

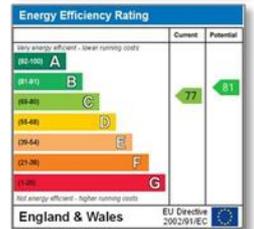


Review of the Oxfordshire Growth Needs Assessment

Undertaken for the Cherwell Development Watch Alliance

Report of Findings

March 2022





Opinion Research Services | The Strand, Swansea SA1 1AF
Jonathan Lee | Trevor Baker | Belinda Herbert
Nigel Moore | Scott Lawrence | Hugo Marchant
enquiries: 01792 535300 · info@ors.org.uk · www.ors.org.uk

© Copyright March 2022

Contents

1. Summary	4
2. Analysis.....	7
Introduction.....	7
Demographic projections and the “Standard Method”	7
Housing Need based on Employment Projections.....	11
Affordable Housing Need	16
Housing Need Assessment: Conclusions	17
Appendix A: Modelling Affordable Housing Need	20
Households Unable to Afford Market Rents	20
Affordable Housing Need: Those Who Aspire to Own.....	22
Appendix B: Project Brief	25

1. Summary

- 1.1 Opinion Research Services (ORS) was asked by Cherwell Development Watch Alliance to review the methodology, analysis and conclusions of Oxfordshire Growth Needs Assessment 2021 (referred to from here on as the “OGNA” and written by “the consultants”), and in particular its three alternative housing requirements.
- 1.2 Each of the three housing requirements is derived in a different way.
- (1) The “Adjusted” Standard Method uses a questionable methodology where the consultants have created their own demographic projections;
- (2) ‘Business as Usual’ is an employment projection based on a period of post 2008 recession high growth, and;
- (3) Transformational is an economic trajectory based on an update of the Local Industrial Strategy’s aspirational ‘go for growth’ scenario.

Demographic (i.e. Population) Projections

- 1.3 The OGNA substantially increases the projected future population of both Oxford and the County compared to the Office for National Statistics 2018 based population projections. The OGNA does this by using what it calls as an “adjusted baseline population projection”. But this projection ignores improvements to population forecasts made by the Office for National Statistics (ONS) in recent years.
- 1.4 The Office for National Statistics has reduced the official population estimates for Oxford City for 2016 by 6,000 persons, but the OGNA adds almost all of this reduction back into the population of the City.
- 1.5 The OGNA suggests that the 2050 population of Oxfordshire will be over 10% higher for the County and 35% higher for Oxford when compared with the 2018 based ONS projections. The distribution of the change within the other Districts is uneven with much more of it being in South Oxfordshire and Cherwell.
- 1.6 The NHS Patient Register is well known to over-estimate populations in student towns like Oxford. However, the consultants use data from this register in their adjustments in a way that we consider to be unprecedented, arbitrary and unjustified.
- 1.7 The OGNA “Adjusted” Standard Method is very different from, and does not represent, the Standard Method. Its use is unjustified and is contrary to Government guidance.

Employment Projections

- 1.8 The OGNA explores three main scenarios for Oxfordshire’s future economic growth. The first is based on the number of jobs that would be supported by the housing growth derived from the consultant’s ‘Adjusted’ Standard Method. The other two scenarios are derived in completely different ways and can best be described as being a high jobs growth scenario, and a very high jobs growth scenario
- 1.9 The OGNA fails to explain that this modelling approach is unconventional and that each of the three scenarios is derived on a different basis. A conventional modelling approach would use a single model to give a **central trajectory** together with high or low variants based on conservative or more optimistic

assumptions. Cambridge Econometrics regularly produce a central trajectory for all local authorities in England and this can be purchased from them, but does not appear to have been included in the OGNA. We would have proposed a more prudent approach and the inclusion of Cambridge Econometrics central projection.

- 1.10 Very little information is given about the assumptions or source data underlying the jobs growth scenarios and source data references are inadequate eg “ONS, Cambridge Econometrics”. This makes it virtually impossible to understand in any detail how the trajectories have been constructed.
- 1.11 None of the scenarios appear to be based on trends of growth that have actually been achieved over a long-time period. A central scenario should have been produced as a benchmark for comparison.
- 1.12 The high growth scenario, described as ‘Business as Usual’, assumes that “robust growth” since the 2008-09 recession will have a strong influence on the projected employment growth until 2050. This is the only modelled trajectory, but in our opinion it significantly over-estimates likely future employment. This has important consequences because the employment projections are used to estimate the number of dwellings that are needed.
- 1.13 The ‘very high’ Local Industrial Strategy (LIS) transformational scenario is based on aspirational growth rather than an economic projection.
- 1.14 Both the ‘Business as Usual’ and Transformational scenarios would imply a very large growth in the population of Oxfordshire and this would have wide implications outside of the area i.e. they would require either lower jobs growth elsewhere in the country or more workers nationally overall.
- 1.15 The three reported employment scenarios have not sufficiently considered the impact of the pandemic, both on long-term job creation and also on the growing trend for working from home. In our opinion this is a serious omission which means that the number of dwellings required is over-stated.

Affordable Housing Need

- 1.16 In the OGNA, and in line with national guidance, two different types of affordable housing need are estimated. (1) those who cannot afford to meet their housing costs in the market and (2) those who can afford to pay their own rents, but who wish to buy and cannot afford to do so.
- 1.17 We consider that the first group is substantially overestimated because the consultant’s model assumes that, once counted, the only way for households to have their needs addressed is for them to move to affordable housing. There is no allowance for households leaving the area or seeing their household circumstances change for the better. This would still leave a very significant affordable housing need in Oxfordshire, but not as high as is shown in the OGNA.
- 1.18 The OGNA calculates a figure for households who can afford to rent but not buy. It is unclear how these numbers have been derived, but we believe this is a very large overstatement of need and includes substantial double counting. As such this figure is completely implausible.

Overall Housing Need

- 1.19 None of the three alternative scenarios for future housing requirements is based on long term economic growth trends that incorporate the likelihood of periodic economic slowdowns or shocks, for example, Brexit, Covid and the current war in Europe. A conventional approach would have included a central economic growth projection.

- ^{1.20} Based on updated Office for National Statistics projections for Oxford City we consider that there may be exceptional circumstances in Oxford City (but not in the other Districts) for adopting *a housing need figure substantially lower than that given by the Standard Method* (as currently formulated). The OGNA should have considered this.
- ^{1.21} We consider that the OGNA's 'Business as Usual' economic scenario does not represent business as usual. Instead it represents unusually high growth and results in a housing requirement which also represents a high growth variant.
- ^{1.22} The OGNA's 'LIS transformational growth' scenario represents a very high rate of sustained growth only likely to come about as part of national policy-driven redistribution of resources towards the region. The Oxford-Cambridge Arc initiative might have supported a transformational growth scenario but now appears to no longer form part of central Government Policy. It would also appear to be contrary to the Government's emphasis on a 'levelling up' strategy which would direct resources elsewhere in the country.
- ^{1.23} The unjustified use of adjustments made to official projections and the Standard Method together with the lack of a conventional central economic forecast call into question the soundness of this document as supporting evidence for the development of the Oxfordshire Plan.

