BIDWELLS

UNIVERSITY OF OXFORD & OXFORD BROOKES UNIVERSITY

OXFORD LOCAL PLAN 2040: REGULATION 19

Quality Assurance

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1.0 Executive Summary

1.1 This representation to Oxford City Council is made on behalf of the University of Oxford and Oxford Brookes University ('the Universities') to the Oxford Local Plan 2040 Regulation 19 Consultation and the associated Community Infrastructure Levy (CIL) Partial Charging Schedule Review. The representation should be treated as an **Objection** to all parts of the Local Plan and its supporting evidence highlighted in the following analysis except where Support is specifically acknowledged.

1.2 This response builds on the representation submitted to the Preferred Options consultation on behalf of the University of Oxford and Oxford Brookes University in November 2022, in addition to the representations submitted to the Regulation 18 Part 2 Consultation in March 2023.

1.3 Throughout this period and in the lead up to the writing of the Draft Plan, the Universities held a series of meetings with the Local Plan Team to seek a resolution to all outstanding points. This has not been possible and this submission is therefore identifying the key issues outstanding from our previous representations, as well as commenting on new detail and evidence.

1.4 Before explaining the Universities' position in relation to the Draft Plan, we would like to set out some important principles which structure the response to the proposed policies:

i. The Universities and the City Region are inextricably linked: the built environment, cultural life and economic output of Oxfordshire is linked to the presence of nationally and internationally regarded leaders in teaching, research and innovation;

ii. The Universities attract talent and stimulate economic activity within the Oxford cluster, driving innovation and demand for services and contributing to the UK's objective of being a global leader in innovation;

iii. The success of both Universities, evident in their ranking successes, is linked to continuous investment in their academic, research and residential estate to support their talent;

iv. The Universities have been able to invest in their estate through strong regional partnerships, particularly with the City and Cherwell Councils: The Universities have leveraged their own estates to help manage their growth. Evidence of this is the substantial supply of student accommodation available within Oxford, ambitious masterplans for the Universities' key remaining sites in the City and the leveraging of their peripheral estate to support housing, whether for staff housing or the mainstream market;

v. However, the Universities cannot develop in a closed system: they need the support of the Oxfordshire authorities to continue to grow or risk compromising the growth of the economy and the future success of the Universities. The draft Policies in the City's Plans and those of its neighbours need to support the City's role in developing the UK as a global leader in innovation.

1.5 Following a review of the latest Draft Plan and its evidence base, the Universities have reluctantly concluded that the strategy and its supporting detailed policies are likely to constrain the successful

development of the Universities as well as the wider knowledge intensive economy in the City. The opening chapter of the Draft Plan is clear in the limited brief of the Local Plan: it is seeking only to balance existing needs within the context of perceived constraints.

"The role of this new Local Plan is to build upon the positive aspects that make the city so special, whilst also seeking to address the challenges we face through positive planning policies to ensure the optimum outcomes for the environment and its residents, businesses, education, and health institutions." (Paragraph 1.2)

1.6 The National Planning Policy Framework ('NPPF') requires the Local Plan to be prepared positively, to be aspirational, but deliverable (para 16b) and make sufficient provision for all development (para 20a). It is our contention that this Plan is proposing a policy of restraint in respect of the Universities and has not examined alternative, aspirational scenarios which could deliver for the City and wider economy. We consider that the requirements of national policy as set out in Paragraphs 85-87 of the NPPF have not been met.

1.7 As set out in this consultation response, we consider that the Draft Plan poses a key constraint to the potential of the Oxford knowledge intensive cluster through the following inter-related mechanisms:

- Vision and Spatial Strategy (Policy S1): the proposed Vision and Spatial Strategy fails to acknowledge the significant contribution of both Universities and the symbiosis they have with the health of the City. As an internationally significant hub for learning and research, Oxford's history, urban form, civic facilities and culture have been shaped by the Universities. The breadth of facilities and opportunity far exceeds that which a City the size of Oxford could reasonably generate without the presence of two major universities. These important urban, social, economic and cultural contributions need to be acknowledged in the Vision and Spatial Strategy, particularly given the importance and potential of the innovation economy to the City as an area of high productivity.

- Student cap (Policy H10): The proposed student Cap presents different problems to both Universities. Although Oxford Brookes University will be able to operate within the cap for most (if not all) of the Plan period, the University of Oxford will be unable to grow in the 2030's once all existing sites on the University's estate, as identified in the Draft Plan, are delivered. The cap imposed by the policy is arbitrary and is no longer guiding an effective policy response;

- Supply of Student Accommodation: No new sites have been identified outside of the Universities' estates and various policies restrict future supply (Policies H3 and H9);

- Control over University Strategy: the Protection, Alteration and Provision of Learning and Non-Residential Institutions (Policy C4) is unnecessarily controlling without recognising the important benefit and historical continuity of this activity within Oxford;

- Collegiate estates: The inappropriate designation of some core collegiate estates as a 'green network' mischaracterises these areas. Already protected, collegiate quadrangles are urban and fulfil important operational requirements which could not be achieved if protected as Core Green Spaces (Policy G1);

- Sustainability (Policy R1, R2 and R3): Whilst improving the retrofit and reuse of buildings is to be welcomed where possible, the current policies fail to take account of the complex requirements of academic and research institutions and make suitable exemptions. Planning policy at a national level does not strictly prohibit demolition, nor does it suggest that carbon saving policies should be prioritised over the growth of the economy and innovation, as does the current Draft Plan. The Universities and for that matter commercial companies should be able to embark on the planning and design process with a higher degree of confidence of success than this open-ended policy currently provides.

- Urban Capacity: The Draft Plan is seeking to impose a height limitation across the City (Policy HD8) based on existing context determining proposed building heights. This takes national guidance out of context and under-estimates the true capacity of Oxford to absorb additional capacity sensitively. If the City genuinely considers it cannot meet its full housing and economic needs, then it must only reach that conclusion once capacity has been more fully tested and opportunities for increased height have been explored.

1.8 There is a lack of clarity throughout the plan with unnecessary repetition and conflict between policies, extensive guidance and opinion perhaps best left to supplementary planning guidance, and an attempt to go beyond national planning policy by seeking to prevent any harm without due weight to the planning balance, alternative mitigation or potential impacts on urban capacity, deliverability and viability.

1.9 Appended to this submission is a detailed audit of Draft Policies and Site Allocations which links our strategic points in the main Report with detailed changes to text required in order to make the Plan sound in those specific respects.

1.10 It should also be noted that the Council have offered *'the public the final chance to express their views*' for an 8-week period between Friday 10th November 2023 and 5th January 2024. The University of Oxford's Michaelmas Term ended on 1st December 2023, with students returning on 15th January 2024. Similarly, Oxford Brookes University's Semester ended on 22nd December 2023 with students returning on the 22nd January 2024.

1.11 The Universities have therefore, only been able to fully engage with their students, who sit at the heart of their institutions, for circa three of the eight weeks of consultation.

1.12 The Universities consider that more engagement and refinement is needed before this Plan can be submitted for Examination. We would welcome a further round of consultation to determine if the concerns of the Universities could be assuaged.

1.13 This representation is supported by two appendices, one of which provides further detail and evidence on the potential of the Oxford innovation cluster, and the other providing detailed commentary on site allocations relating to the core estates of both Universities.

2.0 Vision and Potential

Vision & Spatial Strategy (Policy S1)

2.1 Paragraph 1.2 (second reference) of the Local Plan sets out the overarching vision for the Local Plan, as follows:

'In 2040 Oxford will be a healthy and inclusive city, with strong communities that benefit from equal opportunities for everyone, not only in access to housing, but to nature, employment, social and leisure opportunities and to healthcare. Oxford will be a city with a strong cultural identity, that respects our heritage, whilst maximising opportunities to look forwards to innovation, learn and enable businesses to prosper. The vision is one which supports research and development in life sciences and health sectors which are and will provide solutions to global challenges. The environment will be central to everything we do; it will be more biodiverse, better connected and more resilient. We will utilise resources prudently whilst mitigating our impacts on the soil, water and air. The city will be net zero carbon, whilst our communities, buildings and infrastructure will be resilient to the impacts of climate change and other emergencies'.

2.2 Unfortunately, the proposed Vision fails to acknowledge the significant contribution of both Universities and symbiosis they have with the health of the City. As an internationally significant hub for learning and research, Oxford's history, urban form, civic facilities and culture have been shaped by the Universities. The breadth of facilities and opportunity far exceeds that which a City the size of Oxford could reasonably generate without the presence of two major universities. With a Census 2021 population of just 162,000, Oxford is of a similar scale to Slough, Ipswich or Peterborough, but boasts services, facilities and opportunities that these other locations cannot match. The cultural identity, heritage and innovation referred to in the Vision stem directly from the presence of two major Universities. The success of Oxford has therefore depended on the successful growth and development of the Universities, and it is therefore axiomatic that City's continued success is bound up in the ongoing success of the Universities. The influence of the Universities has also extended into housing through direct provision or the disposal of redundant campuses. These important urban, social, economic and cultural contributions need to be acknowledged in the Vision.

2.3 Moreover, the importance and needs of the knowledge intensive economy are not sufficiently captured within the Vision, which focuses only on life sciences and health. Given the need for – and commitment of – Oxford scientists to tackle the climate emergency, this is a serious omission. Other crucially important forms of the knowledge economy are also missing such as Artificial Intelligence ('AI'), computing, biodiversity, humanities, security, space etc. These fields will generate unique pressures on the City and its infrastructure. Their omission represents an under-estimation of the potential and their spatial impact. As an area of high productivity and a global hub of learning and research, Oxford will drive the national innovation economy and develop solutions to global challenges. As such, the Vision has narrowly framed the position of the City as it is today and has misdirected the Plan so it fails to plan positively for the city, its citizens, the wider economy and internationally.

2.4 The UK Innovation Strategy, published in July 2021, sets out the government's vision to make the UK a global hub for innovation by 2035. The primary objective of the strategy is to boost private

sector investment across the whole of the UK, creating the right conditions for all businesses to innovate and giving them confidence to do so.

'Boosting innovation in the private sector is an essential part of the UK's future prosperity and key to achieving UK objectives to be a force for good on global challenges around climate, biodiversity, prosperity and security.'

2.5 In March 2023, the Prime Minister reiterated the country's objective of making the UK a global science superpower by 2030, turning world-leading science and ideas into solutions for the public good. The plan is backed by over £370 million to boost investment in innovation, bring the world's best talent to the UK, and seize the potential of ground-breaking new technologies like AI where the University of Oxford is a world leader in research.

2.6 The Independent Review of University Spin-out Companies published by the Government in November 2023 further outlines the government's '*ambition for the UK to be a science and technology superpower, with thriving partnerships between universities and high-tech spin-out companies contributing to economic growth and productiv*ity'. The report goes on to recognise that UK universities are globally competitive on research commercialisation with Oxford third respectively in the world in terms of the number of deals in their spin-outs between 2013 and 2017.

2.7 Oxford University Innovations' ('OUI's') first Impact Report published October 12th, 2023, includes many examples of Oxford's economic and societal impact from the spinout companies created by OUI. This includes the creation of more than 300 companies, of which Oxford Nanopore Technology was ranked as the top Initial Public Offering by a spinout by market capitalisation, valued at £3.8 billion. Together the University, Oxford's companies, and OUI's partners in the wider ecosystem, is helping support £3.4bn of economic impact per annum, and the creation of over 28,000 jobs.

2.8 A core economic objective sits at the heart of the NPPF. This objective seeks '*to build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure'* (paragraph 8).

2.9 Emphasising the importance of economic growth and productivity, paragraph 85 of the NPPF states that (our emphasis):

'Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. ***Significant weight should be placed on the need to support economic growth and productivity,*** *taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future.* ***This is particularly important where Britain can be a global leader in driving innovation, and in areas where high levels of productivity, which should be able to capitalise on their performance and potential.****'*

2.10 We would also highlight the importance of paragraph 86 in terms of providing clear guidance regarding proactive economic strategies and the importance of addressing barriers to investment rather than working within existing constraints. Paragraph 87 goes further and highlights the importance of making provision for clusters such as the Oxford knowledge intensive cluster.

2.11 As we have already highlighted, paragraph 1.2 of the Draft Plan qualifies the Vision as seeking to balance existing needs only and in accordance with the Spatial Strategy (S1d), focusing new employment needs on existing sites only. It is telling that the Universities, despite being the largest landowners and employers within the City and having a profound and positive impact on the City, are not referenced in the Spatial Strategy (Policy SP1). As we shall see below, the Draft Plan has under-estimated the impact of the Universities and the knowledge intensive economy and is proposing a restrictive suite of controls though subsequent policies. It has not addressed the clear instruction laid down in paragraph 85 of the NPPF and nor can the Draft Plan be regarded as aspirational. Indeed, the conservatism of the Plan and its inappropriate threshold for environmental protections (no mitigation or compensation accepted) risks making the plan undeliverable through its policies of restraint as well as failing to meet the true level of need from educational and knowledge intensive uses contrary to paragraph 86 of the NPPF. Spatial Strategy Policy S1 is therefore not fit for purpose.

2.12 If the University and the Oxford Knowledge Cluster are to thrive, a greater effort to find space and opportunity is required. If that opportunity is not robustly explored, then the Universities and the wider economy will fail to achieve their full potential. In Appendix 1 we have set out the scale of the opportunity not fully explored in either the evidence base or the Sustainability Appraisal. More must be done to address the specific characteristics of the Oxford cluster in accordance with paragraph 87 of the NPPF.

The Need for Growth in Innovation

2.13 This section explores the potential for growth during the plan period of the Knowledge Intensive ('K.I') sector in Oxfordshire. Appendix 1 provides further details and evidence in support of our main conclusion that the draft Local Plan has significantly under-estimated the growth potential and future accommodation requirements of the K.I sector.

2.14 Across Oxfordshire, K.I. industries are concentrated in Oxford City and the Vale of White Horse where they account for 18% of total employment and collectively represent the biggest employment sector after education. This compares to a national average of 9%, illustrating the significance of the industries to the county.

2.15 The Oxford Science & Tech Cluster, within which the Knowledge Intensive industries sit, has huge potential as it continues to grow year-on-year. Table 1 below shows the breakdown of K.I. employment and other employment for Oxford City and the Vale of White Horse between 2015 and 2022. We have used 2015 as the base year for this analysis because ONS changed its methodology for local employment data between 2014 and 2015.

2.16 **Table 1** reveals that K.I. sector employment grew by an average of 4.2% per annum between 2015 and 2022, with growth of 18.9% between 2021 and 2022.

	2015	2016	2017	2018	2019	2020	2021	2022
Knowledge Intensive	27.8	28.4	27.4	31.1	30.1	30.7	31.2	37.1
Non-K.I. Sectors	178.2	183.7	181.6	184.9	191.9	179.3	171.8	174.5
Total employment	206.0	212.0	209.0	216.0	222.0	210.0	203.0	211.6

Table 1: Employment in Oxford and the Vale of White Horse (000s)
Source: Bidwells, ONS Business Register and Employment Survey. December 2023

2.17 The world leading research undertaken by the Universities and research institutes and the pool of highly skilled staff are key ingredients for the continued success and growth of science and technology businesses within the Oxford cluster. Indeed, other employment sectors have declined during the same period.

