

Oxfordshire Councils

Oxfordshire Growth Needs Assessment

Executive Summary



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1 Introduction and Purpose

The Oxfordshire Growth Needs Assessment

The Oxfordshire Councils¹ are working together to prepare the Oxfordshire Plan which will set out a development strategy for Oxfordshire to 2050.

To support the preparation of the Plan, the Oxfordshire Councils have commissioned Cambridge Econometrics and Icen Projects to prepare the Oxfordshire Growth Needs Assessment (OGNA). The OGNA is intended to provide an integrated evidence base to help the Oxfordshire Councils identify the appropriate level and distributions of housing and employment over the period to 2050. The core objectives of the OGNA are:

- To identify a strategic level, long-term, robust and transparent methodology for assessing Oxfordshire's housing needs over the period to 2050
- To provide a detailed commentary (including the baseline position) on Oxfordshire's housing and employment market, including demographic and economic dynamics and any other key drivers of housing need and how this may change in the period to 2050.
- To identify a range of credible and robust housing need scenarios for Oxfordshire.
- To establish an informed understanding of the implications for sustainable housing growth in Oxfordshire, of the Oxford-Cambridge Arc and of any other strategically significant infrastructure and growth strategies, including proposals for strategic growth in other areas which are likely to have a significant impact in Oxfordshire.
- To identify an appropriate functional economic market area and provide an assessment of employment land requirements.
- To advise on how the Oxfordshire Plan should respond to the uncertainty associated with long-term planning for strategic housing and employment provision.

The methodology adopted, which considers scenarios for future growth in Oxfordshire, responds to this and in particular the strategic and long-term nature of the Oxfordshire Plan.

Context and nature of the Assessment

The Oxfordshire Plan will be a joint statutory spatial plan which covers a 30-year plan period from 2020 to 2050. The Plan is intended to be strategic, focusing on matters such as an overall spatial strategy for development, the integration of new development and investment in infrastructure, and how these can help to improve the quality of life for everyone.

¹ The commissioning authorities comprise Cherwell District Council, Oxford City Council, South Oxfordshire District Council, Vale of White Horse District Council and West Oxfordshire District Council.

The Plan differs from those being prepared in many other areas across England, in particular:

- The Oxfordshire Plan is a strategic plan which is being prepared on a cross-boundary basis spanning the county of Oxfordshire;
- It is looking at a much longer timeframe – a 30-year period to 2050 - than many Local Plans which typically look 15-20 years into the future. This raises issues regarding the reliability of traditional approaches to assessing development needs in some instances;
- It considers the inter-relationship between the economy and spatial planning activities;
- Oxfordshire falls within the Oxford-Milton-Keynes-Cambridge Arc which has been identified by the National Infrastructure Commission and supported by Government. There is a need for the Oxfordshire Plan to consider the strategic context provided by this, including the emerging spatial framework for the Arc, along with other Government growth initiatives and policy. Preparation of the Oxfordshire Plan also provides the opportunity to influence the Arc and shape the future strategy for this strategic corridor.

In addition, one of the major advantages of looking long-term and strategically at the strategy for development and growth is the ability to properly coordinate new development and infrastructure investment and consider what strategic infrastructure might be needed to support growth in the long-term.

These particular circumstances provide a background to the OGNA to which the Assessment seeks to respond.

This report

To ensure the preparation and analysis of an integrated evidence base that effectively addresses the core objectives of the OGNA, the Assessment has been divided into three complementary reports, broadly corresponding to three phases of work, starting with:

- **The Phase 1** , which addresses housing need, economic growth and employment land requirements for Oxfordshire, and appraises the high-level commuting and affordability implications;
- Following on from this, **The Phase 2 Report** defines and characterises the Oxfordshire Functional Economic Market Area, which is used to develop and test scenarios for the distribution of Phase 1 housing need and employment growth *within* Oxfordshire;
- Finally, to reflect the emergence of the Covid-19 pandemic during the development of the OGNA, a **Covid-19 Impacts Addendum** has been produced to sense-check, contextualise, and update the results of the Phase 1 and Phase 2 Reports in light of these developments.

A stand-alone **Executive Summary** report, presented here, has been provided to highlight and bring together the key observations and messages from the three respective reports. The following summary is structured according to these three phases of work, starting with a summary of the *Phase 1 Report*.

2 The Phase 1 Report

Introduction and purpose

The **Phase 1 Report** provides overall growth need figures for housing and employment in Oxfordshire to 2050. It profiles local housing market, demographic, economic and commercial property market dynamics, all within the strategic policy environment.

These factors are then brought together to provide trajectories for future housing and employment land needs, and resultant high-level implications for commuting and affordability.

The following summary highlights and draws out the key findings of the *Phase 1 Report* regarding housing need, economic growth and employment land requirements, and accompanying high-level commuting and affordability implications.

Oxfordshire today

Oxfordshire, like many parts of the greater South East, is characterised by high housing costs and particular affordability pressures. Median house prices have risen from £100,000 to £350,000 in the county over the last 20 years. Whilst current low interest rates mean that mortgage finance is currently relatively cheap, lenders undertake stress testing and the absolute cost of homes to buy means that there are households that need significant savings to be able to buy a home.

Across Oxfordshire the median cost of a home was 10.4 times income in 2019, and Oxford has been ranked as one of the UK's least affordable cities. Influenced by the high cost of homes to buy and rent, there is a very significant need for affordable housing which the OGNA has estimated as being almost 3,200 affordable homes per year across Oxfordshire to 2030.

It is clear that affordability issues are having a real impact not just on young people in Oxfordshire, but also its business community. If left unaddressed this could hold back future economic growth potential. Poor housing affordability can provide a deterrent to young professionals hoping to live and work in Oxfordshire, which affects the ability of businesses to recruit staff to fill positions, including in high-tech and innovative business sectors.

These issues are partly a function of Oxfordshire's economic success. Oxfordshire has been one of the country's fastest growing economies in recent years, and sustained jobs growth of around 6,000 per year over the 2010-18 period. It has notable strengths in research-intensive activities including media and technology, science and healthcare, and public services. Whilst employment growth has been strong, productivity improvements have however stalled in recent years. The ability of companies to recruit and retain skilled staff is one component of this.

The evidence suggests that whilst rates of housing delivery have been rising, jobs growth over the 2010-18 period outpaced growth in housing and labour supply in Oxfordshire. Between 2011-18 the working-age population age 16-64 increased by just 1% (7,800 persons). A supply-demand imbalance for housing has resulted, contributing to both house price growth and growth in net in-commuting into Oxfordshire.