2. Analysis

Introduction

- 2.1 Opinion Research Services (ORS) was asked by Cherwell Development Watch Alliance (CDWA) to review the methodology, analysis and conclusions of Oxfordshire Growth Needs Assessment 2021 (referred to from here on as the OGNA). The aim of the review was to be a succinct non-technical overview of the studies.
- 2.2 ORS has extensive experience of preparing housing needs assessments. Since 1994, we have prepared housing needs assessments for nearly 150 local planning authorities. Of the assessments in England, ORS has undertaken work for a total of 75 local planning authorities during the past five years. ORS has successfully defended its methods and assumptions at all Examinations and Inquiries that we have attended on behalf of local authorities.
- 2.3 A key objective of the OGNA was to, *“To identify a strategic level, long-term, robust and transparent methodology for assessing Oxfordshire’s housing needs over the period to 2050”* (OGNA Phase 1 Report, p3). It sought to address this objective by considering the projected demographic and economic changes in Oxfordshire until 2050 and by also considering the need for affordable housing until this time.
- 2.4 For this analysis, we first consider the demographic projections, employment projections and affordable housing assessment which underlie the overall housing needs assessment. We deal with them in the order they appear in the OGNA. Finally, we summarise how these give rise to the overall housing need assessment.

Demographic projections and the “Standard Method”

- 2.5 The Government published the National Planning Policy Framework (the Original NPPF) in 2012. This set out the planning policies for England and how these were expected to be applied. Housing Need Assessments were to be carried out through a Strategic Housing Market Assessment (SHMA) for which Planning Practice Guidance was issued to assist in their completion, but this guidance was not prescriptive.
- 2.6 A revised version of the National Planning Policy Framework was published in July 2018. Under the Revised NPPF, local planning authorities are still responsible for assessing their local housing needs; however, Paragraph 61 identifies that *“strategic policies should be informed by a local housing need assessment, conducted using the standard method in national planning guidance – unless exceptional circumstances justify an alternative approach”*. This represents a significant change, as the standard method sets out a formulaic approach to determine the minimum Local Housing Need (LHN) figure and prescribes the use of specific data for the calculation. Therefore, whilst the responsibility for establishing housing need continues to rest with the local planning authority, this is now constrained to a minimum figure that is determined centrally by the Government unless exceptional circumstances apply.
- 2.7 Chapter 7 of the OGNA sets out the figures for housing need for Oxfordshire given by the Government’s standard method noting that this is a minimum figure for establishing local housing need. This is reasonable as Government guidance states that *“There is an expectation that the standard method will be used and that any other method will be used only in exceptional circumstances.”* (PPG Paragraph: 003 Reference ID: 2a-003-20190220). However it should be noted that (i) a completely revised standard method approach is

anticipated to be released by Department for Levelling Up, Housing and Communities (DLUHC) in the first half of 2022, and that (ii) the standard method as currently formulated relies on 2014-based ONS household projections, which have now been superseded twice. In Oxfordshire the updated household projections have resulted in significant changes to the projected population, particularly for Oxford City where ONS made substantial revisions to the population projections methodology.

- 2.8 Table 7.2.2 of the OGNA sets out the current official standard method figures for Oxfordshire which are 3,350 dwellings per annum (dpa) capped and 3,383 dpa uncapped. We agree with the consultants that the uncapped figures should be used because using the capped figures requires an early review of any plan, and, given that the difference between the capped and uncapped figures is very small, it would be best to use the uncapped figures. The uncapped figure of 3,383 dpa is not something which is normally disputed unless there are exceptional circumstances, which we will discuss below in relation to Oxford City.
- 2.9 However, having set out the standard method figures, the OGNA then goes on to produce an estimate for housing need based on what is described as “the standard method (adjusted)”. This makes use of an alternative demographic baseline created by the consultants which largely uses 2018-based demographic data. This methodology is questionable for a number of reasons. Firstly, it is contrary to Government guidance which states that “*Any method which relies on using household projections more recently published than the 2014-based household projections will not be considered to be following the standard method as set out in paragraph 61 of the National Planning Policy Framework*” (PPG Paragraph: 015 Reference ID: 2a-015-20190220). More fundamentally however, the calculation is based on demographic projections created by the consultants themselves using a series of adjustments which result in a much higher projected population for the County compared to the 2018-based household projections and a different distribution between Districts, with a much greater increase in Oxford City. We review this below but at this point we simply note that we do not understand why this has been done and also that we consider the approach taken is not justifiable. We will now describe the approach adopted.
- 2.10 The justification for using an adjusted baseline is set out at page 36 which is:

An adjusted baseline projection has been developed by JGC taking account of the demographic analysis above. In particular this recognises the analysis from the Patient Register that suggests the population of Oxford may have been substantially underestimated over the past 7-years (2011-18). Given the potential under-estimation, this would imply that there has been an underestimate of the level of migration to the City (and to a lesser extent other areas).

- 2.11 We will return to the issue of the Patient Register (PR) below, but for now we would note OGNA Table 7.3.1 which shows that the annual need for Oxford City falls under the adjusted baseline approach from the standard method figure of 762 dpa to 729 dpa. Therefore, an approach which was ostensibly to address under-enumeration of the population in Oxford City results in a lower housing need in Oxford City than the standard method. This is probably due to the consultant’s use of adjusted 2018-based demographic data rather than the 2014-based data in the Standard Method. However, it should be noted that if the 2018-based household projections had been implemented for Oxford City without the consultant’s ‘adjustment’, the annual need for Oxford City would become negative, or at least capped at zero. We do not understand why the adjusted baseline has been created by the consultants. When working with the standard method, we consider it best practice either to only work with the standard method figures or to argue that exceptional circumstances apply and that a totally new figure is required. It is not best practice to create,

as the consultants have, an alternative set of (2018-based) projections to arrive at a 'standard method (adjusted)' figure. Furthermore the consultants largely dismiss the official 2018-based ONS projections. The consequences of the consultant's changes are relatively minor when compared with the actual standard method (using 2014-based data) but are extreme when compared to the 2018-based ONS projections. The revised demographic projections also see more dwellings needed in South Oxfordshire and fewer homes being needed in West Oxfordshire.