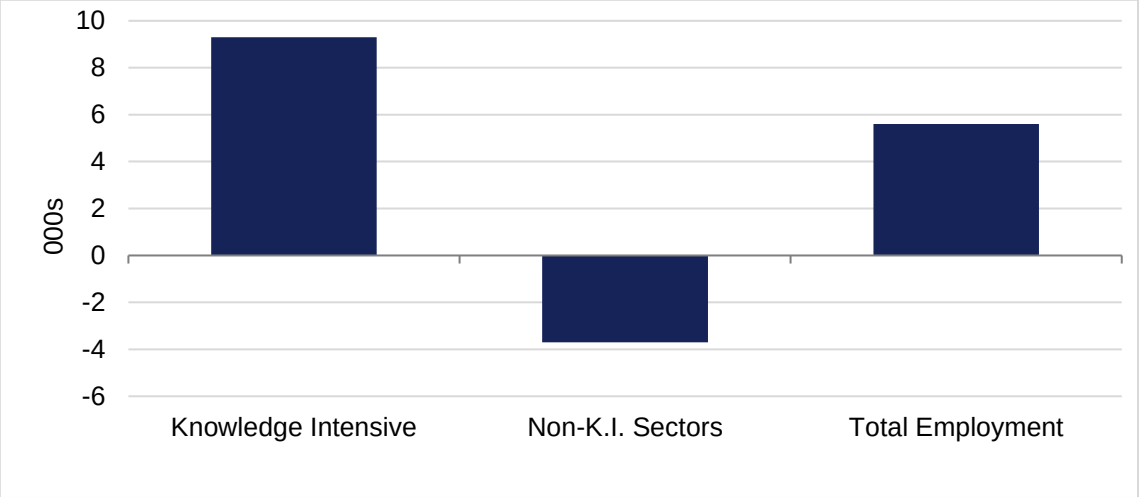

Figure 1: Change in Employment in Oxford and the Vale of Whie Horse 2015 to 2022
Source: Bidwells, NOMIS, December 2023

2.18 The diversity of scientific activities within the cluster also means that it is not dependent on one technology which might be superseded. Growth is likely to be driven primarily by the expansion of existing businesses and future spin-outs from the Universities but will be boosted even further by the addition of multi-national companies. In addition, the growth of the Cluster will be supported by a further maturing of the venture capital environment.

2.19 Bidwells believe that K.I. industries in the Oxford Science and Tech cluster have the potential to sustain employment growth of 4% p.a. during the period to 2040, given all the current advances in science (e.g. cell and gene therapy, AI, quantum computing, nuclear fusion). Growth is likely to be driven primarily by the expansion of existing businesses and future spin-outs from the Universities, but periodically, will be boosted by the arrival of multi-nationals and other smaller specialist firms. Government measures which aim to increase investment by UK pension funds in start-up businesses should also support the long-term growth of the Oxford Science & Tech cluster.

2.20 The growth of K.I. industries will benefit the Oxfordshire economy in two ways. First, as their staff spend money in shops, pubs and restaurants in Oxford and the Vale of White Horse. Second, through supply chains, as K.I. business buy services (e.g. construction, professional services) from businesses across Oxfordshire.

2.21 However, whether the potential of the Oxford Science & Tech cluster is realised will depend on a number of supply-side factors, many of which will hinge on planning decisions made by Oxford City Council and the Vale of White Horse. These include the expansion of the universities, the provision

of additional housing and commercial space, electricity supply and upgrades to the transport network to enable people to commute into Oxford and the science parks in the Vale of White Horse.

2.22 If these supply-side issues are not resolved then there is a risk that many of the jobs that could have been created in Oxfordshire do not materialise, because K.I. businesses which cannot expand locally will be forced to open a second site in another cluster (e.g. Boston, Cambridge, Copenhagen, Leiden, London). That raises a further risk that if the Oxford Science and Tech cluster becomes smaller in relative terms, then it may become less attractive to academics and researchers.

2.23 **Table 2** below shows the total employment that would be generated by K.I. industries in the Oxford Science and Tech cluster if recent employment growth were maintained to the end of the plan period. We have made a conservative assumption of 4% employment growth per annum, compared with the historic figure of 4.2% average annual employment growth since 2015. This scenario is the one in which the K.I. industries in the Oxford Science and Tech cluster fulfil their full potential.

Employment in 2022	
Knowledge Intensive [1]	37,100
Other Sectors	174,500
Total Employment	211,600
Knowledge Intensive % of total	18
2022-2040 Change % p.a.	
Knowledge Intensive	4.0
Other Sectors	0.8
Total Employment	1.5
Employment in 2040	
Knowledge Intensive	75,100
Other Sectors	201,100
Total Employment	276,200
Knowledge Intensive % of total	27
Additional Jobs 2040 vs 2022	
Knowledge Intensive	38,000
Other Sectors	26,600
Total Employment	64,600

Table 2: Oxford & Vale of White Horse Knowledge Intensive Industries Full Potential Scenario
Source: Bidwells, ONS Business Register and Employment Survey. December 2023.

2.24 The Full Potential scenario also assumes that every ten new jobs in K.I. industries would generate 7 new jobs in other sectors. (Source. "Do low-skilled workers gain from high-tech employment growth?" Neil Lee, Stephen Clarke. Research Policy 2019). As a result, employment in K.I. industries would double over the next 18 years to 75,100 jobs, an increase of 38,000 from 2022 and there would be an additional 26,600 jobs in other sectors. This would take the total number of jobs in Oxford and the Vale of White Horse to 276,200 in 2040 and K.I. industries would account for 27% of total employment.

2.25 Many of the additional jobs would be highly skilled and a further assumption implicit in the Full Potential scenario is that the city's Universities will expand to provide the required skills and training. However, not all of the additional jobs would require a degree. For example, just under half of jobs in life science companies are non-graduate roles.

2.26 **Table 3** below considers the implications for floorspace requirements of the Full Potential scenario.

	OXFORDSHIRE HENA LOW SCENARIO	OXFORDSHIRE HENA HIGH SCENARIO	K.I. INDUSTRIES FULL POTENTIAL
Additional Office Jobs	4,908	7,118	16,000
Additional Laboratory Jobs	4,129	6,580	16,000
Office space per worker – Net internal area (NIA) Metre^2	-	-	12.5
Lab space per worker - NIA Metre^2	-	-	28.0
Additional Office Space - NIA Metre^2	122,170	141,380	200,000
Additional Lab Space - NIA Metre^2	145,220	226,560	448,000
Additional Office Space - NIA Feet^2	1,315,026	1,521,800	2,152,780
Additional Lab Space - NIA Feet^2	1,563,134	2,438,669	4,822,227

Table 3: Oxford & Vale of White Horse Additional Office and Laboratory Space in 2040
Source: Bidwells, Cherwell and Oxford City Council Oxfordshire HENA (incl. Errata). December 2023.

2.27 **Table 3** translates the additional jobs identified by **Table 2** into the extra office and laboratory space which will be required in Oxford and the Vale of White Horse by 2040. We have assumed that 6,000 of the additional jobs in the K.I. Industries Full Potential scenario in **Table 2** are in advanced manufacturing rather than life science, Information Technology ('IT') or other Research and Development ('R&D') and therefore do not generate demand for office, or laboratory space. The remaining 32,000 jobs are split evenly between the two sectors.

2.28 While current requirements are tilted 40%:60% between office and laboratory space, we think that in part this is a temporary phenomenon caused by cost cutting in IT and that requirements will

revert to 50:50 over the long-term. For example, an increasing amount of drug discovery involves AI and does not initially require a laboratory.

2.29 Please note that we have ignored the implications of the K.I. Industries Full Potential scenario for housing, retail, leisure and industrial space in the two districts, because that is outside the scope of this study.

2.30 The office and laboratory space per worker figures in **Table 3** are taken from the Oxfordshire Housing and Economic Needs Assessment (HENA) published by Cherwell District and Oxford City Council in December 2022 and the subsequent Erratum in June 2023. It is difficult to know how employment densities will change in the future. The greater adoption of remote working since Covid-19 has encouraged some office occupiers to down-size, although simultaneously there is pressure to provide more collaborative space and reduce noise pollution and improve wellbeing. Laboratory space per worker is assumed to remain constant, given less opportunity for remote working and the need to accommodate scientific equipment.

Additional Floorspace Projections to 2040

2.31 If we multiply the number of additional jobs in the Full Potential scenario by the figures for floorspace per worker, then the analysis suggests that Oxford and the Vale of White Horse will require an additional 2.2 million square feet of office space and an additional 4.8 million square feet of laboratory space by 2040.

2.32 As shown in **Figure 2** below, these estimates are significantly higher than in the HENA report, particularly for laboratories. The HENA report, which has both high and low growth scenarios, suggests that Oxford and the Vale of White Horse will only require an additional 1.3 to 1.5 million square feet of office space by 2040 and an additional 1.6 to 2.4 million square feet of laboratory space.

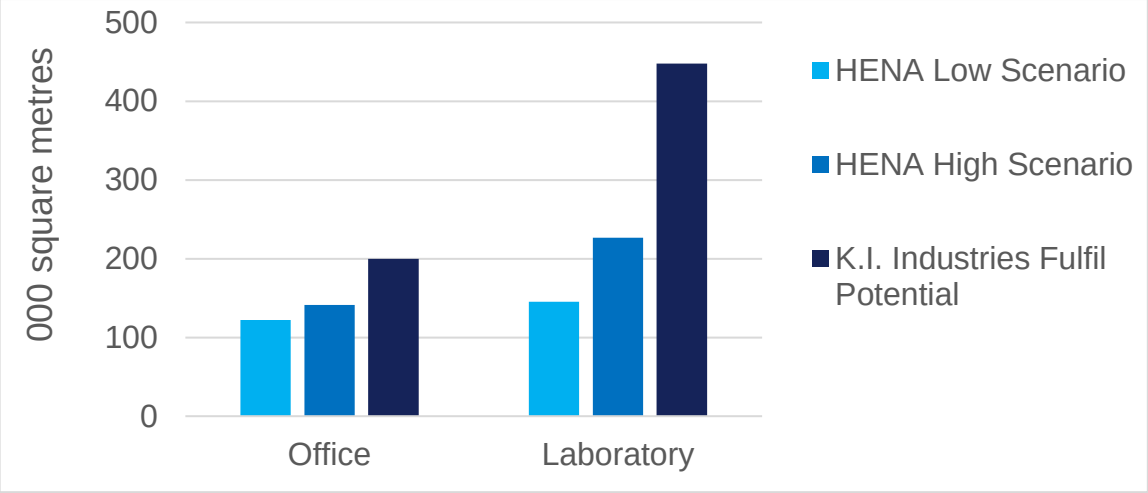

Figure 2: Additional Floorspace Projections to 2040
Source: Bidwells, Cherwell and Oxford City Council Oxfordshire HENA. December 2023

2.33 It is clear that existing employment sites cannot absorb this demand, particularly if the Draft Plan imposes general height restrictions across the City and allows for residential uses to compete on

employment sites (Policy E1). This is a structural fact within the Draft Plan (paragraph 1.7) which confirms that its main Objective is that *'the overall priority use for new sites is to deliver homes to meet housing needs (including on some employment sites)* …'. The Universities do not recognise the level of need the Draft Plan claims it provides for in respect of education and employment.

2.34 If the knowledge intensive industries in the cluster are constrained by restrictive policies and unambitious conservative projections, then potential jobs, capital and expertise are likely to be lost to other clusters. With a smaller cluster in relative terms, the risk is that the Universities will become less able to attract researchers, compared to Cambridge or London, for example.

2.35 This approach would be contrary to paragraphs 85-87 of the NPPF as set out above (paragraph 2.10). The Local Plan and its supporting evidence base fails to plan positively for the Oxford Knowledge Cluster and has under-estimated the capacity of urban Oxford to accommodate additional growth.

2.36 Moreover, the Plan pursues deliberate policies of constraint, limiting and curtailing growth in order to minimise difficult discussions that need to be had with surrounding Districts as to how all of Oxford's need is to be met. We will explain these Draft Policy constraints in Section 3.

3.0 Key Policy Matters

3.1 Whilst Chapter 2 has demonstrated the lack of ambition, and the conflict between its overarching strategy and the NPPF, this chapter sets out policy-specific issues to further demonstrate where the Local Plan has not met the four tests of Soundness which require a Local Plan to be 'Positively Prepared', 'Justified', 'Effective' and 'Consistent with national policy'.

3.2 As outlined in the previous chapter, it is the contention of the Universities that the Draft Plan should support the growth and evolution of the City's Universities, allowing researchers and students to continue to contribute solutions to critical research agendas, including the climate crisis, with benefits not just for the City and Oxfordshire, but globally. Currently, the suite of Policies that comprise the Draft Plan and sit under Policy SP1 pose a key constraint to such potential through the following inter-related mechanisms:

- Student cap (Policy H10): The proposed student Cap presents different problems to both Universities. Although Oxford Brookes University will be able to operate within the cap for most (if not all) of the Plan period, the University of Oxford will be unable to grow in the 2030's once all existing sites on the University's estate, as identified in the Draft Plan, are delivered. The cap imposed by the policy is arbitrary and is no longer guiding an effective policy response;

- Supply of Student Accommodation: No new sites have been identified outside of the Universities' estates and various policies restrict future supply (Policies H3 and H9);

- Control over University Strategy: the Protection, Alteration and Provision of Learning and Non-Residential Institutions (Policy C4) is unnecessarily controlling without recognising the important benefit and historical continuity of this activity within Oxford;

- Collegiate estates: The inappropriate designation of some core collegiate estates as a 'green network', thereby mischaracterising them. Already protected, collegiate quadrangles are urban and fulfil important operational requirements which could not be achieved if protected as Core Green Spaces (Policy G1);

- Sustainability (Policy R1, R2 and R3): Whilst improving the retrofit and reuse of buildings is to be welcomed where possible, the current policy fails to take account of the complex requirements of academic and research institutions and make suitable exemptions. Planning policy at a national level does not strictly prohibit demolition, nor does it suggest that carbon saving policies should be prioritised over the growth of the economy and innovation, as does the current Draft Plan. The Universities and for that matter commercial companies should be able to embark the planning and design process with a higher degree of confidence of success than this open-ended policy currently provides.

- Urban Capacity: The Draft Plan is seeking to impose a height limitation across the City (Policy HD8) based on existing context determining proposed building heights. This takes national guidance out of context and under-estimates the true capacity of Oxford to sensitively absorb additional capacity. If the City genuinely considers it cannot meet its full housing and economic needs, then it must only reach that conclusion once capacity has

been more fully tested and opportunities for increased height have been explored strategically within the evidence base. We would also point out that maintaining uniform height limits through sequential decision making is likely to be more harmful to the City skyline overall than being clear at the outset where the opportunities and constraints across the City exist.

