GL Hearn
Part of Capita Real Estate

Employment Land Needs Assessment

Oxford City Council

Final Report

October 2018

Prepared by

GL Hearn

280 High Holborn
London WC1V 7EE

T +44 (0)20 7851 4900
glhearn.com

Contents

Quality Standards Control

The signatories below verify that this document has been prepared in accordance with our quality control requirements. These procedures do not affect the content and views expressed by the originator.

This document must only be treated as a draft unless it is has been signed by the Originators and approved by a Business or Associate Director.

DATE	ORIGINATORS	APPROVED
October 2018	Nena Pavlidou Senior Planner	Paul McColgan Associate Director

Limitations

This document has been prepared for the stated objective and should not be used for any other purpose without the prior written authority of GL Hearn; we accept no responsibility or liability for the consequences of this document being used for a purpose other than for which it was commissioned.

1 EXECUTIVE SUMMARY

i. There are an estimated 135,400 jobs in Oxford in 2016. Oxfordshire is home to some of the UK's principal locations for high quality knowledge-based economic growth. Firstly, the University of Oxford has the country's largest volume of world-leading research companies. In addition, there is a unique grouping of 'big science' and other research facilities, primarily in the Science Vale in Didcot, South Oxfordshire.

ii. The economic success of Oxfordshire is mainly driven by the knowledge sector. This is reinforced by the fact that the education sector accounts for 7% of the county's economic output and has GVA productivity 17% above the national equivalent (£71,641 GVA per worker against £61,444 in UK in 2017).

Office Market

iii. Oxfordshire is in a strategic location for the office market and benefits from its proximity to London and Heathrow airport; it is an integral part of the UK's Golden Triangle for knowledge based sectors defined as the area between Cambridge, London and Oxford. It is also a node of the Cambridge - Milton Keynes - Oxford corridor (East West Corridor) recognised as the UK's potential Silicon Valley by the National Infrastructure Commission.

iv. Office take-up reached record levels during 2017, driven by three large enquiries according to Savills' Oxford Office Market Update in March 2017. Oxford's office leasing take-up reached 208,000 sq. ft. during 2016, in line with the long term annual average of c200,000 sq. ft.

Industrial Market

v. Both the city centre and out-of-town business parks are popular locations amongst tenants. Although many tenants would sometimes prefer city centre locations, the bulk of the available offices in Oxford are located in out-of-town business parks.

vi. The agents reported an acute undersupply of office space in the city centre, whilst they were perceptions of 'just about the right level of supply' in out-of-town locations. However the city centre locations were significantly constrained in terms of office supply.

vii. Oxfordshire's industrial market is thriving despite the challenging commercial climate. Oxfordshire saw take up rise, requirements increase and rents hit a record high, as occupiers showed faith in a buoyant local economy in 2017.

viii. The Bidwells figures indicate that take up in Oxfordshire's industrial market is at its highest level since 2013, with 427,100 sqft. transacted during 2017. The latest UK Powerhouse Report has forecasted that Oxford will be the second strongest city economy in 2018, growing by 2.0%.

ix. Local agents reported strong industrial floorspace demand of all types of industrial properties ranging from period properties to newly built stock, as with offices the demand was not fixated on new stock with only some tenants preferring new build stock.

x. The most popular size of industrial units in Oxford was considered to be those that range from 5,000 to 10,000 sqft. In terms of location, the consensus was that Oxford does not have a main industrial area and most industrial units are scattered around out-of-town locations across the City with an emphasis to the south.

Future Economic Growth

xi. Future employment growth in Oxford City was forecast by Cambridge Econometrics (CE) and SQW. The forecast is based on the planned economic growth scenario results from the updated Local Economy Forecasting Model (LEFM) from CE. The forecasts took into account demographic changes as well as planned growth in

- Education
- Biosciences
- Healthcare
- Advanced engineering
- Environmental technologies
- Retail

xii. The Planned Economic Growth forecasts show the total number of jobs in Oxford growing from 135,400 in 2016 to 152,400 in 2036. This is a total growth of 17,000 jobs over the 20 year period – equivalent to an annual growth rate of 0.6% per annum.

xiii. The report then translates jobs growth into requirements for employment land in the B1, B2 and B8 use classes and compares these against past completions trend data.

xiv. GLH has considered the proportion of employment in each of these sectors which is likely to take place in office, factories and warehouse floorspace using employment densities. Applying these employment densities to the forecasts of net growth in jobs results in a net requirement for additional B-Class floorspace of 117,215 sq. m (2016-36).

xv. In considering how much employment land to allocate, it is appropriate to include a margin to provide some flexibility within the supply. To calculate an appropriate margin of flexibility we have assumed Five years' worth of completions which is equivalent to c.18,000 sq. m. In total the estimated need for the period 2016-36 is:

- B1a/b - 99,193 sq.m.
- B1c - 14,342 sq.m.
- B2 - 10,984 sq.m.
- B8 - 10,486 sq.m.
- Total - 135,004 sq.m.

xvi. The report also considers historic completions of employment floorspace in Oxford City. However we conclude on a need based on the labour demand scenario. This reflects current and committed growth opportunities. The higher growth rate (particularly for office) is within the 15 year growth rate suggesting this level of growth is achievable in Oxford.

xvii. There is a requirement for local authorities to align their economic and housing strategies. The level of housing growth associated with Labour demand scenario is set out in the housing needs assessment.

xviii. The SHMA sets out an economic housing need ranging from 527 to 555 dpa. However the concluded OAN is based on an adjusted demographic growth that exceeds the economic led scenario. Therefore economic growth will not be constrained by a lack of labour force.

2 INTRODUCTION

2.1 GL Hearn was commissioned by Oxford City Council to prepare an assessment of the City's employment land needs for the period 2016-36. In addition, we have also been commissioned to undertake the Strategic Housing Need Assessment for the City. These two studies have been prepared simultaneously and are in line.

2.2 The most recent assessment of employment need was prepared through the Oxford's Employment Land Assessment (ELA) (2016) which also includes an assessment of the employment supply together with a review of Oxford's economy and employment property market dynamics. In addition, Bidwells commercial agents, together with Savills, have undertaken an extensive analysis of the commercial property market in Oxford and Oxfordshire as a whole. This has been reviewed and taken into consideration in the report. Last but not least, the Council has commissioned SQW and Cambridge Econometrics (CE) to update the economic forecasting for the City of Oxford. This forecast has also been updated by GL Hearn's population and housing projections

2.3 Therefore, the study herein draws together recent evidence regarding economic and commercial property market dynamics in Oxford and provides a 'policy-off' assessment of employment needs based on the SQW and CE economic forecast.

2.4 The key output of this report is the calculation of the labour demand assessment of employment land needs based on the updated forecasts as mentioned above. This require calibration of the GL Hearn's demand model to take account of local data if full-time equivalent jobs, sectoral distribution by use class, employment densities and plot ratios to identify the City's employment needs.

2.5 This report seeks also to consider all the recent evidence and to provide an updated assessment of Oxford's employment floorspace based on the latest evidence. This includes a review of ELA's findings with regards to Oxford's economy together with an update of the commercial market review undertaken in ELA 2016 by primarily undergone a commercial literature review, a review of the latest market data together with interviews to local agents to complement the quantitate analysis.

Structure

2.6 To accomplish this, we have structured the report as following:

- Chapter 2: Review of Evidence
- Chapter 3: Property market dynamics
- Chapter 4: Employment forecasts
- Chapter 5: Employment objectively assessed need

3 REVIEW OF RECENT EVIDENCE

3.1 This section summarises key evidence and wider strategic objectives which have a bearing on consideration of employment land needs in Oxford, recognising that it forms part of a wider sub-regional economy.

Strategic Economic Plan for Oxfordshire 2016

3.2 The aim of the SEP is to be a widely-owned 'economic route map' for Oxfordshire embraced by all stakeholders and focused on supporting the economic performance of the area.

3.3 Oxfordshire is notable for the excellence and scale of innovation, enterprise and research within the county, and for the dynamism of its economy: both employment and GVA (Gross Value Added) are growing strongly, activity and employment rates are high, and there is very low unemployment. The scale of recent investment in some of its most successful firms bodes well for the future.

3.4 A key issue that the area struggles with is the lack of housing that people can afford, and increasing congestion on the road network. There are also concerns around sustainability and inclusion that must be addressed. In addition, there is a need for greater resilience in the face of increased global risks and uncertainty.

3.5 By 2030, the SEP sets out the following four targets for Oxfordshire's economy. These include:

- Vibrant: Oxfordshire will be a place where ambitious businesses and people thrive; and where young people choose to build their careers and their lives, contributing to the vibrancy of Oxfordshire's communities;
- Sustainable: Oxfordshire will be on a trajectory for growth that is sustainable environmentally and economically with businesses and others choosing to re-invest;
- Inclusive: Oxfordshire will be a place in which all residents have a real stake in determining the county's future economic narrative and contributing fully to it;
- World-leading: Oxfordshire will be a place that is recognised globally for its dynamic innovation ecosystem, founded on world class research and fuelled by enterprise, all within an environment of the highest quality.

3.6 These targets will be achieved through four wide-ranging programmes, each with priorities to 2020, and a number of key action areas. These are:

- People – delivering and attracting specialist and flexible skills at all levels, across all sectors, as required by our businesses, filling skills gaps, and seeking to ensure full, inclusive, employment and fulfilling jobs;
- Place – ensuring a strong link between jobs and housing growth, and providing a quality environment that supports and sustains growth; and offering the choice of business premises and homes (including more homes that are genuinely affordable) needed to support sustainable growth whilst capitalising on and valuing our exceptional quality of life, vibrant economy and urban and rural communities;

- Enterprise – emphasising innovation-led growth, underpinned by the strength of Oxfordshire's research, business collaboration and supply chain potential; recognising and reinforcing the significant contribution made by all sectors, in all parts of Oxfordshire and all types of business;
- Connectivity – enabling people, goods and services to move more freely, connect more easily; improving broadband and mobile coverage and capacity; and providing the services, environment and facilities needed by a dynamic, growing and dispersed economy.