The minimum local housing need

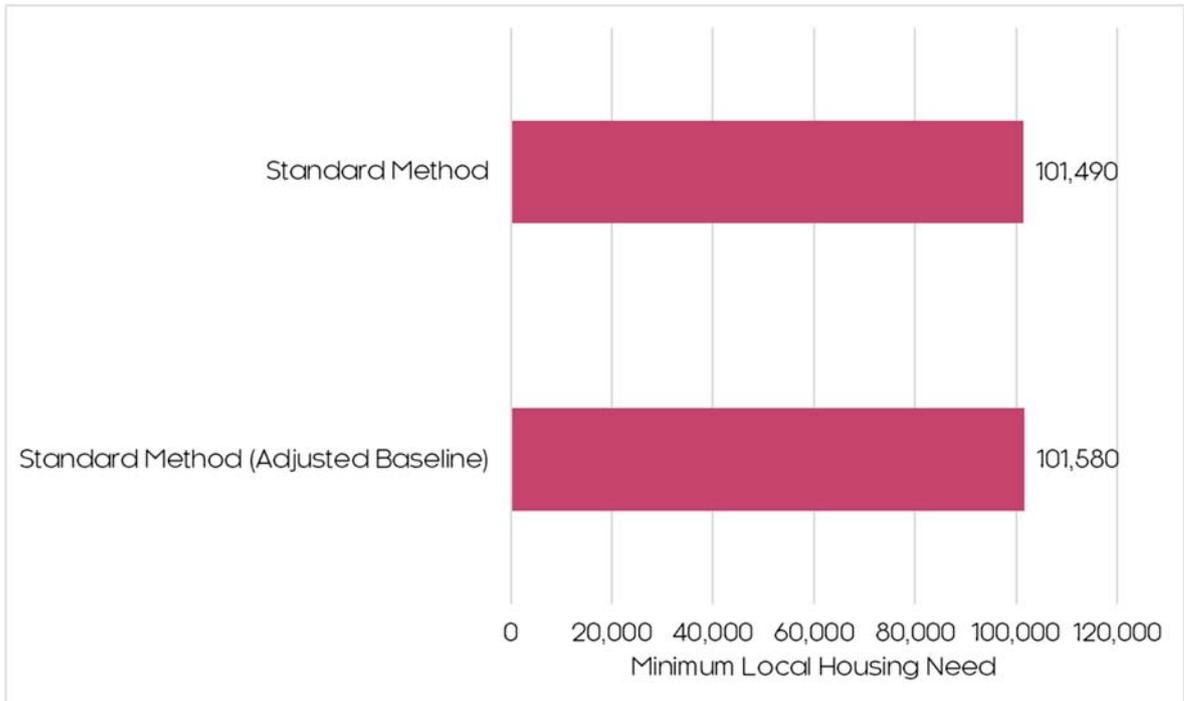
Government’s National Planning Policy Framework (NPPF) and the associated Planning Practice Guidance (PPG) sets out a “*Standard Method*” for calculating the minimum local housing need taking projected household growth and then applying an upward adjustment to improve affordability based on the median house price-to-income ratio.

The Standard Method calculation, following the Planning Practice Guidance at the time of preparation of the OGNA, indicated a minimum local housing need for Oxfordshire of 3,383 dwellings per annum which would equate to a baseline level of provision of 101,490 homes over the 2020-50 plan period. This is based on 2014-based Household Projections.

The review of demographic data undertaken as part of the OGNA indicates that it is likely that Oxford’s population has been under-estimated. To address these issues, revised demographic projections have been developed to provide a revised baseline assessment of the demographic need for housing informed by past population trends.

With appropriate assumptions on household formation, the revised demographic projections presented in the OGNA result in a marginally higher need for 3,386 dwellings per annum equivalent to 101,580 homes over the plan period (as shown in Figure 2.1 below).

Figure 2.1: Standard Method minimum local housing need for Oxfordshire, and with an adjusted demographic baseline, 2020-50



Source: Justin Gardner Consulting, Icen Projects.

This level of housing provision would support population growth of 25.4% across Oxfordshire over the 30-year plan period (equivalent to an additional 183,000 persons).

The Standard Method local housing need changes over time, and the latest data for 2021 (analysis of this revision is appended to the *Phase 1 Report*) shows a slightly lower need for 3,358 dwellings per annum (using the 2014-based Household Projections) and 3,291 dwellings per annum (using the

Oxfordshire's economic trajectories

adjusted projections). The latter would equate to a need for 98,730 homes over the period to 2050.

Government policy sets out that the conditions where other growth levels should be considered, and which are relevant to the preparation of the Oxfordshire Plan. Extensive evidence considered as part of the OGNA in particular demonstrates an important inter-relationship between economic performance and growth potential and housing need.

Resultantly, the OGNA has modelled three alternative economic trajectories to 2050 to consider potential housing and employment land need:

- **Standard Method (adjusted) trajectory:** backwards calculated from the Standard Method calculation of housing need, with an adjustment for the revised demographic baseline.
- **Business as usual trajectory:** this trajectory represents a continuation of Oxfordshire's recent (pre-Covid) economic performance, taking particular account of the robust growth delivered during the recovery from the 2008-09 recession.
- **Transformational trajectory:** this trajectory is broadly the equivalent of the Oxfordshire Local Industrial Strategy's (LIS) aspirational "go for growth" scenario, but updated and adjusted to 2020.

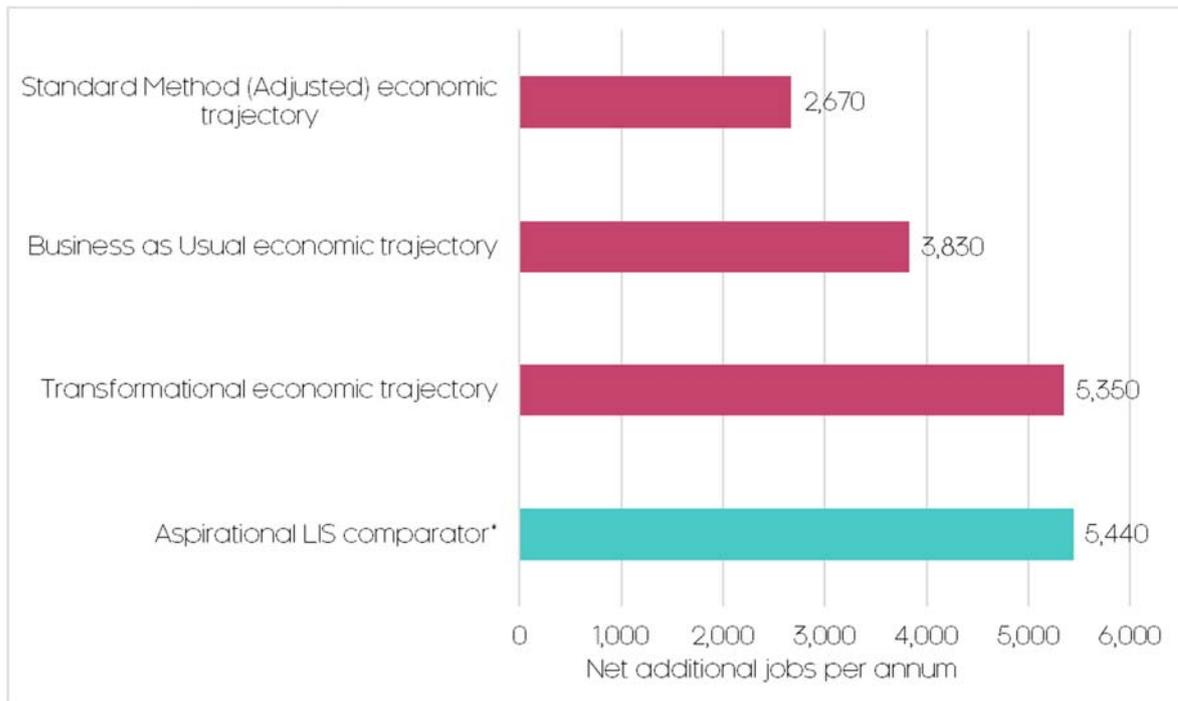
All of the trajectories have a baseline of 2018, the latest available year of data at the time of writing.

From this baseline, the Standard Method (adjusted) trajectory shows 85,400 additional jobs in Oxfordshire by 2050, modelling the level of economic activity that could be expected to be supported by delivery of housing in line with the Standard Method calculations (using the adjusted baseline demographic assumptions).

The business as usual projection models a continuation of Oxfordshire's recent (pre-Covid) robust growth. This shows 122,500 additional jobs in Oxfordshire over the period to 2050. At this pace of growth, Oxfordshire is expected to have continued along its recent growth trajectory, and achieved some of its LIS-related ambitions.