- ^{2.12} It should also be noted that the OGNA's alternative demographic base results in very large increases in the projected population of Oxfordshire from 2020 to 2050. The 2020 figure is some 3.8% higher than the ONS figure (6.7% for Oxford) and the OGNA suggests that the 2050 population is over 10% higher for Oxfordshire and 35% higher for Oxford. The distribution of this change between the other Oxfordshire Districts is also uneven, with growth in Vale of White Horse being much less relative to Cherwell or South Oxfordshire when compared with the ONS projections. As well as having consequences for the Standard Method Calculation these will also affect the calculation of affordable housing need, the needs of other groups such as older persons and wider issues such as education places and transport planning.
- ^{2.13} The standard method is not a number which is normally adjusted. It is either accepted or completely changed because of exceptional circumstances. Fundamentally, what the OGNA consultants call the 'standard method (adjusted)' is not the standard method at all. Moreover, it is also not a revision in light of exceptional circumstances because more recent evidence (i.e. the ONS 2018-based projections) is largely dismissed.
- ^{2.14} ORS would have started with the official standard method output of 3,383 dpa for Oxfordshire, but would then have considered if the data for any local authority displayed exceptional circumstances to warrant an alternative approach being adopted. We see no clear reason for the approach adopted by the consultants.
- ^{2.15} Nevertheless we now examine, in more detail, the key assumptions adopted to arrive at the adjusted baseline which are described as:

An adjusted baseline projection has been developed by JGC taking account of the demographic analysis above. In particular this recognises the analysis from the Patient Register that suggests the population of Oxford may have been substantially underestimated over the past 7-years (2011-18). Given the potential under-estimation, this would imply that there has been an underestimate of the level of migration to the City (and to a lesser extent other areas).

Base population from the 2018-based subnational population projections (SNPP) – the alternative internal migration variant. This has been chosen as it is considered that the principal SNPP has too short a data period when looking at internal migration whilst the 10-year alternative is not thought likely to reflect recent changes seen in Oxfordshire such as a general uplift in housebuilding;

Projections run from 2020 to 2050 to align with the timeframes of the Oxfordshire Plan;

Population data for 2018 fixed by reference to estimates made from mid-year population estimates (MYE) and Patient Register (PR) data. Given previous analysis, both the MYE and PR are taken into account with population levels essentially assumed to be around the average growth in these two sources applied to 2011 MYE data (which was informed by the 2011 Census);

Population to 2020 derived from estimating potential population change given the number of net housing completions (2018-20);

Fertility and mortality rates (by age and sex) as per the 2018-based SNPP – where rolled forward from 2043 to 2050 this assumes a continuation of any trends identified in the SNPP;

The migration profile (by age and sex) in the same proportions as the 2018-based SNPP – where rolled forward from 2043 to 2050 this assumes a continuation of any trends identified in the SNPP; and

Future migration is estimated based on the likely uplift in migration needed to achieve the level of population estimated for 2018.

(OGNA Phase 1 Report, p36-37)

- 2.16 The statement which is most unusual within this approach relates to the role of the Patient Register and the Mid-Year Population Estimates (MYE), namely:
- » *MYE and PR are taken into account with population levels essentially assumed to be around the average growth in these two sources applied to 2011 MYE data (which was informed by the 2011 Census).*
- 2.17 MYE data is estimated by the Office for National Statistics using a model which considers a wide range of factors including internal migration between local authorities in England which is modelled based upon changes in patient registration at GP practices. Therefore, the number of patients registered at GPs in a local authority is one of the factors which contribute to its MYE data. There should therefore be no need for the consultants to combine data from these two sources.
- 2.18 Furthermore, patient registrations at GPs are a useful indication of the population of a local authority, but they are imperfect, particularly in areas with high student populations, like Oxford, where students often do not de-register when their course is complete and they have moved elsewhere. This especially applies to overseas students who have returned home. Therefore, we would not expect to see a good correlation between patients registered at a GP and the MYE in areas with large student populations.
- 2.19 The difficulty of correctly making allowance for this problem in towns with high student populations has been recognised for some time and has been the subject of technical improvements by the ONS. It was also the subject of a recent review by the Office for Statistics Regulation (OSR) who, in their report, noted that *“methodological changes made by ONS to improve the population estimates since 2014 are not reflected in the statistics which inform housing need”*. What this actually means is that improvements made by ONS are not feeding through to housing need calculations because the Government-mandated Standard Method continues to rely on 2014-based data.
- 2.20 This is of particular relevance to Oxford because, in 2016 the ONS undertook their Migration Statistics Improvement Programme (MSIP) which looked at all estimates produced since 2011 and specifically considered problems which were known to exist with measuring the impact of international migration at a

local level. The impact of the MSIP process in Oxford was to remove 6,000 people (equivalent to about 4% of the population) from the ONS estimate of the population of the City in 2016. This correction was specifically required to take into account the over-estimate of the number of international migrants who remained in Oxford.

- 2.21 However, the approach adopted in the OGNA is to split the difference between the patient registration data and the MYE since 2016. **This is simply an arbitrary approach for which no justification is provided.** As described above, the ONS have looked in detail at the population of Oxford City and consider that they have made a robust estimate which corrects errors resulting from the use of patient registration data. Therefore, there is no defensible case for the OGNA approach of splitting the difference between these figures, and potentially re-introducing the problems which ONS's changes had sought to correct.
- 2.22 In summary, the ONS reviewed the population estimates for Oxford City and concluded that they had been significantly over-estimated until 2016. This included the period 2011-2014 which is key to the population projections under-writing the standard method. Therefore, the ONS considered that the population estimates driving the standard method for Oxford City were too high and these were revised.
- 2.23 The outcome of the ONS methodological improvements/revisions is that the most recent population projections for Oxford City correct errors in the projections on which the standard method is based. Therefore there may be a case in Oxford City for adopting a housing need figure substantially lower than that given by the standard method. This is allowed for in the guidance which states that in such circumstances *"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."* (PPG Paragraph: 015 Reference ID: 2a-015-20190220). Whether a lower housing need figure should be applied for Oxford City due to the ONS's more recent data requires more consideration and evidence, but the current approach in the OGNA to its demographic projections cannot be justified.
- 2.24 The issue of the current population of Oxford City would normally have been resolved when the Census 2021 is released in the Spring of 2022. However, the Census took place during the pandemic and may have seen students being recorded in locations other than their normal term time addresses. Therefore, the population of Oxford and other cities with large student populations may be under-recorded in the Census, particularly for undergraduates who would normally be in halls of residence.
- 2.25 We would note that we also reviewed the population data for the other four local authorities in Oxfordshire, none of which saw large changes in population as a result of the MSIP process. There is therefore no real case for their standard method figures being adjusted downwards in the way we consider may be justified for Oxford City.