3.7 Oxford is the heart of the county accounting for a quarter of the population and a third of jobs in Oxfordshire. The revised strategy includes a variety of projects to enable the above targets and programmes. Of relevance to Oxford City these include:

- Oxford BioEscalator: A total investment of £21.2m (7.8 from City Deal Funding) for a new-breed of incubator space to nurture small spin-off companies in the life science sector with the capacity to grow into mid-sized companies. Situated in the Old Road Campus in Oxford, it will allow co-location with hospital and research facilities and staff and sharing equipment that allow "adjacent innovation" to develop at scale. It will also support single teams to manage multiple biotech companies which will significantly reduce management costs. Delivered by The University of Oxford
- The first phase of Oxford Science Transit is a fully integrated public transport system that connects the area's centres of innovation and economic growth with the two universities. Delivered by Oxfordshire County Council. The total investment will cost £23.5m where £8.7m are funded through the City Deal.
- Oxford Science Transit Phase 2 – support to expand the integrated public transport system along the Knowledge Spine. Delivered by Oxfordshire County Council. This project has secured £35m (out of the total of £40m).
- Centre for Applied Superconductivity - a new centre of innovation to coordinate the interaction between key industry players, Oxford University, cryogenics companies, and end users (including SMEs). This investment cost in total £6.5m and £4.5 derived by the Local Growth Fund (LGF). Delivered by The University of Oxford.
- Oxfordshire Centre for Technology and Innovation - development of a Technology and Innovation Training Centre in Oxford to address skills shortages across engineering, electrical, design, and emerging technologies. Delivered by Activate Learning. £4.5m LGF has been secured for this project.
- Headington Phase 1 and Eastern Arc Transport Improvements – a package of junction and local road improvements to support growth in the Headington area. Delivered by Oxfordshire County Council. The total cost of this project is £12.5m.
- Northern Gateway – a package to improve transport in North Oxford and enable the Northern Gateway development, which will provide business and research space, and new homes. Delivered by Oxford City Council. A total of £452.5million is required. Currently £5.9million has been secured through LGF.
- Oxpens – transport and site improvements to support the Oxpens development, which will provide office and research space and new homes in the heart of Oxford. Delivered by Oxwed a development consortium.

The Oxfordshire Innovation Engine Report, Realising the Growth Potential 2013 and Update 2016

3.8 This report sought to realise the growth potential of Oxfordshire's high-tech clusters and research. The report views Oxford as the 'engine for growth' by stating that 'Oxford is the service centre for

the economy, it has the fastest growing, best educated workforce and is the main centre for spin-outs in the County.'

3.9 The report suggest that high tech firms in Oxfordshire are becoming increasingly outward-facing and their location within an hour of a major hub airport and global city is becoming more important. An overwhelming imperative to internationalise is creating new and often transient relationships, allegiances (spatial and otherwise) and behaviours.

3.10 The report proposes measures to accelerate the growth of the high tech community, making recommendations in four main areas: the research-based institutions; the "soft" infrastructure to support the growth of technology-based businesses; issues relating to physical infrastructure and spatial development and overall leadership.

Oxford Economic Growth Strategy 2013-23

3.11 The Strategy sets out a vision for the city and amongst its key actions seeks to support the expansion of the knowledge economy and start-ups; support the growth of existing employers to ensure a sufficient supply of employment land is available to enable this economic growth to take place.

3.12 Eleven main elements of the growth strategy have been identified to realise the Vision for Oxford's economy. These include:

1. Expanding Oxford's knowledge economy using the global connections of Oxford's Universities and major/large employers to attract new companies, and promote new start-ups;
2. Supporting the growth of existing employers including large, global companies, high value small and medium sized enterprise, the Universities, and the health care sector;
3. Ensuring sufficient supply of employment land;
4. Strengthening Oxford's city centre retailing offer;
5. Expanding the value of Oxford's tourism across the region;
6. Continuing to improve education and skills attainment to support future economic growth opportunities;
7. Increasing, the annual rate of housing development in locations which are easily accessible to the city centre and other main employment areas by cycle, bus, and rail;
8. Ensuring on-going investment in broadband infrastructure;
9. Addressing the environmental challenges and opportunities presented by economic growth;
10. Investing in the physical and transport infrastructure to enable economic growth; and
11. Securing an effective partnership for implementation and 'single team' delivery for Oxford.

Employment Land Assessment 2016

3.13 The ELA has assessed the quality and quantity of all employment land and premises (B1, B2 and B8) within the city and compared the employment land supply against the forecast demand (available at the time of its production) for employment use to test whether there is sufficient land of the right quality and in the right location to meet the identified needs.

3.14 The overall findings at the time of its production were that that the demand for employment land is in excess of the supply. These findings would be used to shape emerging planning policies within the Local Plan 2036 that will help to support and grow Oxford's economy and to allocate and or protect sufficient employment sites to deliver sustainable economic growth.

3.15 The assessment forecasted the total demand for B1 floorspace to be between 65,800 sq. m and 105,000 sq. m. The demand for B2/B8 floorspace was estimated between -0.1 ha and 21.9 ha depending on the growth scenario applied. If a higher growth scenarios of 105,000 sq. m B1 and 22ha of B2/B8 were applied, and even if a more conservative mid-point scenario figures was taken, the demand for B1 floorspace in particular but also B2/B8 use was well in excess of the estimated supply.

3.16 A total of 118 employment sites and areas were assessed according to 20 criteria to measure their performance and assessed the quality and characteristics. The spatial analysis showed the best performing areas for office uses (B1) were the City and District centres together with Headington (Hospitals) and the South-East (Oxford Business Park and Science Park); whilst the cut-off centre locations near the ring road were good performing locations for industrial (B2,B8) uses.

3.17 The majority of the individual B1 office sites were in good condition, with few vacancies and generally scored well for transport access. The industrial uses scored well in terms of strategic access, near to the ring road, together with servicing and parking facilities.

3.18 In terms of the quantity of employment land, the assessment showed that Oxford City has approximately 1,030,728 sq. m of B1 floorspace and 151ha of B2/B8 land. This includes all occupied land as well as vacant sites and buildings and sites with planning permission awaiting development.

3.19 The amount of vacant land including sites awaiting development was 408,372 sq. m of B1 (about 25% of the total employment land) and just 2.5ha of B2/B8 (under 2% of total B2/B8 land) in 2016. However most of the vacant land had proposals for development, including planning permission, and was expected to be built out in the short term.

3.20 The findings from this assessment clearly show that there is an undersupply of employment space and land to meet the forecast demand in Oxford to 2036. The policy direction in the future therefore needs to recognise this position and seek to meet this demand to avoid constraining economic growth. In line with Government policy the new Local Plan 2036 should take forward policies that positively promote sustainable development.

4 PROPERTY DYNAMICS

4.1 This section provides an update to the commercial market dynamics across Oxford and its wider property market comprising from the shire authorities within Oxfordshire (i.e. Cherwell, West Oxfordshire, South Oxfordshire and Vale of White Horse).

4.2 Oxfordshire is home to some of the UK's principal locations for high quality knowledge-based economic growth. Firstly, the University of Oxford has the country's largest volume of world-leading research companies. In addition, there is a unique grouping of 'big science' and other research facilities, primarily in the Science Vale in Didcot, South Oxfordshire. This includes

- The Fulham Centre for Fusion Energy and the Science and Technology Facilities Council (STFC);
- Rutherford Appleton Laboratory;
- Diamond Light Source, the national synchrotron facility;
- the ISIS Pulsed Neutron Source;
- the Central Laser facility;
- the UK Space Gateway, including the Satellite Applications Catapult Centre;
- the European Space Agency; and
- The Medical Research Council's facilities.

4.3 The Science Vale lies to the South of the City of Oxford expanding around Didcot, Milton Park and Abingdon. It constitutes three Enterprise Zones namely Harwell, Didcot and Milton Park. Didcot New Garden town together with Bicester Garden Town aims to ensure among other goals that labour availability will be retained in the area.

4.4 In addition, there is an increasing supply of specialist science, business parks and incubator spaces such as Begbroke, Bicester Business Park, Harwell Science and Innovation Campus, Milton Park, and Oxford Science Park.

4.5 The economic success of Oxfordshire is mainly driven by the knowledge sector. This is reinforced by the fact that the education sector accounts for 7% of the county's economic output and has GVA productivity 17% above the national equivalent (£71,641 GVA per worker against £61,444 in UK in 2017).

4.6 The result of this is Oxford being ranked as 2nd in the Fastest Growth City Ranking and ranked first on the Good Growth for Cities Index. This growth is further supported at a macro level by the Government's Industrial Strategy and the commitment made in the Autumn Budget 2017 to invest £215 million in Oxfordshire on vital infrastructure projects. Long awaited plans to redevelop Oxford train station will enhance further the local economy

4.7 Carter Jonas (Commercial Edge Oxfordshire 2018[1]) suggests that Oxford City itself has witnessed above average economic growth over the last five years (An average of 3.4% pa) with 2017 seeing economic growth of 2.7%. The strong economic growth has translated into particularly healthy employment growth. During 2017 employment growth was 2.0%, compared to 1.3% nationally.

4.8 Consumer expenditure in Oxford grew by 2.0% across 2017. Growth is forecasted to be lower in 2018, at 1.3%, but still noticeably above the national level. In fact, disposable income per head in Oxford is 36% above the national average.

4.9 We summarised herein the key findings from currently available commercial property literature together with analysis of the CoStar database on availability. To supplement the quantitative analysis we also undertook interviews with commercial agents to further understand local dynamics.