3.3 In addition, it is considered that there is a lack of clarity throughout the plan with unnecessary repetition between policies, extensive guidance and opinion perhaps best left to supplementary planning guidance, and an attempt to go beyond national planning policy by seeking to prevent any harm without due weight to the planning balance or potential impacts on urban capacity, deliverability and viability. The remainder of this chapter addresses each of these points in more detail.

Student Cap and Policy H10

3.4 The Universities have asked that sensitivity analysis of Draft Policy H10 is undertaken and in support of that exercise, the Universities have looked at their growth projections in both student numbers and accommodation. This has been the subject of dialogue with Officers over the summer. The City Council has made clear its desire to retain the cap, but they had initially put forward caps which would have provided some long-term certainty for the Universities. These proposed caps were not taken forward and instead replaced by the current draft Policy H10.

Current Supply

3.5 Both Universities began by calculating the available supply as it stands today. The University of Oxford has circa 13,975 bedspaces in collegiate settings administered by Colleges and centrally provided by the University. The University does not believe that its students are significant users of third party purpose-built student accommodation (PBSA), but this data is not tracked and therefore any students residing in third party PBSA would be classed as living in HMOs.

3.6 Oxford Brookes University (OBU) will have 3,724 rooms on its estate by 2026, once the first phase of Clive Booth Student Village finishes. In support, OBU students also occupy circa 2,028 bedspaces in the third party Purpose Built Student Accommodation (PBSA) sector. By 2026, OBU will only have a nominations agreement with Parade Green, although this will expire in 2029. Given the demand for student accommodation, there is no commercial rationale for further nomination agreements as it is not necessary for the University to be a guarantor for these third-party developments.

Student Growth: Demand

3.7 Both Universities are currently compliant with the student cap as currently expressed in Policy H9, but future projections are needed in undertaking a sensitivity analysis. Growth should be seen in two ways: growth specifically planned for in the next 5 years, but also that which is not planned for and is likely to occur outside of any current round of business planning. This is partly owing to the extended timescale of the Local Plan (up to 2040) and partly because of the dynamic nature of the Higher Education (HE) sector which means further growth is inevitable as it is difficult to predict.

3.8 Growth in the HE sector is dynamic and the size and shape of any institution is dependent on a number of factors, many of which are not in the control of the institution:

- Demographics and demand: the number of 18-year olds declined from a high in 2008/09 and following a dip in 2020 will climb again and will reach a peak in the late 2030's;
- Competitor behaviour, particularly in relation to offers;
- Government policy in respect of the HE sector and also immigration;
- Government grants and other stimulus in support of strategic areas of UK Plc growth and required skills. The recent announcement to double the number of places in medical schools is a good example of this;
- Donor/Sponsor activity: a new Department, School or College could be founded;
- Leadership initiatives brought forward by a new team or individual;
- Recruitment: A senior Dean or Pro Vice-Chancellor may join an organisation with the objective of expanding a particular academic or research priority for the institution.

3.9 This list is not exhaustive, but underlines the importance of understanding how dynamic universities are and how they present the City with the same level of uncertainty and dynamism as the wider economy. The projections are not the stated policy of either University, but merely a forward projection of inevitable historic trends to assist our interaction with the 2040 Local Plan. The projected levels are consistent with historic levels of growth and are not unusual or radical in that context.

3.10 The uncertainty in predicting means we have considered two levels of growth (an upper and lower limit) so we see growth as a band rather than a definitive line. Indeed, student growth at both institutions is likely to fluctuate rather than advance as a steady line.

3.11 The University of Oxford projects limited undergraduate teaching expansion but is forecasting more demand for postgraduate taught courses and this is the most significant factor in forecasting growth in the coming years. Depending on the strength of recruitment therefore, the next 5 years will see rises of between 2% and 2.9% p.a. on average. With no specific plan beyond that, a reduced annual growth of between 1.7% and 1.9% p.a. has been assumed for the 2030s.

3.12 Oxford Brookes University expects to recover its pre-pandemic levels and increase international students. The next 5 years will see growth of between 4-8%p.a. and a similar, lower average growth projected through the 2030s of between 0.8 p.a. and 1.8% p.a.

3.13 We will return to the impact on the cap below but will first turn to the supply of bedspaces.

<u>New Supply of Accommodation</u>

3.14 Following a period of sustained investment in student accommodation by both Universities and the private sector, taken with methodological changes to Policy H9 at the last Local Plan Examination in 2019, both Universities are currently in a compliant position regarding the student cap.

3.15 Looking ahead however, there appears to be limited opportunities for substantial increases in new bedspaces and the majority if not all are identified in the Draft Plan. In Oxford Brookes' case, gains on sites such as Crescent Hall and the delivery of the second phase of Clive Booth will be off-set

by redundancy elsewhere. Pressure on both Universities' operational estates mean that there are few substantive opportunities on a scale such as a Clive Booth. The key determinant over future supply is therefore the phasing of these modest sites i.e. when a site might come forward for accommodation, operationally or financially. In short, Oxford Brookes will end 2040 roughly where it is now (4,062 directly provided bedspaces) whilst the University of Oxford, owing to the Collegiate estate adding between 0.2 and 1% bedspaces per annum, will move from 13,714 bedspaces to between 16,000 and 18,000 bedspaces. A proportion of those bedspaces come from opportunities on University sites identified in the Draft Plan. The difference between the best and worst-case scenarios is a reduction in collegiate growth, only two thirds of the capacity is delivered and that delivery is delayed by several years.

3.16 The City Council is not seeking to allocate any substantive third party PBSA sites which might also make a difference, particularly in respect of Oxford Brookes University.

Projections and Draft Policy H10

3.17 For the purposes of the current Policy H9 (H10 in the new Draft), only certain portions of the student body are counted. Postgraduate research, placement/vocational students, part-time, those studying at other locations, and those living at home are all excluded. This leaves 'countable' student populations at 15,406 for the University of Oxford and 8,172 for Oxford Brookes University OBU). Over a period up to 2040, these populations, countable under the terms of Policy H10, could rise to between 20-22,000 for the University of Oxford and 12-14,000 for Oxford Brookes University.

3.18 A growth in student populations can then be set against changes in bedspaces. As in OBU's case, any growth in line with the business plan against stagnating bedspaces quickly reveals itself and by 2025, OBU will be above the existing cap of 4,500 in all scenarios, whether high or low growth in student numbers set against more optimistic or pessimistic assessments of the supply of accommodation. The revised cap of 6,900 is helpful and supported by OBU, but would need to be extended until 2040 if the University were to remain compliant without some new supply of accommodation being found.

3.19 The OBU position is better if all third party accommodation where a proportion of OBU students are known to reside every year is included. These are purpose-built bedrooms and therefore we do not consider it relevant as to whether there is a Nominations Agreement in place or not: the fact is that this accommodation is available and is removing pressure from the general housing market. That said, the numbers set out above already include third-party accommodation for OBU – without it, around 2,000 bedspaces should be deducted from the numbers above and the cap raised further, but we believe it would be more productive and rational to amend the methodology set out in Appendix 2.3 of the Draft Local Plan.

3.20 In the University of Oxford's case, growth quickly outstrips the available supply of accommodation with the cap being breached from next year under a low accommodation and high student growth scenario. Other scenarios show the cap being breached on a rolling basis until 2026 when all scenarios breach the cap, even where there is high accommodation delivery combined with low student growth. By the end of 2040, these trends mean a cap would need to be set at 6,900 under

a worst case scenario, 3,000 under a best-case scenario or 5,000 if a mid-point is selected. A lower cap of up to 3,000 would be needed until 2028.

3.21 However, an important methodological change for the University of Oxford has emerged. A further supply of 2,190 rooms can be added into the calculation as these had been excluded on the basis they were occupied by Post Grad Researchers (PGRs). This change will now allow the University to comply with the revised cap of 1,300 up until 2028 when it would be breached by a high growth/low accommodation scenario. By 2037, all scenarios would have breached the revised threshold – assuming it remained the same - except for a low growth and high accommodation scenario. Revised thresholds of between 2,500 to 4,500 students would be sufficient depending on if the mid-point or higher growth trajectory is used.

The Viability of the Student Cap

3.22 For Draft Policy H10 to be viable, new sources of supply are needed, otherwise it will serve as a brake on the future operation of both Universities. At best, it is simply reacting to facts on the ground rather than directing them. Worse still, the lack of clarity after 2028 will significantly impact on institutional planning and investment. The reduction of the cap in relation to the University of Oxford is particularly significant given the emerging Local Plan is not identifying any significant new locations for student accommodation, whilst at the same time is intensifying controls over new accommodation. Draft Policy H10 could have a significant impact on the vitality and impact of the University of Oxford to the detriment of the City and its economy.

3.23 The Policy is also unfair when seen in the context of the wider housing market. Both universities are either actively developing new staff housing projects in and adjacent to the City, or are leveraging their surplus estates to deliver new housing within the City's housing market area. It seems discriminatory that this investment is not accounted for within the current approach. The disposal of Wheatley Campus means there is a double impact of losing student accommodation, but with no significant new opportunities in the City being identified. In the University of Oxford's case, the extent of collegiate housebuilding activity, particularly in Cherwell, if counted, would obviate the need for any cap.

3.24 The City does have an option which has not been considered: explicitly allowing for more student accommodation within the City and ensuring unmet housing need, which unlike student accommodation can be met in the wider housing market, is adjusted to allow for a sustainable balance. The Draft Plan is not a positive response to the City's needs, but a restraint on the growth and success of the Universities.

Supply of Student Accommodation

3.25 In support of our comments above, we would highlight that the proposed list of permissible locations in Draft Policy H9 is hugely restrictive to both Universities and the delivery of student accommodation by third party providers. The provision of sufficient purpose-built student accommodation ('PBSA') positively impacts on the wider housing availability in the City by providing more accommodation at a higher density, thereby releasing housing stock back to the community. Providing more opportunities for PBSA is not counter-productive in terms of overall housing strategy and will help deliver compliance with the student threshold, as discussed above as recognised at paragraph 2.4 of the Plan that '*Accommodating university students in purpose-built halls and other university-provided accommodation can help to reduce the demand from students on the general housing stock'.*

3.26 The Universities would support the principle of Policy H9 if the list of suitable locations were expanded to include 'along arterial routes' and the test of adjacency clarified to 'sites within a 15-minute walking distance of an existing campus/college'. The supporting text outlines that the policy *'aims to ensure new student accommodation is built only in suitable locations'* and ensure that *'student accommodation is well managed so that it results in no unacceptable impact on amenity for local residents, including through any increase in cars brought into an area*'.

3.27 It is considered that the arterial routes in/out of Oxford (Banbury Road, Iffley Road, Botley Road, St Clement's Street, Headington Road, Cowley Road, Iffley Road, Abingdon Road, Woodstock Road) present a logical and suitable option for locating new student accommodation given the frequency of public transport services along these routes and ease of access to/from both educational and social facilities and the reduced sensitivity of the residential environment. With the exception of students with accessibility requirements, it would be reasonable to expect all students residing in such locations to travel via sustainable modes of travel on a day-to-day basis, and that PBSA built along these routes could be car-free accordingly.

3.28 Moreover, given the concentration of campuses within the City, it is logical to ensure that sites within close proximity of these campuses and institutions are also positively considered as the test of 'adjacent' is unclear and not appropriate in parts of Oxford where institutions form the dominant land use in parts of the City.

- We would also highlight two other constraints which will affect the supply of new bedspaces. Draft Policy H3 seeks affordable housing contributions on the uplift of new student rooms on existing student accommodation sites being redeveloped, provided they are not owned by a university. There is no logical rationale for this on the basis all existing or allocated sites are not in competition with the general housing market and the identity of the developer has no bearing on the planning question;
- Planned reforms to leases are likely to erode the Houses in Multiple Occupation market and will lead to a tightening in supply. This needs to be factored into any assessment of impact on the calculations of the student cap.

Future Academic and Research Strategy

3.29 Policy C4 is a threat to the future academic and research strategies of both Universities. It is not clear why any justification for future academic and research development is required and in no way can a local need be guaranteed beyond that any such development in a global hub for learning is inherently desirable and necessary. Indeed, the importance of research and learning undertaken at both Universities may from time to time generate challenging development propositions. These issues are likely to engage matters of public benefit in respect of heritage policy given the historical continuity of this activity within Oxford. This benefit should be acknowledged within Policy C4 and wherever institutional activity falls within the Areas of Focus, such as Policy NCCAOF and Policy MRORAOF. The various tests for new development around density and traffic are duplicating other policies in the Plan and it is not planning positively to single these institutions out in this way.

3.30 Further clauses in the Policy require the Universities to justify why existing uses are no longer required and why new ones are important. This places the Local Planning Authority in control of the research and learning strategies being pursued by an institution, a level of control which is unjustified and inappropriate.

3.31 We also note that all development must not create 'unacceptable impacts'. This either does not need to be stated or it must be qualified that mitigation strategies are an acceptable alternative.

3.32 However, the University of Oxford is pleased to note the retention of Policy H5 (Employer Linked Affordable Housing) and supports this Policy, although Objects to Policy H6 on the basis that staff housing schemes will need their own mix specific to the needs of the University community and this should be acknowledged within Policy H6.

Collegiate Estates and Green Infrastructure Protections

3.33 The designation of some collegiate quadrangles as 'core green spaces' under Policy G1 imposes inappropriate and unnecessary constraint. Not only does their designation as a 'green network' mischaracterise them, but these spaces are already afforded suitable protection by heritage considerations and the setting of Listed Buildings.

3.34 The designation mischaracterises their urban function and fails to recognise how they often fulfil important operational requirements which could not be achieved if protected as Core Green Spaces. These are dynamic functional sites which should be open to potential development such as accommodating subterranean, top-lit spaces such as new libraries or book stores, study spaces, connections etc, as well as new pavilions. Changes in hard landscaping as well as biodiversity interventions underline their dynamic urban character.

3.35 These exchanges have been successfully managed for many years through existing planning policies and protections and we see no justification for adding additional controls through Policy G1.

Sustainability

3.36 Not only is the University of Oxford a leader in research on climate change and the technological innovation necessary to support a net zero economy, but both Universities have invested resources in tackling carbon emissions across their estates for many years. Both Universities are supportive of any policies to measure and manage carbon. By 2040, Oxford Brookes University intends to become a net-zero carbon organisation, where only unavoidable emissions are offset. Similarly, the University of Oxford is aspiring to be net zero carbon from gas and electricity usage by 2035. Where it is not possible to eliminate emissions altogether, the Universities will rely on carbon offsetting to balance the residual emissions and reach net zero carbon.

3.37 Despite the Universities' commitments to reducing their own carbon emissions, both Universities have concerns that the prescriptive approaches currently set out in Policies R1 and R2 will adversely impact their ability to support the cutting-edge research that is urgently required to reduce carbon on a global scale (e.g., into the decarbonisation of transport, low-carbon materials, renewable energy technologies, or the circular economy), as well as their ability to achieve their own set of sustainability targets. These policies introduce too much uncertainty into the development management process.