Housing Need based on Employment Projections

- 2.26 When employment projections are used to estimate the need for new housing in an area, there are two key questions. These are: (1) How plausible are the employment projections? and (2) How plausibly are the employment projections then linked to the demographic projections to calculate the need for new housing? We will take these two points in turn.

Modelling Employment Trajectories

- 2.27 Within the OGNA, Section 8.5 sets out the main findings in relation to the models for economic trajectories. The models were provided by Cambridge Econometrics (CE) and are described as:

CE has prepared three sector-led growth trajectories for the Oxfordshire economy (set within its MDM-E3 macroeconomic model). One of these trajectories, the business as usual trajectory, is the extension of Oxfordshire's recent trend of accelerated growth, as observed in Figure 8.4.1.

The Standard method (adjusted) trajectory presents an estimate of the level of employment growth enabled by the level of housing growth calculated using the Standard method, adjusted for the revised demographic baseline explored in Chapter 3 Demographic Trends.

The transformational trajectory is a straightforward update to the LIS "go-for growth" trajectory. The latter two projections sit either side of the business as usual trajectory, representing relatively more constrained or unconstrained versions of future growth prospects.

- 2.28 A conventional modelling approach would use a single model to give a **central trajectory** together with high or low variants based on conservative or more optimistic assumptions. Cambridge Econometrics calculate as standard a central trajectory for all local authorities in England and this can be purchased from them, but does not appear to have been included in the OGNA.
- 2.29 However, in this case three quite different models are used. One model asks how many jobs can be supported by the adjusted standard method, a second asks what outcome would result from a continuation of the trend of recent 'accelerated growth' and the third takes an extremely ambitious Local Industrial Strategy for Oxfordshire and adopts its key employment target.
- 2.30 Undertaking jobs projections for a 30 year period is very difficult. Employment surveys use a sample approach, so there is uncertainty as to how many workers are employed in an area now and this will impact on future projections. It is also the case that it is almost impossible to project recessions and growth periods in advance for a 30 year period and employment growth is often driven by external factors to an area.
- 2.31 Very little detail is provided within the OGNA Reports about the underlying methodology and assumptions of the jobs-led scenarios. For example:

Figure 8.4.1 (reproduced after para 2.35) shows the historic trend in jobs numbers in the County. Nowhere are the data presented as a table and the source is only given as "Oxfordshire Strategic Documents, Cambridge Econometrics".

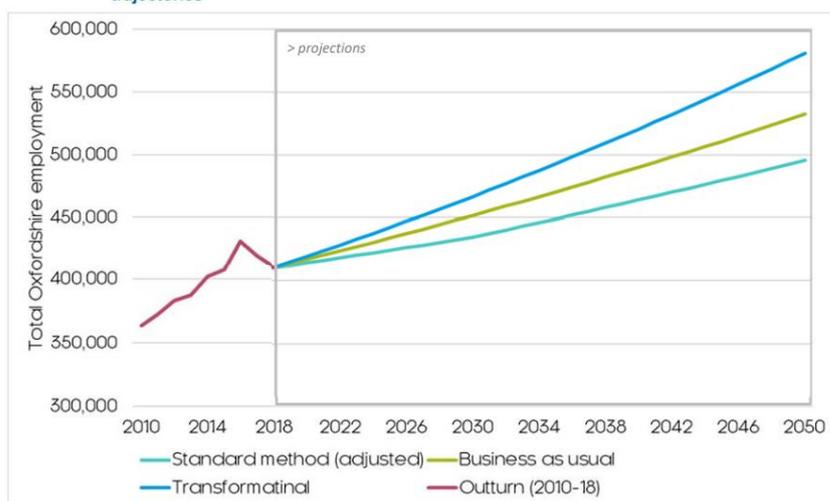
Paragraph 8.5 of the OGNA states: '*.....a detailed modelling methodology is provided in 8.3...*'. However, section 8.3 is a little over one page long and does not in fact provide a detailed methodology.

The jobs projections under all three trajectories are given in Figure 8.6.1 (reproduced below) and (in very summary form) in Table 8.6.1 The source here is simply given as "ONS, Cambridge Econometrics".

The lack of useful source references makes it virtually impossible to understand how the trajectories have been constructed.

- 2.32 It is not even clear in the OGNA what period has been used for the recent trends to be projected forward in the 'Business as Usual' trajectory. We believe that the period used is 2010-2018, which would be a logical assumption from figure 8.6.1, but this is not clearly explained and we do not believe that this represents Cambridge Econometrics standard policy off central projection. The OGNA merely states on p105: "this trajectory represents a continuation of Oxfordshire's recent economic performance, taking particular account of the growth delivered during the recovery from the 2008-09 recession".

Figure 8.6.1: Employment (jobs) projections for Oxfordshire under the different trajectories

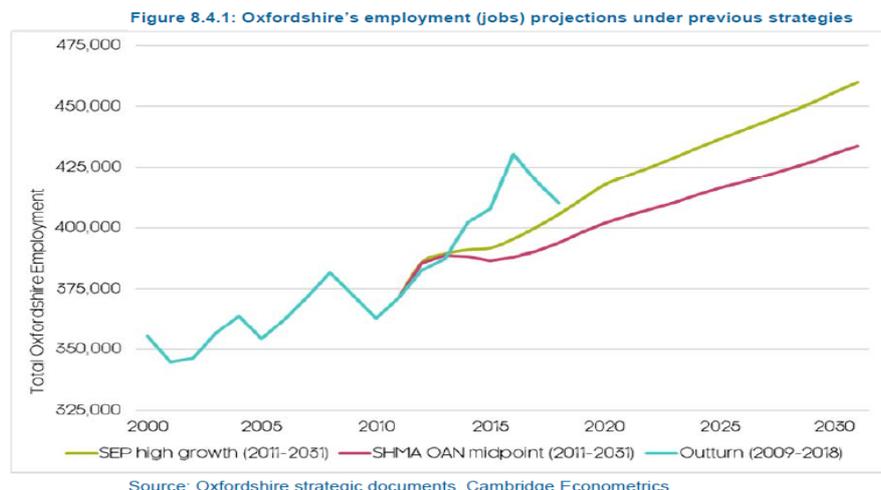


- 2.33 The adjusted standard method figures show a compound growth rate of around 0.59% (2,672 jobs per annum on average) for 2018-2050, the 'Business as Usual' model shows a compound growth rate of around 0.82% (3,827 jobs per annum) and the LIS (Local Industrial Strategy) transformational model results in a compound growth rate of 1.1% (5,350 jobs per annum).

- 2.34 In section 5.2 of the OGNA it is noted that:

Alongside this, Oxfordshire's robust labour market has been creating jobs at an unprecedented pace; since 2010, on average more jobs had been created in Oxfordshire than any other equivalent period in the last 50 years (approximately 6,000 per annum). As of 2018, the Oxfordshire economy contributes an estimated £21.2 billion to UK plc, and supports some 410,000 jobs and 37,000 businesses.

