Greater Cambridge Growth Sectors Study: Life science and ICT locational, land and accommodation needs

Final report

Iceni Projects Limited on behalf of

Greater Cambridge Shared

Planning

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0. Executive Summary

Introduction

0.1 Iceni Projects has been commissioned by Greater Cambridge Shared Planning (GCSP) to undertake a study on the employment space requirements for 'key sectors' that notably drive employment growth in Greater Cambridge.

0.2 The definition of the sectors draws on those defined as key growth sectors in the Greater Cambridge Employment and Housing Evidence Update 2023 (EHEU)[1] and previous iterations (Greater Cambridge Employment Land and Economic Development Evidence Study 2020)[2].

0.3 In broad terms the key sectors are defined as life sciences and ICT - and to a lesser degree professional services.

0.4 In order to plan effectively for the growth of key sectors this study looks in more detail at a range of issues:

- The specific locational and land characteristic needs for key sectors - what locational priorities are taken into account when seeking premises and how this may affect growth
- The mix of employment space types and sizes required by key sectors, taking into account the lifecycle of those businesses

[1] https://consultations.greatercambridgeplanning.org/sites/gcp/files/2023-01/EBGCLPDSUEandHEvUJan23v2Jan23.pdf

[2] https://www.greatercambridgeplanning.org/media/1399/greater-cambridge-employment-land-and-economic-development-evidence-study-gl-hearn-nov2020.pdf

- The (modelled) amount of land required by sectors, taking into account business lifecycles (reflecting their use class needs)
- A comparison between the scale, location and types/size needs identified in this study against committed supply, including sites in the emerging Greater Cambridge Local Plan.

0.5 In response to the above, the study encompasses the following:

- Provides a broad overview of the ICT and life sciences sectors in the Cambridge specific and broader context using a range of primary and secondary data sources
- Identifies the spatial characteristics of ICT and life sciences premises and employment across Greater Cambridge
- Includes a review of existing literature regarding the sector growth and related requirements
- Reviews international case studies
- Provides feedback on interviews undertaken with a number of sector experts from the Greater Cambridge area and beyond
- Considers the findings of a specific business survey undertaken as well as business interviews
- Reports on 'floorspace needs' modelling and sensitivity scenarios undertaken drawing on employment forecasts in the EHEU and other data
- Broadly considers current commitments and how these reflect against the qualitative and quantitative requirements.

0.6 This study has brought together a wide range of research to draw together an independent perspective on the insights of the sector requirements. This takes into account diverse and at times divergent views from stakeholders which themselves reflect different organisational priorities and changing workspace and sector dynamics. The breadth and depth of stakeholder and occupier engagement involved in this study has enabled conclusions to be reached with confidence, or to indicate where there is divergence.

0.7 In reality, each sector occupier has particular requirements which will vary from the trend. These differences do not prevent undertaking practical and useful research to support the Local Plan making and application decision making processes. Where this report is being used to inform a response to planning applications, it would be beneficial for applicants to set out a justification for how their requirements differ from the findings of this report.

Key findings

0.8 The key messages and findings from this work are:

i. Greater Cambridge remains one of the most desirable places in the UK *and the world* for both the ICT and life sciences sectors. Its outstanding legacy of academic and research institutions, businesses, science parks, labour and networks continue to support innovation, indigenous growth and attract inward investment.

ii. Greater Cambridge has a well established network of science and technology parks that each play a particular role in the knowledge ecosystem. Many of these have developed over several decades and provide locations of choice for business clusters that benefit from the networks, services and accessibility on offer.

iii. Whilst individual occupiers and organisations have specific needs, there are thematic locational preferences for different sectors and life cycle stages. A reoccurring theme is the importance of integrated 'places' that provide the technical premises and facilities but also offer amenity, clustering and connectivity.

iv. In terms of floorspace requirements for the life sciences sector:

- There has been a lack of available wet labs (across the size bands) through the 2020-23 period. Whilst there was a theoretical committed supply in planning terms, some of this has been long term and not readily deliverable. This has coincided with a period of considerably heightened demand for

wet lab space due to COVID-19 and an increase in venture capital funding. The need for scale-up space (particularly from 500 – 1,000 sqm and up to 2,500 sq.m) has been particularly acute and less well provided for, with Cambridge's portfolio historically better placed for smaller start-ups and more mature businesses. Constraints have been due to a combination of viability and space being taken up by larger firms. It is estimated that up to 40% of space should be provided for this size category going forward and current proposals appear better suited to support this.

- Through the 2023/24 monitoring year a significant number of planning permissions have been consented[3] for labs, including at the Grafton Centre, Melbourn Science Park and Cambridge North. The supply for wet lab space through 2025-2030 and beyond is now substantial. However, subject to the details of development proposals, there may remain a shortfall in scale-up space provision. There is also likely to remain a shortfall in wet lab commitments later in the Plan period towards 2041 which can be met through the draft allocations in the emerging Local Plan.

v. In terms of floorspace requirements for the ICT sector:

- The future supply of general office space appears relatively healthy looking ahead, however there are likely to be additional requirements later in the post 2030 Plan period, depending on the specific details of current supply and how it is configured to the market.
- High quality start-up and moreover scale-up space will remain in demand and need to continue to be provided for across the office market spectrum. How well current supply supports this

[3] Including those with Section 106 agreements to be signed

segment will be subject to the details of development proposals however indications are that this sector will be better served.

vi. Looking ahead, Greater Cambridge has a pivotal role to play on the national and international scale in life science and tech evolution but will need to enhance its offer to support its existing ecosystem and continue to compete on the national and international scale. Key priorities emerging from this work are:

a) Prioritising ‘place based’ business destinations for life science and ICT that offer: high quality modern work spaces; preferably form part of a larger cluster / community to enable knowledge exchange; are in attractive settings; offer a range of amenities including food and beverage; and are well served by public transport as well as car. Urban and edge of urban locations are advantaged in their connectivity to workforce and amenities, whereas rural settings whilst offering attractive environments typically have greater connectivity challenges. ICT occupiers enjoy park based settings but equally may thrive in ‘downtown’ locations such as CB1 that are less a part of a defined knowledge cluster, their office premises requirements tending to be better suited to urban environments than labs and more amenity / accessibly node orientated.

b) Recognising that even Greater Cambridge’s most successful life science locations such as Cambridge Biomedical Cluster and Cambridge Science Park will need to evolve to provide best-in-class occupier place based destinations that can offer the full range of commercial accommodation, facilities and amenities.

c) Seeking to provide a range of premises in terms of scale, ensuring that smaller start-up and scale-ups are provided for. Start-up / scale-up provision is considered to function best in the supported campus environment rather than in isolation; and starts ups in supported institutional environments. Mechanisms to ensure diverse scale provision in part may be through an improved overall supply which is already emerging. Exploring the

feasibility of commuted sums contributions for start-up provision is recommended.

d) Incorporating the findings of this work, notably in terms of size band (at the Greater Cambridge, not necessarily site level) and locational requirements into the decision-making processes for plan making and application decisions, to ensure best use of limited resources.

e) That the existing sector institutions and representative bodies in Greater Cambridge continue to collaborate to provide best in class place and infrastructure solutions to support growth, recognising the range of broad challenges to be faced including infrastructure provision for transport connectivity and affordable homes.

Spatial Context

The Greater Cambridge life science ecosystem manifests spatially between the academic / research institutes and a range of science parks; the latter tend to be located on edge of city centre / rural campus developments that reflect the more land hungry / lower density requirements of the sector (compared to office based tech) such as:

- Babraham Research Campus: supporting early-stage bioscience enterprise, home to over 60 companies
- Cambridge Biomedical Campus: with a clinical focus including Addenbrooke's Hospital, Royal Papworth Hospital, AstraZeneca, Cancer Research UK Cambridge Institute and the Medical Research Council Laboratory of Molecular Biology
- Cambridge Science Park: longstanding science and ICT destination
- Granta Park, Great Abington: with 30 mid and large size commercial life science occupiers

- Wellcome Genome Campus, Hinxton: home to some of the world's foremost institutes and organisations in genomics and computational biology.

ICT focussed locations are closer to the city centre such as CB1, Cambridge Science Park (which also hosts life sciences), Cambridge Business Park, Peterhouse Technology Park and Castle Park. There are also a range of out-of-town business ICT / mixed parks at Cambourne, Cambridge Research Park Waterbeach and Vision Park, Histon as well as activity in surrounding settlements.

0.9 The Greater Cambridge area offers a number of accelerator / incubator spaces for both sectors providing managed and supported spaces to enable ideas catapults and new business evaluation. The majority of these are located within existing parks, or hosted / run by the university or other institutions.