Policy R1: Net Zero Buildings in Operation

3.38 Draft Policy R1 requires all new buildings to '*be net zero carbon in operation',* and in doing so fails to recognise that heavy engineering, highly serviced laboratory spaces, and high-performance computing facilities (such as those required for work in AI) do not fit within the typical energy hierarchy, as explained below. As such, they will likely fail more than one criteria set out within Policy R1 constraining both academic teaching and research, and commercial R&D companies, which are central to the Knowledge Intensive economy.

3.39 The Universities wish to make it clear that as large institutions they are unlikely to fit neatly within the parameters of a generic carbon emissions policy which sets a prescriptive approach for developers who normally take a shorter-term outlook.

3.40 **Figure 3** below demonstrates that it would not be possible for laboratory-based science buildings to meet the proposed Energy Use intensity target of 70kWh/m^2/yr. Across 38 of Oxford University's existing non-medical laboratory buildings alone the median electricity use equates to approximately 200kwh/m^2/yr GIA. Fewer than one in six buildings would met the proposed Energy Use intensity target (note: consumption figures exclude gas used to heat older buildings; and so will increase once a transition to heat pumps is made).

3.41 It should also be noted that the policy does not make clear what unit of area is to be used: the threshold would be even more restrictive if they apply to Net Internal Area. But it is clear that the policy fails to take account the specialised nature of academic and science and innovation buildings.

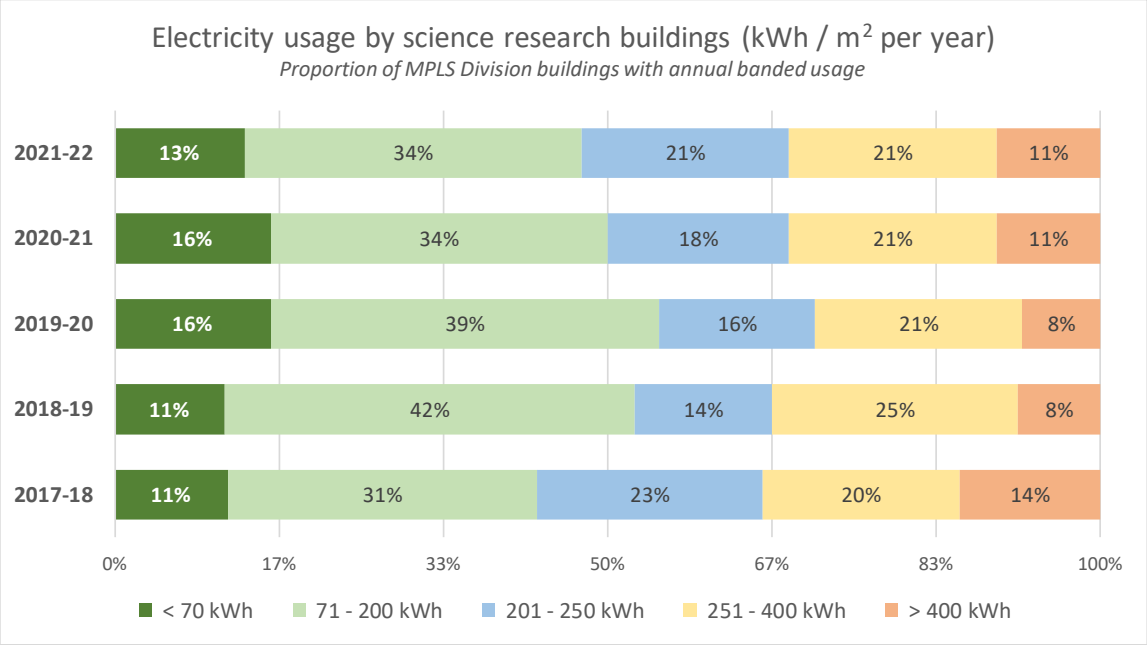

Figure 3: Annual electric use per m^2 (Gross Internal Area) for Oxford University (MPLS) science buildings.

3.42 Due to the scale and nature of operations, it is also likely that there will be instances where it is simply not possible to generate sufficient energy onsite to sustain the operation of a science

building. As such, it is requested that the proposed policy acknowledges the critical role played by institutions such as these and provides an exemption for such institutions who already have a Sustainability Strategy in place.

3.43 The policy goes on to state that '*Where the total energy need cannot be met onsite, the remaining energy balance should be met through installation of sufficient additional renewable generation at a location offsite*'. This reads as though it is intended to be a requirement for additionality in renewable energy generation offsite, and not merely as a requirement for offsite electricity to be provided from (possibly existing) renewable sources, or through purchasing energy from a certified renewable source. Furthermore, off-site renewable generation is dependent on adequate capacity in local infrastructure, which is a major local constraint owing to the shortage of capacity within the electric grid in Oxford.

Policy R2: Embodied Carbon

3.44 Policy R2, as proposed, expects applicants to 'robustly demonstrate' that the re-use of **any** existing building is '*unfeasible*' before it can be demolished. There are no exceptions for allowing demolition and re-build where the public benefits of doing so would significantly outweigh any harm arising.

3.45 In the case of the Universities, it is envisaged that there may be cases whereby the retrofit of existing building stock is 'feasible' (albeit the Plan is absent of any definition of what constitutes feasible), but that this will not necessarily be conducive to the best outcome, in terms of sustainability, cost and public benefit. Policy R2 is also absent of any definition of how it must be '*robustly demonstrated*' that demolition is unfeasible and what this would look like in practice.

3.46 The dynamic nature of research and learning means how space is used and serviced is continually rethought and the primary principle underpinning the University of Oxford's new Estate Strategy is that its facilities must meet the needs of the academic mission.

3.47 Research in fields ranging from life sciences to advanced materials (with applications including photovoltaics and the circular economy) to quantum technologies – all areas of strength for the Universities and the local economy – requires ever tighter control of experimental conditions. This includes the levels of vibration, temperature, humidity, and dust. Retro-fitting these performance standards into existing buildings (which may be a minimum of 50 years old) is effectively not possible in most cases. For example, the ultra-low levels of vibration in the Beecroft Building (amongst the most stable laboratories in Europe) could only have been achieved in a new building using state-of-the-art construction methods; and the large air handling ducts and fire suppression required for the chemistry used in making new medicines and low carbon materials cannot be fitted to older buildings. Similarly, Oxford Brookes University could not have met its modern teaching requirements in a converted printing press building on its Headington Hill Hall Site.

3.48 The policy is not, therefore, aligned with even the narrow definitions set out in the Draft Vision in respect of supporting '*research and development in the life sciences and health sectors'* which increasingly require high-tech, purpose-built facilities. It will also have the unintended consequence of adversely impacting the Universities' ability to drive innovation in the very fields of research which enhance our understanding of the climate crisis or support the move to a net zero economy and low-carbon world.

3.49 Furthermore, there are cases where permitting the replacement of a building which is beyond its useful economic life will allow the Universities to make intensive use of scarce land and enable them to grow their activity without a commensurate expansion of footprint. Simply retaining buildings as a point of principle therefore conflicts with other objectives and policies in the Plan, including E1 and HD8 which seek to make the most efficient use of land. Redevelopment of new buildings as opposed to refurbishment may also be conducive to achieving higher quality design: for example, there is much greater potential to reduce the visual impact of roof plant in a replacement building than when retrofitting it to an existing structure.

3.50 In summary, it is not uncommon for existing building stock to be incapable of meeting future learning and research requirements through retrofit; and there is severely limited space within the City boundaries generally and within the Universities' existing estates specifically, to deliver new facilities. Demolition and replacement of an older building may be the *only* feasible way to create a facility which is 'functionally suitable' for specific purposes. In such cases, lifecycle carbon issues are then addressed through the design process by improving 'in-use' environmental performance (e.g., by optimising form factors, using Passivhaus principles, selecting low carbon materials) and by considering both future disassembly and recycling of the new building and recycling of materials from the original building.

3.51 It follows that the proposed policy is not conducive to the Government's vision of making the UK a global science superpower (The UK Science and Technology Framework) by 2030 and a global hub for innovation by 2035 (UK Innovation Strategy). The Local Plan recognises that the University of Oxford has more spin-outs than any other University in the UK and that the Oxford economy has its strengths in research and development which are helping to find solutions to global problems, such as through the development of the Astra Zeneca Covid-19 vaccine. The proposed policy has potential to hinder the contributions of the University to such critical research and innovation agendas by preventing them from being able to deliver the necessary facilities and infrastructure. The dynamic nature of research and learning requires how space is used and serviced to be fundamentally rethought on a sustained basis.

3.52 Any new policy must acknowledge that severely restricting the ability of the Universities, research institutions and spinouts to replace a building, particularly given the lack of available land within the City boundaries, has potential to hinder their capabilities to deliver word-leading education, critical research agendas, and impacts with global reach and significance, including the transition to net zero.

3.53 It should also be noted that planning policy at a national level does not strictly prohibit demolition, nor does it suggest that carbon saving policies should be prioritised over the growth of the economy and innovation. Rather Paragraph 157, of the National Planning Policy states that 'the planning system should '**support** the transition to a low carbon future in a changing climate' and '**encourage** the reuse of existing resources, including the conversion of existing buildings' – the key words being those in bold (our emphasis).

3.54 The proposed policy is therefore moving beyond what is justified within national policy and written so broadly that the Local Planning Authority would have control over the learning and research agendas of both Universities. This is not sustainable and is not sanctioned anywhere within the planning system. The proposed policy has potential to hinder the Universities' knowledge and research contributions to the local, regional and UK economy and should be deleted.

3.55 We also note that where necessary building performance can be met through refurbishment, then the Universities' own net zero goals already point to conversion of existing buildings as the preferred approach. The University of Oxford's new Estate Strategy specifically highlights the issue of embodied carbon, noting that refurbishment should be the preferred approach where this can bring older or poor condition buildings up to the required levels of functional and environmental performance; but recognising that this will not always be possible for various reasons, including sustainability objectives.

3.56 We would recommend that the Local Planning Authority be clearer as to what scenarios or sectors it considers there to be a lack of consideration of embodied carbon and design a clearer policy that does not leave major matters of principle to be resolved via discretion or on an ad hoc basis at the determination of a planning application. The Universities and for that matter commercial companies need to embark on a lengthy planning and design process with a high degree of confidence that their schemes will not fail a final hurdle based on disagreements over what is or is not an acceptable carbon budget.

Urban Capacity and Unmet Need

3.57 In Section 2 we have highlighted the gap between the actual potential of the Oxford Knowledge Cluster and that allowed for in the Draft Plan which, in accordance with Policy S1, seeks only to direct employment requirements to existing sites. The Plan outlines that '*the physical land constraints mean there is a limited supply of housing in the city*' and that the '*overall priority use for new sites is to deliver homes to meet housing needs'*.

3.58 In failing to allocate sufficient land to support the Oxford Knowledge Cluster, the Plan compounds this constraint further, through advocating a suite of policies which prevent making most efficient use of land and therefore lower urban capacity:

- Policy HD8 Using Context to Determine Appropriate Density: We understand what the Policy is seeking to achieve, but in its current form it is a recipe for conservatism and missed opportunity. There are many parts of Oxford which are less sensitive to increased height.

- Policy HD9 Views and Building Heights: This Policy is not consistent with NPPF as it does not allow for the level of harm to historic significance to be assessed and then balanced against public benefit. Under the terms of the Policy, all levels of harm are unacceptable and cannot be approved. This is a constraint on urban capacity not sanctioned by national policy.

Policy G2 Enhancement and Provision of New Green and Blue Features: states that '*for residential sites of 1.5 hectares and above, new public open space of 10% of the area covered by residential development is required',* without exception. Again, it is considered that this should be assessed on a case-by-case basis. For example, there may be instances within the City where the application site is located immediately adjacent to significant areas of public open space ('POS') and therefore the requirement for 10% POS unnecessarily detriments the quantum of housing provision, contrary to the overarching priorities for the Plan.

Policy G5: Enhancing Onsite Biodiversity: sets out a minimum number of ecological enhancements selected from the Councils' Ecological Points List required for householder, minor and major applications. It is not clear why such prescriptive requirements are needed on top of the Urban

Greening Factor Policy and mandatory Biodiversity Net Gain legislation which are sufficient to ensure that the natural environment is in a healthier state post-development than it was prior.

3.59 If the Draft Plan is to seek the resolution of unmet housing need within surrounding Districts, and if unmet employment needs are also to form part of that discussion, then it is imperative that the Draft Plan tries harder to ensure every sinew within the City is flexed in support of meeting all needs. Strict tests, low ambition and a lack of evidence to support urban capacity cannot justify the Spatial Strategy in its current form. Identifying new areas of opportunity or capacity in townscape will be essential before determining the final level of unmet housing and employment need.

Viability

3.60 The supporting Viability Study concludes as follows (page 83):

The cumulative impact on viability is hugely variable and it is likely that some trade-offs between policy objectives will be required at the development management stage. It would be difficult to set a suite of policies that are viable for all potential developments coming forward without reducing them to a 'lowest common denominator', which would reduce overall delivery of policy objectives below capacity on many schemes. A policy approach that sets ambitious targets which may not be fully achieved in all cases is better placed to optimise delivery of policy objectives, although this inevitably comes with the downside of a higher volume of site-specific viability testing at the development management stage.

3.61 We do not consider this statement to be an endorsement of the viability arising from the cumulative impact of the Local Plan Policies and changes to CIL rates, but a recommendation that the current suite of Policies is used to extract maximum targets or benefits from development until site-specific viability appraisals demonstrate otherwise, or in some cases, delivery fails to come forward at all. This approach is not in accordance with national policy or guidance, as it points to delay or failure in delivery of the Draft Plan.

3.62 National guidance does demand that the development industry is engaged with in support of assessing viability (paragraph 004 Reference ID: 10-004-20190509) and does not seem to have happened in this instance. The Universities would welcome more engagement particularly in respect of construction costs which are a significant constraint on delivery within Oxford. It is not helpful that the current evidence base predicts an increase in case-by-case viability testing which will only undermine the development management process and by extension, the deliverability of the Draft Plan, in contradiction of paragraph 34 of the NPPF.

Clarity

3.63 Finally, we would ask that the Draft Plan is reviewed carefully against the criteria set out in paragraph 16 of the NPPF in terms of the form and content of new Local Plans as well as more broadly in terms of some of the proposed tests.

3.64 Many of the Policies veer between the provision of guidance and prescriptive presumptions against development outside the parameters of accepted national tests. Some examples are provided below but this is not exhaustive:

- Policy E1 identifies University sites as employment sites, which is inappropriate, but the Policy then effectively rules out future academic or teaching facilities by limiting new development on these sites to employment uses. The two need to be separated for clarity.