The highest scenario, the transformational trajectory, models the equivalent of delivering many of the aspirations set out in the Oxfordshire LIS, and results in 171,200 additional jobs in Oxfordshire over the period to 2050. The Oxfordshire LIS sets out an ambitious vision for Oxfordshire to be one of the top three global innovation systems by 2040.

The results of the three economic trajectories, shown in terms of additional jobs per annum, are presented in Table 2.1 and Figure 2.2 below (the latter of which includes the Oxfordshire LIS' jobs aspiration as a comparator, shaded in turquoise). They present alternative assumptions of how Oxfordshire's economy might perform. It's per annum not gross

Figure 2.2: Employment (jobs) trajectories for Oxfordshire, 2018-50

Source: Cambridge Econometrics, PwC. Note: * LIS comparator corresponds to 2017-40 only.

Table 2.1: Employment (jobs) trajectories for Oxfordshire

	Employment (jobs) at 2018 (baseline)	2030	2040	2050	Net additional employment (jobs), 2018-50	Net additional employment (jobs) p.a., 2018-50
Standard Method (adjusted) economic trajectory	410,066	434,538	464,179	495,555	85,489	2,672
Business as usual economic trajectory	410,066	451,742	490,234	532,517	122,451	3,827
Transformational economic trajectory	410,066	466,804	520,636	581,254	171,188	5,350

Source: ONS, Cambridge Econometrics. p.a. = per annum.

Despite the application of a robust methodology and evidence base, there are clearly uncertainties associated with predicting the future economic performance of a local area, which heightens as the forecasts look further into the future.

However, the growth trajectories considered are reasonable parameters for growth when set against Oxfordshire's historic economic performance and employment growth trends over previous economic cycles, with Oxfordshire displaying particularly robust growth over the most recent economic cycle.

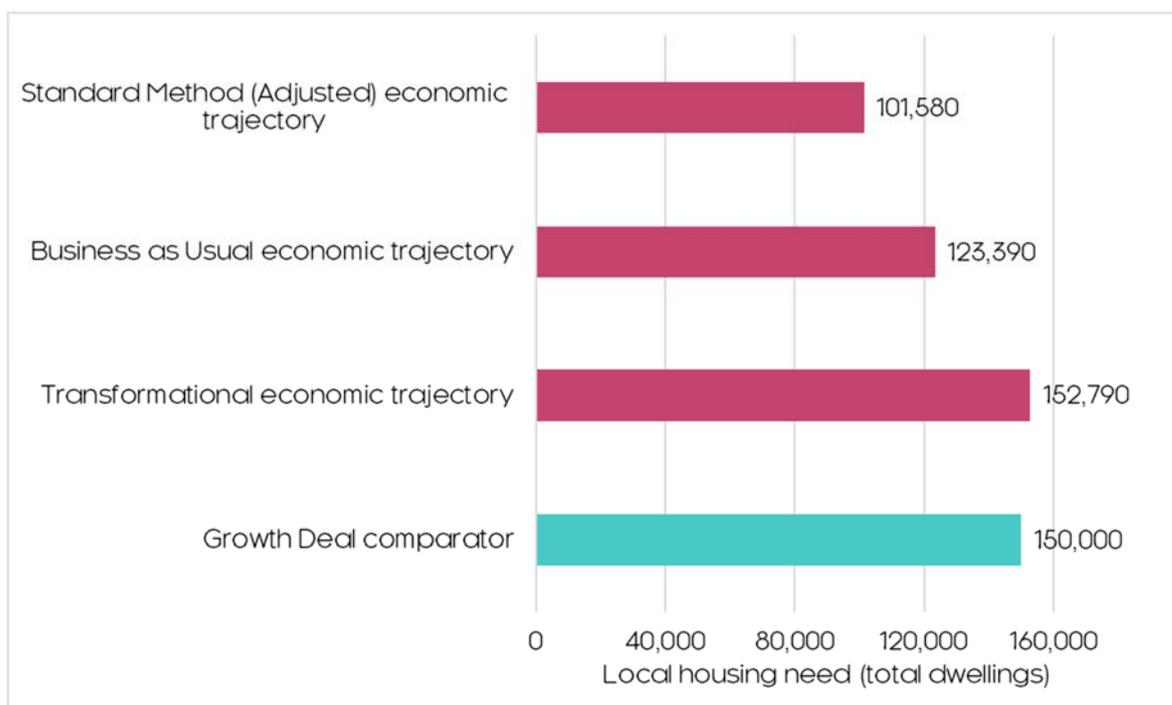
Building on this analysis, the OGNA has proceeded to model what level of housing provision might be needed to accommodate these levels of growth, taking into account factors such as the changes in the age structure of the population and the proportion of people of different ages in work.

The results of the housing need accompanying the economic trajectories are shown in Table 2.2 and Figure 2.3 below (the latter of which includes the Oxfordshire Housing and Growth Deal housing aspiration as a comparator, shaded in turquoise. The Deal provides funding for affordable housing and infrastructure improvements to support the ambition of building 100,000 homes between 2011-31 to address the county’s severe housing shortage and support economic growth).

The analysis shows that to meet the Standard Method (adjusted) level of need over 2020-50, Oxfordshire would require around 3,400 dwellings each year; with the business as usual level of growth this increases to 4,100 dwellings per annum, with a transformational figure approaching 5,100 dwellings per annum, dependent on the realisation of LIS-related ambitions.

These figures can be compared with the Standard Method housing need (unadjusted, across the whole of Oxfordshire) of 3,400 dwellings per annum over the period 2020-50.

Figure 2.3: Projected housing need in Oxfordshire from the economic trajectories, 2020-50



Source: Justin Gardner Consulting, Icen Projects. Note: the Oxfordshire Housing and Growth Deal however only runs to 2031 however, and has been extrapolated using per annum rates of delivery.

Table 2.2: Projected housing need in Oxfordshire from the economic trajectories, 2020-50

	Households at 2020	Households at 2050	Change in households, 2020-50	Change in households p.a., 2020-50	Local housing need (dwellings) p.a., 2020-50
Standard Method (adjusted) economic trajectory	288,999	387,591	98,592	3,286	3,386
Business as usual economic trajectory	288,999	408,806	119,807	3,994	4,113
Transformational economic trajectory	288,999	437,328	148,329	4,944	5,093

Source: ONS, Justin Gardner Consulting, Icen Projects. p.a. = per annum.

For the purposes of the Oxfordshire Plan, planning for higher levels of housing provision than the Standard Method provides greater potential both to support economic growth and deliver affordable housing; and a greater likelihood of improving the affordability of market housing over the plan period to 2050.

The OGNA does not however recommend one trajectory over another but provides a set of parameters for growth. In determining the appropriate strategy and how much development to plan for, the evidence in the assessment needs to be brought together with broader factors including the capacity to accommodate growth and environmental consequences of different levels of growth.

Employment land provision

There is a healthy market for commercial property in Oxfordshire. Office take-up and availability is generally concentrated in Oxford and southwards along the 'Knowledge Spine', including Milton Park and Harwell Campus. Take-up and availability of industrial floorspace is more spread out across Oxfordshire, with noticeable amounts of speculative developments to the northeast of the county where there is good access to the M40.

It is evident that there are short-term supply constraints in the office market, particularly in the Oxford area and for Grade A space. Many of the area's science and business parks are at capacity. The evidence also points to a healthy market for industrial space.

The OGNA has modelled the implications of the jobs growth arising in each of the employment projections for employment land and floorspace. This has been compared to projections of past employment floorspace completions based on trends over the 2011-18 period.

For the purposes of considering the amount of land to allocate for employment uses, it is sensible to group together Office and Research and Development uses. These types of activities typically take place on business and science parks within Oxfordshire and can also take place in central parts of towns and cities including town and city centres.

Equally it is sensible to group together more general industrial land which can cater for both light and heavy industrial uses (Classes EG(iii) and B2) as well as storage and distribution (Use Class B8) which are less likely to take place in central areas.