- 2.35 However, Figure 8.4.1 (reproduced below) in the OGNA puts the figure of 6,000 jobs per annum into context. This shows that the number of jobs recorded in Oxfordshire in 2010 was around 360,000, while the figure in 2018 was around 410,000, so the growth has been 50,000, or roughly 6,000 per annum as noted in the quote above. However, the number of jobs in 2008 (pre-recession) was around 380,000, so the growth over 10 years from 2008-2018 was around 30,000 or an average of 3,000 per annum.



- ^{2.36} Figure 8.4.1 also shows how variable employment numbers can be. This is in part due to economic shocks (such as the financial crisis or the Covid pandemic) but also because they are based upon survey data. Little weight should therefore be placed on year to year outcomes and this is correctly noted in the OGNA. However, this should act as a warning as to placing too much weight on employment projections. If we don't know with any great certainty how many people were employed in the past, it is difficult to project forward how many will be employed by 2050.
- ^{2.37} The absolutely key issue in economic projections is what period to extend trends from. The discussion above demonstrates the dramatic effect that a small change in the period chosen can have. Projecting employment based on 2010-2018 change results in double the growth in jobs (6,000 per annum rather than 3,000) than if the period 2008-2018 is used. Taking a longer period, Figure 8.4.1 shows that in 2000 there were approximately 355,000 jobs in Oxfordshire and that over 18 years the number rose by 55,000 or around 3,000 per annum, which, of the three scenarios, is closest to and not much more than the adjusted standard method projected growth (2,672 jobs per annum). However, if we take 2002-18 the rise in jobs numbers is around 65,000 or about 4,000 per annum, which is more consistent with the 'Business as Usual' scenario (3827 jobs per annum). The difference between these two points is likely to be survey variability rather than real changes in employment numbers in Oxfordshire. Within the OGNA it is clear the 'Business as Usual' case is not a straight extrapolation from the growth of employment between 2010-18, but equally the OGNA is clear that this period of unusually strong growth has strongly influenced the projection.
- ^{2.38} In summary, the OGNA includes three employment trajectories but the narrative in the OGNA fails to explain the very different bases for these and their limitations. Similarly the OGNA fails to explain that the modelling approach taken is unconventional in that each trajectory is constructed in a different way. They are not simply low, medium and high variants on a similar methodology. One model is based on dwelling growth (it states how many jobs would be supported by the adjusted standard method dwelling delivery). A second takes forward trends from an arbitrary period of high growth, but doesn't explain how this was modelled, and the third is simply an aspirational target for jobs growth based upon transforming the economy of Oxfordshire. However, none of the projections look at how long-term employment in Oxfordshire has changed. We would have proposed a more prudent approach and the inclusion of Cambridge Econometrics central projection. 'Business as Usual' is the only trajectory that seems to have been modelled on the basis of past trends and this appears to be heavily influenced by data from 2010-2018 and as previously stated this was a period of high growth post-recession. Using this period of high growth builds in an assumption that there won't be another major recession before 2050 but this is simply not plausible. In ORS' opinion the outcome of the approach used in the OGNA is therefore that the only

modelled trajectory has the potential to over-estimate likely future employment. This has important consequences because the employment projections are used to estimate the number of dwellings that are needed.

Converting Employment Projections to Dwelling Targets

^{2.39} Section 9.5 of the OGNA explains how job targets are converted to the number of workers resident in Oxfordshire and is set out below:

Office for Budget Responsibility (OBR) economic activity rates (adjusted for local situation in Oxfordshire (from 2011 Census data) –July 2018 Fiscal Sustainability Report figures

Commuting rate from Annual Population Survey analysis and the 2011 Census. The modelling assumes a commuting rate of 1.06 in 2020, returning to 1.03 by 2030 and remaining at 1.03 thereafter;

Double jobbing ratio from the Annual Population Survey (APS) – ratio of 0.955 used

Assume no changes to unemployment from 2020 onwards

^{2.40} With the exception of some technical details which have little impact on an area such as Oxfordshire, we consider this to be a logical approach and indeed it is almost identical to one ORS have been using for the past 7 years.

^{2.41} We have checked the conversion of employment projections to resident workers to dwelling targets in the report. We confirm that on current employment patterns we broadly agree that if the standard method was used for dwelling provision, this would support approximately 2,650 more jobs per annum from the existing workforce. We also agree that if the 'Business as Usual' model of employment growth was applied this would require around 4,100 more dwellings and the LIS transformational employment scenario would require around 5,000 more dwellings per annum.

^{2.42} These final two figures would imply a very large growth in the population of Oxfordshire and this would have wide implications outside of the area. Both would substantially exceed both the most recent ONS population projections and also the higher adjusted demographic projections produced for the OGNA. Many local authorities have ambitious regeneration or growth plans and not all of them could come to fruition without many more workers in the population. For the 'Business as Usual' and LIS transformational growth models to occur in Oxfordshire, it would require either more workers nationally or lower growth elsewhere. If more jobs are created in Oxfordshire, this will require either more people residing in the County or the jobs being in Oxfordshire while the workers live elsewhere.

^{2.43} The models assume that if there are more workers in Oxfordshire, there have to be more houses. Traditionally this has been done to avoid a need for excessive commuting. However, one outcome from the pandemic and technology change has been an increase in working from home. This separates the location of employment and the location of residency for an employee. Therefore, jobs can increasingly be created in an area, but the employees do not have to reside there. Whilst this process clearly works two ways, if Oxfordshire itself is to see strong economic growth, then it is more likely that more employees will not live locally. This issue is covered by the OGNA 2021 Covid Appendix, but has not been considered as part of the three employment scenarios. It only requires very small changes to the employment/residence pattern for the standard method housing delivery to accommodate the 'Business as Usual' employment

growth, or for the 'Business as Usual' dwelling growth to accommodate the LIS transformational jobs growth.

- ^{2.44} To quantify this issue, the difference between employment growth over 32 years in the standard method scenario and the LIS transformational scenario is around 85,000 employees. This amounts to 15% of the current workforce. ONS Annual Population Survey data indicates that in 2011 around 3.5% of the population worked mainly from home. By 2019 this had risen to 5% and in 2020 it had risen to 8.5%. While this figure may revert downwards in 2022 as pandemic restriction end, there is a clear trend towards more home working and this can be expected to grow up to 2050.
- ^{2.45} The OGNA however, completely fails to reflect, or even to acknowledge, the impact that working from home could have on reducing the number of dwellings required. In ORS' opinion this is a serious omission which means that the number of dwellings required is over-stated.