- Area Focus Policies: They mainly repeat generic design principles outlined in policies elsewhere and do not offer any spatially significant policies or insight;

- Policies HD1, HD6, HD9, G1, C4, C5 are examples where tests for development range beyond those in national policy: impacts of any kind are prohibited and mitigation is not offered as a solution;

- Policy S3: The Council being 'content' is listed as a threshold for successfully passing the policy.

- Policy G9 requires that '*Supporting infrastructure is designed to function in extreme weather conditions*' without any definition of 'extreme weather' and no regard for cost or necessity.

- Policy G5 states that '*Proposals incorporating invasive plant species will be refused'*, without deigning what constitutes an 'invasive plant species';

- Policy H10 states that beyond 2028 permissible student numbers are 'to be negotiated based on consideration of the situation at the time', is another example of vague and imprecise policy- making.

3.65 We would therefore encourage a further tightening of all draft Policies and further consultation prior to Submission as the current drafting appears to be unsound in many instances.

3.66 There are also three minor points or objections relating to Policies C6, C7 and C9

- Policy C6 requires a Travel Plan to be submitted for Higher and Further education facilities over 2,500sqm or other uses which are likely to generate significant amounts of movement. Whilst the Universities fully accept the need to promote a reduction in car use in favour of sustainable and active travel, the draft policy fails to make exemptions for institutions which already have overarching Travel Plans. The Universities, therefore, ask that where the University has an up to date Travel Plan, any new student development is exempt from providing an independent Travel Plan.

- Policy C7: Although we support this Policy with qualification, bicycle parking provision should be informed by an assessment of need, considering occupancy levels and travel data to avoid unnecessary duplication of cycle facilities. The proposed policy fails to recognise the unique operations of Universities and that students and staff often travel between multiple buildings throughout a day. Cycle parking provision for University facilities should be exempt from standard methodical calculations which are oversimplified for such uses and risk creating an overprovision.

- Policy C9: Whilst the Universities recognise the need to provide Electric Vehicle charging provision, this should be based on overall institutional / operational need rather than repeated provision across all schemes. This is on the basis that most employees are able to charge at home to support their commute. Secondly, the requirements for Electric Vehicle charging points are not always compatible with changing insurer requirements which dictate where they can be safely located owing to risk of fire. This can exclude their provision altogether on dense urban sites which means that developments would be unable to comply with the draft policy as proposed. Finally, it is not justified why all new blue badge parking should be equipped with EV charging provision. It is considered that future-proofing would be a more suitable requirement to enable its conversion should sufficient demand arise.

4.0 Site Allocations

4.1 In addition to the Key Policy Matters outlined in Chapter 3, the University also objects to several of the Site Allocation Policies as outlined below. **Appendix 2** sets out a detailed audit of Site Allocations which links our strategic points outlined in Sections 1-4 with detailed changes to text required in order to make the Plan sound in those specific respects. These sites are as follows:

- Policy SPN2: Oxford University Press Sports Ground
- Policy SPS16: Crescent Hall
- Policy SPE3: Headington Hill and Clive Booth Hall
- Policy SPE4: Oxford Brookes University and Marston Road Campus
- Policy SPE6: Churchill Hospital
- Policy SPE7: Nuffield Orthopaedic Centre
- Policy SPE20: John Radcliffe Hospital

4.2 We would also cross refer to representations made by others where University interests are engaged. We would support the following representations made in respect of these sites:

- Policy SPCW1: Wellington Square - Oxford University Development Ltd
- Policy SPN3: Diamond Place & Ewert House – Oxford University Development Ltd
- Policy SPCW7: Osney Mead – Oxford University Development Ltd
- Policy SPE8: Warneford Hospital - Oxford Health NHS Foundation Trust

4.3 Many of these policies contain references to a minimum number of dwellings. We would object to this term within the policies for these sites on the basis that the exact balance between the various uses has not been fixed.

4.4 There are also two omission sites which the Draft Plan should address:

<u>Faculty of Music, St Aldates</u>

4.5 We cross-refer to the representation made by Christ Church in respect of the Faculty of Music, St Aldates which the University of Oxford supports, particularly as the University of Oxford has continuously promoted this site for inclusion in the Plan and had anticipated it would have been

included in this latest version. However, as above, we would object to the inclusion of the term 'minimum number of dwellings' within any newly drafted policy for this site on the basis that the exact balance between the various uses has not been fixed.

SPCW2: Land at Winchester Road, Banbury Road and Bevington Road

4.6 Policy SPCW2 replaces the existing Policy 'SP31: Banbury Road University Sites'. The current policy addresses three sites (A, B and C).

4.7 Site SP31 (B) is currently subject to a Planning Application (Ref: 22/02849/FUL) for the provision of student accommodation. The Planning Application has a Resolution to Grant, subject to the agreement on the S106. The planning application expands the whole site allocation; however, it is noted that the proposed Policy SPCW2 has reduced the extent of the allocation.

4.8 The University of Oxford wish to see the allocation re-instated to its former extent to secure the delivery of the pending Planning Application on the site. Given that this site is a mixed research and academic site, the University also request that the minimum number of dwellings is removed.

4.9 In addition, it is noted that Policy SPCW2 has removed the allocations from parcels SP31 (A) and SP31 (C). As outlined above the Universities wish to expand the list of suitable locations for student accommodation (Policy H9) to include 'along arterial routes' and 'sites within a 15 minute walking distance of a campus/college'. In the event that this proposal cannot be incorporated into the Plan, the University of Oxford requests that former SP31(A) and SP31(C) are reinstated for academic institutional uses, student accommodation, and/or residential development.

BIDWELLS

APPENDIX 1

OXFORD AS AN INNOVATION CLUSTER

Oxford Cluster Vision
University of Oxford
February 2024 v3

BIDWELLS

OXFORD CLUSTER VISION
UNIVERSITY OF OXFORD

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Annex 1
EMPLOYMENT BY SECTOR

1.0 Introduction

Purpose of this research:

1.1 This research was commissioned by the University of Oxford ('the University') to determine if the needs of the Oxford knowledge cluster, which is driven by the academic and research outputs of the University, are being met in the draft Local Plan 2040. The University is concerned that if the Draft Plan is one of restraint and does not plan positively for economic growth, particularly in an area of high innovation and productivity, this will ultimately constrain the University and the wider economy.

1.2 This report will respond to the following key questions:

I. How big is the Oxford Science and Tech Cluster and how does it compare with Cambridge and other cities?

II. Why is the Oxford Science & Tech Cluster growing?

III. What is the potential of the Oxford Science & Teach Cluster and how does it compare with the projections in the Draft Local Plan 2040?

2.0 How Big is the Oxford Science & Tech Cluster and How Does it Compare with Cambridge and other cities?

2.1 This study assumes that Knowledge Intensive (K.I.) industries will continue to be the primary driver of employment growth in Oxfordshire for the foreseeable future. While other sectors (e.g. health and tourism) may also create additional jobs, their contribution to the local economy is unlikely to be on the same scale as K.I. Industries.

2.2 The study uses the same broader definition of K.I. industries as Advanced Oxford in its "Oxfordshire Innovation Engine 2023" report. The definition was originally developed by Eurostat. The main constituents are life science, IT & communications, advanced manufacturing and other R&D companies. The definition excludes professional services, financial services and higher education, even though the latter provides the foundation for many K.I. industries.

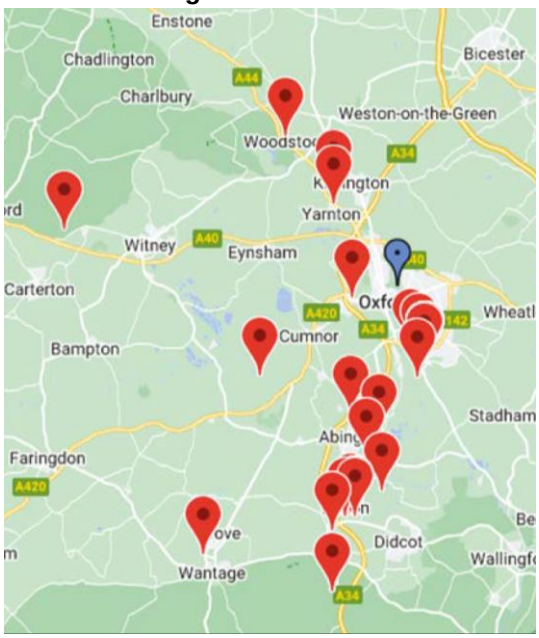
Table 1: Definition of Knowledge Intensive Industries

SIC CODE	INDUSTRY
Narrow Definition	
21	Manufacture of Pharmaceuticals
26	Manufacture of Electronics & Computers
30.3	Manufacture of Aircraft & Spacecraft
59-61	T.V., Film & Music
62-63	Computer Software, Websites & Data Processing
72	Science & Engineering R&D
Broader Definition (Industries above +)	
20	Manufacture of Chemicals
25.4	Manufacture of Weapons
27-30	Mechanical & Electrical Equipment including Cars
32.5	Manufacture of Medical Supplies
58	Publishing
71	Architects, Planners & Consulting Engineers
74.1	Specialised Design
74.9	Environmental Consultants

Source: Oxfordshire's Innovation Engine 2023. Advanced Oxford. June 2023.

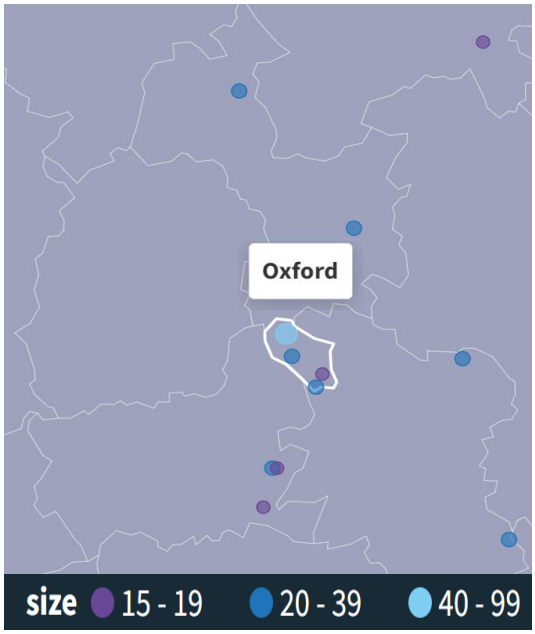
2.3 Although companies working in K.I. industries can be found across Oxfordshire, the two main concentrations are in Oxford and in the south around Abingdon and Didcot / Harwell. Figure 1 maps the most active companies and institutes filing patents in Oxfordshire in the five years to June 2022. Figure 2 shows where new economy firms are clustered in the county. In terms of local authorities, the majority of K.I. businesses in the Oxford Science & Tech cluster are in Oxford City and the Vale of White Horse.

Figure 1: The Most Active Companies and Institutes Filing Patents



Source: Oxfordshire's Innovation Engine 2023. Advanced Oxford, Filing Analytics. June 2023.

Figure 2: Number of New Economy Firms



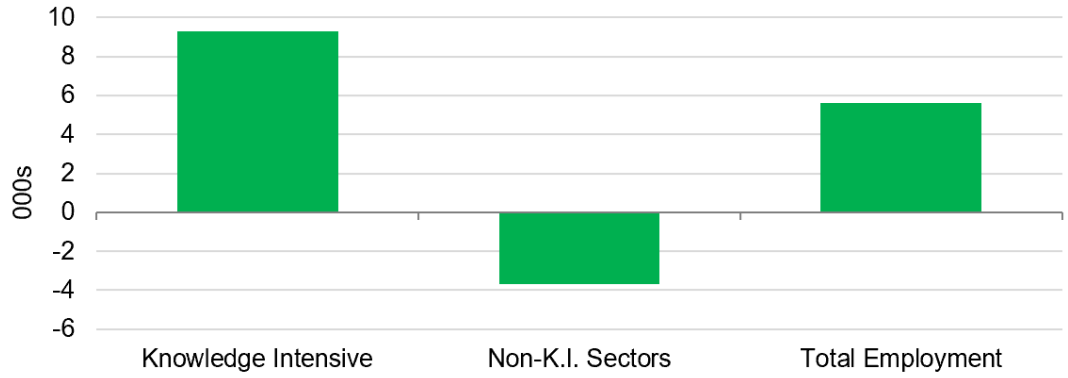
Source: Clustering the New Economy Centre for Cities. September 2023

2.4 The latest data available from the ONS Business Register and Employment Survey for 2022 show that there were 37,100 jobs in K.I. industries in Oxford and the Vale of White Horse in 2022. Employment in K.I. industries has increased by 9,300 since 2015. K.I. sector employment in the two districts grew by an average of 4.2% per annum between 2015 and 2022, with growth of 18.9% between 2021 and 2022.

2.5 Most of the growth has been in life sciences, tech and other R&D, rather than K.I. sectors such as mechanical & electrical engineering, or publishing. By contrast, employment in non-K.I. sectors fell by 3,700 jobs between 2015-2022. K.I. industries accounted for 18% of total employment in the two districts in 2022, up from 13% in 2015.

2.6 See Annex 1 for a full breakdown of employment in Oxford and the Vale of White Horse. We have used 2015 as the base year for this analysis because ONS changed its methodology for local employment data between 2014 and 2015.

Figure 3: Change in Employment in Oxford and Vale of White Horse 2015-2022



Source: Bidwells, ONS Business Register and Employment Survey. December 2023.

Table 2: Employment in Oxford and the Vale of White Horse (000s)

	2015	2016	2017	2018	2019	2020	2021	2022
Knowledge Intensive	27.8	28.4	27.4	31.1	30.1	30.7	31.2	37.1
Non-K.I. Sectors	178.2	183.7	181.6	184.9	191.9	179.3	171.8	174.5
Total employment	206.0	212.0	209.0	216.0	222.0	210.0	203.0	211.6

Source: Bidwells, ONS Business Register and Employment Survey. December 2023.

How does the Science & Tech cluster in Oxford and the Vale of White Horse compare with Cambridge and other UK cities?