Business lifecycles

0.10 The tables below identify key property requirements through the growth phases of each sector.

0.11 Accommodation for life science businesses would usually be around a 60:40 ratio of wet lab to office provision.

Table 0.1 Life Science Lifecycle Stages

	Incubator / Start-Up	Scale-up	SME	Large
Staff	1-10	11-100	101-250	250+
Space (sq.m)	<200	200 – 2,500	2,500 – 5,000	5,000+

Fund	Typically grant- and/or founder-funded, pre-seed	Raised or raising some equity funding alongside grant funding. Most commonly in space under 1,000 sq.m. Series A[4].	Reached some commercial milestones, generating revenue. Series AB	IPO / listing or move to trade sale
Property	Short term lets given the level of uncertainty and risk	Improved leasing but remains risk.	Strong lease covenants.	Strong lease covenants / freehold
Support	Business incubators / bench space, fully fitted	Small lab space and back office.	Can be more isolated from established institutions, although many still prefer the proximity.	Labour market cluster / or specific research proximity depending on type

Source: Stakeholders; Med CITY / Constructing Science: Guidance for Life Science Labs 2023; Review of Wet Lab Space and Incubator Space for the Life Sciences in the Cambridge Area, Cambridge Ahead, 2017

0.12 For tech, premises are usually offices and stable high-quality fibre broadband to premises is a requirement for all lifecycle stages. Drylab space can be a

[4] Businesses tend to advance through funding rounds; it's common for a company to begin with a seed round and continue with A, B, and C funding rounds that grow in value through each stage.

requirement for some firms including quantum computing and a supply shortage has been reported.

Table 0.2 ICT Lifecycle Stages

	Start-Up	Scale-up	SME	Large
Staff	1-5	6-30	30-250	250+
Space (sq.m)	0-10	11-500	501-2,000	2,001+
Fund (varies)	Early stage / pre seed / Series A	Series A/B	Series B/C	Series C
Property	Hot desk / very short let	Improved leasing but remains risk.	Strong lease covenants.	Strong lease covenants / freehold
Support	Business incubators / commercial hot desk space. Advisory services.	Smaller – medium office multi-let space. Advisory services.	Larger scale serviced or independent managed office accommodation. Increased in house infrastructure / outsourcing.	Larger scale serviced or independent managed office accommodation. Increased in house infrastructure / outsourcing.

Source: Stakeholders

Locational needs: Life science

0.13 Taking into account the range of evidence gathered, the following summarises the locational priorities.

- A trend towards **integrated 'place' based locations** that encompass quality premises with amenity offer and connectivity including commuting via public transport. Urban settings are increasingly popular being connectivity and amenity rich but need to achieve sufficient scale / critical mass as well as urban integration. Edge of

urban locations can offer greatest scale, flexibility and connectivity. Out of town science parks offer scale and choice but connectivity particularly by public transport can be more challenging as can developing an amenity offer.

- A significant **critical mass to create a community** that can attract and retain a concentrated labour pool on site, creating a network and community of workforce, as well as a viable offer of facilities, both technical and amenity focused.
- For smaller businesses and start-ups, the need to **be located with institutions or research centres** that can provide a range of supporting including appropriate space at affordable cost, which is often not viable in fully commercialised centres
- Some businesses need to be in close proximity to clinical research centres such **Cambridge Biomedical Campus**, but others are able to operate on a non clinical campus, depending on sector specific focus.
- **Amenity offer** as a part of a place making strategy including cafes / restaurants, green spaces, gyms, sustainable / functional transportation and market housing that is affordable.
- **Sustainable transport connections** are highly desirable across the occupier spectrum however many of the science parks in reality are accessed and accessible by car which requires parking space and enables in commuting from a range of locations.
- Space for **interaction and collaboration**, particularly for start-up / scale-up businesses
- Life science centres require sufficient '**space and scale**' recognising that facilities tend to be lower density and therefore space hungry as well as potentially having some bad neighbour characteristics such as deliveries, waste disposal and extraction.

Locational needs: ICT

0.14 Taking into account the range of evidence gathered, the following summarises the locational priorities.

- Focus on **premium locations** characterised by high quality stock and amenity in the city centre or premium parks, rather than urban periphery or rural locations and older stock. This is important in attracting staff back to the office in an increased work from home culture.
- **Public transport is important**. Rail connections are a priority for businesses needing a London connection. Others in the sector in Greater Cambridge require locations with good road network access and parking for commuting purposes.
- For start-ups and smaller businesses, there are specific needs in terms of **incubator or innovation centre support** and potential mentoring; and as a minimum flexible hot desking space. In Greater Cambridge, this is largely provided in existing business parks or centres such as Cambridge Science Park, CB1 as well as the University of Cambridge.
- Immediate proximity clustering and collaboration is beneficial for start-ups and smaller businesses but for larger businesses this occurs at a labour market level through provision of a highly skilled workforce.
- Access to market housing that is affordable is a concern for ICT businesses.

International Case Studies

0.15 Section 7 provides an overview of four international case studies relevant to the Greater Cambridge context where best practice lessons may be learnt in terms of delivering best in class places to support sector growth: Gateway of Pacific (San Francisco, US), Stanford Research Park (San Francisco, US),

Switzerland Innovation Park, Basel Area (Switzerland) and Kendall Square (Boston, US). The case studies above all have the following common features which are relevant to the Cambridge cluster:

- **Proximity to research institutions:** all sites benefit from the -roximity to world-famous universities, generating a graduate workforce and research to prompt start-up concepts.

- **Clustering:** situating large scale parks close to established ecosystems of existing organisations is regarded as important for leveraging venture capital, facilitating collaboration and attracting staff. For start-ups, having access to shared resources (such as labs or support services) could reduce costs and support growth.

- **Connectivity:** connectivity is key for attracting and retaining staff. Having public and active transport options was seen as positive for promoting environmental sustainability. All case studies are urban / edge of urban locations.

- **Quality amenity land and facilities:** All cases indicate the importance of green space and landscaping for improving staff wellbeing, as well as providing opportunities for informal networking between organisations. In addition, all sites have a variety of quality food and drink and leisure offerings, enhancing the overall attractiveness of sites for staff.

0.16 Greater Cambridge's parks and clusters do have many of these essential characteristics particularly the research base and cluster of organisations and parks. Lessons to be learnt include: enhancing connectivity and amenity at existing locations; and considering how future developments reinforce cluster benefits and meet other key characteristics.

Land / space requirements: Life sciences and ICT

0.17 The EHEU recommends that looking to 2041 for offices a future need of 289,700 sqm (3.1m sqft). For R&D premises a position of around 600,000 sqm (6.5m sqft) is recommended. This section looks at these modelled requirements alongside market data and ONS data to provide conclusions on size band segmentation. Key findings are that in broad terms across the ecosystem (not necessarily each development) the broad range of premises should cover:

Life science

- Requirements will change over time and through business cycles, however overall it is recommended that towards 50% of total new R&D space should be for start-up / scale-up provision.
- Start-up provision would be in dedicated specialist incubator space usually with up to 10 employees and more like bench / flexible labs of up to 200 sqm in size and which might account for 5-10% of total demand. The offer should be expanded over time, either at or in addition to the existing start-up locations. Collective space supported by institutions works best.
- A further up to 40% would be for 200 sq.m up to 2,500 sq.m for scale-ups. Even at the smaller end this should be viable for commercial provision where part of a larger development.
- The remainder of requirements would be for larger floorplates over 2,500 sq.m potentially c30% of demand for 2,500 sq.m to 5,000 sq.m and 20% demand for over 5,000 sq.m. This is based on more recent

market data and would be a greater emphasis on larger footprints than in the past.

ICT office:

- Around 20% of demand sub-500 sq.m (potentially under 50 employees) typically in flexible or managed space;
- around 30% 500 to 2,000 sq.m (50 to c250 employees); and
- c.50% for larger businesses of 250+ staff occupying 2,000 sqm+.

Comparing demand with supply

0.18 This considers the supply of premises and how this responds to the assessment of demand, including the scale, location and type of needs relevant to the key sectors.