Table 2.1 below brings together the results of the labour demand modelling and the projections of gross floorspace completions on this basis. This includes an allowance for replacement of losses and some supply-side flexibility.

Table 2.3: Gross additional employment land needs (total hectares, ha) in Oxfordshire, 2020-50

	Office, R&D and Education need (ha), 2020-50	Industrial, Warehousing & Other need (ha), 2020-50	Total employment land (ha) needed, 2020-50
Standard Method (adjusted) economic trajectory	149	296	445
Business as usual economic trajectory	185	369	555

Transformational economic trajectory	233	444	677
Completions projection	162	645	807

Source: Icenis Projects.

For office, R&D and education uses the OGNA concludes that labour demand trajectories provide an appropriate basis for considering the level of employment land provision which should be made within the Oxfordshire Plan. This demonstrates a need for provision of between 149-233 ha of land for these uses to 2050 (depending on the growth trajectory taken forwards).

However, for the broad industrial use category, there is a weaker relationship between jobs and floorspace or land requirements given productivity improvements and demand arising for replacement of older dated stock.

The OGNA therefore considers that greater weight should be afforded to the completions projection scenario for industrial land (which is based on past gross development trends) which suggests a need for almost 650 ha of industrial land for the 30 year plan period.

Overall, the evidence suggests that the scale of employment land needed across Oxfordshire could be up to 807 ha. The precise scale will be influenced by decisions on what growth scenario to take forward in the Plan.

Commuting and affordability implications

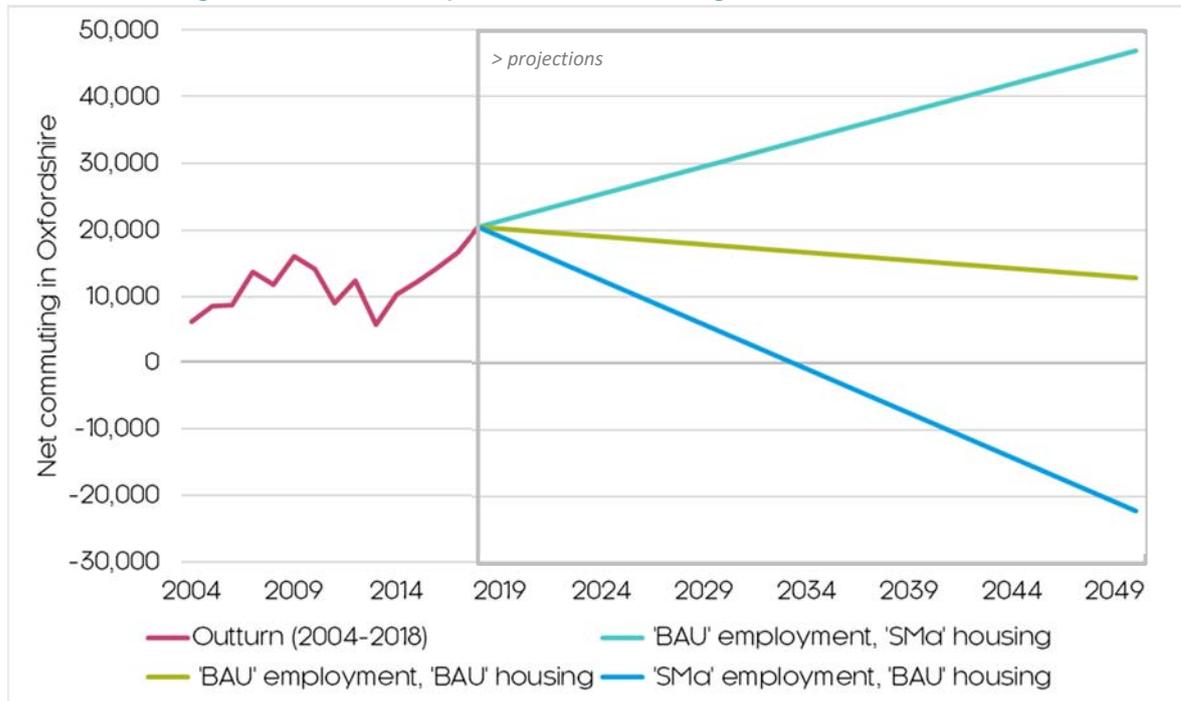
Over the past decade, relative to the supply of housing, employment growth has accelerated in Oxfordshire. This has had implications for both net commuting and housing affordability, which have both increased significantly in the county over this time. OGNA analysis has identified a statistically significant relationship between the balance of housing and employment growth in local areas, and the implications for commuting levels and affordability.

The analysis shows housing delivery above that required to sustain the associated level of employment growth will likely result in a reduction of net commuting and an improvement in housing affordability within Oxfordshire. Yet housing delivery below that required to sustain the associated level of employment growth will likely result in an increase in net commuting and a deterioration in housing affordability.

The intention of the three economic and housing trajectories is to ensure the delivery of employment and housing growth in Oxfordshire will become more aligned. The trajectories address this by incorporating a lowering of the ratio between the number of jobs relative to the number of dwellings in Oxfordshire, demonstrating how a balance of future housing and economic growth can stabilise and lower affordability and commuting pressures.

Such outcomes are increasingly desirable given the high welfare and inequality costs of unaffordable housing, and the growing strain on Oxfordshire's transport network from increased commuting (and associated externalities, notably, environmental and emissions effects, particularly in light of the desire to attain net zero).

Figure 2.4: Current and potential net commuting flows in Oxfordshire

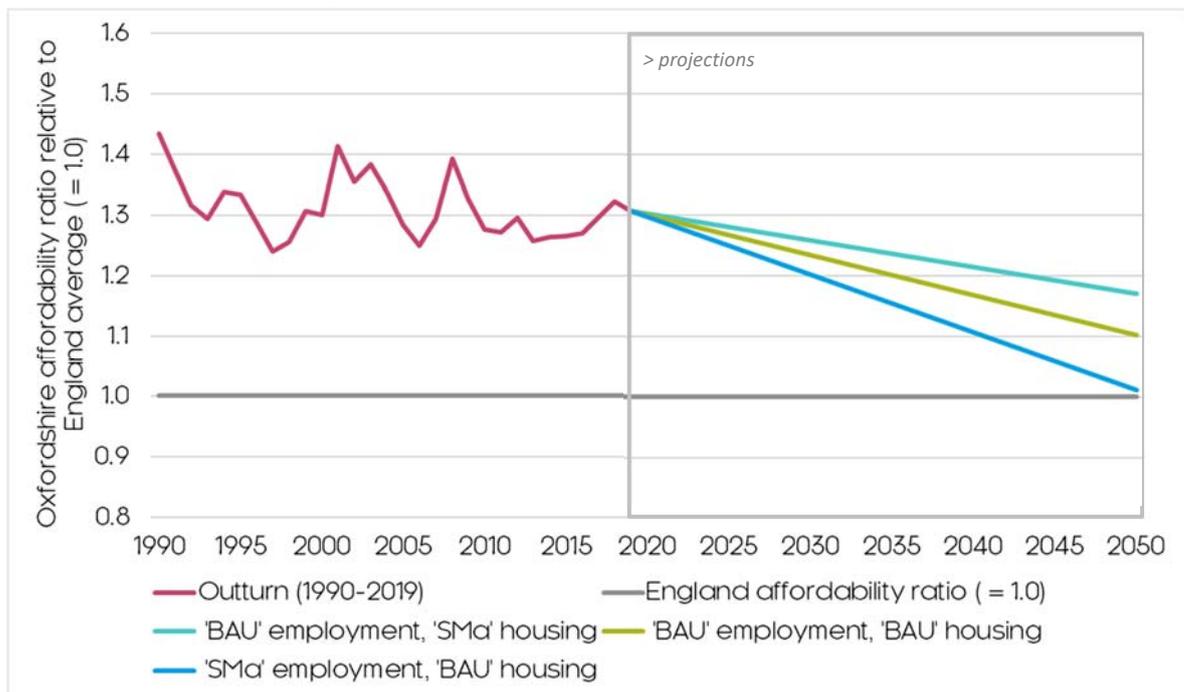


Source: ONS, Cambridge Econometrics.

