard Method* identifies lower levels of housing need in places with less affluent communities and less expensive housing. Yet some of the places that have some of the lowest housing needs according to the *Standard Method* have some of the highest fertility and net migration rates.

5.14 Does a Standard Method constructed in this way accurately portray housing requirement? The Standard Method is so responsive to changes in the projection of household formation and the affordability ratio that relatively subtle changes in these input variables can have a considerable impact on the assessment of housing requirement. This is why the scale of required new dwellings resulting from the Standard Method changes quite dramatically when the 2016 ONS figures are used instead of 2014, as demonstrated by Simpson (2018). However, rather than concluding that this might signal a problem with the Standard Method itself, government specifically required local authorities to revert to the 2014 base year. This illustrates the weight placed on some of the inputs to the Standard Method over others despite 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).

6.0 Conclusions

6.1 Questions regarding the suitability and rigour of the Standard Method have been widely articulated, to the extent that the Ministry for Housing Communities and Local Government has come to acknowledge the *Standard Method's* deficiencies and signalled a review of the approach in March 2020:

"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, 2020a: 5).

- 6.2 This commitment resulted in a consultation document (MHCLG, 2020b) that accompanied the Planning White Paper of August 2020. This consultation sets out a proposal for a replacement to the *Standard Method* that continues to rely heavily on a demographic forecast of household formation.
- 6.3 As we identified at the start of this review there is ample scope to enhance the quality of the assessment of housing need in Wirral in ways that go beyond the terms of the *Standard Method*. However, hitherto, deviating from the *Standard Method* would only have been possible in light of credible evidence that Wirral experiences exceptional local circumstances. The implications of any successor to the *Standard Method* and the acceptability of a more locally bespoke approach to the assessment of housing need will only become apparent in time through government's consultation on the proposed replacement of the *Standard Method*.

References

Bramley, G. and Watkins, C. (1995), *Circular Projections*, London, Campaign to Protect Rural England.

Dunning, R. et al., (2013) *Sheffield Strategic Housing Market Assessment 2013*, Sheffield City Council

Dunning, R. et al., (2020) *Affordable Housing Need in Scotland Post-2021*, Scottish Federation of Housing Associations

Ferrari, E., Leahy-Laughlin, D. and Watkins, C. (2011). Planning and the housing market: reflections on strategic housing market assessment in England. *Town Planning Review*, 82(4), pp.393-424

Gregg, D. (2020a) Wirral Local Plan: Mid 2020 Consultation Housing Need (July 2020).

Gregg, D. (2020b) Comments: "exploring the computational housing need in Wirral".

ITPAS & WGSA (2020) LU report on computation of housing need – Final Consultation response V3.

Lichfields (2020) Representation on exploring the computation of housing need in *Wirral.*

Lord, A. and O'Brien, P., 2017. What price planning? Reimagining planning as "market maker". *Planning Theory & Practice*, *18*(2), pp.217-232.

Lord, A., Dunning, R. and Williamson, P. (2019) *Determining Housing Need in Wirral: a review of the commissioned evidence*. 21st January 2019. Centre for Sustainable and Resilient Cities, Liverpool University.

Lord, A., Williamson, P, Dunning, R., Cheang, C-W and Yin, C. (2020) *Exploring the computation of housing need in Wirral*. 29th July 2020. Centre for Sustainable and Resilient Cities, Liverpool University.

Maclennan, D., More, A., O'Sullivan, A. and Young, G. (1998), Local Housing Systems Analysis: Best Practice Guide, Edinburgh, Scottish Homes.

MHCLG (2019) *Guidance: Housing and Economic Needs Assessment*. Ministry of Housing, Communities and Local Government: London. Available at: <u>https://www.gov.uk/guidance/housing-and-economic-development-needs-assessments</u>

MHCLG (2020a) Planning for the Future. March, 2020. MHCLG: London.

MHCLG (2020b) White Paper: Planning for the Future, August 2020. MHCLG: London.

MHCLG (2020c) Changes to the planning system. Consultation on changes to planning policy and regulations. August, 2020. MHCLG: London.

Miles, D. and Monro, V. (2019) Working Paper No 837. UK house prices and three decades in the decline of the risk- free interest rate. Available at: <u>https://www.bankofengland.co.uk/working-paper/2019/uk-house-prices-and-three-decades-of-decline-in-the-risk-free-real-interest-rate</u>

ONS (2016) Rural/urban local authority classification (England). Available at: <u>https://www.ons.gov.uk/methodology/geography/geographicalproducts/ruralurbancla</u> <u>ssifications/2001ruralurbanclassification/ruralurbanlocalauthoritylaclassificationengla</u> <u>nd</u>

Powell, R., Dunning, R., Ferrari, E.T. and McKee, K. (2015) *Affordable housing need in Scotland*, Shelter Scotland

Simpson, L. (2018) An objective assessment of the latest ONS Household Projections for Wirral Metropolitan Borough. 21st December, 2018. Centre for Sustainable and Resilient Cities, Liverpool University.

Stevens, G. (2020a) Wirral local plan: consultation on additional evidence. Exploring the computation of housing need in Wirral.

Stevens, G. (2020b) Wirral population and housing projections. Evidence on the Standard Method, July 2020 V3.

Whitehead, C. (1991) From Need to Affordability: An Analysis of UK Housing Objectives, *Urban Studies*, 28 (6), pp.871-887

Williamson, P. Lord, A., and Dunning, R. (2018) *Evaluating the validity of the population and household projections underpinning the Wirral Local Plan: A response to public submissions*, 5th December, 2018. Centre for Sustainable and Resilient Cities, Liverpool University.