- At March 2024 there is around 1.1 sqm committed supply being classified as:
    - Office Class B1(a)/E(g)(i) 16% notably around Cambridge Station (Hills Road, Devonshire Road, Station Road and Clifton Road); Cambridge Science Park / St John's Innovation Park; Peterhouse Technology Park; and Cambridge Innovation Park.
    - Dry lab ICT / physical science Class B1(b)/E(g)(ii): 27%; including West Cambridge 170,000 sqm (commercial non-academic components) and 40,000 sqm at Eddington.
    - Wet / dry lab life sciences Class B1(b)/E(g)(ii): 48%%: including Cambridge Biomedical Campus; Cambridge Science Park / St John's Innovation Park / Merlin Place; Grafton Centre, Wellcome Genome Campus; Cambridge North; Granta Park; and Melbourn Science Park.
    - Other Class B1/E(g): 8%

0.19 When comparing demand (to 2041) with modelled supply:

- **Office** provision in terms of general requirements reports around a c.25% undersupply – however when taking into account the other office / dry lab elements relating specifically to ICT and life sciences - as assumed or reported in applications - there is a potential over supply. This suggests that there is a good general office supply but in the longer term there may be a need for more general high quality offices. Supply is spread across a balanced future trajectory and will be supplemented by further First Proposals space at North East Cambridge and later at Cambridge East.
- **Dry labs** including for ICT and physical sciences have a large supply and a forecast oversupply based on modelled need. Some of this provision is likely to fall under demand related to advanced manufacturing requirements rather than ICT/Tech. Shorter term supply has reportedly been limited.
- **Wet labs** (including dry lab space at the Wellcome Genome Campus) demand / supply is considered to be broadly in balance for the foreseeable future after taking into account recent significant permissions for lab space in Greater Cambridge through 2023 and 2024. There was relatively limited delivery in the 2020-2023 period at a time when demand for life science research has risen. The pipeline is now much stronger looking at the 2025-30 period, and some schemes may more realistically be brought forward post 2030 subject to market conditions. Even so, additional space commitments will be required in the 2030s, which highlights the importance of the availability and deliverability of the emerging Local Plan allocations including sites at CBC, North East Cambridge, Babraham and Cambridge East - which combined could deliver some additional 380,000 sqm of labs. Despite improved anticipated scale-up space provision for wet labs in permitted supply, there is likely to be an ongoing requirement – subject to the detailed design / reserved matters applications arising from a range of existing commitments.

1. Introduction

1.1 Iceni Projects has been commissioned by Greater Cambridge Shared Planning (GCSP) to undertake a study on the locational and accommodation requirements for 'key sectors' that notably drive employment growth in Greater Cambridge.

1.2 In broad terms the key sectors are defined as the life sciences and ICT - and to a lesser degree professional services.

1.3 In order to plan effectively for the growth of these sectors this study looks in more detail at a range of issues:

- The specific locational and land characteristic needs for key sectors - what locational priorities are taken into account when seeking premises and how this may affect growth
- The mix of employment space types and sizes required by key sectors, taking into account the lifecycle of those businesses
- The (modelled) amount of land required by sectors, taking into account business lifecycles (reflecting their planning Use Class[5] needs)
- A comparison between the scale, location and types/size needs identified in this study against committed supply, including sites in the emerging Greater Cambridge Local Plan.

[5] The Town and Country Planning (Use Classes) Order 1987 (as amended) puts uses of land and buildings into various categories known as 'Use Classes' see https://www.planningportal.co.uk/permission/common-projects/change-of-use/use-classes

1.4 In responding to the above, the study encompasses the following:

- Provides a broad overview of the ICT and life sciences sectors in Greater Cambridge using a range of primary and secondary data sources
- Includes a review of existing literature regarding sector growth and related requirements
- Provides feedback on interviews undertaken with a number of sector experts from the Greater Cambridge area and beyond
- Considers the findings of a business survey undertaken for this study as well as business interviews
- Reports on modelling and sensitivity scenarios drawing on employment forecasts in the EHEU and other data

1.5 The definition of the sectors draws on those defined as key growth sectors in the Greater Cambridge Employment and Housing Evidence Update 2023 (EHEU)[6] and previous iterations (Greater Cambridge Employment Land and Economic Development Evidence Study 2020)[7]. The EHEU sets out forecasts for employment growth and associated premises requirements which are not revisited here.

1.6 The study uses the sector definitions for life sciences and ICT in broad terms. Both of these encompass a very wide variety of businesses with differing accommodation and locational needs. Whilst the life science and ICT sector differences are clearly drawn out in the study, sub sector requirements and

[6] https://consultations.greatercambridgeplanning.org/sites/gcp/files/2023-01/EBGCLPDSUEandHEvUJan23v2Jan23.pdf

[7] https://www.greatercambridgeplanning.org/media/1399/greater-cambridge-employment-land-and-economic-development-evidence-study-gl-hearn-nov2020.pdf

specifications are not looked at in significant detail and are addressed proportionately in the work. This reflects the fact that the emphasis of this study is on land use planning rather than it being a commercial property study and that the study will help to inform decisions on land use planning in Local Plan development and planning applications.

1.7 GCSP (Cambridge City Council and South Cambridgeshire District Council) and Iceni Projects are grateful to the significant number of stakeholders that provided their time in supporting this study, as well as the businesses and organisations participating in the survey and interviews. The important research of other organisations is recognised, not least Cambridge Ahead, with this study drawing on a number of their publicly available datasets and research.

2. Context for the life sciences and ICT: evolution and composition

Introduction

2.1 This section sets a context for the study by providing insight on the definition, evolution and current composition of the key sectors in Greater Cambridge.

2.2 The uniqueness of the Greater Cambridge economy overall is well known and documented, the 'Cambridge Phenomenon' being driven by a concentration of high tech and life science research companies in and around Cambridge emerging from the 1960s onwards.

2.3 At the core of Greater Cambridge's success lie the University of Cambridge and a great number of research institutes[8] including the Medical Research Council Laboratory of Molecular Biology, Cancer Research UK Cambridge Institute and National Institute of Health Research on the Biomedical Campus, Addenbrooke's Hospital, the Babraham Institute and Wellcome Sanger Institute as well as Anglia Ruskin University.

2.4 At 2022[9], employment in Greater Cambridge remains dominated by the professional, scientific and technical services sector (21%) which includes scientific research and development, followed by education (15%), health (14.0%) and ICT (9.0%). Greater Cambridge has around double the national average rate of employment in professional services and ICT. Between 2011

[8] See longer list at https://cambridgeand.com/a-unique-ecosystem/research-institutes

[9] latest ONS BRES data

and 2022 employment grew by over 45,000 jobs or 20%[10] with research and development employment representing 25% the growth and ITC 12%.

2.5 Beauhurst report that Cambridge and South Cambridgeshire are the local authorities with the highest density of high-growth companies across all sectors in the UK with 2.18 and 1.6 per 1,000 people[11] respectively. Cambridge is ranked the 3rd top Science hub in the world, behind Bay Area, San Fransisco and Boston, scoring highly on University talent[12].

2.6 Cambridge was recently named the 'unicorn[13] capital of Europe' in terms of unicorns per inhabitant, with 47.9 'unicorns' per million inhabitants, compared to 17.4 in Luxembourg and 12.9 in Oxford[14]. The city has an impressive capital investment network operating, including firms like Parkwalk Advisors, Cambridge Angels and Cambridge Enterprise (the commercialisation arm of Cambridge University)[15].

2.7 Greater Cambridge has a high proportion of residents with level 4 qualifications and above[16] at 52%, comparing favourably with the East of

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[10] Cambridge Econometrics Local Economic Forecasting Model 2022

[11] Unlock Growth – Beauhurst 2021

[12] 'The Next Generation of Tech Ecosystems' – Dealroom.co, December 2022

[13] Privately held startup company with a value of over $1 billion

[14] State_of_European_Tech_2021.pdf (soet-pdf.s3.eu-west-2.amazonaws.com)

[15] How Cambridge became the UK's leading tech city | NatWest Business

[16] Level 4 qualifications are: certificate of higher education (CertHE); higher apprenticeship; higher national certificate (HNC); level 4 award; level 4 certificate; level 4 diploma; level 4 NVQ

England (32%) and England (34%). In terms of occupational status, it has a high proportion of residents within Professional occupations (36.6%), compared to the East of England (19.6%) and England (20.3%).

2.8 Greater Cambridge has particular attributes that enable the sector clusters to succeed:[17]

- Access to highly skilled labour pool and source of entrepreneurs related to the universities;
- Knowledge spillovers and informal learning facilitated by the scale of the sector clustering and interaction between academics, institutions and business; and
- Depth of the supporting supplier base across the range of professional services such as financial and legal.

2.9 The business ecosystem thrives from interrelationships including between larger and smaller firms[18]. The larger firms are able to attract talent and supply chain partners inevitably locate locally.

2.10 Cambridge sits within a number of innovation corridors including:

- The London-Cambridge corridor known as the **'Innovation Corridor',** home to advanced technology and bioscience clusters, where world-class business, universities and R&D centres converge, providing a unique ecosystem of talent and businesses[19];

[17] Review of Wet Lab Space and Incubator Space for the Life Sciences in the Cambridge Area (2017) Cambridge Ahead

[18] Life Science Strategy for the Cambridgeshire and Peterborough Combined Authority (2021)

[19] UK Innovation Corridor – Home

- The **Oxford-Cambridge Arc** formed of Oxfordshire, Buckinghamshire, Northamptonshire, Bedfordshire and Cambridgeshire is recognised by the Government as having the potential to become a world-leading and globally renowned centre for business, innovation and investment in a variety of industries including AI (Artificial Intelligence), advanced manufacturing and life sciences[20];
- Cambridge also falls within the **Cambridge Norwich Tech Corridor** which contains world-leading universities, research institutes and science parks, complemented by an ecosystem of businesses and networks, offering a 100km opportunity across Cambridgeshire, Suffolk and Norfolk for start-ups, growing businesses and investors[21].