Figure 2.4 above demonstrates how the balance of future housing and economic growth can impact upon net commuting in Oxfordshire:

- A lower employment growth trajectory relative to higher housing growth (the blue line) could see a reduction in Oxfordshire's net commuting, potentially below historic (pre-1991) levels. This would mean there are more residents than jobs in the county, so residents commute out for work.
- A higher employment growth trajectory relative to lower housing growth (the turquoise line) could see an increase in Oxfordshire's net commuting, above current record-highs. This would mean there are more jobs than residents in the county, so out of county residents commute in for work.
- A similar employment and housing growth trajectory (the green line) would see a steady decline in Oxfordshire's net commuting as it returns to 'normal' levels. The number of jobs is still marginally higher than the number of residents in the county, reflecting Oxfordshire's historically higher commuting ratio.

Figure 2.5: Current and potential house price affordability in Oxfordshire, relative to the England average



Source: ONS, Cambridge Econometrics. Note: a ratio of 1.0 would equate to an affordability ratio exactly the same as the England average.

Figure 2.5 above demonstrates how the balance of future housing and economic growth can impact upon affordability (relative to the England average) in Oxfordshire:

- A lower employment growth trajectory relative to higher housing growth (the blue line) would see a significant reduction in Oxfordshire's affordability ratio relative to the England average. This could result in housing in Oxfordshire being as affordable as elsewhere in the country.
- A higher employment growth trajectory relative to lower housing growth (the turquoise line) would see a steadier reduction in Oxfordshire's affordability ratio relative to the England average. Housing would still be around 1.2x less affordable in Oxfordshire than elsewhere in the country though.
- A similar employment and housing growth trajectory (the green line) would still see a notable reduction in Oxfordshire's affordability ratio relative to the England average. This could result in housing in Oxfordshire being marginally less affordable than elsewhere in the country.

Covid-19 and the Phase 1 Report

The development of the *Phase 1 Report* coincided with the Covid-19 pandemic of 2020 and 2021. It is clear that the pandemic and some of its long-lasting effects have the potential to impact upon the findings of *Phase 1* of the OGNA, not least those relating to commuting trends, and housing and employment land needs. As such additional consideration has been given to this question. This analysis is summarised by the *Covid-19 Impacts Addendum* below.

3 The Phase 2 Report

Introduction and purpose

Following on from the *Phase 1 Report*, the **Phase 2 Report** considers a range of high-level scenarios for the spatial distribution of housing and employment need across Oxfordshire.

The purpose of this is to aid decision-makers in understanding of the implications of alternative spatial choices. It does not seek to identify specific options or priorities for development, but rather explores the potential scale and implications of different approaches.

The following summary highlights and draws out the key findings of the *Phase 2 Report* regarding the definition and characteristics of the Oxfordshire FEMA, the scenarios for the distribution of housing need and employment growth, and their resultant implications for commuting and transport use.

The Oxfordshire Functional Economic Market Area (FEMA)

Figure 3.1: Spatial levels of the Oxfordshire FEMA



Source: Cambridge Econometrics.

Functional Economic Market Areas (FEMAs) are designed to capture the extent and spatial distribution of a local economic market more accurately than administrative boundaries, which rarely reflect the true scale and reach of local economic markets and accompanying economic flows.

The OGNA has sought to identify the extent and characteristics of the Oxfordshire FEMA, to enable a more precise and in-depth exploration of potential spatial distributions of economic growth and housing need in Oxfordshire.

The analysis of several economic, demographic, and social markets and indicators showed that the county of Oxfordshire is a reasonable approximation for the Oxfordshire FEMA, with Oxford at its centre. Further spatial levels ('Zones') have also been identified within the FEMA, each with their own distinct characteristics and economic attributes. Presented in Figure 3.1 above, these include:

- **Oxford City Centre:** the area with the highest concentration of economic activity, as well as central urban amenities, with a strong and growing services-led economy.
- **Oxford City Fringe:** the area surrounding the City Centre, characterised by a high degree of integration with and connectivity to the City Centre, and the presence of important urban fringe sites, such as science parks and large suburb, as well as the undeveloped Green Belt. An area of diverse and fast-growing economic activity.
- **The Knowledge Spine:** an area of globally-recognised knowledge activity that runs through the centre of the FEMA, largely along the A34 corridor. Straddling the City and Centre and Fringe, it comprises a **Northern** and a **Southern** part. Both areas have seen robust economic and housing growth of late.
- **The Wider County:** areas that remain outside both the Knowledge Spine and City Centre and Fringe. They comprise three roughly equal parts of comparable economic activity and functionality: **County East**, **County West** and **County North**. Pockets of high economic and housing growth can be found within these predominantly rural areas.

As emphasised in the *Phase 2 Report*, these Zones are purely hypothetical, to allow for a better spatial understanding of housing need in relation to economic trends, and they should not be regarded as specific options or priorities for the distribution of development.

Employment and housing need distributions to 2050

Understanding the potential spatial scale and pattern of employment growth is important for informing, testing and illustrating contrasting distributions for housing need. Drawing on the definition of the Oxfordshire FEMA and its constituent spatial levels ('Zones'), the OGNA has explored the potential spatial distribution of the three Oxfordshire-wide employment trajectories to 2050 (as prepared and presented in the *Phase 1 Report*).

The distributions for employment growth are summarised in Figure 3.2 below. Over the longer timeframe of the *Phase 1* employment trajectories (to 2050), there is the potential for a more spatially balanced growth picture to emerge compared to recent (2011-18) trends.

Central Oxfordshire, encompassing the Knowledge Spine (including Oxford City and Fringe), is expected to remain a significant driver of economic activity, accounting for a potential two-thirds of net additional jobs in the FEMA to 2050.

Figure 3.2: Spatial scenarios for Zonal distribution of additional employment (jobs) growth, 2011-18 and 2018-50



Source: ONS, Cambridge Econometrics. County East excluded from 2011-18 outturn due to negative employment growth. Percentage shares relate to Zones proportion of FEMA-wide jobs growth to 2050.

Having considered the scale and pattern of potential economic growth within the Oxfordshire FEMA, the OGNA proceeds to illustrate a range of spatial distribution scenarios for the FEMA-wide housing need to 2050 (as prepared and presented in the *Phase 1 Report*.)