Affordable Housing Need

- ^{2.46} ORS would like to draw attention to the fact that the OGNA affordable need analysis is based on the consultants' own demographic model which rejects ONS central projections and, as explained earlier, is likely to over-estimate future population growth. It also gives a very different population distribution between the Districts with a much greater increase in Oxford City than there would have been if the ONS central projections had been used.
- ^{2.47} Unlike the Oxfordshire Strategic Housing Market Assessment 2014, at this stage it does not appear that the OGNA uses affordable housing need as a justification for higher overall housing numbers in Oxfordshire. We have therefore reviewed the analysis of affordable housing in the OGNA and have summarised the key issues while providing a more detailed analysis in Appendix A, noting that this may be required in the future if any suggestion is made that overall housing numbers should rise in response to the affordable housing need assessment.
- ^{2.48} In summary the affordable housing need model used in the OGNA follows the definition of affordable housing used in the NPPF to consider two separate groups. The first is those who cannot afford market rents. The OGNA identifies a need for 1,714 affordable homes per annum for this group.
- ^{2.49} However, while the OGNA assumes that households can fall into housing need through reasons such as losing a job or separation from a relationship, it does not recognise that a household can also climb out of need. In the real world, households who are in housing need in the private rented sector could see their income rise or could combine with another household (eg two single-person households forming a couple) and that would cause them to cease being in housing need. This effect is not included in the OGNA and we therefore consider that the housing need figure of 1,714 per annum is more realistically somewhere in the range of 1,000-1,150 per annum if households climbing out of need are taken into account. This still represents a very significant level of affordable housing need, just not as high as is set out in the OGNA.
- ^{2.50} Annex 2 of the NPPF 2019 widened the definition of affordable housing need to include those households who aspire to own, but are unable to afford to do so. This issue is considered in Annex C, Section 5 of the OGNA which calculates (see Table 5.1) a figure of 1,485 dwellings per annum for households who can afford to rent but not buy.

- 2.51 It is unclear how these numbers have been derived but we believe this is a very large overstatement of this element of need and includes substantial double counting. As such, this figure is completely implausible and the correct figure should probably be below 500 dpa for the whole of Oxfordshire.

Housing Need Assessment: Conclusions

- 2.52 In summary, the standard method sets out the minimum housing need for a local authority unless exceptional circumstances demonstrate the need for a lower number. The approach adopted in the OGNA to the standard method through calculating an “adjusted” standard method is unusual and unjustified. The standard method provides a fixed number for housing need and this does not need to be adjusted. Another method should only be used if there is evidence that exceptional circumstances apply in the local authority.
- 2.53 The ONS fundamentally reviewed the population in Oxford City in 2016 and concluded that they had been over-estimating it by 6,000 persons. These 6,000 people would have fed in to the population projections used to calculate the standard method figure for Oxford City. There is therefore a case to explore the population and household projections of Oxford City in much more detail, and there may be exceptional circumstances to justify a housing need figure lower than given by the Standard Method. We think that this should have been considered in the OGNA 2021. The approach adopted in the OGNA effectively to ignore the changes made by ONS and to use Patient Register data is arbitrary and unjustified. In the other Oxfordshire Districts, having reviewed the evidence, we do not consider that exceptional circumstances exist to justify a number lower than the Standard Method.
- 2.54 The OGNA includes three employment scenarios undertaken in very different ways. These cannot be considered as low, medium and high variants on a similar methodology which are often presented in similar studies. The first is simply endogenous to dwelling growth (it states how many jobs would be supported by the adjusted standard method dwelling delivery). A second takes forward strong growth trends from 2010-2018 into the future in a manner which is not fully explained and the third is an aspirational target for jobs growth based upon transforming the economy of Oxfordshire. Therefore, the three models can best be described as housing led, high growth and very high growth models.
- 2.55 For the ‘Business as Usual’ and LIS transformational growth scenarios to occur in Oxfordshire, it would require either more workers nationally or lower growth elsewhere. The LIS transformational growth is realistically only going to happen as part of a wider sub-regional plan such as the Oxford -Cambridge Arc, which at the time of writing has seen its central government support withdrawn. If more jobs are created in Oxfordshire, this will require either more people residing in the County or the jobs being in Oxfordshire while the workers live elsewhere.
- 2.56 A further employment projection to consider long-term growth would probably deliver outputs which could be considered as the central growth scenario. Cambridge Econometrics calculate as standard a central trajectory for all local authorities in England, but this does not appear to have been included in the OGNA.
- 2.57 While the OGNA 2021 Covid Appendix does consider the long-term impact on working from home of the pandemic, this is not factored in to the main scenarios.
- 2.58 Unlike the Oxfordshire Strategic Housing Market Assessment 2014, at this stage it does not appear that affordable housing need is being used as a justification for higher overall housing numbers in Oxfordshire, but of course this may change over time.

- ^{2.59} For households who cannot afford market housing, the OGNA assumes a net need for 1,714 affordable dwellings per annum. ORS consider this figure to be too high and that the correct figure is more likely to be in the range 1,000-1,150 dpa.
- ^{2.60} For households aspiring to own the OGNA concludes that there is an overall need for 1,485 dpa for households who can afford to rent but who aspire to own. The figures appear to include a range of very large over- and double counts and the correct figure should probably be below 500 dpa for the whole of Oxfordshire.
- ^{2.61} Overall, our conclusion is that the Standard Method is currently the minimum level of housing need mandated by Government for local authorities. We do not see any reason why an alternative figure should be used for Cherwell, South Oxfordshire, Vale of White Horse and West Oxfordshire. We consider that extra work needs to be undertaken for Oxford City, given that the ONS has made methodological improvements to its household projections which would substantially reduce its housing need relative to the projections used in the Standard Method. We consider that there is no justification for the consultants' use of the 'Standard Method (adjusted)' in the OGNA and that the alternative demographic basis for this is flawed.
- ^{2.62} We consider that the two employment-based assessments of housing need represent high and very high growth scenarios. A central scenarios should also have been considered. The high growth scenario appears to be based on a period of strong previous growth with no significant economic shocks. This would be unlikely to continue for the period covered until 2050. We also consider that the very high LIS transformational growth projections are ultimately driven by national policy outside of Oxfordshire. If the Oxford-Cambridge Arc policy was implemented fully then the figures may become plausible given that they are derived from the National Infrastructure Commission Report, 'Planning for Prosperity', and represent the figures needed to lift the local housing needs of Oxfordshire to those proposed within the Oxford-Cambridge Arc policy. However, at the time of writing national government has withdrawn its backing from the Arc project, so these figures should carry little weight at this stage.