4.10 We sought to review the following market literature:

- "What is the Golden triangle in the UK?", Bidwells, available at: https://www.bidwells.co.uk/insights-and-research/what-is-the-golden-triangle-in-the-uk/;
- "Wet Labs in the Golden Triangle", Bidwells, available at: https://www.bidwells.co.uk/insights-and-research/wet-labs-in-the-golden-triangle/;
- "Golden Triangle – new best area for business", Bidwells, available at: https://www.bidwells.co.uk/insights-and-research/golden-triangle-new-best-area-for-business/
- "The Oxford – Milton Keynes – Cambridge Expressway", Bidwells, available at: https://www.bidwells.co.uk/insights-and-research/the-oxford-milton-keynes-cambridge-expressway/
- "Bidwells: Our view on Industrial Market", September 2017, available at https://www.bidwells.co.uk/assets/Research/0162-Our-View-on-Industrial-Market-September-2017-6pp-online.pdf
- "Bidwells: Our view on Oxfordshire Industrial", Spring 2018, available at https://www.bidwells.co.uk/assets/Uploads/Our-view-on-industrial-Spring-2018-Oxfordshire.pdf
- "Market Watch Oxford Office Market", March 2017, Savills, available at: http://www.savills.co.uk/research_articles/173558/215670-0
- "Science and technology sector drives Oxford office market success"– 2017, Lambert Smith Hampton, available at: http://www.lsh.co.uk/commercial-property-news/2017/july/science-and-technology-sector-drives-oxford-office-market-success
- "Commercial Edge Oxfordshire 2018", Carter Jonas, available at https://www.carterjonas.co.uk/-/media/files/research/public/web---commercial-edge-2018-oxford.pdf?la=en

Office Market

4.11 Oxfordshire is in a strategic location for the office market and benefits from its proximity to London and Heathrow airport; it is an integral part of the UK's Golden Triangle for knowledge based sectors defined as the area between Cambridge, London and Oxford. It is also a node of the Cambridge -

[1] Available at https://www.carterjonas.co.uk/-/media/files/research/public/web---commercial-edge-2018-oxford.pdf?la=en

Milton Keynes - Oxford corridor (East West Corridor) recognised as the UK's potential Silicon Valley by the National Infrastructure Commission.

4.12 The Golden Triangle as a term is used to describe the grouping of *"elite, highly-funded universities"* located in the southern English cities of Oxford, Cambridge, and London. In particular, the term relates to University of Oxford, University of Cambridge, Imperial College London, King's College, London School of Economics and University College London.

4.13 These universities are prominent in the world of education and innovation, or the 'knowledge' sector, both in the UK and on a global scale. These institutions receive some of the highest research incomes, funding and grants from the UK government, and the largest financial endowments of all British universities. These universities work collaboratively (with initiatives like G5, Global Medical Cluster, MedCity, and SES) to ensure that the Golden Triangle becomes a global science and innovation hub.

4.14 The Golden Triangle area achieves impressive business growth across numerous sectors, including digital technology, innovation, life sciences, medicine and more. Oxford, in particular, has one of the most dynamic digital tech economies in the UK, and in 2016, Oxford University attracted £632.5m of funding from 59 companies.

4.15 Strong demand for office and lab space (including web lab[2]) in the Golden Triangle has pushed up rents in the area. Oxford rents saw a significant increase of 7.1% between 2016 and 2017. This is a significant rental increase compared to central London, where office rental prices moved into reverse with rent in prime city locations down by 6.7% and the West End dropping by 12% during the same period (Bidwells).

4.16 Office take-up reached record levels during 2017, driven by three large enquiries according to Savills' Oxford Office Market Update in March 2017. Oxford's office leasing take-up reached 208,000 sq ft during 2016, in line with the long term annual average of c200,000 sq ft. The key transaction during 2016 was AC Nielson's lease of 45,000 sq ft at Oxford Business Park and a 42,000 sq ft pre-let by MEPC to a confidential occupier at Milton Park.

4.17 There has been also strong take-up in the first half of 2017. LSH reports that exceptional demand, led by the robust investment in the region's knowledge economy which recorded lets of 238,674 sq ft; only just below the 10-year average for a whole year. LSH also reported that 10 out of 13 transactions comprised occupiers from the science and technology sectors. Of those 10, nine are expanding businesses in the science parks.

[2] A wet lab can be defined as a laboratory in which chemicals, drugs or other biological matter are analysed and tested using water, or, other liquids during experiments.

4.18 The majority of transactions have been completed by expanding home-grown occupiers, with few from locations outside of Oxfordshire. This, combined with the burgeoning science and technology sector, has largely insulated this market from the uncertainty caused by the EU referendum which has affected so many other Thames Valley areas.

4.19 Over the last two years, a large volume of secondary office space has been converted to student and residential accommodation, rather than kept for refurbishment. This has been reported across all the commercial agents.

4.20 As a result this has applied further pressure to rents. Grade A space is currently quoting in excess of £30 per sq ft, and with a shortage of space a further rise on rents is expected. Newly refurbished space is now achieving £27.50 psf, which has squeezed the rental differential between new build and refurbished space.

4.21 Rents on out-of-town space which is under construction is currently being quoted at £32.50 per sq ft as reported by both Savills and LSH. Colliers International report lower rental values with prime office rents in the City Centre around £22 psf for 2018H1. Similarly rental values in the outer Oxford areas have been recorded at £25 psf. Grade B rents have been recorded at £14.5psf in the City Centre and £18psf in the outer areas according to Colliers Rental Map.

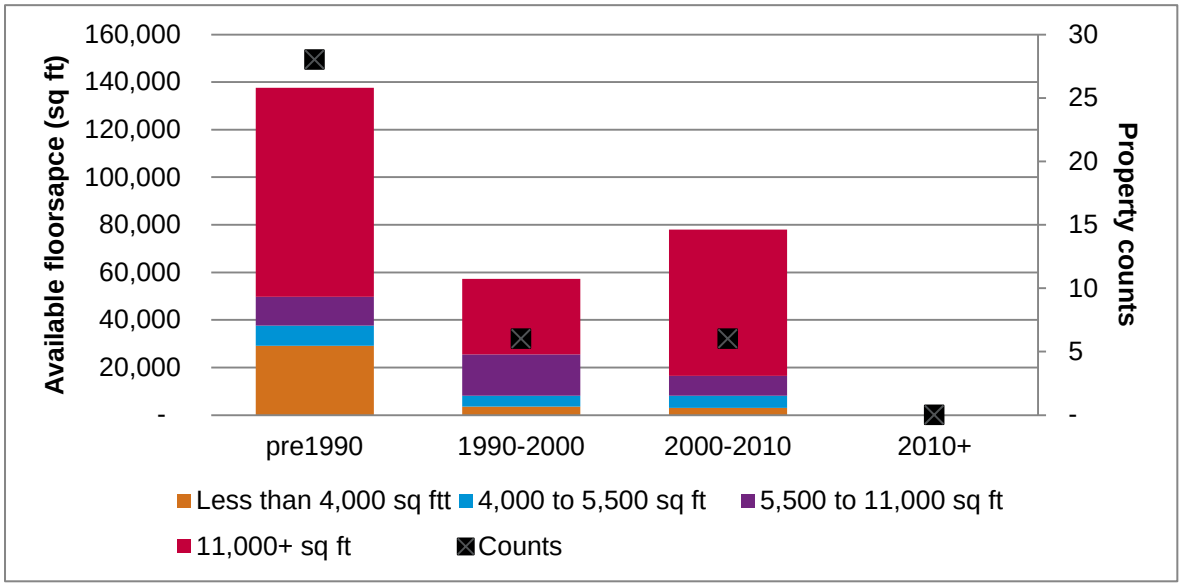
4.22 Agents report that Oxford still remains attractively priced relative to other UK regional cities such as Cambridge where activity is currently quoting £36 psf.

4.23 Office investment reached £39 million during 2016, in line with the 10 year average, largely driven by Sutton City Council's £30 million purchase of Oxfam's headquarters at Oxford Business Park, representing a yield of 5.3%.

4.24 In terms of supply, we have sought to assess what is currently available (i.e. end July 2018) and advertised in CoStar. Figure 1 overleaf shows the office availability by size and age. A total of 273,000 sq ft, through 40 premises, was advertised across the City in the end of July 2018.

4.25 Of these the vast majority (70%) relates to properties with over 30 years of age. The majority (53%) of premises relates to small and medium units below 4,000 sq ft. On the other hand, it should be noted that a quarter of the units relate to large units above 10,000 sq ft.

Figure 1: Office Availability by size and age, July 2018



Source: CoStar – edited by GL Hearn

4.26 There is a shortage of Grade A space in the city centre, with 37,000 sq ft of small/medium office space (>3,800sqft per space) remaining. Out of town, a total of 235,000 sq ft of space is advertised. CRL House at Watlington Road is the largest available property with a total of 33,500 sq ft available space.

4.27 At around 273,000 sq ft available office supply is 85% below the equivalent in 2016 (i.e. 505,000 sq ft). It is also well below both the 2014 (464,000 sq ft) and 2015's (398,000 sq ft) equivalents. The shortage is most acute in Oxford City Centre, with no new supply expected here. However even in the City's fringe the availability is mainly related to pre1990s stock.

Agents Consultation

4.28 A primary research exercise was carried out in July 2018 by way of consulting various commercial agents with a view to understanding the office market conditions in Oxford and supplementing the findings of the above commercial literature. Three agents provided their views on the local office market conditions in Oxford., these were:

- Colliers International,
- Lambert Smith Hampton; and
- VSL

4.29 All agents reported strong office demand for all types of offices ranging from refurbished period properties to newly built offices. The demand was not fixated on new stock. The most popular scale of offices was considered to be those in a range from 5,000 to 15,000 sq ft.