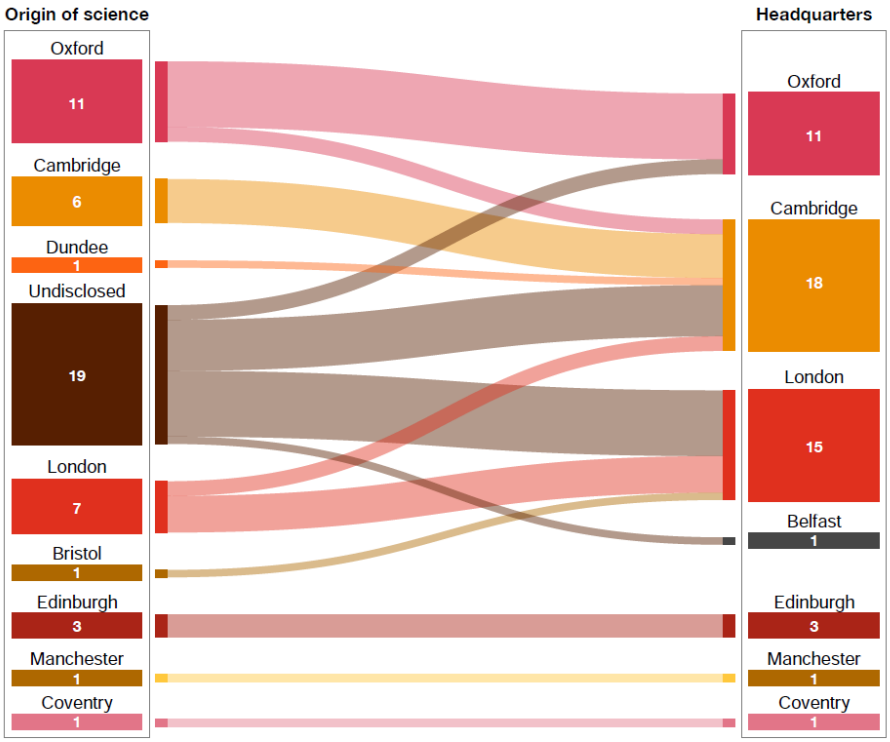
2.7 Cambridge including South Cambridgeshire has the largest cluster of K.I. jobs outside London. In 2022 it had 51,200 people working in K.I. industries and they accounted for 26% of total employment. The employment data therefore suggest that the Oxford Science & Tech cluster is around 70-75% the size of Cambridge. This relativity is consistent with other data on venture capital (see Figure 6) and the number of new economy firms. ("Clustering the New Economy" report published by Centre for Cities in September 2023 found 175 new economy firms in Oxford and Vale of White Horse vs 235 in greater Cambridge).

Figure 4: Knowledge Intensive Employment in Oxford and Cambridge in 2022

Source: Bidwells, ONS Business Register and Employment Survey. December 2023.

2.8 Although Oxford's Science & Tech cluster is smaller in size when compared with Cambridge, according to figures from the Higher Education Statistics Agency (HESA), the University of Oxford consistently generates more research income (total £4.3 billion between 2015/16 – 2021/22) than the University of Cambridge (total £3.8 billion between 2015/16 – 2021/22). That suggests that K.I. businesses have found it more difficult to locate in Oxfordshire than around Cambridge. Circumstantial evidence is provided by a recent study of 50 of the fastest growing life science businesses, prepared by PwC. The study compared where the businesses' science originated (the left of Figure 5 below) with their current location (the right of Figure 5). The study found that Cambridge has been more successful than Oxford at attracting life science businesses from other parts of the UK.

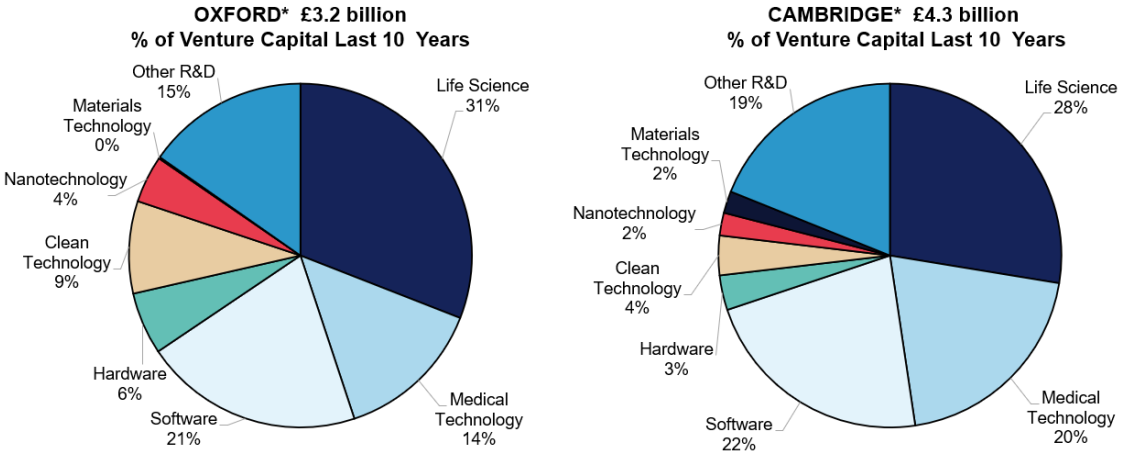
Figure 5: 50 of the Fastest Growing Life Science Businesses



Source: PwC Life Sciences Future 50. October 2023.

2.9 Oxford has the fourth biggest cluster of K.I. jobs outside London. Birmingham (40,500) and Manchester (39,200) have the second and third biggest number of K.I. jobs outside London, but their total workforces are more than double the size of both Oxford and Cambridge. In relative terms, Oxford and Cambridge stand out as having exceptional industrial structures. The city with the next highest exposure to K.I. industries in 2022 was London with 12%, reflecting its strengths in IT and media. The national average was 9% of total employment.

Figure 6: Technologies Employed in Oxford and Cambridge



Source: Beauhurst, Bidwells. December 2023.
*Oxford & Vale of White Horse. *Cambridge & South Cambridgeshire

2.10 The pie-charts above provide more detail on the technologies employed in Oxford and Cambridge. The data are based on the total amount of venture capital raised over the last 10 years and also suggest that the Oxford's Science & Tech cluster (£3.2 billion) is around three quarters the size of Cambridge (£4.3 billion). The pie-chart indicates that Oxford has a diverse mix of different technologies and is not dependent on one technology which might leave it vulnerable if that technology was superseded in the future. While Life Science is the single biggest sector in the Oxford cluster, it does not dominate and the cluster also has a significant presence in software and clean technology (e.g. batteries, nuclear fusion).

3.0 Why is the Oxford Science & Tech Cluster Growing?

3.1 The key attraction of Oxford K.I. for industries are the University, research institutes and teaching hospitals which deliver both world class research and a pool of highly trained people. While the internet means it is now possible for academics and researchers to do a lot of work remotely, the best ideas still generally come from face-to-face interactions. Innovation remains local. This is demonstrated by a 2021 YouGov survey of global R&D companies commissioned by Bidwells which showed that their key priorities for choosing a location are access to staff and proximity to business collaborators, academics and clinicians.

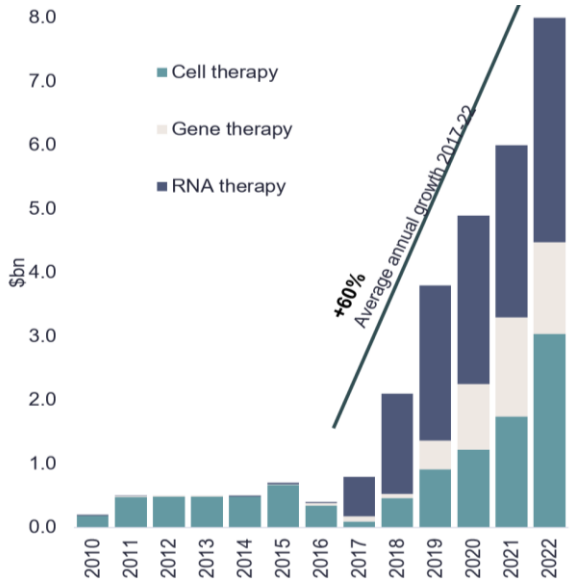
Table 3: Location Considerations for Global R&D Companies with a Presence in the UK

IMPORTANCE	FACTOR
1	Ease of recruiting and retaining staff
2.	Proximity to potential business collaborators
3.	Proximity to potential academic, or clinical collaborators
4.	Availability of 24/7 amenities
5.	Availability of property to expand

Source: Bidwells, YouGov. 2021.

3.2 Another key reason for the growth of the Oxford Science & Tech cluster are rapid advances in science including: cell & gene therapies which target oncology, rare diseases and neurology; AI and machine learning which can create text and other content and have a host of applications in marketing, navigation, security and social media: 3D printing of complex assemblies and human tissue; quantum computing and nuclear fusion. For example, sales of cell, gene and RNA therapies grew by 60% p.a. between 2017-2022. The distinction between life science and tech is blurring as AI is increasingly used in areas such as drug discovery and materials technology.

Figure 7: Revenues from Cell, Gene and Ribonucleic acid (RNA) Therapies



Source: IQVIA MIDAS MAT. February 2023.

3.3 The third factor which is contributing to the growth of the Oxford Science & Tech cluster is the ambition of the University of Oxford to grow its income from licensing its intellectual property and the maturing of the fund-raising environment. Oxford Science Enterprise plc (OSE) which was founded in 2015 has played a pivotal role and it plans to invest a further £1 billion over the next five years, which in turn should lever £4 to 5 billion from other investors.

3.4 Finally, success breed success. K.I. businesses exhibit a high degree of locational inertia, because once they have built relationships with other local businesses, academics and clinicians they are very reluctant to move. 76% of R&D companies would prefer to extend existing facilities when they grow (Source. Bidwells, YouGov Survey 2021).

3.5 This is further demonstrated by Table 4 which analyses the businesses looking for laboratory space in Oxfordshire in mid-2023. What is striking is that almost half of requirements for laboratory space are from businesses which started in Oxford, probably as spin-outs from the University. In short, much of the growth of the Oxford Science & Tech cluster is home-grown. That means that while the arrival of multi-national companies (e.g. Moderna) is very positive, the future growth of the cluster is not entirely dependent on securing more inward investment.

Table 4: Oxford Laboratory Requirements in Mid-2023

COMPANY ORIGIN	% OF TOTAL SPACE	% OF TOTAL NUMBER
Existing Presence & Started in Oxford	48%	48%
Existing Presence & Started in Rest UK	11%	17%
Existing Presence & Started Overseas	8%	13%
Existing Presence in Oxford	**67%**	**78%**
New Entrants (UK)	4%	4%
New Entrants (Overseas)	29%	18%
New Entrants	**33%**	**22%**
Total	100%	100%

Source: Bidwells. July 2023.

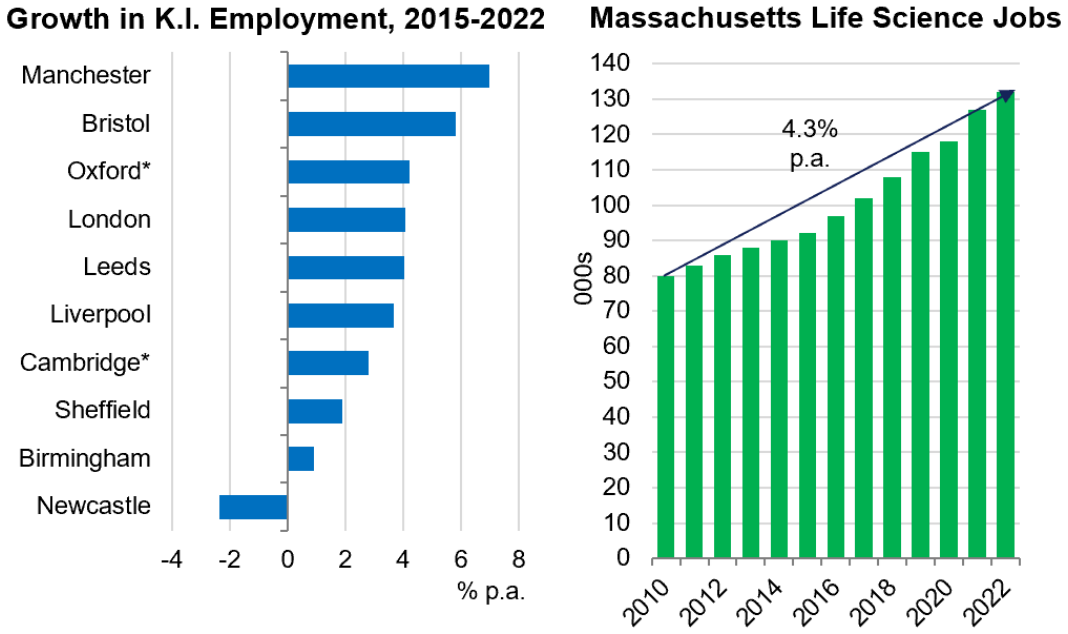
3.6 Furthermore, because the Oxford Science & Tech cluster has already achieved a critical mass it is likely to attract more researchers, because there are now a range of different employers and people can stay in Oxfordshire and build a career. They do not have to move to another part of the country in order to find a more interesting job or gain a promotion. In addition, as the Oxford Science & Tech cluster grows, so it will attract more people in finance and professional services (e.g. lawyers and patent agents) and it will be easier to raise venture capital and start a business.

4.0 What is the potential of the Oxford Science & Tech Cluster and how does it compare with the projections in the Draft Local Plan 2040?

4.1 Oxford's Science & Tech cluster has huge potential. The world leading research undertaken by the University and research institutes and the pool of highly skilled staff are key ingredients for Knowledge Intensive (K.I.) industries. The wide range of different technologies employed in the cluster means that it is not a single sector whose fortunes are tied to one industry.

4.2 Employment in K.I. industries in the Oxford Science & Tech cluster grew by 4% p.a. on average between 2015 and 2022 and a similar rate of growth was seen in most other UK cities, except Birmingham, Newcastle and Sheffield. (The faster rate of growth of K.I. jobs in Manchester was due in part to the partial re-location of the BBC from London and subsequent expansion). Data for life sciences in Boston / Massachusetts, which is the largest life science cluster in the world, shows a similar trend with employment growing by 4% p.a. since 2010.

Figure 8: Growth in Knowledge Intensive Employment



Source: Bidwells, ONS Business Register and Employment Survey. Massachusetts Life Sciences Employment Outlook 2023. December 2023.
*Oxford & Vale of White Horse. *Cambridge & South Cambridgeshire

4.3 Bidwells believe that K.I. industries in the Oxford Science &Tech cluster have the potential to sustain employment growth of 4% p.a. during the period to 2040, given all the current advances in science (e.g. cell and gene therapy, AI, quantum computing, nuclear fusion). Growth is likely to be driven primarily by the expansion of existing businesses and future spin-outs from the University, but periodically, will be boosted by the arrival of multi-nationals and other smaller specialist firms. Government measures which aim to increase investment by UK pension funds in start-up businesses should also support the long-term growth of the Oxford Science & Tech cluster.

4.4 The growth of K.I. industries will benefit the Oxfordshire economy in two ways. First, as their staff spend money in shops, pubs and restaurants in Oxford and the Vale of White Horse. Second, through supply chains, as K.I. business buy services (e.g. construction, professional services) from businesses across Oxfordshire.

4.5 However, whether the potential of the Oxford Science & Tech cluster is realised will depend upon a number of supply-side factors, many of which will hinge on planning decisions made by Oxford City Council and the Vale of White Horse. These include the expansion of the universities, the provision of additional housing and commercial space, electricity supply and upgrades to the transport network to enable people to commute into Oxford and the science parks in the Vale of White Horse.

4.6 If these supply-side issues are not resolved then there is a risk that many of the jobs that could have been created in Oxfordshire do not materialise, because K.I. businesses which cannot expand locally will be forced to open a second site in another cluster (e.g. Boston, Cambridge, Copenhagen, Leiden, London). That raises a further risk that if the Oxford Science & Tech cluster becomes smaller in relative terms, then it may become less attractive to academics and researchers.