Appendix A: Modelling Affordable Housing Need

Households Unable to Afford Market Rents

- ^{2.63} In summary, the Oxfordshire SHMA 2014 contained an identified need for 2,370 affordable dpa annum for households who could not afford market housing. In the OGNA, this figure has fallen to 1,714 (or 1,713 at one point in the report) dpa. However, these two figures are not comparable because the OGNA assumes that the backlog of need (5,107 households with base date 2018) is met in 13 years, while the Oxfordshire SHMA 2014 assumes that the backlog (4,483 households with base date 2011) is met over 20 years. If the OGNA was to be run on the same assumption as the Oxfordshire SHMA 2014 and resolve the backlog over 20 years, the modelled level of affordable housing need would be 1,577 dpa in the OGNA 2021.
- ^{2.64} Therefore, on a like for like comparison, the modelling approach adopted in the OGNA 2021 has reduced the level of affordable housing need to 1,577 dpa compared to the 2,370 dpa in the Oxfordshire SHMA 2014. The key driver of this change is that in the Oxfordshire SHMA 2014, 50% of newly forming households were assumed to be unable to afford market housing, while in the OGNA 2021, this figure is 37%. This alone takes over 700 dpa off the affordable housing needs figure.
- ^{2.65} The key question is whether the 1,577 figure is now plausible? One way to assess the plausibility of affordable housing needs models is to consider their past outcomes. The figures set out below are estimates, but they reflect what has happened in Oxfordshire recently.
- ^{2.66} As noted above, the Oxfordshire SHMA 2014 showed a backlog of need of 4,483 in 2011, while the OGNA shows a backlog of need in 2018 of 5,107. This would indicate that the backlog of need has grown by only 624 over 7 years despite the huge level of identified need. The OGNA model assumes that 44.8% (Annex C Table 4.4) of those in unsuitable housing cannot afford to meet their own needs, while the Oxfordshire SHMA 2014 assumed that this figure was 62.6% (Table 45). If we were to apply the new figure of 44.8% to the Oxfordshire SHMA 2014 then the backlog of need would fall to 3,951 households.
- ^{2.67} Taking this assumption forward, on a like for like basis, the backlog of need was 3,951 households in 2011 and 5,107 households in 2018. The growth therefore has been 1,156 or 165 per annum. The backlog of need is just a measure of households who should have had their housing needs met, but haven't to date. This has been growing at 165 per annum after new supply has been deducted in Oxfordshire, while in the OGNA modelled affordable housing need is assumed to grow at 1,321 households per annum before new supply is deducted and excluding the existing backlog of need (Annex C Table 4.7, newly forming need + households falling into need – supply).
- ^{2.68} One clear reason why net new affordable housing has been growing at less than 1,321 dwellings per annum each year is that the past need has been picked up by the supply of new dwellings. The OGNA Table 10.5.1 contains a record of the gross level of affordable housing completions in each local authority in Oxfordshire and is reproduced below. This shows that from 2011-2018 the 5 local authorities delivered a gross total of 5,464 affordable homes (336 in Oxford, 1,674 in Cherwell, 1,496 in VOWH, 1,249 in South Oxfordshire, 709 in West Oxfordshire), which represents an average of 781 per annum.

	Oxford		Cherwell		Vale of White Horse		South Oxfordshire		West Oxfordshire	
	Affordable completions	% of total delivery								
2003/04	141	26	84	21	50	17	80	41	75	13
2004/05	186	28	32	5	20	3	40	21	53	8
2005/06	167	18	61	6	90	14	30	14	218	30
2006/07	267	33	166	19	30	6	30	18	113	14
2007/08	73	14	133	29	100	22	150	29	186	22
2008/09	231	35	87	20	10	3	40	16	94	16
2009/10	192	75	97	22	N/A	N/A	70	37	22	6
2010/11	105	53	96	26	198	59	40	19	163	38
2011/12	18	8	204	57	63	18	194	38	181	50
2012/13	90	42	113	33	143	53	143	30	28	10
2013/14	0	0	140	34	67	12	187	39	41	22
2014/15	17	5	191	20	250	34	114	19	103	26
2015/16	164	37	322	23	326	29	180	30	75	37
2016/17	20	5	278	25	336	21	172	24	123	24
2017/18	27	7	426	31	311	19	259	28	158	28
2018/19	105	30	507	34	392	31	382	28	N/A	N/A
Total	1803	26	2937	25	2386	23	2111	27	1633	23

- ^{2.69} The figure of 1,321 households per annum needing affordable housing is a net figure, and the 781 completions are a gross figure. It is necessary to discount any right to buy sales or demolitions from the supply figures to get a net supply figure. We do not have any records of demolitions of affordable housing, but there are unlikely to be many of these. However, from 2011-18, a total of 195 properties were sold under right to buy by Oxford City Council, or 28 per annum. This gives a net growth in supply of no more than 753 dwellings per annum. There may also have been a small number of right to acquire sales elsewhere.
- ^{2.70} Therefore, net supply has grown by 753 dwellings, per annum and the backlog of need has been growing by around 165 dwellings per annum, which suggests that the annual level of net new need is probably closer to 900 dpa than the 1,312 dpa. When adding the backlog of need, this would suggest a need for affordable housing for those who cannot afford to meet their needs in the market of around 1,000-1,150 dwellings per annum, compared with the 1,714 estimated in the OGNA. However, this would require much more work to confirm a final figure, so this should be treated as only an estimate.
- ^{2.71} There are many reasons why we disagree with the modelling approach adopted in the OGNA, but the key reason relates to households falling into need. For households falling into need, the OGNA measures this need by counting established households on the housing register who have been allocated affordable housing (840 each year in Annex C Table 4.7). As this is a measure of households having their needs resolved and not the number falling into need, ORS does not consider it to be an appropriate figure to use.
- ^{2.72} On the basis that the turnover of social rented properties is 1,401 each year and accepting that 841 of these were let to established households on the housing register, then only a maximum of $(1,401 - 841 =)$ 560 each year could have been let to newly forming households unable to afford market rents. Even this figure is likely to be an over-estimate because newly forming households are assumed to be under 45 years old and some affordable properties will be let to older households, particularly as 494 of 1,401 is in the form of supported housing (Table 4.6) and few newly forming households aged under 45 years are likely to occupy these dwellings.
- ^{2.73} The OGNA shows that the total number of newly forming households unable to afford market rents is 1,881 each year— so if the maximum number being allocated affordable housing is 560 each year, the remaining $(1,881 - 560 =)$ 1,321 new households must have formed in a different tenure. As, by definition, they cannot afford market housing we can conclude that they won't be owner occupiers, and we have already established that they are not renting affordable housing – so we have to conclude that they are forming in

the private rented sector (either paying a higher percentage of their income than the OGNA had assumed on rent and/or receiving housing benefit support).