4.30 The agents reported that the rents are in excess of £30 per sq ft in town centre locations and some of the best quality prime offices in out-of-town can also achieve excess of £30 per sq ft. However, the consensus was that the out-of-town locations tend to be slightly lower in rent and range from £25 to £30 per sq ft.

4.31 In terms of location, the consensus was that both the city centre and out-of-town business parks are popular locations amongst tenants. Although many tenants would sometimes prefer city centre locations, the bulk of the available offices in Oxford are located in out-of-town business parks.

4.32 The agents reported an acute undersupply of office space in the city centre, whilst they were perceptions of 'just about the right level of supply' in out-of-town locations. It was noted that, whilst the office space demand is strong in out-of-town locations, there were still healthy levels of vacant space available for new tenants to rent.

4.33 However the city centre locations were significantly constrained in terms of office supply and the agents all reported that there is a gap in the market, and wanted to see more supply of office floorspace in the city centre.

4.34 Another gap in the market was identified to the north of the city, as it was noted that most of the out-of-town offices are located in business parks mostly to the east, south and west of the city centre. It was noted that an additional supply of office floorspace and business parks to the north of the city may be desirable in the future.

Industrial Market

4.35 The latest Bidwells' research suggests that Oxfordshire's industrial market is thriving despite the challenging commercial climate. Oxfordshire saw take up rise, requirements increase and rents hit a record high, as occupiers showed faith in a buoyant local economy in 2017.

4.36 The Bidwells figures indicate that take up in Oxfordshire's industrial market is at its highest level since 2013, with 427,100 sqft transacted during 2017. Activity was strong right across the sector, with the largest transaction relating to a 30,080 sq.ft. lease to Alere Toxicology at Abingdon Business Park in the first half of 2017.

4.37 The latest UK Powerhouse Report has forecasted that Oxford will be the second strongest city economy in 2018, growing by 2.0%. The report, which tracks the growth potential of the UK's major cities, has identified the three strongest local economies as Cambridge (2.2%), Oxford and Milton Keynes (2.0%). The latest consensus forecast for the UK is 1.5%.

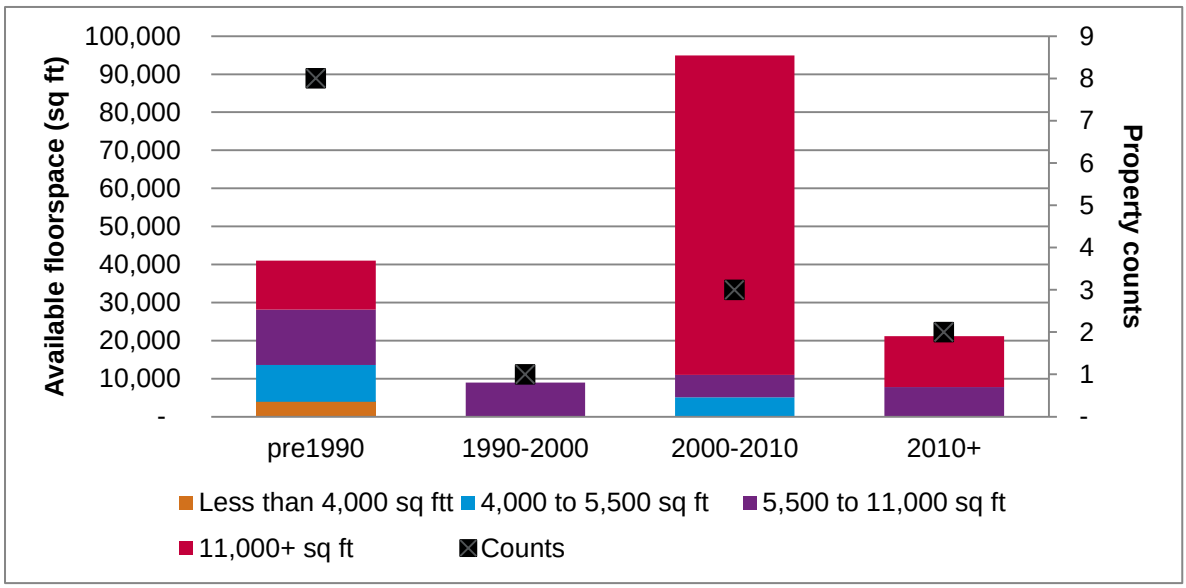
4.38 Bidwells said business sentiment for industrial occupiers across the county appears to remain positive, with the level of requirements increasing to 2.1m sqft mainly due to the knowledge economy's surge that spills over demand for flexible industrial space.

4.39 Strong occupier appetite has seen supply continue to tighten, with Bidwells recording the lowest level of availability over the last 10 years in 2017 a total of 381,700sq ft. For comparison we have sought to review availability as of July 2018. This shows a further contraction with a total of just 166,000 sq ft, through 14 premises, being currently advertised across the City.

4.40 Figure 2 shows the distribution of these units by size and age. The vast majority of available floorspace (70%) relates to modern premises having been built post 2000. However, in unit terms this relates to 5 properties. More than half of the available units are small to medium with less than 4,000 sq ft floor area.

4.41 There has been recently a boost in the supply with two large available properties having been completed in 2016 in the Trade City Business Park. The largest currently available premise is the 84,000 sq ft unit in Oxford Business Park North (at Garsington Road).

Figure 2: Industrial available floorspace by size and age, July 2018



Source: CoStar July 2018-edited by GL Hearn

4.42 Bidwell's analysis suggested that those developers willing to deliver new prime products are likely to reap the benefits. The development pipeline of Oxfordshire as a whole includes a new speculative scheme at the DB Symmetry site in Bicester which has started construction of an 110,000 sq ft speculative unit. The supply chain and logistics hub has outline consent for an additional 477,000 sq ft, with the remaining units available on a pre let basis.

4.43 A highlight for the Oxfordshire industrial market is BMW's decision to build the new fully electric version of the Mini at Cowley. The BMW plant in Cowley currently employs 4,500 workers and is one of the largest employers in the Oxford area. The production of the e-Mini will commence in 2019, securing the future of production at the plant, which produces the majority of the 360,000 Mini's produced each year.

4.44 The rising demand and short supply put pressure on rents. Prime rents have hit a record high in 2017 of £10.75 per sq ft, representing an increase of 30.3% since 2014. Colliers International has reported that prime rents in 2018H1 reached £6.75 per sq ft for big sheds and £10 per sq ft for small sheds. Secondary rents vary between £5 per sqft for big sheds and £8.5 per sq ft for small sheds. Finally land values have been recorded as £600,000-£700,000 per acre.

Agents Consultation

4.45 A primary research exercise was carried out in July 2018 by way of consulting various commercial agents with a view to understanding the industrial market conditions in Oxford. Two agents namely Carter Jonas and VSL provided their views on the local industrial market conditions in Oxford.

4.46 The agents reported strong industrial floorspace demand of all types of industrial properties ranging from period properties to newly built stock, as with offices the demand was not fixated on new stock with only some tenants preferring new build stock.

4.47 The most popular size of industrial units in Oxford was considered to those range from 5,000 to 10,000 sqft. In terms of location, the consensus was that Oxford does not have a main industrial area and most industrial units are scattered around out-of-town locations across the City with an emphasis to the south. It was noted that the city centre has very limited amount of industrial units due to its well preserved, historic nature protecting it from industrial activity.

4.48 The agents reported a general undersupply of industrial space across Oxford and they are seeing increasing demand for smaller units (under 1,200 sq ft). It was noted that there has not been any significant new industrial developments in recent times relating to smaller sheds.

4.49 The agents reported that rents have increased over the years in Oxford. Whilst the industrial units averaged about £8.50-£9.00 per sqft some 5 years ago, equivalent units now are achieving £10.00 or even £11.00 per sqft for some prime quality units.

4.50 Finally, according to Carter Jonas' Commercial Edge Oxfordshire 2018, Oxfordshire's immediate future appears strong despite the uncertainty surrounding the impact of Brexit. This is primarily linked to the rapid growth in knowledge based industries but also the related prospects presented by Oxford University spin out companies.

4.51 In the industrial market, limited stock and demand for new built stock will encourage further development, where opportunities allow. In turn, this will be bolstered by the improvement seen in rental and capital values.

5 EMPLOYMENT FORECASTING

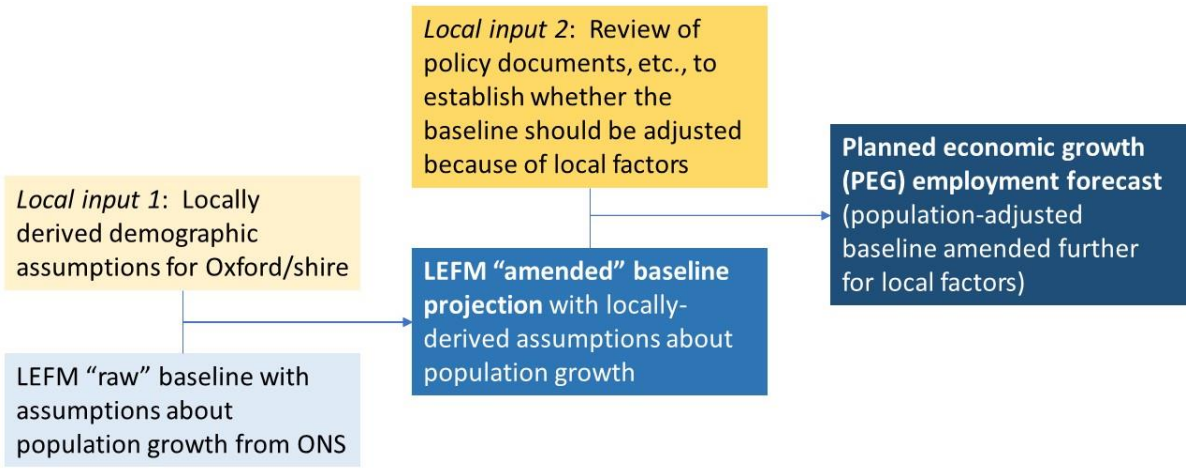
5.1 This section considers future employment growth in Oxford as forecast by Cambridge Econometrics (CE) and SQW. This forecast is based on the planned economic growth scenario results from the updated Local Economy Forecasting Model (LEFM) from CE.