Table 5: Oxford & Vale of White Horse Knowledge Intensive Industries Full Potential Scenario

Employment in 2022	
Knowledge Intensive [1]	37,100
Other Sectors	174,500
Total Employment	211,600
Knowledge Intensive % of total	18
2022-2040 Change % p.a.	
Knowledge Intensive	4.0
Other Sectors	0.8
Total Employment	1.5
Employment in 2040	
Knowledge Intensive	75,100
Other Sectors	201,100
Total Employment	276,200
Knowledge Intensive % of total	27
Additional Jobs 2040 vs 2022	
Knowledge Intensive	38,000
Other Sectors	26,600
Total Employment	64,600

Source: Bidwells, ONS Business Register and Employment Survey. December 2023.

4.7 Bidwells K.I. Industries Full Potential scenario assumes no supply-side limits to the growth of the Oxford Science & Tech cluster and that employment in K.I. Industries grows by 4% p.a. between 2022-2040, maintaining the trend since 2015. The scenario also assumes that every ten new jobs in K.I. industries would generate 7 new jobs in other sectors. (Source. "Do low-skilled workers gain from high-tech employment growth?" Neil Lee, Stephen Clarke. Research Policy 2019). As a result, employment in K.I. industries would double over the next 18 years to 75,100 jobs, an increase of 38,000 from 2022 and there would be an additional 26,600 jobs in other sectors. That would take the total number of jobs in Oxford and the Vale of White Horse to 276,200 in 2040 and K.I. industries would account for 27% of total employment.

4.8 Many of the additional jobs would be highly skilled and a further assumption implicit in the Full Potential scenario is that the city's Universities will expand to provide the required skills and training. However, not all of the additional jobs will require a degree. For example, just under half of jobs in life science companies are non-graduate roles.

Table 6: Oxford & Vale of White Horse Additional Office and Laboratory Space in 2040

	OXFORDSHIRE HENA LOW SCENARIO	OXFORDSHIRE HENA HIGH SCENARIO	K.I. INDUSTRIES FULL POTENTIAL
Additional Office Jobs	4,908	7,118	16,000
Additional Laboratory Jobs	4,129	6,580	16,000
Office space per worker – Net internal area (NIA) Metre^2	-	-	12.5
Lab space per worker - NIA Metre^2	-	-	28.0
Additional Office Space - NIA Metre^2	122,170	141,380	200,000
Additional Lab Space - NIA Metre^2	145,220	226,560	448,000
Additional Office Space - NIA Feet^2	1,315,026	1,521,800	2,152,780
Additional Lab Space – NIA Feet^2	1,563,134	2,438,669	4,822,227

Source: Bidwells, Cherwell and Oxford City Council Oxfordshire HENA (incl. Errata). December 2023.

4.9 Table 6 converts the additional jobs identified by Table 5 into the extra office and laboratory space which will be required in Oxford and the Vale of White Horse by 2040. We have assumed that 6,000 of the additional jobs in the K.I. Industries Full Potential scenario in Table 5 are in advanced manufacturing rather than life science, IT or other R&D and therefore do not generate demand for office, or lab space. The remaining 32,000 jobs are split evenly between the two sectors. While current requirements are tilted 40%:60% between office and lab space, we think that in part this is a temporary phenomenon caused by cost cutting in IT and that requirements will revert to 50:50 over the long-term. For example, an increasing amount of drug discovery involves AI and does not initially require a laboratory. Please note that we have ignored the implications of the K.I. Industries Full Potential scenario for housing, retail, leisure and industrial space in the two districts, because that is outside the scope of this study.

4.10 The office and laboratory space per worker figures in Table 6 are taken from the Oxfordshire Housing and Economic Needs Assessment (HENA) published by Cherwell District and Oxford City Council in December 2022 and the subsequent Erratum in June 2023. It is difficult to know how employment densities will change in the future. The greater adoption of remote working since Covid-19 has encouraged some office occupiers to down-size, although simultaneously there is pressure to provide more collaborative space and reduce noise pollution and improve wellbeing. Laboratory space per worker is assumed to remain constant, given less opportunity for remote working and the need to accommodate scientific equipment.

4.11 If we multiply the number of additional jobs in the Full Potential scenario by the figures for floorspace per worker, then the analysis suggests that Oxford and the Vale of White Horse will require an additional 2.2 million square feet of office space and an additional 4.8 million square feet of laboratory space by 2040. Those estimates are significantly higher than in the HENA report, particularly for laboratories. The HENA report, which has both high and low growth scenarios, suggests that Oxford and the Vale of White Horse will only require an additional 1.3-1.5 million square feet of office space by 2040 and an additional 1.6-2.4 million square feet of laboratory space.

5.0 Summary

5.1 Knowledge Intensive (K.I.) industries as defined by Advanced Oxford are concentrated in Oxford City and the Vale of White Horse. They account for 18% of total employment and collectively are the biggest employment sector after education.

5.2 K.I. sector employment in the two districts grew by an average of 4.2% per annum between 2015 and 2022, with growth of 18.9% between 2021 and 2022. Employment in other sectors declined during the same period.

5.3 The Oxford Science & Tech Cluster has huge potential. The world leading research undertaken by the Universities and research institutes and the pool of highly skilled staff are the key ingredients for science and tech businesses.

5.4 The diversity of scientific activities means that the cluster is not dependent on one technology which might be superseded. Growth is likely to be driven primarily by the expansion of existing businesses and future spin-outs from the Universities but will be boosted by the periodic arrival of multi-national companies. The growth of the Cluster will also be supported by a further maturing of the venture capital environment.

5.5 Whether the Oxford Science & Tech Cluster achieves its full potential will depend on supply-side factors: the delivery of commercial floor space, the expansion of the Universities, transport upgrades, an increase in electricity supply and additional housing.

5.6 If these constraints are removed, then employment in K.I. industries is likely to maintain its recent trend and grow by 4% p.a. between 2022-2040. That would lead to an additional 64,600 jobs in total by 2040, as other parts of the local economy benefitted from the growth in K.I. industries.

5.7 If the K.I. Industries do achieve their full potential, an additional 2.2 million square feet of office space and 4.8 million of laboratory space would be required by 2040. The Local Plan projects an additional 1.3-1.5million square feet of office space and 1.6-2.4 million of laboratory space.

5.8 The growth of the Oxford Science & Tech Cluster will have positive spillover effects on employment across Oxfordshire.

5.9 If the K.I. Industries in the cluster are constrained, then potential jobs, capital and expertise are likely to be lost to other clusters. With a smaller cluster in relative terms, the risk is that the Universities would be less able to attract academics and researchers, compared to Cambridge, or clusters in other countries.

5.10 The Local Plan fails to plan positively by imposing, or neglecting constraints on both the Universities and the wider economy.

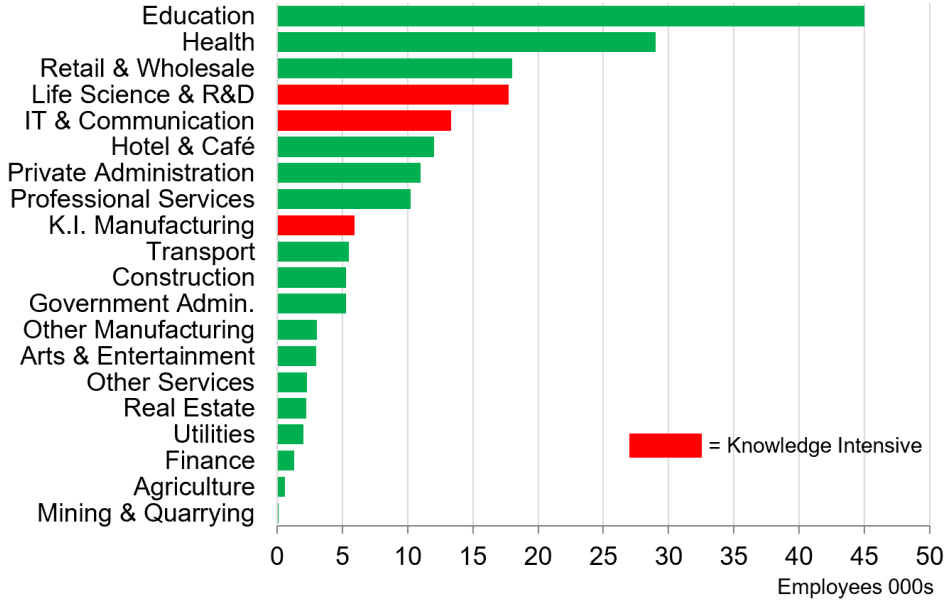
ANNEX 1
EMPLOYMENT BY SECTOR

Education is the most important employment sector in Oxford and the Vale of White Horse with 45,000 jobs in 2022 (the latest year for which official data are available). 29,000 of these jobs are in higher education, reflecting the importance of Oxford's two Universities.

Collectively, there were 37,100 K.I. jobs in Oxford (16,600) and the Vale of White Horse (20,500) in 2022. K.I. Jobs accounted for 18% of total employment in the two districts in 2022. The national average was 9%.

Hotels, cafes, pubs, museums, the arts and other cultural attractions accounted for 15,000 jobs in 2022.

Figure 9: Employment in Oxford and Vale of White Horse in 2022



Source: ONS Business Register and Employment Survey. December 2023.

Note the ONS data on employment by sector in the chart excludes around 19,000 jobs among the self-employed, government-supported trainees and HM Forces

BIDWELLS

APPENDIX 2
SITE ALLOCATIONS

POLICY SPN2: OXFORD UNIVERSITY PRESS SPORTS GROUND	COMMENT
Planning permission will be granted for residential development and public open space at Oxford University Press Sports Grounds. The minimum number of homes to be delivered is 90 if the cricket pitch is retained on the site, rising to 130 if it is not. Some complementary employment use would also be suitable. Other complementary uses will be considered on their merits. **Open space, nature and flood risk** The capacity of the sports provision must be retained unless it can be demonstrated there is not demand for the facility (which is not the case at the current time) or the loss of the sports provision can be otherwise compensated for (Policy G1). If an alternative site is found, the City Council must be satisfied that it will be delivered and operational prior to the occupation of residential development on the site. The Active Communities team should be consulted about whether their cricket pitch needs to be retained or an alternative sporting use would better meet needs. In addition, the Oxford University Press Sports Ground site will still be expected to provide 10% new public open space as part of the residential development, if that is above the 1.5ha threshold set in Policy G2. Policies G1 and G3 require protection of existing green infrastructure features and enhancement of greening on site through the urban greening factor. It is expected that those requirements can be met in the following ways. Opportunities should be taken to create wildlife corridors through the site by enhancing the biodiversity of the hedgerow to the west of the site and connecting it to existing mature trees in the corner of the Wolvercote cemetery. The southern part of the site should be retained as open green space, connecting to the existing recreation ground and maintaining the green setting of the Wolvercote Cemetery, which is the main asset of historic interest in the area. The surrounding area is characterised by wide streets and set-back buildings in large plots, which contributes to a high-quality public realm. Gardens and landscaping along streets should help introduce high quality green features into the site, which will contribute to biodiversity net gain and maintaining the Urban Greening Factor score. Development should be designed to ensure that there is no adverse impact on the Port Meadow SSSI (Policy G6) and will be subject to appropriate traffic mitigation measures.	

Urban design and heritage Policy HD7 requires high quality design and the following sets out key considerations for achieving that on this site. Development should line and face ~~the~~ key streets ~~and including~~ which should be greened by ~~greening~~ features ~~alongside~~ such as verges, planting and swales would help achieve the urban greening factor. Development should encourage active frontages onto the new public open space. There is potential for higher density than the surroundings, with some flats set within grounds. To the west and the centre of the development near the business park and with a significant gap from the Wolvercote cemetery for open space and replacement facilities, will be most suitable for higher densities. **Movement and access** The relationship between development on this site and the neighbouring urban extension site in Cherwell District Council's area must be carefully considered. The hedgerow that divides the sites adds important greening, but there should be high Policy HD7 requires high quality design and the following sets out key considerations for achieving that on this site. quality links through to the neighbouring development site for pedestrians and cyclists. This should provide a safe and clear linkage all the way through the site to the recreation ground, and through on to Jordan Hill, improving permeability through the area for pedestrians and cyclists. Vehicular access to the site should be from Jordan Hill. This is likely to be the only exit and entrance so the road layout will need to allow easy circulation around the site. Any significant increase in traffic is likely to impact upon the nearby Wolvercote and Cutteslowe roundabouts, so appropriate mitigation measures will be required, and traffic generation should be limited, with low parking.	

POLICY SPS16: CRESCENT HALL	COMMENT
Planning permission will be granted for residential development and/or student accommodation on the site. The minimum number of dwellings to be delivered on the site is 29 net gain (or, if delivered as student rooms, the number of rooms that equate to this when the relevant ratio is applied). **Open space, nature and flood risk** Policies G1 and G3 require protection of existing green infrastructure features and enhancement of greening on site through the urban greening factor. Policy G5 requires onsite biodiversity enhancement, and Policy G2 requires new Green Infrastructure features and enhancement of existing features. The following is expected to help meet these requirements. There are opportunities to incorporate high-quality green infrastructure on the site. Existing mature trees should be retained as far as possible, especially those on the edge of the site and those that screen the site from the adjoining conservation area. Replacement and additional planting of trees and other mixed high-quality planting will be required. There should be permeable surfacing across the site and more natural landscaping. ~~Development schemes will be expected to retain and integrate the existing MUGA, unless the loss of the sports provision can be otherwise compensated for in accordance with the requirements of Policy G5. If an alternative site is found, the City Council must be satisfied that it will be delivered.~~ **Urban design and heritage** Policy HD7 requires high quality design and the following sets out key considerations for achieving that on this site. There is scope for intensification on the site, including additional height; however development proposals are expected to have regard for the character of the adjoining conservation area (in accordance with Policy HD1), particularly in terms of heights, massing, roofscape and impacts on street scene and local character. **Movement and access** The scheme should seek to prioritise walking and cycling owing to its proximity to the district centre and location within a CPZ. The most suitable access to the site is likely to be from Crescent Road, as the existing access is. Designing and locating circulation areas and servicing areas so that vehicle circulation around the site is minimised will be important due to the limited access opportunities for this relatively large site.	The Crescent Hall allocation (Policy SPS16) includes a council owned Multi-Use Games Area (MUGA) within the site boundary and 'it is expected that this would be retained or integrated within any development scheme unless it is deemed surplus to requirements'. However, Oxford Brookes is of the opinion that the MUGA has been closed for several years following anti-social behaviour and that the City should satisfy itself now if the MUGA is surplus to requirements. In any case, if there is question over its delivery the MUGA should be removed from the allocation. Subject to further testing, the wider site could deliver a minimum of 450 gross bedspaces and this should be allocated as such.