Life Sciences

Life sciences overview

2.11 Life sciences broadly refers to the application of biology and technology to health improvement, including biopharmaceuticals, medical technology, genomics, diagnostics and digital health. It broadly falls under Standard Industrial Classification[22] (SIC) code 72.1[23] "Research and experimental

[20] https://www.gov.uk/government/publications/oxford-cambridge-arc/oxford-cambridge-arc

[21] What is the Tech Corridor | Cambridge Norwich Tech Corridor

[22] ONS codes used to classify business establishments and other standard units by the type of economic activity

[23] Comprises 72.11 Research and development on biotechnology and 72.19 Other research and experimental development on natural sciences and engineering.

development on natural sciences and engineering" albeit the difficulties in using SIC codes in defining business activity are recognised. .

2.12 In the UK there are 4,500 companies employing 183,000 staff within the pharmaceuticals, medical biotechnology and medical technology sectors. The 20 top global pharmaceutical companies all have sites within the UK and these companies represent 80% of total sector employment[24].

2.13 Cambridge is a world leader in the life science and healthcare sector, home to 17 Nobel Prize winners since 2000. The cluster is underpinned by the presence of world-leading R&D taking place at the University of Cambridge and specialist research institutes, hospital and businesses established in and beyond the city.

2.14 The formation of biotechnology company Cambridge Antibody Technology in 1989 was the start of Cambridge's long-term life sciences success story.

2.15 Since then, the ecosystem has benefitted from significant investment in critical research base initiatives such as the Wellcome Genome Campus, the Cancer Research UK Cambridge Centre and the Cell and Gene Therapy Catapult.

2.16 The UK's sciences sector was heavily involved in the response to the COVID-19 pandemic through vaccine development. At the same time, venture capital funding significantly increased in the life sciences sector particularly in 2020-22 which fuelled research potential and demand for lab space.

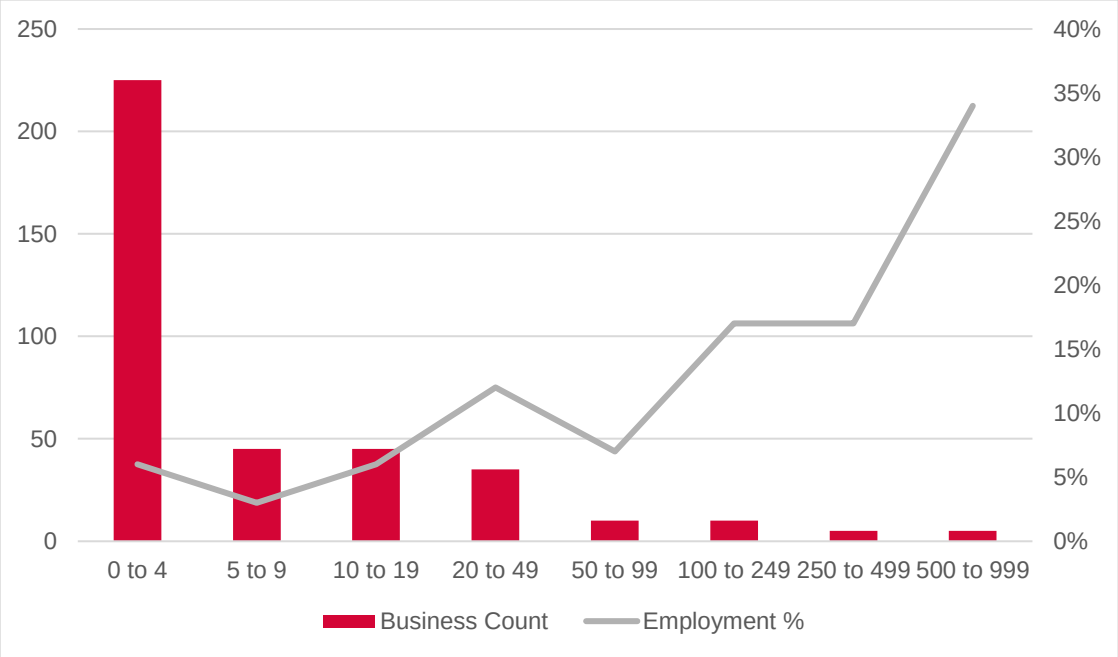
2.17 Major business investments and corporate deals have seen over $1bn of private capital pour into the cluster in recent years – through collaborations such as Microbiotica with Genentech (2018), Mission Therapeutics with Abbvie (2018) and Crescendo Biologics with Takeda (2016). Significant

[24] One Nucleus, Life

funds have been raised including for CMR Surgical, Artios, Acacia Therapeutics or Nasdaq IPO's such as Bicycle Therapeutics[25].

2.18 The chart below shows the ONS life science sector business count and sector employment by business size. There are 380 businesses of which 225 (59%) have 0-4 employees and support just 6% of sector employment. There are 10 companies with over 250 employees, of which 5 have over 500 employees supporting 34% of employment.

Figure 2.1 Life Science Business Count and % Sector Employment by Size

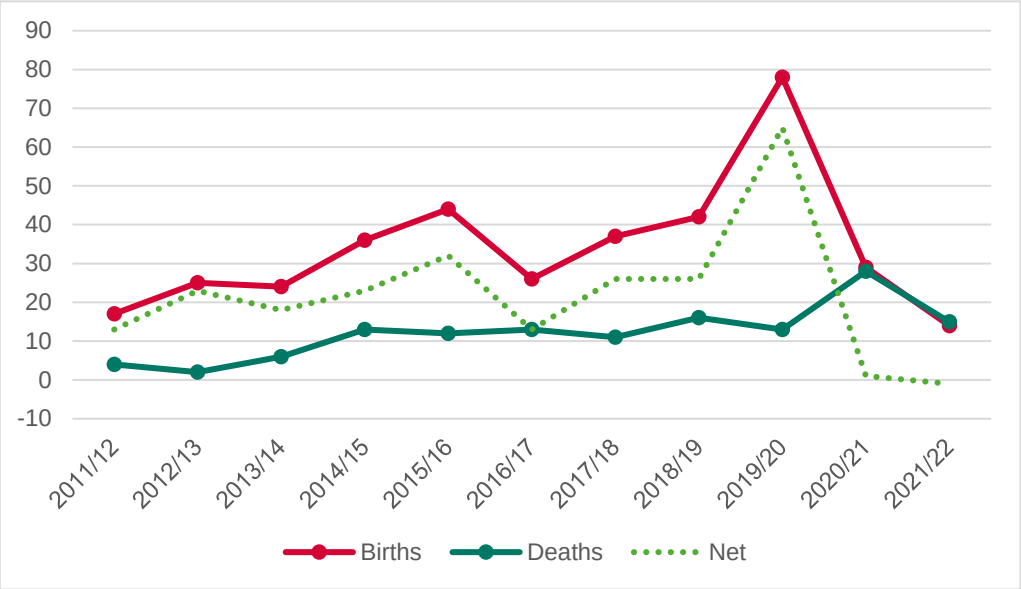


Source: ONS UK Business Counts 2023

2.19 Considering the birth and death count of life science businesses over the past decade, 2019/20 saw a peak with 78 business births, which followed a consistent rise since 2016/17. Thereafter there has been a negligible net change in the number of businesses due to business deaths matching births.

[25] Cambridge&

Figure 2.2 Life Sciences Business Births and Death – Greater Cambridge



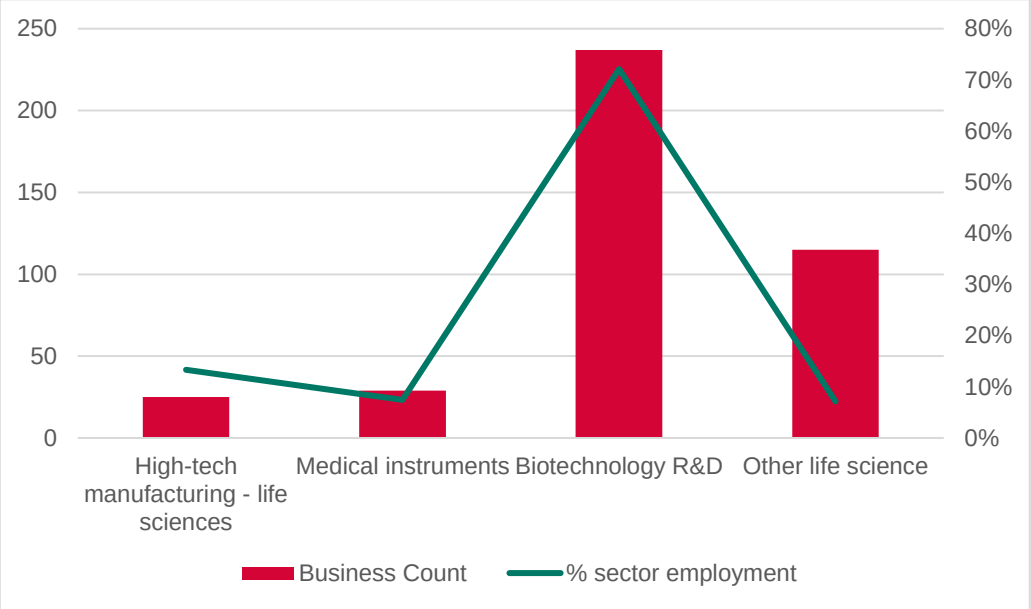
Source: Cambridge Cluster Insights, Cambridge Ahead

Life sciences sector composition in Greater Cambridge

2.20 Cambridge Ahead report that there are 406 life sciences companies in Greater Cambridge, supporting 19,753 jobs[26].It should be noted that Cambridge Ahead data does not include sole traders and therefore underestimates total business / jobs count. A majority of businesses are within the Biotechnology R&D sub-sector (237) many of which will require wet lab premises for research (see section 5 on premises definitions).