5.2 The new LEFM baseline forecasts incorporate assumptions regarding the impact of macroeconomic policy (such as that associated with Brexit) and national sectoral trends (such as changes in retail patterns). This has been updated to take account of locally specific factors:

- Revised demographic projections provided by GL Hearn; and
- Economic inputs based on the planned developments expected to come forward within the study period.

5.3 The overall approach is summarised in the figure below:

Figure 3: Approach to developing employment scenarios for Oxford and Oxfordshire in 2014 – and for Oxford in 2018



Source: CE and SQW

5.4 The assumptions which feed into the updated baseline and planned economic growth scenarios are set out in full in the 2018 Oxford City SHMA Update. A summary of the key economic growth drivers is set out below:

Universities

5.5 The universities make a substantial contribution to Oxford's economy. In combination, Oxford Brookes University and the University of Oxford accounted for 32,455 students in 2016/17[3]; a recent study[4] estimates that the University of Oxford alone supports around 28,800 jobs in Oxford,

[3] HESA
[4] Biggar Economics for University of Oxford (2017), *Economic Impact of the University of Oxford*

contributing around £2 billion GVA. Between 2012 and 2016, Education employment in Oxford grew significantly faster than anticipated in the 2014 PEG forecast (by 23% compared with 7%).

5.6 There has been significant recent development (since 2014): much of the redevelopment of the former Radcliffe Hospital site is now complete, with the Mathematical Institute and Blavatnik School of Government opened on site in 2013 and 2015 respectively. The redevelopment of the Science Area is also now underway, with the new Beecroft Physics building now complete.

5.7 There is significant scope for expansion on the Osney Mead industrial estate, a 17.4 hectare site west of the city centre. The emerging master plan seeks to develop the site as an 'innovation quarter', which is likely to have both commercial and university-related R&D uses. Proposals for the development of Osney Mead remain at an early stage, and employment on the site is therefore likely to come forward over the longer term. While redevelopment of the site may involve the displacement of existing (mainly lower-value) activities, the estate has capacity for further intensification.

5.8 In 2016, Oxford Brookes University announced a new estate investment plan that will see a consolidation of teaching and research activity on its Headington and Harcourt Hill campuses (the former of which is located inside the city boundary), with withdrawal from the Wheatley campus in South Oxfordshire due to take place by 2022. This is likely to mean some increase in employment within Oxford itself (although site consolidation should lead to some efficiency).

5.9 Generally, given the development plans of the two universities, CE and SQW consider that university expansion will result in an additional 2,000 jobs in the Education sector over the baseline to 2036.

Biosciences

5.10 Between 2012 and 2016, actual employment in pharmaceuticals and 'other professional services' (the two sector groups used as a proxy for biosciences) grew rapidly. The 2016 Oxfordshire Innovation Engine Update report noted "rapid and sustained growth" over the preceding seven years, with a number of Oxfordshire-based firms attracting high levels of investment and the county proving attractive to inward investors. This has led to some locally-based firms (such as Oxford Biomedical) increasing employment.

5.11 There are a number of recent developments due to provide additional capacity and additional jobs in the near future. For example, the BioEscalator, based on the University of Oxford's Old Road campus, and offering lab space for small biomedical businesses) is now complete and opens in August 2018.

5.12 The Oxford Northern Gateway Area Action Plan was published in July 2015. This identifies 90,000 sq m of employment space, with a focus on "science and technology research, biotechnology and spin-off companies from the universities and hospitals". Public consultation on a master plan for the area commenced in June 2018, and development is likely to be accelerated by a recent announcement of capital support from the Government's Housing Infrastructure Fund. Potentially, up to 8,000 jobs could be supported by the Northern Gateway site: while not all of these will be in bioscience, it is likely (given the focus of the development and evidence of indigenous growth) that the sector will account for a significant proportion of them.

5.13 The new Wood Centre for Innovation at Stansfield Park in Headington is being developed by the Oxford Trust and will provide new space for start-up and growing businesses from 2019. While this is not only aimed at the bioscience sector, it is being promoted with reference to its proximity to the clinical research facilities at the universities and is likely to be attractive to businesses in this sector. This expansion will complement existing provision at Oxford Science Park to the south of the city (currently home to around 28 bioscience firms). Since taking full ownership of the Park, Magdalen College has plans to develop an additional 2,800 sq m of office and laboratory space over the next ten years. There may also be some potential for additional bioscience employment associated with the development of Osney Mead.

5.14 Overall, the growth potential of the bioscience sector in Oxford is likely to be greater than the baseline projections would suggest, particularly given the major developments coming forward. CE and SQW consider that around 2,000 jobs could be created over the baseline to 2036, these would be in the Pharmaceuticals manufacturing and other professional services sectors.

Healthcare

5.15 Oxford is a major centre for health investment over and above locally-responsive provision (demand for which is rising and is reflected in the baseline projections). The key drivers of growth are the increasing concentration of NHS investment on centres of excellence, particularly given Oxford's position as a leading global centre for cancer research at the Churchill Hospital and the international significance of the Nuffield Orthopaedic Centre. CE and SQW therefore consider that around 2,500 jobs could be created over the baseline to 2036. These would mostly be in the Health sector and also the other ancillary professional services.

Advanced engineering

5.16 Since 2014, employment in the sector has grown by around 18%. This is due in part to BMW's commitment to Cowley which has been maintained with the announcement in 2017 that the new electric Mini will be produced at the site. Oxford's knowledge base is also likely to be important in supporting growth in specialist technical sectors: the Oxfordshire Innovation Engine Update, for

example, cites Oxbotica, an artificial intelligence and robotics company which originated from Oxford University's Mobile Robotics Group. CE and SQW therefore consider that around 1,000 jobs could be created over the baseline to 2036 – mostly in the Motor vehicle manufacturing sector.

Environmental technologies

5.17 The Oxfordshire's Low Carbon Economy report prepared by the University of Oxford Environmental Change Institute in 2014 highlighted Oxford's strengths as particularly associated with its research capacity and the role of the universities, noting (inter alia) the low carbon building research group at the Oxford Institute for Sustainable Development and SMEs that have spun out of the universities focused on developing engineering solutions to drive carbon reductions. There are also a number of larger construction operators based in Oxford, and (anecdotally) demand for 'higher value' construction services is high.

5.18 Overall, a modest increase over the baseline appears appropriate, given the overlap between environmental technologies and Oxford's advanced engineering strengths. CE and SQW therefore consider that around 100 jobs could be created over the baseline to 2036, in the Other professional services sector.

Retail

5.19 The new Westgate Centre opened in October 2017, offering around 74,000 sq m of retail, restaurant and leisure space (of which around 40,000 sq m is net). Most of the additional jobs created as a result of the development will now have been created, although these will not yet be 'visible' in the baseline (given that the most recent actual employment data is from 2016).

5.20 CE and SQW therefore consider that around 100 Retail jobs could be created over the baseline to 2036. However, these will take the form of a 'one off' injection of new employment in 2017-19. Beyond 2019, there is no reason to assume any additional retail employment over the baseline.

Downside risks: Factors likely to depress growth below trend

5.21 There is likely to be further pressure on public services, although these are factored into the baseline. In Oxford, it is likely that the public sector overall will be quite resilient, given that a relatively high proportion of employment is in the universities and the health sector – both areas in which the city has strengths and which are likely to grow.

5.22 While the publishing sector faces challenges from digital media, this should again be factored into the baseline, and it is likely that Oxford will be relatively resilient, given its specialism in academic publishing.

5.23 Competition from neighbouring areas (for example for skills and talent and for property) was also considered. This is essentially a 'risk' factor, which could be exacerbated if other locations (especially in the Thames Valley, given its closer proximity to London) benefit from better labour market conditions or infrastructure. However, at this stage, we do not consider a need to change the PEG forecast numbers.

5.24 A final factor which was not relevant in 2014, but which clearly is in 2018, is Brexit. The baseline projections take account of the sectoral impact of variation in projected economic growth in the light of Brexit, although the terms of the UK's departure from the European Union are not yet clear. Some sectors in which Oxford has particular strengths have (potential) vulnerabilities to Brexit (for example, bioscience, given the relevance of European regulation), although it is reasonable to assume that the same issues apply within sectors everywhere. CE and SQW do not therefore consider that any changes should be made to the planned economic growth forecast.

Baseline and Planned Economic Growth Forecast

5.25 Table 1 shows the level of employment within the Baseline (as revised in 2018) and Planned Economic Growth forecasts across the plan period. As illustrated the resultant rate of growth within the Planned Economic Growth scenario is almost treble that of the revised baseline.