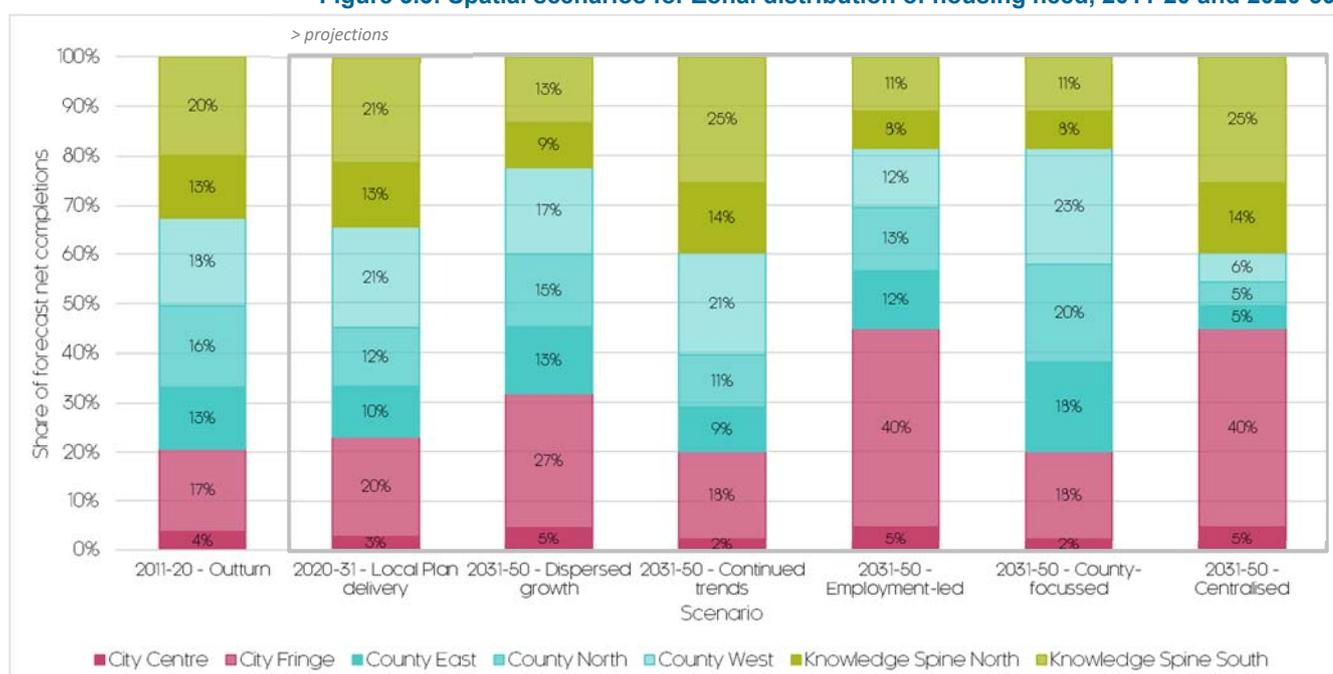
By taking the opportunity to quantify and test a range of different scenarios for housing distribution, the potential implications and trade-offs of different development choices can be identified and contrasted at a high-level.

The distributions of housing need have been informed by a set of robust and contrasting housing scenarios, with the results presented in Figure 3.3 below. The scenarios cover a variety of contrasting development choices for need after the 2020-31 period of Local Plan forecast completions. The scenarios include:

1. **An evenly dispersed scenario** – which sees housing need allocated at an even *percentage rate* (not quantity) across the FEMA.
2. **A continued trends scenario** – mirrors current concentrations of forecast net completions in Local Plans (which cover 2020-31), extrapolating them over the additional 2031-50 period.

3. **An employment-led scenario** – sees need matched to the distribution of projected Zonal employment growth, including growth in LIS-outlined key employment locations.
4. **A County-focussed scenario** – focuses need on the Wider County, resulting in the lowest proportion of need allocated to Oxford City Centre and Fringe and the Knowledge Spine.
5. **A centralised scenario** – focuses need on central Oxfordshire, incorporating Oxford City Centre and Fringe and the Knowledge Spine. This results in the lowest proportion of need allocated to the Wider County.

Figure 3.3: Spatial scenarios for Zonal distribution of housing need, 2011-20 and 2020-50



Source: MHCLG, Cambridge Econometrics. Note: percentage shares are an average of distributions across the three employment trajectories. Percentage shares relate to Zones proportion of FEMA-wide housing need to 2050.

As Figure 3.3 (above) shows, the distribution scenarios cover a variety of contrasting development choices, ranging from an economic-led focus on distribution in central Oxfordshire (Oxford and the Knowledge Spine), to a more evenly dispersed approach across the county, to an emphasis on market towns in Wider County areas.

As it allocates housing growth rates equally across Zones, the **evenly dispersed** scenario sees housing distributed the most evenly between the Zones post-2031. The Wider County still has the highest absolute level of growth, as it starts with the highest number of initial dwellings at 2031.

The **continued trends** scenario, extrapolating 2020-31 Local Plan forecasts to 2050, sees significantly greater distribution to the Knowledge Spine, and marginally less allocated to the Wider County and City Centre and Fringe.

The **employment-led** scenario sees much greater distribution to Oxford City (specifically the City Fringe), and comparatively lower levels allocated to the Wider County and Knowledge Spine.

The **County-focussed** scenario combines the low City Centre and Fringe distribution from the *continued trends* scenario with the low distribution to Knowledge Spine from the *employment led* scenario. This scenario results in a very high relative allocation to the Wider County.

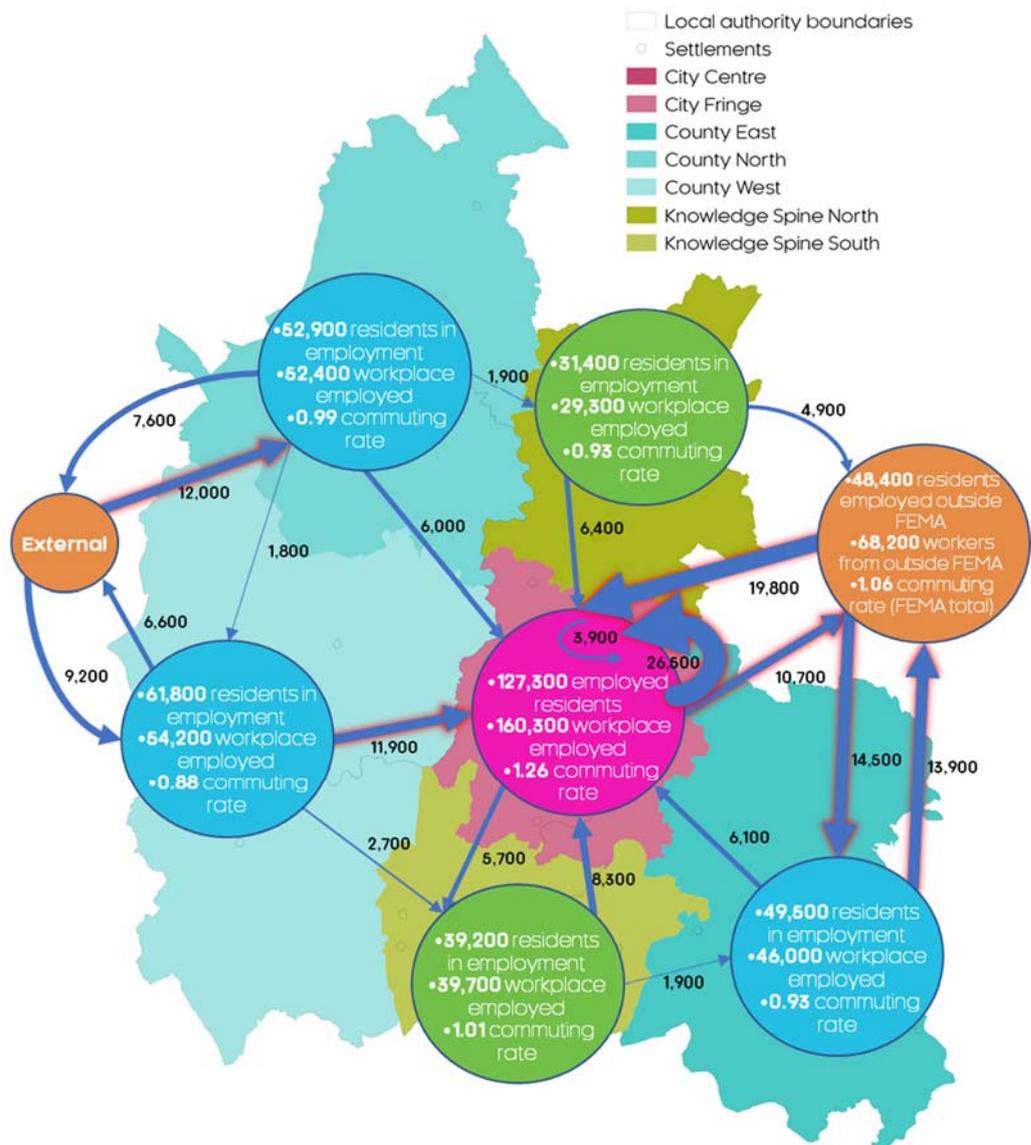
The **centralised** scenario reverses this process, with the high City Centre and Fringe distribution from the *employment-led* scenario paired with the high Knowledge Spine allocation from the *continued trends* scenario. This scenario results in a very low relative distribution to the Wider County.