- ^{2.74} Therefore, by implication, the OGNA Phase 1 study shows that at least 1,321 newly forming households who are assessed as being unable to afford housing will actually establish as new households in the private rented sector each year in Oxfordshire. It is important to note that the needs of all of these households have already been counted by the OGNA study as part of the demographic projections.
- ^{2.75} If any of these households then register on the housing register and are subsequently allocated affordable housing, the OGNA will count their needs again – for at the time they are allocated affordable housing, they will be an established household so the OGNA counts them as an established household falling into need. This is double counting in that the household is counted as being in need when they form, but then they are counted as falling into need when their needs are met. It also has the perverse outcome of saying that the higher the number of existing households in need who have their needs met then the higher number of households will be falling into need each year. Similarly if the number of households having their need resolved falls, so will the modelled level of future households falling into need and the total level of affordable housing need.
- ^{2.76} It is also the case that if any of these households then leave their home in the private rented sector and move to live in another area, they will no longer be counted in the overall housing need figure (as out-migrant households are discounted from the household projections) but as the OGNA study has already counted their needs, they would still be counted as needing affordable housing despite them no longer living in the area. It is clearly wrong to still count the needs of households that don't live in the area.
- ^{2.77} The key point to note about the way the OGNA model operates is that the only way in which these households can cease to be in need of affordable housing is to move to affordable housing. None are assumed to out-migrate or see their incomes rise or household circumstances change for the better. Therefore, once in need, the household will remain in need permanently until housed in affordable housing. To put this another way, households are assumed to fall into need, but they are then assumed to never move out of need unless provided with an affordable home.

Affordable Housing Need: Those Who Aspire to Own

- ^{2.78} Annex 2 of the NPPF 2019 widened the definition of affordable housing need to include those households who aspire to own, but are unable to afford to do so. This issue is considered in Annex C, Section 5, Table 5.1 of the OGNA.
- ^{2.79} The OGNA assumes that 233 dwellings per annum are required for households who can afford to pay their rents in Oxfordshire, but who aspire to own. This is 233 dpa for 13 years, so the total is 3,025 households over the 13 year period. Given the scale of the private rented sector, this is not an implausible figure for the area in 2018 and if anything may be too low.
- ^{2.80} However, it then assumes that 1,881 newly forming households each year will aspire to own, but be unable to afford to do so. This is the same as the number who cannot afford market housing in Table 4.5 and implies that 37.5% of households who form each year in Oxfordshire do so in the private rented sector while being able to afford their rents, but being unable to afford to buy. No tests are made as to whether the 1,881 aspire to own, or could afford a mortgage, or have sufficient savings to be able to move to affordable home ownership.

- 2.81 Table 5.1 also includes a total of 735 established households falling into need each year. We struggle to comprehend who these households are! They are not households who previously could not afford to rent but have seen their income grow because the model for this element, as discussed above, allows for no improvement in household circumstances. Therefore, the 735 must be households who could previously afford owner occupation, but now cannot do so. There is no explanation in the report to say how this figure is derived or the types of households they represent.
- 2.82 What we can conclude is the OGNA states that 37.5% of newly forming households cannot afford market housing, another 37.5% of newly forming households can afford to rent, but cannot afford to buy, so 75% of newly forming households cannot afford to buy. They are then joined each year by 840 newly forming households who fall into need and cannot afford market housing each year, and 735 of newly forming households who previously could afford to buy, but can't afford to do so anymore.
- 2.83 Therefore each year, 75% of households who form cannot afford to own in Oxfordshire and then the equivalent of 31% of all newly forming households are existing households who fall into need for affordable housing.
- 2.84 The figures appear to contain another clear unresolved double count. Taking a circumstance where a household forms in the private rented sector and can afford to pay their rent, but cannot afford to own, they are counted as a potential need for affordable homeownership. However, if their circumstances then deteriorate and they are allocated a home through the housing register they will be counted as a household falling into need in the category of those who cannot afford to rent.
- 2.85 Therefore, unless the 840 and 735 households falling into need all come from those who could previously afford to own, then there are clear double counts of need between the categories. If 1,575 households a year are moving from being able to afford to own, to requiring affordable housing then this is a staggeringly high figure which is not offset by any households moving in the opposite direction.
- 2.86 The supply figures in Table 5.1 are also problematic. The figure of 1,364 dwellings per annum sales comes from the lower quartile of the owner occupied stock. However, these sales will include many sold as buy to lets which are then occupied by private renters, rather than owner occupiers. Therefore, the figure of 1,364 dwellings is probably a significant over-estimate of the supply of cheaper housing available in Oxfordshire for first time buyers.
- 2.87 In summary:
- » We consider that the figure of 1,881 households forming each year, being able to afford to rent and not being able to afford to buy should be tested further to include only those who aspire to own, have some savings and who can realistically afford a mortgage on an affordable home ownership product;
 - » The report does not explain how the figure of 735 households per annum falling into need for affordable home ownership is derived or what it represents;
 - » We consider that there is clear potential for double counting between households forming and being able to afford to rent and those who subsequently fall into need because they cannot afford to rent;
 - » In the OGNA analysis, No households who form while being able to afford their own rent, but not owner occupation ever leave Oxfordshire or see their circumstances improve which is implausible/impossible;

- » Not all of the lower quartile of owner occupied dwellings can be assumed to available for households looking to buy cheaper housing.

^{2.88} Overall, a model which concludes that there is an overall need for 3,025 households who aspire to own now, but that this figure grows by at least 1,252 per annum (1,881 newly forming + 735 falling into need – 1,364 relet supply) is not plausible. Realistically the net need for affordable home ownership for Oxfordshire is likely to be below 500 dwellings per annum, not 1,485 dwellings per annum, but the whole model needs to be re-estimated from scratch.

Appendix B: Project Brief

The Oxfordshire Growth Needs Assessment (OGNA) is fundamental to the Oxfordshire Plan 2050 (OP2050) because assumptions about economic growth and the resulting number of homes to be built affects every other aspect of the plan. The first of the OGNA's core objectives is: *"To identify a strategic level, long-term, robust and transparent methodology for assessing Oxfordshire's housing needs over the period to 2050"*. However, responses to the latest consultation on OP2050, which was accompanied by the publication of the OGNA, have raised concerns about whether the OGNA has met this objective. We are therefore commissioning an independent and objective review of the OGNA in order to:

- Summarise, in terms intelligible to Councillors and the general public, the methodology which the OGNA consultants have used to determine the range of housing requirements;
- Explain the main assumptions and methodology behind the OGNA, in particular the alternative demographic projections adopted, and the economic projections;
- Comment on whether the approach appears reasonable, in the light of criticisms raised, and what alternative approaches could have been adopted;
- Quantify the impact of the methodology on the range of housing requirements compared to examples of other approaches that might have been taken; and,
- Explain the spatial implications for the City and District Councils of the approach taken in the OGNA.