POLICY SPE3: HEADINGTON HILL AND CLIVE BOOTH HALL	COMMENT
Planning permission will be granted for: a) additional academic and teaching facilities on the Headington Hill Hall site (subject to Policy H10), with associated sport, social and leisure facilities subject to other relevant Local Plan policies; b) residential development on the Clive Booth Student Village site, including student accommodation or employer-linked affordable housing at a minimum quantum of 229 residential units net gain (or, if delivered as student rooms, the number of rooms that equate to this when the relevant ratio is applied). c) The re-use of Headington Hill Hall for academic or complementary commercial uses including hotel use. Other complementary uses will be considered on their merits. **Open space, nature and flood risk** Policies G1 and G3 require protection of existing green infrastructure features and enhancement of greening on site through the urban greening factor. Policy G5 requires onsite biodiversity enhancement, and Policy G2 requires new Green Infrastructure features and enhancement of existing features. It is expected that those requirements will be met in the following ways. Habitats should be preserved and enhanced, retaining existing green features where possible, particularly where these are identified as important for supporting the setting of the conservation areas and views across the site. In particular, there are a number of significant mature trees and some important tree groups, many of which will need to be preserved, and there must be no long-term overall loss of historic tree canopy cover across the site. New planting should be incorporated to enhance the landscape setting or to improve linkages between the adjacent green spaces. Planning permission will only be granted if it can be proven that there would be no adverse impact upon surface and groundwater flow to the New Marston SSSI (Policy G6). Development proposals should reduce surface water runoff in the area and should be accompanied by an assessment of groundwater and surface water flows and development proposals must incorporate sustainable drainage with an acceptable management plan (Policies G7 and G8). **Urban design and heritage**	

Policy HD7 requires high quality design and the following sets out key considerations for achieving that on this site. Development proposals must be designed with consideration of their impacts on the setting of the listed buildings, the character of the conservation area, and on views, particularly from the historic core. Proposals must demonstrate compliance with policies HD1, HD2 and HD9. Development should ~~have a positive impact on~~ maintain or enhance the relationship between buildings and the landscape setting. Development that rises above the treeline will need to be ~~very~~ carefully considered and justified. Adjustments and considerations at design stage may be helpful in reducing the ongoing impact of poor air quality. Potential options may include considering layout options that place habitable spaces and openings away from pollution sources such as busy roads, landscape buffers, and designing in walking and cycling options as integral part of schemes Development proposals must take into consideration the potential presence of archaeological remains related to the Civil War Parliamentarian Siege line. Due to this potential, development should demonstrate compliance with Policy HD5. **Movement and access** Development proposals should improve the pedestrian and cycle connectivity around the site, following desire lines between different parts of the site and from Gipsy Lane. The development will be expected to minimise car parking spaces on site, and there should be no increase. Applicants will be expected to demonstrate how the development mitigates against traffic impacts and maximises access by alternative means of transport. Pedestrian and cycle access should be enhanced across the whole site, following desire lines from the Gipsy Lane campus and between different parts of the site. **Natural resources** The site is located in an air quality hot spot area. Development proposals must demonstrate compliance with Policy R4 by ensuring that all necessary mitigation measures against poor air quality have been incorporated during the construction and operational phases and ensuring that any potential negative air quality impacts are adequately mitigated on an ongoing basis, within and surrounding the site.	

Development proposals will be required to include an appropriate site contamination investigation and applications will be required to demonstrate how any contamination issues will be resolved in compliance with Policy R5.	

Policy SPE4: Oxford Brookes University and Marston Road Campus	Comment
Planning permission will be granted for further academic, research and related uses (subject to Policy H10), ~~potentially with linked~~ and/or student accommodation and/or residential development including employer-linked housing, subject to other relevant Local Plan policies. Other complementary uses will be considered on their merits. **Open space, nature and flood risk** Policies G1 and G3 require protection of existing green infrastructure features and enhancement of greening on site through the urban greening factor. Policy G5 requires onsite biodiversity enhancement, and Policy G2 requires new Green Infrastructure features and enhancement of existing features. It is expected that those requirements will be met in the following ways. Development should not result in adverse impacts on the Milham Ford Nature Park or the inner quad, which is designated as a local wildlife site. Green links could be incorporated through the site connecting from the nature park, these should include green SuDS features, rain gardens etc. to facilitate sustainable drainage. Hard, non-permeable surfaces should be kept to a minimum. There are a few medium sized trees on the site which should be retained in first instance, opportunities to incorporate additional trees and hedges would help to replicate the character of the wider area and have various benefits. Planning permission will only be granted if it can be proven that there would be no adverse impact upon surface and groundwater flow to the New Marston SSSI. Development proposals should reduce surface water runoff in the area and should be accompanied by an assessment of groundwater and surface water flows. Development proposals must incorporate sustainable drainage with an acceptable management plan. Boundary treatments could continue the natural style present on the site, e.g. retain and make use of existing hedges and trees as much as possible. ~~The existing row of hedges and trees form a natural border along the western boundary as well as to the north of the site (which are characteristic of the length of Jack Straw's Lane) and should be retained in any development proposals.~~ Public realm improvements should incorporate ample amounts of green features designed to function aesthetically, but also as important resources for biodiversity,	The University requires more flexibility over the future of this campus.

cooling, noise, and flood resilience. Particular attention should be paid to new lighting and its impacts on biodiversity, particularly on the western side of the site adjacent to the nature park, efforts should also be made to minimise negative impacts of noise and poor air quality. **Urban Design and Heritage** It is expected that the form, materiality and significance of the existing school buildings are assessed and responded to appropriately in development proposals. Attention should also be paid to the materiality of the adjacent conservation area, and Policy HD7 requires high quality design and the following sets out key considerations for achieving that on this site. materials selected that are sensitive to this and enhance it. Development proposals must be designed with consideration of their impact on the overall landscape setting and character of the adjoining conservation area, demonstrating compliance with Policy HD1. **Movement and access** The existing accesses allow good permeability through the site and are likely to remain the best locations for accessing the site in future. **Natural resources** Development proposals will be required to include an appropriate site contamination investigation and applications will be required to demonstrate how any contamination issues will be resolved in compliance with Policy R5.	

POLICY SPE6: CHURCHILL HOSPITAL	COMMENT
Planning permission will be granted for: a) further hospital related uses, including the redevelopment of existing buildings to provide improved facilities on the Churchill Hospital Site. b) Other suitable uses which must have an operational ~~and~~ or research link to ~~the hospital~~ healthcare and education and could include: • employment; • patient hotel; • primary health care; • education; • academic institutional and research; • extra care accommodation, including elderly persons accommodation; • small scale retail units, provided that they are ancillary to the hospital; • employer-linked affordable housing; • student accommodation. Other complementary uses will be considered on their merits. Development of the site should be undertaken as part of a masterplan to ensure all landuse issues including parking are considered in a comprehensive way to make the most efficient use of land. **Open space, nature and flood risk** Policies G1 and G3 require protection of existing green infrastructure features and enhancement of greening on site through the urban greening factor. Policy G5 requires onsite biodiversity enhancement, and Policy G2 requires new	The proposed changes are necessary to avoid unnecessarily restricting the scope of activity taking place at the Churchill Hospital.

Green Infrastructure features and enhancement of existing features. It is expected that those requirements will be met in the following ways. Planning permission will only be granted if it can be demonstrated that there would be no adverse impact upon surface and groundwater flow to the Lye Valley SSSI.

Development proposals should reduce surface water runoff in the area and should be accompanied by an assessment of groundwater and surface water. Development proposals must incorporate sustainable drainage with an acceptable management plan. Important trees should be retained.

A buffer zone should be provided during the construction period to avoid disturbance to the adjacent SSSI.

Any planning applications near the Boundary Brook or Lye Valley will also need to assess the potential for additional indirect impacts on the flora and fauna of those areas, including (but not limited to) potential impacts from lighting, noise, and dust, and provide adequate buffers and deliver ecological enhancements as required.

Additional protective and enhancement measures for river and wetland restoration as required around the watercourse and ecological buffers zones (minimum 10metres from bank top) should form part of development proposals.

Opportunities should be sought to repurpose the existing hard surfaces for other uses including GI and amenity uses, or to create connections between the site and landscape beyond, or green corridors/routes through the site.

Urban design and heritage

Policy HD7 requires high quality design and the following sets out key considerations for achieving that on this site. Redevelopment or consolidation of buildings is likely to be the most appropriate approach to achieve more effective use of land and free up land for further development and for landscaping and the creation of amenity areas. Rationalisation and consolidation of parking provision where possible will free up more land for more effective uses. New buildings should be designed to create active frontages and avoid creating largeareas of inactive frontage. Design should draw inspiration from the non- designated heritage assets, drawing inspiration from them to inspire and enrich the identity, character and quality of new development on the site.

New development must preserve the Roman pottery manufacturing site and should take into consideration the potential for further Roman archaeological remains. Due to this potential, development should demonstrate compliance with Policy HD5.

Movement and access

Applicants will be expected to demonstrate how the development mitigates against traffic impacts and maximises access by alternative means of transport. Mitigation measures will be required to ensure that proposals do not lead to increased parking pressure on nearby residential streets. Improvements to pedestrian and cycle links to and across the site, and good public transport access will be required. Development proposals must not prejudice current bus access through the site.

Natural resources

Due to the site's proximity to recorded peat reserves, and the potential for further deposits in the area, any development on currently undeveloped parts of the site will only be permitted where it can be demonstrated that there will be no harm or loss of peat deposits in accordance with the requirements of Policy R6. This may mean that where there is the potential for causing removal of peat, site layout has been designed accordingly to protect and mitigate any harm to identified peat deposits onsite.

Because of the use as a hospital some areas of potential contamination are present on the site, so site investigation will be required, and remedial works are likely to be necessary (Policy R5).

POLICY SPE7: NUFFIELD ORTHOPAEDIC CENTRE	COMMENT
Planning permission will be granted for further healthcare facilities and medical research including staff and patient facilities at the Nuffield Orthopaedic Centre. Planning permission will also be granted for residential development and extra care accommodation, employer linked affordable housing that supports the main use of the site. **Open Space, Nature and Flood Risk** Policies G1 and G3 require protection of existing green infrastructure features and enhancement of greening on site through the urban greening factor. Policy G5 requires onsite biodiversity enhancement, and Policy G2 requires new Green Infrastructure features and enhancement of existing features. It is expected that those requirements will be met in the following ways. Planning permission will only be granted if it can be demonstrated that there would be no adverse impact upon surface and groundwater flow to the Lye Valley SSSI. Development proposals should reduce surface water runoff in the area and should be accompanied by an assessment of groundwater and surface water and development proposals must incorporate sustainable drainage with an acceptable management plan (Policies G7 and G8). **Urban Design and Heritage** Policy HD7 requires high quality design and the following sets out key considerations for achieving that on this site. There may be potential for infill development of repurposed surface level parking areas and redevelopment of low-density buildings in the South–Western part of the site. The use of pitched roofs can also help in the transition down in scale from institutional buildings to the residential edge. Development must take into consideration the potential presence of Roman archaeological remains. Due to this potential, development should demonstrate compliance with Policy HD5. **Movement and Access** Along with the potential for consolidating car parking areas, there may also be opportunities to reduce the overall amount of hard surfacing in favour of increased considered landscaping and amenity spaces such as pocket parks, or other forms of GI for ecological purposes. **Natural Resources**	No comments.

Due to the site's proximity to recorded peat reserves, and the potential for further deposits in the area, any development on currently undeveloped parts of the site will only be permitted where it can be demonstrated that there will be no harm or loss of peat deposits in accordance with the requirements of Policy R6. This may mean that where there is the potential for causing removal of peat, site layout has been designed accordingly to protect and mitigate any harm to identified peat deposits onsite. Because of the use as a hospital some areas of potential contamination are present on the site, so site investigation will be required, and remedial works are likely to be necessary (Policy R5).	

POLICY SPE20: JOHN RADCLIFFE HOSPITAL	COMMENT
Planning permission will be granted for: a) further hospital related uses, including the redevelopment of existing buildings to provide improved facilities on the John Radcliffe Hospital Site. b) Other suitable uses which must have an operational or research link to ~~the hospital~~ healthcare and education and are: • employment uses; • patient hotel; • extra care accommodation, including elderly persons accommodation; • primary health care; • education; • academic institutional • small scale retail units ancillary to the hospital • employer-linked affordable housing; • student accommodation. Other complementary uses will be considered on their merits. Development of the site should be undertaken as part of a masterplan to ensure all land use issues including parking are considered in a comprehensive way to make the most efficient use of land. **Open space, nature and flood risk** Policies G1 and G3 require protection of existing green infrastructure features and enhancement of greening on site through the urban greening factor. Policy G5 requires onsite biodiversity enhancement, and Policy G2 requires new Green Infrastructure features and enhancement of existing features. It is expected that those requirements will be met in the following ways. This site is within an area where development could exacerbate surface and/or foulwater flooding. There is an opportunity to address excess of runoff at the John Radcliffe Hospital site by ensuring that any development at the site reduces rather than maintains existing levels. This could take the form of ponds, wetlands or an on-site attenuation feature. A drainage strategy will also need to be produced by the	The proposed changes are necessary to avoid unnecessarily restricting the scope of activity taking place at the John Radcliffe Hospital.

developer in liaison with the City Council, Thames Water and the Environment Agency, to establish the appropriate drainage mitigation measures for any development. Planning permission will only be granted if sufficient drainage mitigation measures are incorporated into the design of proposals.

Existing drainage features such as the brook separating northern car parks should be maintained, enhanced and integrated into the landscape scheme, potentially creating wildlife corridors through the site.

Surface level parking dominates the site. Consolidating and rationalising the level of car parking on the site could free up land for redevelopment, as well as present opportunities for providing improved landscaping and GI, improved pedestrian/cycle paths, and SuDS for managing surface water run-off.

Urban design and heritage

Policy HD7 requires high quality design and the following sets out key considerations for achieving that on this site. Development proposals must be designed with consideration of their impact on the adjoining Old Headington Conservation Area and views, particularly from the Boars Hill and Elsfield view cones, as well as on the listed buildings. As such, proposals must demonstrate compliance with policies HD1, HD2 and HD9.

For development of new hospital buildings, materials should be consistent with townscape character and be modern in style and materials. Whilst a more contextual approach should be considered for development of residential, student residential or key worker housing which would soften the impact of any new development and take inspiration from neighbouring areas. Material choice should not exacerbate the prominence of the hospital in views across the city or the view cones. Flat roofs onsite could accommodate solar panels.

Movement and access

Improvements to public transport, walking and cycling access through the site will be required. These measures should be set out within a transport assessment or travel plan and reflected in an agreed masterplan. Development proposals must not prejudice bus access through the site, and new routes that effectively separate walking and cycling from visitor or servicing traffic, will be encouraged. Additional access points to non-vehicular traffic onto the site will also be beneficial.

Rationalisation of the existing parking must be undertaken as part of development proposals coming forward on the site to ensure the most efficient use of land is made. **Natural resources** Site investigation works would be required in the event of redevelopment due to current and historic uses of the land and must demonstrate compliance with Policy R5.	

BIDWELLS