It should be emphasised that these scenarios do not reflect preferred options or priorities for economic growth or housing delivery, but are rather hypothetical distributions to better understand the implications and trade-offs of different development choices at a high level. It should also be noted that these scenarios do not take into account specific site constraints, phased need, or development sites outside of the Local Plan period (2020-31).

Implications for commuting

By taking the opportunity to quantify and test a range of different housing distributions, potential implications and trade-offs can be identified and contrasted. The OGNA has specifically focussed on understanding the

Figure 3.4: Stylized overview of commuting flows in the Oxfordshire FEMA, 2018



Source: ONS, Cambridge Econometrics.

consequences for commuting trips, modal share and private vehicle miles within the FEMA, particularly given their important role in attaining net zero ambitions for the county.

Analysis of recent trends has shown that, as a result of employment growth accelerating relative to the supply of housing, commuting into the Oxfordshire FEMA has more than doubled over the past decade. This means more people are commuting – and commuting further, typically using private transport - to work in the FEMA, exacerbating congestion and environmental effects. Oxfordshire’s current commuting profile is summarised in Figure 3.4 (above).

Though the scale of potential employment and housing growth in Oxfordshire will increase the absolute number of commuting trips within the FEMA, the OGNA has found that, given certain development choices, there is the potential for the length of these trips to decrease, for modal share to shift towards greener, more sustainable forms of transport, and for millions of private vehicles miles to be taken off Oxfordshire’s roads by 2050.

Such outcomes are increasingly desirable given the growing pressure on Oxfordshire’s transport network, associated externalities (notably, environmental and emissions effects), and the desire to attain net zero, and should therefore be considered in the appraisal of any future spatial development options for the FEMA.

Covid-19 and the Phase 2 Report

The development of the *Phase 2 Report* coincided with the Covid-19 pandemic of 2020 and 2021. It is clear that the pandemic and some of its long-lasting effects have the potential to impact upon the findings of *Phase 2* of the OGNA, not least those relating to the size and structure of the FEMA, and commuting trends and patterns. As such additional consideration has been given to this question. This analysis is summarised by the *Covid-19 Impacts Addendum* below.

4 Covid-19 Impacts Addendum

Introduction and purpose

During the course of the OGNA development in 2020, it became clear the Covid-19 pandemic could have significant, long-term impacts that may be relevant to the scope of the study, in terms of the prospects of different sectors locally, the demand for housing within the county, and the interaction between housing and employment location and transport demand given remote work.

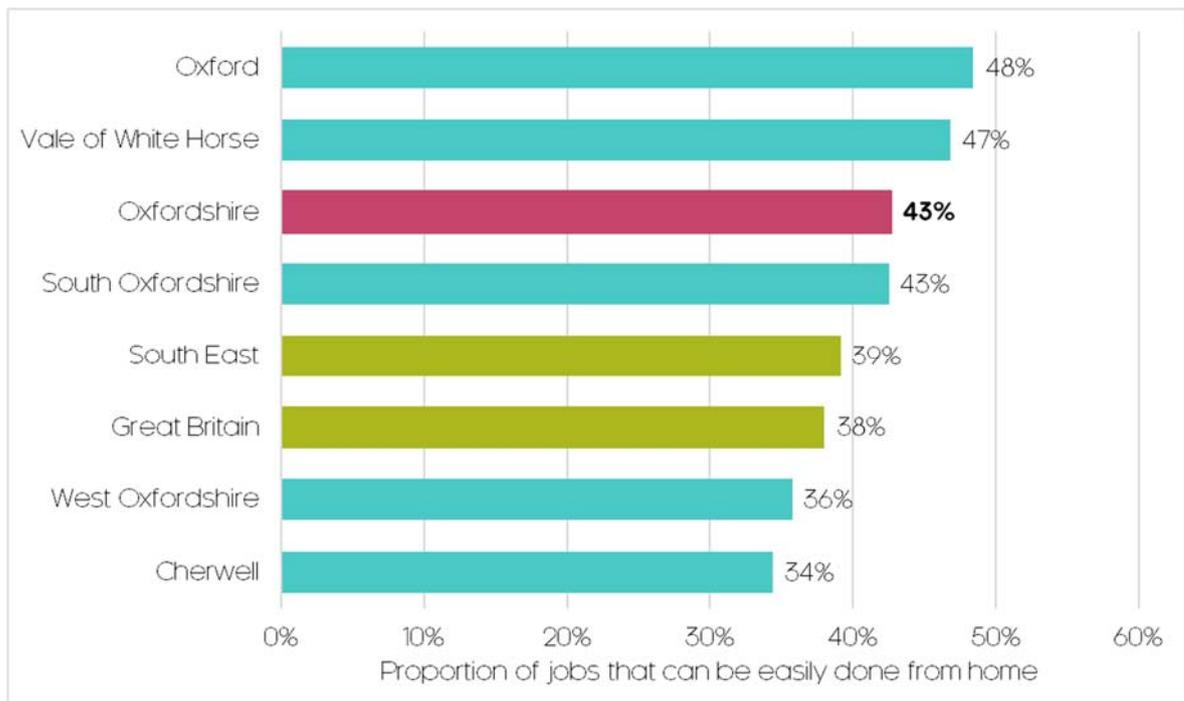
To reflect the emergence of the Covid-19 pandemic during the development of the OGNA, this short report - the **Covid-19 Impacts Addendum** - was therefore commissioned to sense-check, contextualise, and update the results of the *Phase 1* and *Phase 2 Reports* in light of these developments.

The Addendum draws heavily on and supplements the extensive analysis and research undertaken for [Oxfordshire LEP's Economic Recovery Plan \(ERP\)](#), which was produced by Steer ED in conjunction with CE over 2020-21 in response to the pandemic. The following summary highlights and draws out the key findings and observations from the Covid-19 Impacts Addendum.

The legacy of the Covid-19 pandemic

Drawing on the latest theory and evidence, the addendum has sought to gauge the potential legacy of the Covid-19 pandemic over the longer timeframe of the Oxfordshire Plan (to 2050). Particular attention has been given to the durability and legacy of the Covid-induced shift to remote working ('homeworking'), which as Figure 4.1 below shows has the potential to be a much more prevalent within parts of Oxfordshire's labour market.

Figure 4.1: Homeworking potential across Oxfordshire



Source: Dingel & Neiman (2020), ONS, Cambridge Econometrics.

Beyond the short- and medium-term economic impact, the addendum appraises the longer-term potential for the pandemic to trigger and accelerate substantive economic, social and behavioural change in Oxfordshire and beyond, particularly in terms of matters associated with the thematic areas identified in the OGNA, such as:

- demography and housing (e.g. by changing the attractiveness of urban living, or people revising their need to reside close to work);
- sectors and employment land needs (e.g. by shifting/reducing demand for retail, leisure and office space, or accelerating the shift to online shopping), and;
- commuting and transport (e.g. by shifting/reducing the volume, mode and distance of commuting trips).