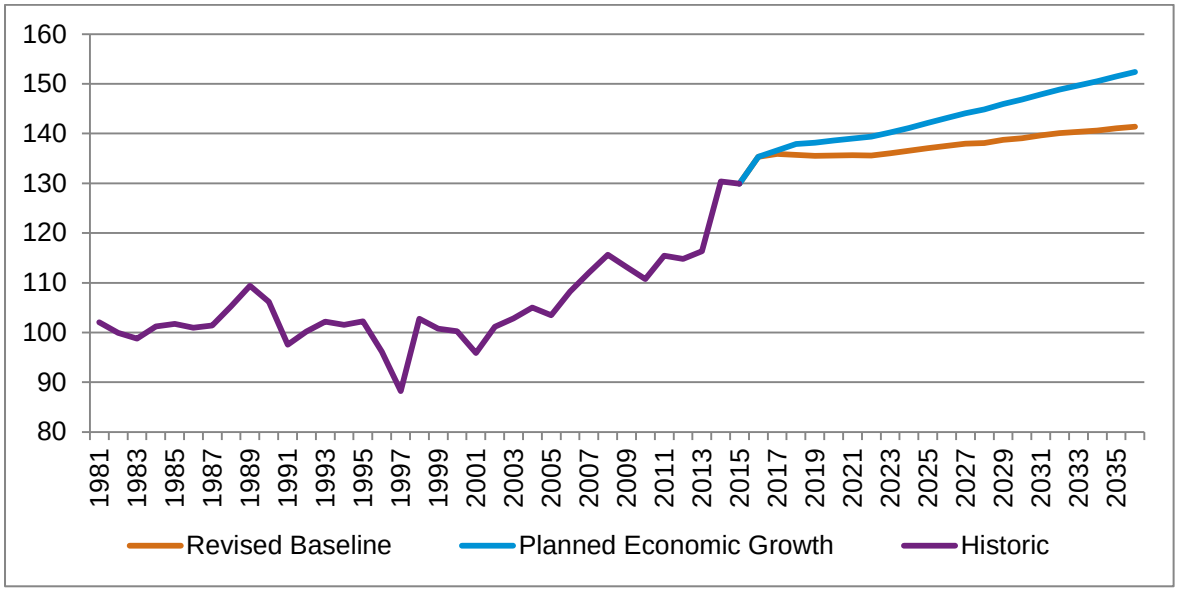
Table 1: Comparison of 2018 scenarios for employment and employment growth in Oxford

	Revised baseline projection (2018)	Planned Economic Growth forecast (2018)
2016	134,800	135,400
2036	141,100	152,400
Jobs growth: 2016-2036	+6,300	+17,000
CAGR	0.2% p.a.	0.6% p.a.

Source: CE, SQW

5.26 The Growth forecasts show the total number of jobs in Oxford growing from 135,400 in 2016 to 152,400 in 2036. This is a total growth of 17,000 jobs over the 20 year period – equivalent to an annual growth rate of 0.6% per annum. There are an estimated 135,400 jobs in Oxford in 2016, which is higher than that recorded by the Business Register and Employment Survey (BRES) – 124,000 jobs – due to the inclusion of self-employed, forces personnel and government trainees.

Figure 4: Employment Growth 1981-2036

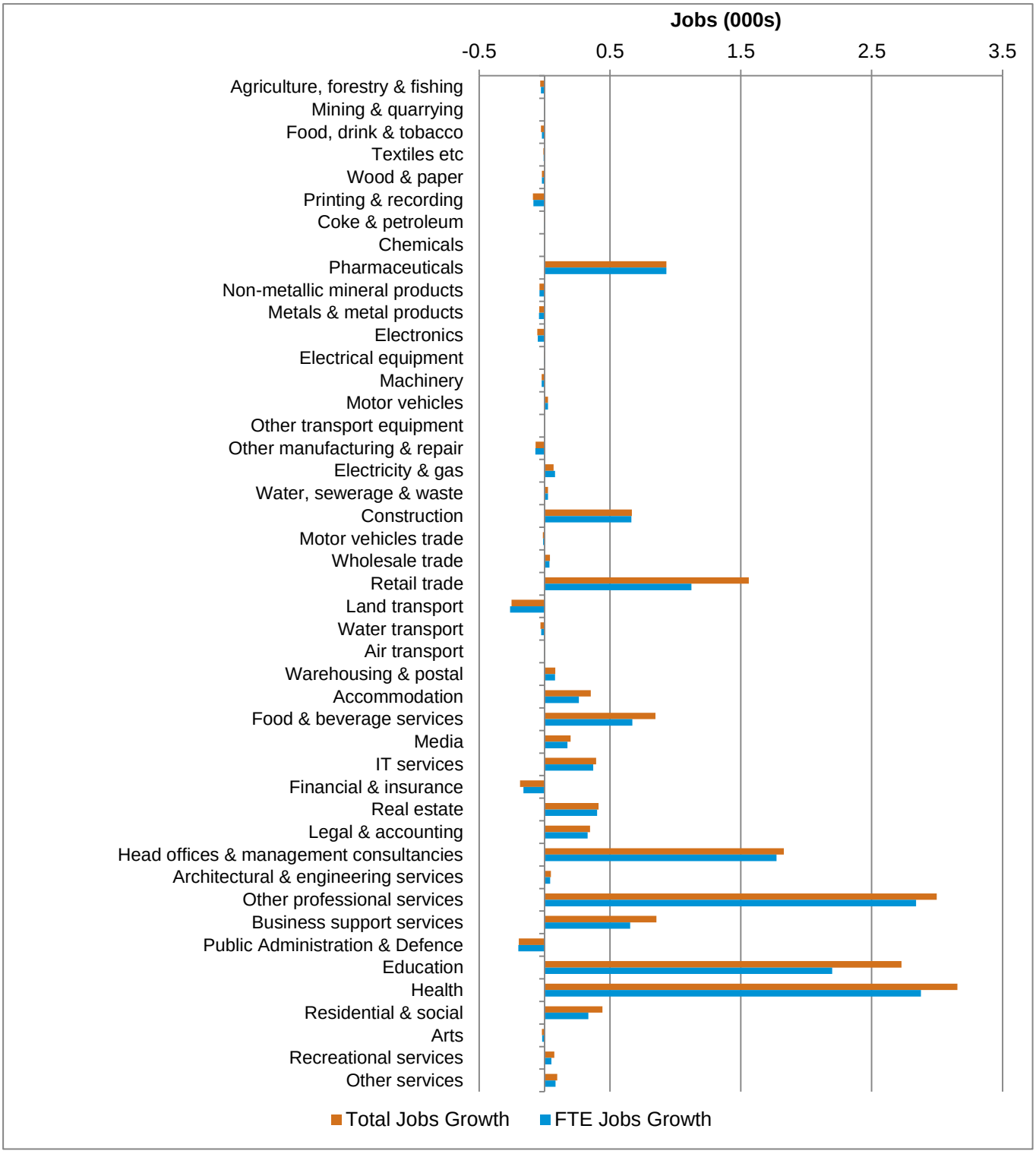


Source: CE 2018

5.27 **Figure 5 overleaf** shows the breakdown of jobs growth as estimated in the Economic Growth forecast in Oxford by sector for the period 2016-36. This shows the largest growth is expected in Health (3,000+ jobs); 'Other' professional services[5] (3,000); Education (2,730); Head offices and management consultancies (1,830); and Retail sectors (1,560).

[5] Including design, film, and photography services; environmental consultancy, and quantity surveying services.

Figure 5: Sectoral Growth, Total and FTE jobs, 2016-2036



Source: CE 2018

5.28 In addition, Residential & social (440 jobs); Real estate (410); IT services (390); Legal & accounting (350); Accommodation (350); and Media (200) sectors also expect some growth between 2016 and

2036. Conversely, the forecasts show a net decline in jobs in a number of sectors including Land transport (-260 jobs); Public administration and defence (-200); and Financial and insurance sectors (-190); as well as smaller losses in a range of manufacturing sub-sectors.

5.29 GLH has converted the forecasts for total employment by sector into forecasts for Full-Time Equivalent (FTE) employment by sector through analysis of the proportion of full- and part-time jobs in Oxford on a sector by sector basis for the 2 digits 45 sectors, based on the latest data from BRES (2016).

5.30 The figure above shows the total jobs and FTE jobs growth for each sector. This shows that the Retail, Education, and Health sectors have the largest proportion of part-time work and therefore have the largest reduction to account for FTE jobs. Overall, the forecasts show a growth of 14,600 FTE jobs over the period 2016-36.

5.31 The table below shows the annual average growth rate for each broad sector as shown in the CE forecast. We have also provided the historic equivalent to allow comparisons. This shows the sector with the growth is the Professional, scientific and technical services sector which is forecast to grow by an average of 1.9% per annum over the study period. Overall, over all sectors the forecast shows a growth rate of 0.6% per annum in Oxford over this period.

Table 2: Jobs Growth Rate by Broad Sector, 2016-36

Broad Sector	Historic comparison 1996-2016	Jobs Annual Growth Rate, 2016-36
Agriculture, forestry and fishing	-1.9%	-0.3%
Mining and quarrying	-3.6%	-3.2%
Manufacturing	-1.2%	0.5%
Electricity, gas, steam and air conditioning	20.8%	1.4%
Water supply, sewerage, waste management	1.7%	0.4%
Construction	3.5%	0.4%
Wholesale and retail trade	0.0%	0.6%
Transportation and storage	-2.9%	-0.3%
Accommodation and food service	3.0%	0.6%
Information and communication	2.4%	0.4%
Financial and insurance	-2.7%	-0.9%
Real estate activities	5.9%	1.1%
Professional, scientific and technical	4.3%	1.9%
Administrative and support service	1.3%	0.6%
Public administration and defence	-0.3%	-0.3%
Education	3.0%	0.4%
Human health and social work	1.9%	0.7%
Arts, entertainment and recreation	0.7%	0.1%
Other service activities	0.4%	0.2%
Total	1.7%	0.6%

Source: GL Hearn analysis of CE data

5.32 The table below shows the forecasts productivity for each broad sector in terms of Gross Value Added (GVA) output. The forecast shows an overall GVA growth of 2.0% per annum over the study period. Most notable, is the Manufacturing sector which sees a productivity growth of 5.5% per annum over this period. This indicates that while the rate of jobs growth in the Manufacturing sector (as shown in the table above) is comparatively modest – at 0.5% growth per annum – the sector is nonetheless forecast very strong performance in terms of performance.