[26] Cambridge Cluster Insights, Cambridge Ahead, CBR data which may differ from ONS data

Figure 2.3 Life Sciences Business Count and Employment by Sub-Sector 2021/22



Source: Cambridge Cluster Insights, Cambridge Ahead

2.21 Figure 3.4 below reports on the Cambridge Ahead assessment of employment over time in the life science sector in Greater Cambridge. As of 2021/22 there were 19,753 employees in the sector and on average. Cambridge Ahead data indicates that sector employment has grown by 17% per annum since 2015/16.

2.22 The biotechnology R&D sub-sector has 14,243 employees. Its largest businesses include Astrazeneca (4,400 employees); PPD Global (2,174 employees), Genome Research (1,187 employees), Illumina Cambridge (871 employees) and Amgen (558 employees). This subsector has the largest proportion of larger companies with 8 companies with over 250 employees.

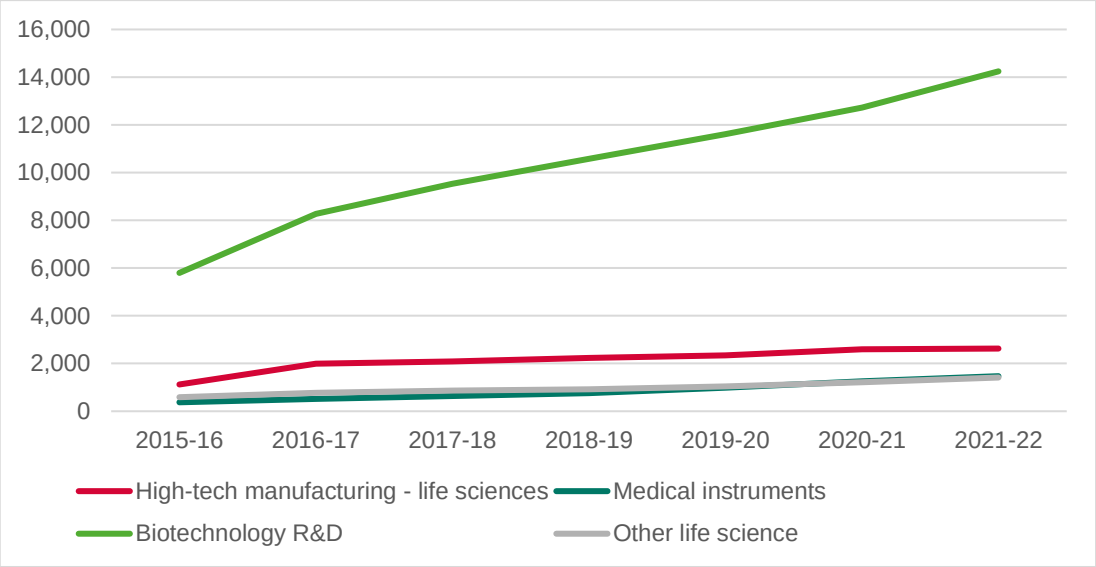
2.23 The Other Life Sciences sub-sector contains 115 businesses and has 1,413 employees. Its tops employers are Costello Medical Consulting (259 employees), Carl Zeiss (248 employees), Mundipharma International (163 employees), BIT BIO (158 employees and Cambridge Healthcare Research (116 employees). Based on known employee information, a majority of businesses within this sector has less than 10 employees, reflecting by the

subsector having the second greatest number of businesses but only 7% of life science employment.

2.24 The Medical Instruments sub-sector has 29 businesses and 1,470 employees. Its key employers are CMR Surgical (918 employees); SDI Group (354 employees), Team Consulting (141 employees), Prior Scientific Instruments (130 employees) and Endomagnetics (90 employees). A significant proportion of companies this sub-sector have less than 10 employees.

2.25 The high-tech manufacturing sub-sector has 1,890 employees across 25 businesses. Top employees include Abcam (805 employees), Mapp Pharmaceutical (372 employees), Gilead Sciences (260 employees) and SPT Labtech (157 employees). The sector is split between micro enterprises and large companies.

Figure 2.4 Life Sciences Employment by Sub-Sector, Greater Cambridge



Source: Cambridge Cluster Insights, Cambridge Ahead

The 10 largest life science employers in Greater Cambridge employ 63.2% of employees within the life sciences sector with AstraZeneca being the single largest employer.

Table 2.1 Greater Cambridge Top 20 Life science employers

Company	Employees	Sub-sector
AstraZeneca Plc	4,400	Biotechnology R&D
PPD Global Ltd	2,174	Biotechnology R&D
Abcam Plc	805	High-tech Manufacturing – Life Sciences
Genome Research Ltd	1,187	Biotechnology R&D
GW Pharmaceuticals Ltd	1,047	Biotechnology R&D
Illumina Cambridge Ltd	871	Biotechnology R&D
CMR Surgical Ltd	918	Medical Instruments
Amgen Ltd	558	Biotechnology R&D
Napp Pharmaceutical Holdings Ltd	372	High-tech Manufacturing – Life Sciences

Babraham Institute	369	Biotechnology R&D

*Cambridge Ahead estimate

Source: Cambridge Cluster Insights, Cambridge Ahead

ICT Sector

ICT overview

2.26 Information and Communications Technology (ICT) has specific OECD[27] definitions. This study is primarily concerned with the digital component of the sector covering computer consultancy, data processing & hosting and software development & publishing (and not the manufacture of equipment). A useful definition[28] of the digital economy is that covering:

- e-commerce / e-business (the trading of goods or services over computer networks such as the internet)
- supporting infrastructure (that is, hardware, software, telecoms).

2.27 At the national level, DCMS report that the UK is the European leader in technology sector investment and the main challenger to the US and China. Consistent growth saw the UK tech industry reach the $1 trillion value milestone in early 2022, making it the third largest in the world. During 2022,

[27] https://www.oecd-ilibrary.org/science-and-technology/information-and-communication-technology-ict/indicator-group/english_04df17c2-en#:~:text=ICT%20investment%20is%20defined%20as,)%3B%20communications%20equipment%3B%20and%20software.

[28] https://backup.ons.gov.uk/wp-content/uploads/sites/3/2015/10/What-defines-the-Digital-Sector.pdf

UK tech companies continued to raise at near-record levels of £24 billion, compared to France (£11.8bn) and Germany (£9.1bn), taking the total raised 2018-22 to £97bn[29]. Compared to Europe, the UK has the highest number of high-growth companies with 144 unicorns, 237 futurecorns[30] and over 85,000 start-ups and scale-ups[31] in the tech sector.

2.28 The digital sector is a significant part of Cambridge's economy and ecosystem. Cambridge& report that it has more than twice the employment (per working person) in digitally intensive sectors compared to the rest of the UK. The digital sector delivers almost 9% of Greater Cambridge's revenue and 8% of employment[32].

2.29 Cambridge has a long history of tech innovation, which can be traced back to 1970 when Trinity College launched its Cambridge Science Park Initiative, which was later spurred on by the launch of Acorn Computers in 1978 and Sinclair Research in 1981, who were both headquartered in Cambridge during the early days of the personal computer boom. However over the past decade the types of tech companies being started in Cambridge have evolved. Previously there was a heavy focus on companies building software packages for government bodies, robotics, CAD soft and audio-visual

[29] Department of Digital, Culture, Media & Sport – December 2022

[30] Companies with a value of $250m - $1bn which are on the path to unicorn status

[31] UK tech sector retains #1 spot in Europe and #3 in world as sector resilience brings continued growth - GOV.UK (www.gov.uk)

[32] Cambridge&

applications. More recently there has been an increase in AI, energy savings monitoring, ecological recycling applications, data analysis and health tech.[33]

2.30 The city and surrounding areas has been given the nickname ‘Silicon Fen’. Global giants including Amazon, Apple, Huawei, Intel, Microsoft, Nokia, Samsung and Toshiba have a presence in Cambridge.