Yet in many instances, the pandemic has simply brought to the fore trends that were already in place and likely to be significant by 2050 anyway (and were typically considered, if not accounted for, within the original OGNA evidence base). Rather than changing the direction of travel, the pandemic has accelerated these trends, whilst, crucially, bringing them to the attention of a wider audience.

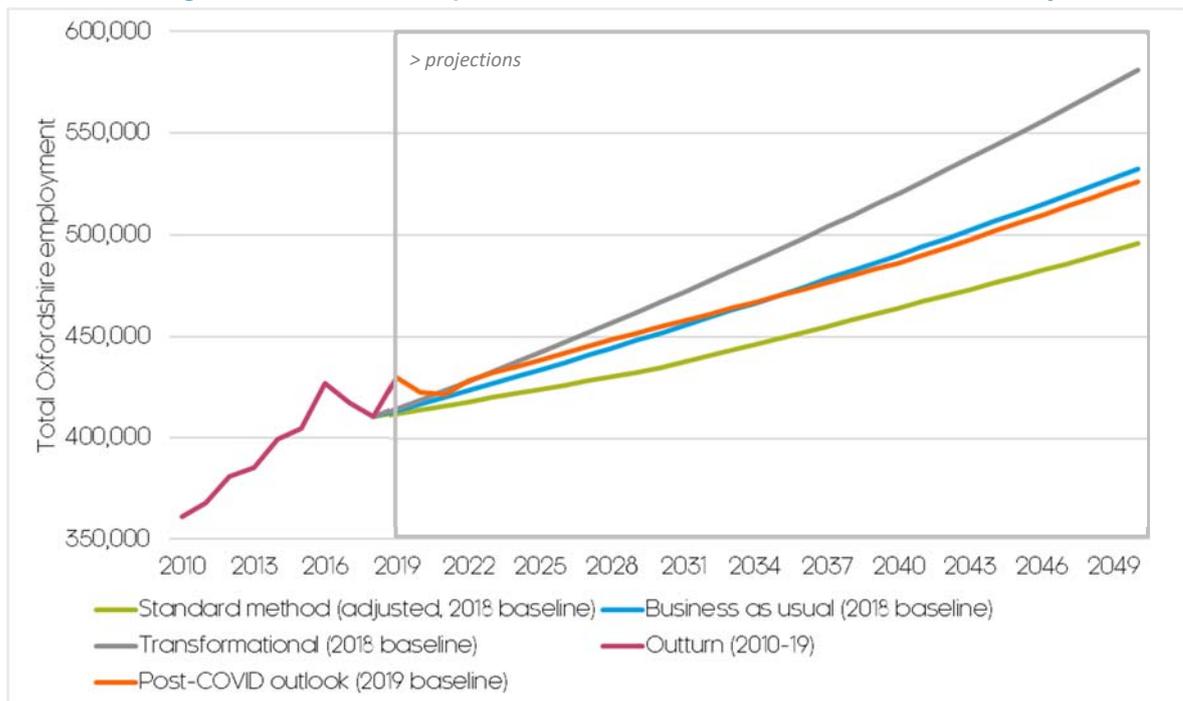
Likewise, for many workers and residents and Oxfordshire, it is important to note that the pandemic may have little to no impact relative to their pre-Covid routine; for instance, even during strict lockdown measures, the majority of workers were still reporting that they had never worked from home.

Although the negative short-term impacts of the pandemic have undoubtedly been severe within Oxfordshire, and will continue to be felt for several years to come, some of the Covid-induced trends, such as homeworking and localism, should be seen not as a threat but a significant opportunity to reshape Oxfordshire’s economic geography and transport systems, particularly in the context of the urgent need to reduce emissions.

Robustness of the Phase 1 trajectories

Informed by updated forecasts and evidence incorporating the impact of the pandemic and its accompanying trends (presented in Figure 4.3.2 below, with post-Covid forecasts shown as the orange line), the addendum appraises the longer-term robustness of the OGNA’s original economic trajectories.

Figure 4.2: Oxfordshire’s post-Covid outlook to 2050, relative to the OGNA trajectories



Source: Oxfordshire ERP, ONS, Cambridge Econometrics.

Given Oxfordshire’s intrinsic resilience and recoverability to economic shocks, it is expected the short-run impact from the pandemic will be less pronounced in Oxfordshire, whilst Oxfordshire’s recovery will also outperform the national average, resulting in a smaller shortfall relative to pre-Covid trends.

Resultantly, as far as Oxfordshire is concerned, the addendum considers that the analysis underpinning the *Phase 1* and *Phase 2 Report* remains current and valid, though there is undoubtedly a need for the planning system to build in an increased level of flexibility.

As Figure 4.2 and Table 4.1 show, the range of feasible trajectories for employment growth and subsequent housing need are still well represented by the three trajectories depicted in the *Phase 1 Report*. Similarly, the five housing distribution scenarios outlined in the *Phase 2 Report* are still a suitable means of exploring the implications – in terms of commuting and affordability - between different approaches.

Table 4.1: Oxfordshire’s post-Covid outlook to 2050, relative to the OGNA trajectories

	Jobs, baseline	Jobs, 2050	Jobs growth, baseline-2050	Jobs growth per annum, baseline-2050
Post-Covid outlook (2019 baseline)	430,100	526,500	96,400	3,100
Standard Method (adjusted, 2018 baseline) trajectory	410,100	495,600	85,500	2,700
Business as usual (2018 baseline) trajectory	410,100	532,500	122,500	3,800
Transformational (2018 baseline) trajectory	410,100	581,300	171,200	5,300

Source: Oxfordshire ERP, ONS, Cambridge Econometrics.

What may change is how policy makers calculate these implications, depending upon which version of the future they think is most likely to occur, as captured by the three post-Covid scenarios presented in this addendum. The scenarios, which look ahead to 2050, cover a range of feasible and contrasting behavioural changes as a result of the pandemic:

- *Scenario 1: a ‘relative’ return to normal* – a conservative scenario for the adoption and durability of remote working.
- *Scenario 2: a new normal* – a more likely scenario of a popular and widespread adoption of a ‘hybrid’ model of remote working.
- *Scenario 3: a step change* – an ambitious scenario assuming a positive step change in the adoption and durability of remote working.

Drawing on these scenarios, and flexibly incorporating any other relevant trends and indicators that emerge, policy makers are better placed to understand and appraise the scale and distribution of housing and employment space needed, and accompanying implications for commuting and affordability.

For instance, the original OGNA identifies a need for 560 hectares of employment land to 2050 under the central outlook of the business as usual trajectory. However, under the more extreme behavioural scenarios (i.e. scenarios 2 and 3) rather than maximising land allocations, local policy makers may wish to make more flexible allocations for employment land.

**Post-Covid
monitoring and
review**

When planning for the Oxfordshire of 2050, there is an increased emphasis on planning for a vision that is both feasible and desirable; the “forced experiment” of the pandemic has provided us with incredibly valuable information as to what that might look like.

For instance, the geography of Oxfordshire’s residents has both expanded and contracted during the pandemic: expanded, by the reduced need for daily commuting, which has increased the range of feasible employment or residential options; contracted, by the increased opportunity and willingness to engage with and increase dependence on local communities and amenities.

Moving forward, there is a need for the planning system to continue to monitor such trends and build in additional flexibility and responsiveness, particularly given there is still an unprecedented amount of uncertainty when it comes to estimating the scale and durability of the pandemic’s longer-term impacts.

Building on the opportunities provided by the pandemic – such as increased active travel, and reduced commuting - there is also a need for additional analysis on how best to join up spatial planning with infrastructure delivery sequencing, to reach net zero carbon targets whilst maintaining an innovative and prosperous economy.