Table 3: Productivity (GVA) Growth Rate by Broad Sector, 2016-36

Broad Sector	GVA Annual Growth Rate, 2016-36
Agriculture, forestry and fishing	1.8%
Mining and quarrying	-6.3%
Manufacturing	5.5%
Electricity, gas, steam and air conditioning	1.2%
Water supply, sewerage, waste management	1.2%
Construction	1.5%
Wholesale and retail trade	1.7%
Transportation and storage	2.7%
Accommodation and food service	1.9%
Information and communication	2.1%
Financial and insurance	0.9%
Real estate activities	1.8%
Professional, scientific and technical	2.0%
Administrative and support service	1.2%
Public administration and defence	1.1%
Education	1.3%
Human health and social work	1.7%
Arts, entertainment and recreation	1.2%
Other service activities	1.1%
Total	2.0%

Source: GL Hearn analysis of CE data

6 EMPLOYMENT LAND NEEDS

6.1 In this section we consider demand for employment land and floorspace over the period from 2016-36. The section considers requirements for employment land in the B1, B2 and B8 use classes. The analysis considers future employment land needs using the labour demand scenarios set out in the previous section and compares these against past completions trend data.

6.2 There are relative benefits of each approach. Econometric forecasts take account of differences in expected economic performance moving forward relative to the past, overall in regard to the sectoral composition of growth. However a detailed model is required to relate net forecasts to use classes and to estimate gross floorspace and land requirements. In contrast, the past take-up is based on actual delivery of employment development; but does not take account of the implications of growth in labour supply associated with housing growth nor any differences in economic performance relative to the past. It is also potentially influenced by past land supply policies. The quantitative evidence is supplemented by the wider analysis of market and economic dynamics.

Labour Demand Scenarios

6.3 This section takes forward the econometric forecasting set out in the previous section, based on the 2018 planned growth forecast from CE and SQW.

Translating Sectors to Use Classes

6.4 GLH has considered the proportion of employment in each of these sectors which is likely to take place in office or R&D floorspace (Use Classes B1a and B1b), light industrial floorspace (Use Classes B1c), general industrial floorspace (Use Class B2), and warehouse / distribution floorspace (Use Class B8).

6.5 The model is used to derive the following forecasts of net growth in Full-time Equivalent (FTE) employment by use class over the plan period. This explains the difference between the employment forecast of 8,600 jobs and the FTE of 6,640, as presented in detail in Chapter 5 above. This figure is below what had been seen historically (i.e. between 1996 and 2016).

Table 4: FTE Jobs Growth by B-Class Sector, 2016-36

Job Growth	FTE Jobs (2016-36)
B1a/b	5,967
B1c	282
B2	274
B8	119
Total	**6,642**

6.6 To these figures we have applied employment densities taking account of the *HCA Employment Densities Guide: 3rd Edition* (HCA, 2015) as below:

- Office (B1a and B1b): a range of between 10-13 sq m GEA per employee based on a blend of B1a office types and an average of 60 sq m GEA per employee for B1b uses. Assumes that the gross external area of buildings is on average 20% higher than the net internal area;
- Light Industrial (B1c): an average of 49 sq m GEA per employee, assuming that the gross external area of buildings is on average 5% higher than the net internal area;
- General Industrial (B2): an average of 38 sq m GEA per employee, assuming that the gross external area of buildings is on average 5% higher than the gross internal area;
- Warehouse/ Distribution (B8): an average of 70 sq m GEA per employee. This is within the middle of the range of B8 activities reflecting evidence of some demand for strategic distribution development in the City, particularly port-related logistics, alongside smaller B8 units elsewhere in the sub-region.

6.7 Applying these employment densities to the forecasts of net growth in jobs in B-class activities, we can derive forecasts for net changes in employment floorspace. This forecasts a net requirement for additional B-Class floorspace of 117,215 sq m (2016-36). The breakdown by use class is shown below.

Table 5: Labour Demand Floorspace Change, 2016-36

Gross Floorspace	Sq m (2016-36)
B1a/b	85,803
B1c	13,243
B2	9,855
B8	8,314
Total	**117,215**

6.8 These are net changes and do not take account of replacement demand, such as from existing companies requiring upgraded floorspace. In considering how much employment land to allocate, it is therefore appropriate to include a margin to provide some flexibility within the supply.

6.9 To calculate an appropriate margin of flexibility we have used post 2016 gross completions in the City. The past completions data (set out in the section below) shows an annual average delivery of 3,600 sq m of floorspace. ***Five years' worth of completions is equivalent to c.18,000 sq. m and this has been included as a buffer in the labour demand forecast***

Table 6: Labour Demand Floorspace (Inc. 5 years past completions buffer) , 2016-36

Gross Floorspace	Sq m (2016-36)
B1a/b	99,193
B1c	14,342
B2	10,984
B8	10,486
Total	**135,004**

Past Completions

6.10 Next we have considered historic completions of employment floorspace in Oxford City. We have considered data for completions of B class floorspace in the District over the period from 2016 to 2018 (in accordance to the emerging Local Plan period) based on the Council's monitoring data.

6.11 Table 7 shows the employment floorspace projections together with the 3 year completions (2016-2018) by use class[6]. If this is projected forward to 2036 a total of 71,150 sq. m of commercial floorspace will be required across the local plan period.

6.12 **To provide a context, we present also historic completions data between the period 2009 and 2018 (based on data availability). Based on longer terms a total of 86,000 sq. m of commercial floorspace will be required across the local plan period.**

Table 7: Gross Employment Completions and Projection (sq. m), 2016-36

	2009-2018			2016-2018		
	Sum	Average	Projection 2016-36	Sum	Average	Projection 2016-36
B1a/b	35,654	3,565	71,308	8,034	2,678	53,560
B1C	1,609	161	3,218	659	220	4,393
B2	2,883	288	5,766	677	226	4,513
B8	2,851	285	5,702	1,303	434	8,687
Total	**42,997**	**4,300**	**85,994**	**10,673**	**3,558**	**71,153**

Source: Oxford City Council, GL Hearn 2018

Table 8: Employment Losses and Projection (sq. m), 2016-36

	2009-2018			2016-2018		
	Sum	Average	Projection 2016-36	Sum	Average	Projection 2016-36
B1a/b	31,802	3,180	63,604	4,917	1,639	32,780
B1C	2,279	228	4,558	470	157	3,133
B2	3,184	318	6,368	884	295	5,893
B8	17,298	1,730	34,596	4,796	1,599	31,973
Total	**54,563**	**5,456**	**109,126**	**11,067**	**3,689**	**73,780**

Source: Oxford City Council, GL Hearn 2018

6.13 The gross completions data points to a need for office floorspace while the losses concentrate in both office and warehouse space. Combining the completions (Table 7) and the losses data (Table 8) we can identify the net employment completions projection for employment floorspace to 2036. A negative requirement of -2,700 sq. m is estimated for the whole plan period up to 2036 based on projecting net completions since 2016 (Table 9). Based in longer completion trends the figure is -23,100 sq. m showing clearly that the market has been enhanced recently. It should be noted that

[6] The mixed industrial floorspace figures have been disaggregated among the employment uses classes on a pro rata basis.

the available completions data since 2009 covers the recessionary period entirely and therefore it is expected to have less positive outcomes. This data is presented only for contextualising purposes and are not included within the forecasting model.

Table 9: Net Employment Completions and Projection (sq. m), 2016-36

Net	2009-2018 Sum	2009-2018 Average	2009-2018 Projection 2016-36	2016-2018 Sum	2016-2018 Average	2016-2018 Projection 2016-36
B1a/b	3,852	385	7,704	3,117	1,039	20,780
B1C	- 670	- 67	- 1,340	189	63	1,260
B2	- 301	- 30	- 602	- 207	- 69	- 1,380
B8	- 14,447	- 1,445	- 28,894	- 3,493	- 1,164	- 23,287
Total	**- 11,566**	**- 1,157**	**- 23,132**	**- 394**	**- 131**	**- 2,627**

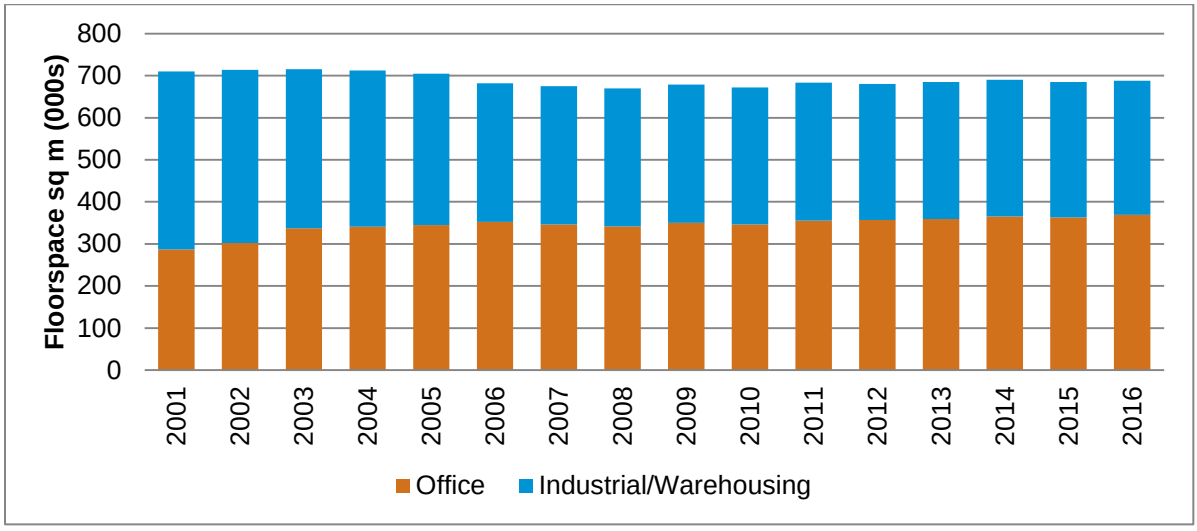
Source: Oxford City Council, GL Hearn 2018

Floorspace Trends

6.14 In assessing employment completions it is useful to consider the implications on the overall employment floorspace in the City. Set out below is the employment floorspace for office and industrial (including both B2 and B8) floorspace trends from VOA. This shows the total employment floorspace in Oxford is around 700,000 sq m. This relates to 369,000 sq. m (54%) of office and 319,000 sq. m (46%) of industrial and warehouse floorspace.