2.31 The region has and continues to grow global businesses[34]:

- Autonomy – founded in 1996, sold to HP in 2011 for $11bn
- CSR – founded in 1998, sold handset technology division to Samsung in 2012 for $310bn and in 2015 was sold to Qualcomm for $2.4bn
- ARM (semiconductors) – founded 1990, floated in 1998 and sold in 2016 to Softbank Group for $31bn
- Aveva – formed out of government funded CAD centre in 1994, merged with Schneider Electric in 2018
- Frontier Developments (gaming) – founded in 1994, market value £659m
- Darktrace (cyber-defence) – founded 2013, market value $1.25bn
- Five AI (self-driving software) – founded in 2015, acquired by Bosch in 2022

2.32 The University of Cambridge’s Computer Laboratory and Cavendish Laboratory have been a prolific source of ICT and digital spin-out businesses, producing at least 200 companies included Acorn, Jagex, Ubisense and Raspberry Pi Foundation[35]. In 2022, £29.4bn was invested into UK tech

[33] NatWest – TMT insights: How Cambridge became the UK’s leading tech city (February 2022)

[34] Cambridge tech industry - Cambridge& (cambridgeand.com)

[35] https://cambridgeand.com/knowledge-intensive-industries/tech

companies, up from £11.5bn in 2021[36] and Cambridge topping the league of investment.

2.33 The chart below shows ICT business count and sector employment by business size. There are 1,195 businesses with 0-4 employees, 80% of ICT businesses, accounting for 22% of sector employment. At the other end of the scale there are 10 businesses with 500-900 employees and 15 businesses with 250-499 employees.

Figure 2.5 ICT Business Count and % Sector Employment by Size

Source: ONS UK Business Counts

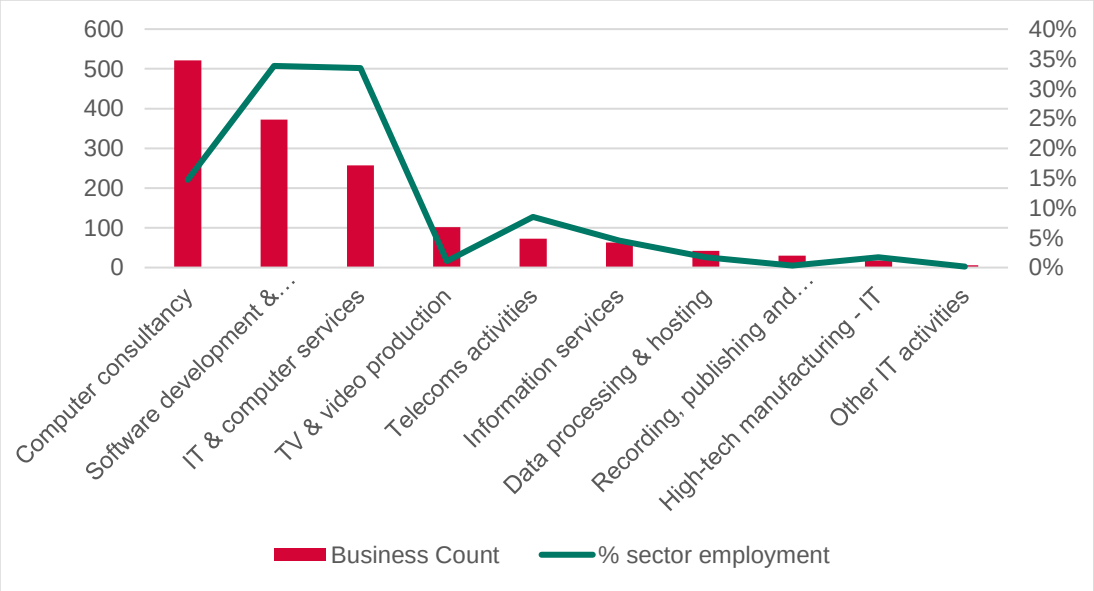
ICT sector composition in Greater Cambridge

2.34 The figure below draws on Cambridge Ahead data to identify the number of ICT businesses by sub-sector. In Greater Cambridge there are 1,484

[36] https://www.gov.uk/government/news/uk-tech-sector-achieves-best-year-ever-as-success-feeds-cities-outside-london

businesses, of which the majority are Computer consultancy (521), Data processing & hosting (372) and Software development & publishing (257).

Figure 2.6 Greater Cambridge ICT Business Count and % Sector Employment by Sub-Sector 2021/22



Source: Cambridge Cluster Insights, Cambridge Ahead

Source: Cambridge Cluster Insights, Cambridge Ahead

2.35 According to Cambridge Ahead, 18,438 people are employed by businesses in the ICT sector in Greater Cambridge.

2.36 The ICT sub-sector that employs the largest number of people in Greater Cambridge is Software Development & Publishing (6,237 employees). Businesses in this sub-sector tend to employ a higher number of people than those in other ICT sub sectors. Its largest businesses include Darktrace (cyber security - 1,440 employees), Frontier Developments (game development - 584 employees) and Jagex (game development - 474 employees).

2.37 The IT & Computer Services sub-sector (6,166 employees) has a similar structure to Software Development & Publishing with a higher proportion of ICT sector employees than businesses. Nine businesses employing over 100 employees account for 74.9% of subsector employment. The largest

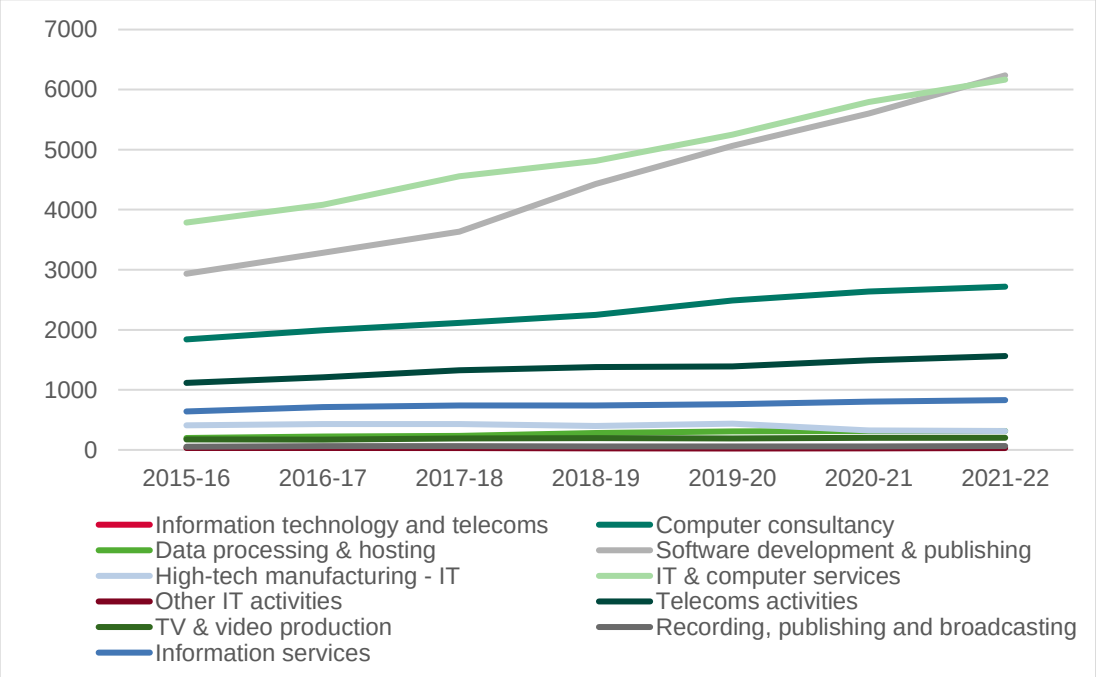
business in this sub-sector is ARM (semiconductor and software design – 2,809 employees) and it includes internationally recognised companies active in the field of AI such as EVI Technologies and Microsoft Research.

2.38 Computer consultancy is the largest tech sub-sector in Greater Cambridge in terms of the number of businesses. In general, these companies do not have large workforces. The vast majority of computer consultancy businesses are SMEs. 35% of businesses with the subsector employ just 15% of ICT sector employment.

2.39 Greater Cambridge is home to 102 companies within the TV & Video Production sub-sector, supporting 202 jobs. The subsector is predominantly micro businesses (< 10 employees) with only a few businesses employing more than 10 people.

2.40 Figure 3.6 shows that together the Software Development and Publishing and IT & Computer Services sectors have driven employment growth in ICT employment in Greater Cambridge since 2014/15.

Figure 2.7 ICT Employment by Sub-Sector, Greater Cambridge



Source: Cambridge Cluster Insights, Cambridge Ahead

2.41 The table below shows Greater Cambridge's top 10 ICT employers. The 10 largest employers employ 42.9% of the sectors workforce in Greater Cambridge.

Table 2.2 Greater Cambridge Top 20 ICT Employers

Company Name	Employees	Sub-Sector
Arm Ltd	2,809*	IT & Computer Services
Darktrace Holdings Ltd	1,440	Software Development & Publishing
EVI Technologies	608	IT & Computer Services
Frontier Developments PLC	584	Software Development & Publishing
Aveva Group PLC	479*	Computer consultancy
Jagex Ltd	474	Software Development & Publishing
Proquest European Holdings Ltd	458*	Information Services
RED Gate Software Group Ltd	399	Software Development & Publishing
Huawei Technologies Research and Development (UK) Ltd	368	Telecoms Activities
Aferian PLC	285	Computer consultancy

*Cambridge Ahead estimate

Source: Cambridge Cluster Insights, Cambridge Ahead

3. Greater Cambridge: spatial context for the sector study

Overview

3.1 This section looks at the spatial context in particular the locations and roles of key business and science parks across Greater Cambridge. Each of these tends to a particular role in the sector ecosystem and continue to evolve responding to increasing and changing demands for space. Many have a long history of development and some are orientated around particular research institutes.

3.2 Life science parks are concentrated south of Cambridge including Wellcome Genome Campus, Babraham Research Campus and Granta Park, with Cambridge Biomedical Campus at the southern fringe of the city.

3.3 Many parks also offer a science tech mix including the most established Cambridge Science Park at the northern edge of the city, as well as Histon Vision Park and Cambridge Research Park further north.

3.4 Higher demands for land associated with lab space and the large clustering at parks logically locates them at edge of city / out of town locations, although more recent proposals have included both central urban and more rural locations.

3.5 ICT / tech and office park / locations combine edge / out of town locations with inner city and city centre destinations, the latter enabling denser office space combining proximity to amenities, labour and public transport notably rail access.

3.6 The Centre for Business Research, University of Cambridge note that business parks are an important part of the innovative milieu of the

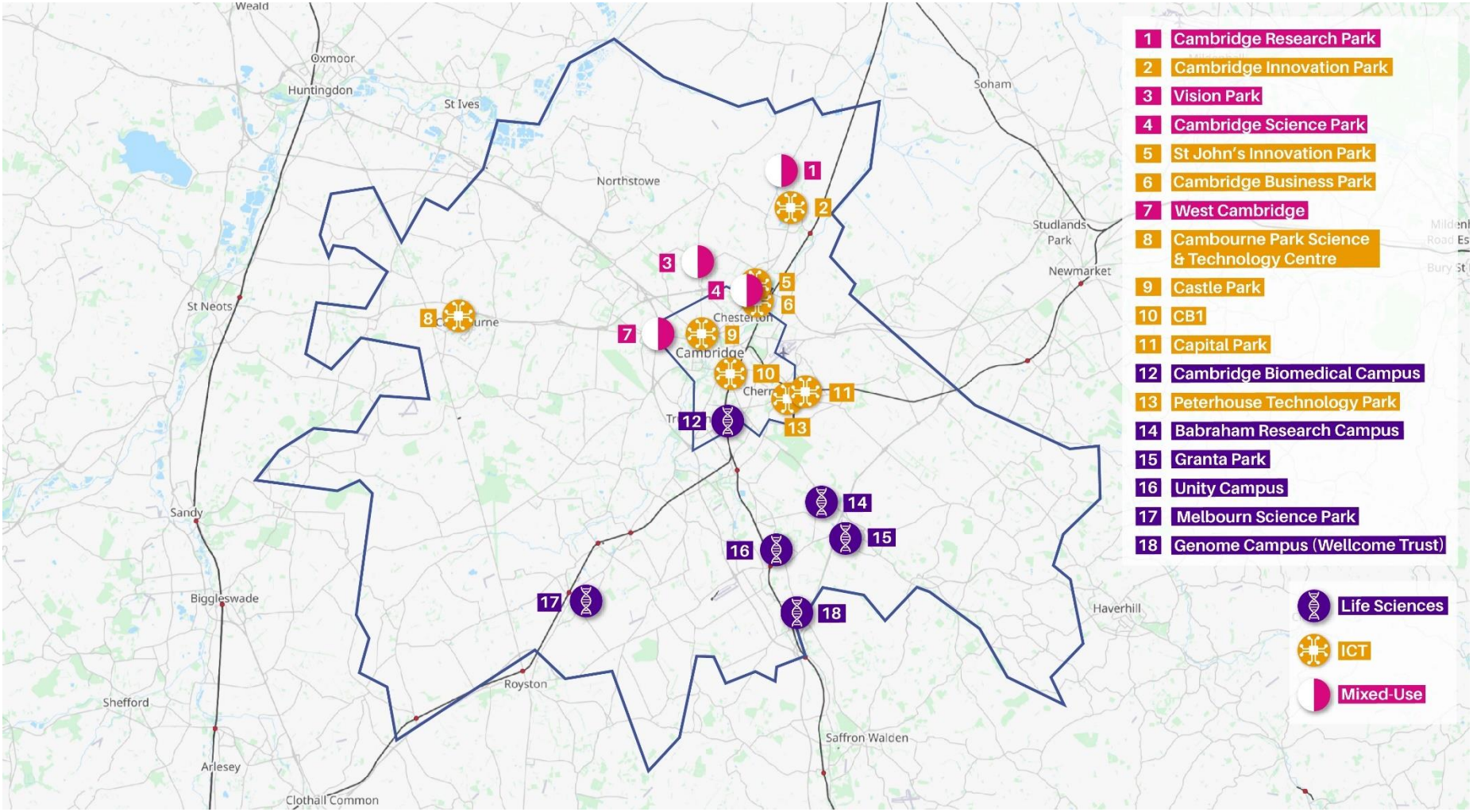
Cambridge City region and twenty knowledge intensive focused parks have a dominant influence on innovation in the region[37].

Key business locations in Greater Cambridge

3.7 The ICT and life sciences sectors are distributed throughout the area but notably concentrated in a number of business park locations. The map below highlights key science and technology parks within Greater Cambridge, categorising them by their primary sector focus.

[37] The Economic Geography of the Cambridge City Region - a story of corporate resilience 2023, CBR

Figure 3.1 Map of Greater Cambridge Parks by Sector Focus



3.8 Life science focused campuses have tended to be located outside of the city centre on developments such as Cambridge Biomedical Campus, Granta Park, Babraham Research Campus Unity Campus and the Wellcome Genome Campus to the south of Cambridge city centre. Cambridge Science Park also hosts life science activities on the city northern edge. These tend to have lower density facilities and businesses are more space hungry than those in the ICT sector.

The ICT focussed parks are generally closer to the city centre such as CB1 around Cambridge Station / Hills Road, Castle Park, Cambridge Business Park and Peterhouse Technology Park, - as well as Cambridge Science Park.

3.9 It is of note that recent planning permissions for life science developments have seen new patterns emerging. This notably includes the Grafton Centre redevelopment in urban Cambridge, Cambridge North and the development / expansion of locations to the south such as Melbourn Science Park.

3.10 The following section gives a brief overview to some of Greater Cambridge's larger science and technology parks.

3.11 **Babraham Research Campus** has a focus on supporting early stage bioscience enterprises including being the area's leading provider of life science start-up facilities and support.

3.12 The Campus is a rural parkland estate home to over 60 companies, 2,000 jobs and 300 academic researchers[38]. It is located just off the A11, 5 miles south of Cambridge and 1 mile from Granta Park. It hosts the Babraham Institute, a life sciences research institution focussing on healthy ageing and molecular biology, an independent charitable organisation.

3.13 The campus provides over 35,000 sq.m of floorspace from flexible, co-working, bench space (LiveLabs) to fully-fitted, high tech lab and office space

[38] Home - Babraham Research Campus

for scale-ups. Multi-occupancy buildings are designed to support the early stage needs of new life science ventures, with units from 50 sq.m to 5,000 sq.m available on a range of leases. Occupancy tends to be consistently near full. The are proposals to expand Babraham in the emerging Local Plan and there is an existing permission for a new office / R&D building[39] which is currently under construction.

3.14 Start-ups located at Babraham Research Campus that outgrew their premises move onto Granta Park, Chesterford Research Park, Wellcome Genome Campus and Cambridge Science Park.[40]

3.15 The Park has a café and is a 5 minute walk from the village of Babraham where there is a pub.

3.16 **Cambridge Biomedical Campus** is a clinical research campus, located on the same site as the teaching hospitals of the University of Cambridge and other research organisations including the Cancer Research UK Cambridge Institute, Clinical Research Centre and Medical Research Council Laboratory of Molecular Biology, creating an optimum environment for the rapid and effective translation of research into routine clinical practice. It is the largest employment site in Cambridge, located to the south of the city centre and contains Addenbrookes Hospital.

3.17 Astrazeneca and Abcam both have their HQ buildings located at CBC and GSK are located within the hospital campus. ideaSpace is located in the Clifford Allbutt Building a co-working area for biomedical start-ups or individuals.