6.15 **Figure 6** shows a comparably flat growth in the commercial floorspace fluctuating from 670,000 sq m to 715,000 sq. m over this period. This relates to an increase in the office space of 29% and a decrease in the industrial space of 25% since 2001.

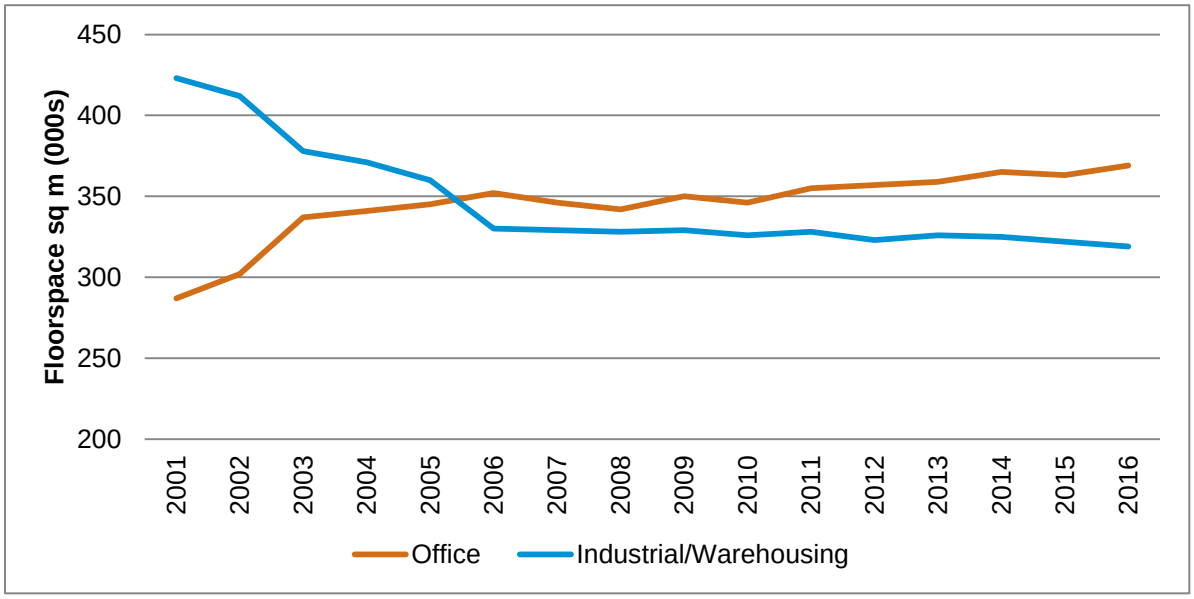
Figure 6: Commercial floorspace, Oxford City Council (sq m)



Source: Valuation Office Agency

6.16 However, the data shows that while overall employment floorspace in Oxford has remained constant over this period, the proportions of office space and industrial space have seen considerable change.

Figure 7: Office and industrial floorspace change (sq m)



Source: Valuation Office Agency

6.17 Since 2000 the City's office floorspace has seen a 29% increase, growing from 287,000 sq. m in 2000-01 to 369,000 sq. m by 2015-16. This represents an average annual growth rate of 1.7% and is considerably above the growth rate 0.8% per annum seen across England and Wales. However, the majority of this growth was in the first 5 years of this period from 2001-06. Since 2006 the growth rate in Oxford has been slower at 0.5% per annum. This is slightly lower than the growth rate seen across England and Wales over this period which was 0.7% per annum.

6.18 Conversely, the industrial floorspace trend since 2000 shows a steady decrease in stock. In Oxford the total industrial floorspace has decreased from 710,000 sq. m in 2000-01 to 688,000 sq. m in 2015-16. This is equivalent to an average annual growth rate of -1.9% per annum. This decrease rate is significantly sharper that the national equivalent of -0.3% per annum over this period. As with the office floorspace trend, the majority of this change was in the period from 2001-06. Since 2006 Oxford has seen a growth rate of -0.3% per annum. This is a smaller rate of losses than the growth rate of -0.5% seen across England and Wales over this period.

Implications

6.19 This section considers a range of approaches in estimating future employment floorspace need in Oxford City. The outputs of these are summarised in Table 10 overleaf. The labour demand

forecast and the gross completions trend projection both show a need for around 135,000 and 71,150 sq. m of employment floorspace to 2036, respectively.

Table 10: Comparison of Projections, 2016-36

Use Class	Labour Demand	Gross Completions	Net Completions
B1a/b	99,193	53,560	20,780
B1c	14,342	4,393	1,260
B2	10,984	4,513	-1,380
B8	10,486	8,687	-23,287
Total	**135,004**	**71,153**	**-2,627**

6.20 The Labour-demand scenario (incl. the 5 year past completions flexibility buffer) together with the gross completions are considered more appropriate and pragmatic to put forward. ***The gross completions scenario is a trend-based (policy off) scenario while the labour-demand includes growth assumptions.***

6.21 Undeniably the economy in Oxford is predominantly based on jobs and activity in the office market. This statement does not underestimate the contribution of industrial activity across the City, however the evidence in this report has highlighted the dominance of office market.

6.22 Table 11 compares the average annual growth rates of each of the projections to the historic growth rates for office and industrial uses (over the period 2000-16). This shows that the labour demand and gross completions trend forecasts reflects the historic growth as recorded by VOA . Although, these forecasts show a growth in industrial floorspace above the negative trend shown historically, the weight of office market across the City is the one that should lead the forecasts .

Table 11: Employment Stock Growth Rates Under the Projections, 2011-36

Use Class	VOA 15 yr Stock Trend	VOA 10 yr Stock Trend	Labour Demand	Gross Completions	Net Completions
Office	1.7%	0.5%	1.2%	0.7%	0.3%
Industrial	-1.9%	-0.3%	0.5%	0.3%	-0.4%

Overall Conclusions on Employment Land Needs

6.23 The labour demand scenario is based on the planned economic growth forecast produced by CE and SQW which takes account of a range of locally specific growth drivers. This included consideration of both demographic and economic demand drivers, as well as risks which could affect future economic growth. This identifies a number of growth sectors:

- Universities
- Bioscience
- Advanced Engineering
- Environmental Technologies
- Retail trade

6.24 This provides an evidenced justification for increasing employment growth above the baseline forecast. The majority of the identified growth sectors are in sectors which will require B Class employment floorspace. ***Therefore, this is reflected in the higher floorspace figures shown in the Labour Demand scenario than the other scenarios***.

6.25 ***Therefore, while the labour-demand scenario is higher than the forecast suggested looking at past completions, this reflects current and committed growth opportunities. The higher growth rate (particularly for office) is within the 15 year growth rate suggesting this level of growth is achievable in Oxford.***

6.26 ***It is recommended that the labour-demand scenario figure of 135,000 sq. m is taken forward to inform forecasts compared to the gross-completions figure of 71,200 sq. m. There are two key reasons for this:***

- The difference between the two scenarios is predominantly based on B1a/b forecasts – including R&D uses. The differences in B8 and B2 Use Class are marginal based on plot ratios and space taken by these land uses. Based on discussions with various parties there is clear demand for office space across the City. For instance the Northern Gateway scheme aims to provide 90k sq. m of knowledge employment uses which mainly falls within B1a/b Use Class.
- Secondly, the labour-demand scenario provides an alignment with the housing needs assessment as this has been tested for economic-led housing need.

6.27 ***The table below presents the residual requirement up to 2036. A total of 135,400 sq. m is required across the City between 2019 and 2036 based on the labour scenario which as mentioned above considers growth assumptions.*** When considering the amount of employment land to plan for, it is important to remember that the planned growth scenario reflects a range of commitments, some of which are already permitted or under development.

6.28 To provide a comparison, we have also modelled the baseline scenario. The table below presents also the residual requirements for the baseline scenario which totals to -4,032 sq.m. This is mainly driven by a significant loss projected in manufacturing together with further losses in B8.

6.29 Finally the table presents also the residual (gross completions scenario) ***of 71,600 sq.m. which is a trend-based estimation.***

Table 12: Residual requirement per use class, 2019-2036

Use Class	Net Gain 2016-2018	Residual (Labour Demand) 2019-36	Residual of Baseline Scenario 2019-36	Residual (Goss Completions) 2019-36
B1a/b	3,117	**96,076**	50,557	50,443
B1c	189	**14,153**	-7,959	4,204
B2	-207	**11,191**	-24,644	4,720

B8	-3,493	**13,979**	-21,986	12,180
Total	-394	**135,398**	-4,032	71,547

6.30 Therefore, the jobs growth and employment land needs associated with these developments will meet a proportion of the additional need shown in the labour demand modelling. These developments will be captured in the current supply / future completions data. When considering the amount of additional employment land to plan for the Council should make sure to avoid double counting.

6.31 There is a requirement for local authorities to align their economic and housing strategies. The level of housing growth associated with Labour demand scenario is set out in the housing needs assessment.

6.32 The SHMA sets out an economic housing need ranging from 527 to 555 dpa. However the concluded OAN is based on an adjusted demographic growth that exceeds the economic led scenario. Therefore economic growth will not be constrained by a lack of labour force.

6.33 ***To conclude, across the plan period there is a requirement of 135,000 sq. m. However, due to recent losses the residual requirement for the 19-36 period is slightly higher at 135,400 sq. m.***