3.18 It is undergoing major expansion that includes the co-location of companies alongside the existing 17,500 community of healthcare professionals and

[39] 21/03607/FUL

[40] Microsoft Word - Babraham Master FINAL MAY 26th 2020.docx

research scientists[41]. Phase 1 is nearly complete with construction on the new Children's Hospital starting at the end of 2025 and the recent permission for the Cambridge Cancer hospital[42]. There is further activity on Phase 2, with the second plot, 1000 Discovery Drive[43], nearing occupation and a planning application currently under consideration for two R&D and office building at 2000 and 3000 Discovery Drive. Phase 3 of the site has been allocated in the South Cambridgeshire Local Plan and will expand the site to the south.

3.19 Additionally, a new rail station, Cambridge South is currently under construction and will serve the campus providing services to and from London, Stansted Airport and Birmingham.

3.20 The campus has a range of amenities within the hospital including cafes, fast food restaurants, newsagents, hairdressers, supermarket, bank, nursery, green space and gardens and a sports centre, however there are limited amenities across the rest of the campus.

3.21 **Cambridge Business Park** is an urban tech / business park which comprises 12 office/technology buildings, amounting to 30,000 sq.m of floorspace. Key occupiers include Qualcomm, Redgate Software and Price Bailey[44]. The Park is located in the north of Cambridge a 10 minute walk from Cambridge North railway station. The Park lies within the emerging NEC AAP[45] area, a planning framework which would seek to create a new city district covering a183ha of brownfield land including an additional 188,500m2

[41] Cambridge Biomedical Campus | Health Care, Science & Medicine (cambridge-biomedical.com)

[42] 16/1078/OUT Cambridge Medipark

[43] 20/03950/REM

[44] cambridgebusinesspark.co.uk

[45] North East Cambridge Area Action Plan

of commercial floorspace. The vision includes the relocation of the Cambridge Waste Water Treatment Plant.

3.22 **Cambridge Research Park** provides a mix of commercial occupier types. It is located on the A10, 6 miles north of Cambridge to the north of Waterbeach. The Park provides self-contained office, lab, hi-tech and industrial accommodation, with over 31,000 sq.m of floorspace.

3.23 The Research Park is partially developed with three outstanding plots which received planning permission for office, R&D, light industrial or storage and distribution uses in 2021[46] including plot 5000 which received reserved matters permission for mid-tech and low-tech buildings in 2022.

3.24 The Park has diversified in recent years with a range of new Plug & Play Grade A office suites, the conversion of existing office floorspace to lab space and the development of 'Enterprise' mid-tech units.

3.25 The Park is set in a parkland setting and is located next to the Waterbeach New Town development. A shuttle bus is provided to and from Cambridge North station and has improving cycle connection to surrounding villages and towards Cambridge via the new town at Waterbeach, adjacent to the site.

3.26 **Cambridge Science Park** is the longest standing campus development in Greater Cambridge. It was established in 1970 by Trinity College Cambridge and is home to a mix of science and tech companies with start-up space provided on site at the Bradfield Centre and TusPark Bio-Innovation Centre. The Park comprises of 150 acres, hosting 160,000 sq.m of high technology and laboratory buildings, 7,000 employees and 170 companies[47]. Located just off the A14 in the north of Cambridge, the Science Park is one mile from

[46] S/4615/18/OL

[47] Cambridge Science Park - Building a better world

Cambridge North railway station and adjacent to the Cambridgeshire Guided Busway and cycle path.

3.27 A wide range of companies and entrepreneurs in the knowledge economy are hosted on the Park with businesses working on, amongst other things, life-enhancing technologies ranging from non-invasive diagnostics and novel medicines to next-generation display and communication technologies.

3.28 Recent developments at the Science Park have included the 1 and 2 Cambridge Science Park and the Tus-Park Bio-Innovation Centre. There is renewed interest in intensification including a pending application for further development at 440 Cambridge Science Park[48]. Several of the businesses located at the Park have moved elsewhere in Greater Cambridge to obtain the mix of office, R&D, production and storage space they require for expansion.

3.29 The Park lies within the proposed NEC AAP area (see above). The emerging Action Plan identifies opportunities to maximise its potential, including increasing the scale and range of activities on the site.

3.30 Amenities at the Park include a nursery, a health centre, barbers, food trucks and a café.

3.31 **Cambourne Park Science & Technology Campus** is an out of town tech / business park home to 60 companies, including medical research specialists Carl Zeiss,MTK Wireless, semi-conductor manufacturers and numerous smaller scale businesses based within Regus offices. The Campus offers Grade A offices and lab space.

[48] 24/01079/FUL – new R&D building

3.32 The Cambourne campus was acquired by Life Science REIT in 2021 and is currently undergoing a repurposing and retrofitting of 6,500 sq.m of existing floorspace to create wet and dry lab spaces[49].

3.33 It is located on the A428, 9 miles west of Cambridge in the northwest of the settlement of Cambourne where there are two hotels, a supermarket, a gym and a pub within a 10 minute walk of the Campus.

3.34 The Park has taken time to build up occupancy. Its more limited public transport connectivity, considered to be a reason for its slower take-up, will be improved through the potential East West railway connecting Oxford to Cambridge.

3.35 **Capital Park** is a specialised office park located in Fulbourn. Its current facilities include 15,800 sq.m of Grade A offices and 7,200 sq.m hospital converted into offices.

3.36 The Park has a vision to capture life science businesses through the modification and re-use of existing buildings and new-build development. Planning permission has recently been granted to modify CPC1 and CPC2 to create new laboratory space.[50].

3.37 Amenities at the Park include a day nursery and preschool, fitness and pilates studio, café. The site has cycle and footpath links to the city and a bus service between the park, city centre and train station.

3.38 **Granta Park** was established over 20 years ago and is home to life science occupiers such as Gilead, Astrazeneca, Illumina, Pfizer and PPD, supporting 3,700 jobs[51]. It is located on the A11, 6 miles south of Cambridge.

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[49] Home - Cambourne Park

[50] 23/00413/FUL

[51] Granta Park. Centred on science. - Granta Park

3.39 The Park consists of 13 buildings, providing 70,000 sq.m of floorspace and has a number of permissions in place for its expansion and redevelopment including Phase 2 Zone 2 which will provide over 32,000 sq.m of floorspace[52] and the redevelopment of the Welding Institute's Campus for TWI and/or R&D purposes. One Granta, which will be a Headquarters lab and office building, is currently under construction..

3.40 The Park offers many amenities including fitness and wellbeing centre, restaurant, conference centre, commuter bus, nursery and a car share scheme.

3.41 **Melbourn Science Park** is located 9 miles to the southwest of Cambridge, offering office, lab and shared workspace. It covers 17 acres with nine buildings providing 18,500 sq.m of floorspace[53] and is well-let.

3.42 Following the relocation of TTP into their new adjacent Melbourn HQ development, adjacent plans have been approved at committee for a masterplan redevelopment of the Park . This will provide world class lab and coworking space, and leased and managed office space for science and tech businesses, in addition to a village green, boutique hotel and restaurant.

3.43 The Park is a 10 minute walk from the village centre which contains a supermarket, barbers, takeaway, B&B, cafes and a pub.

3.44 **St John's Innovation Park** is owned by St John's College, University of Cambridge and adjacent to Cambridge Science Park (across Milton Road). It has 7 buildings and a philosophy engendered in 1987 of supporting young knowledge based businesses. These cross technology and life science organisations include DarkTrace, Qualcomm, Raspberry PI and Samsung. St John's Innovation Centre is host to around 80 firms a majority of which are in

[52] 22/05549/OUT

[53] Melbourn Science Park | Cambridge | Bruntwood Scitech

the knowledge economy and a number offering supporting services such as marketing, accountancy and legal services.

3.45 There is an approval in place for the first phase of redevelopment of the Park which involves the demolition of St John's House and erection of 5 and 6 storey buildings[54]. There is also permission for the demolition of Vitrum House and erection of an R&D building[55]. The Park is part of the emerging NEC AAP area (see above).

3.46 **Wellcome Genome Campus** is home to the Wellcome Sanger Institute and EMBL's European Bioinformatics Institute as well as genomics and biodata companies, scientific facilities and a conference centre. It has a range of research programmes which have led to a number of spin-out companies.

3.47 The Wellcome Sanger Institute has one of the largest DNA sequencing facilities in the world. The EMBL-EBI provides open access to biological research datasets, which are used extensively across the world by more than 2 million researchers.

3.48 The BioData Innovation Centre is an incubator for businesses of all sizes and stages of development and provides flexible rentable office and dry lab units to suit SMEs, early start-ups and individuals. There are currently no larger units immediately available.

3.49 The Park has outline permission for expansion plans which includes over 120,000 sq.m of new genomics and bio-data floorspace and private homes and facilities to support the retention of talent and sustain/enrich the community.

[54] 20/03523/FUL

[55] 23/01509/FUL; 23/01487/FUL

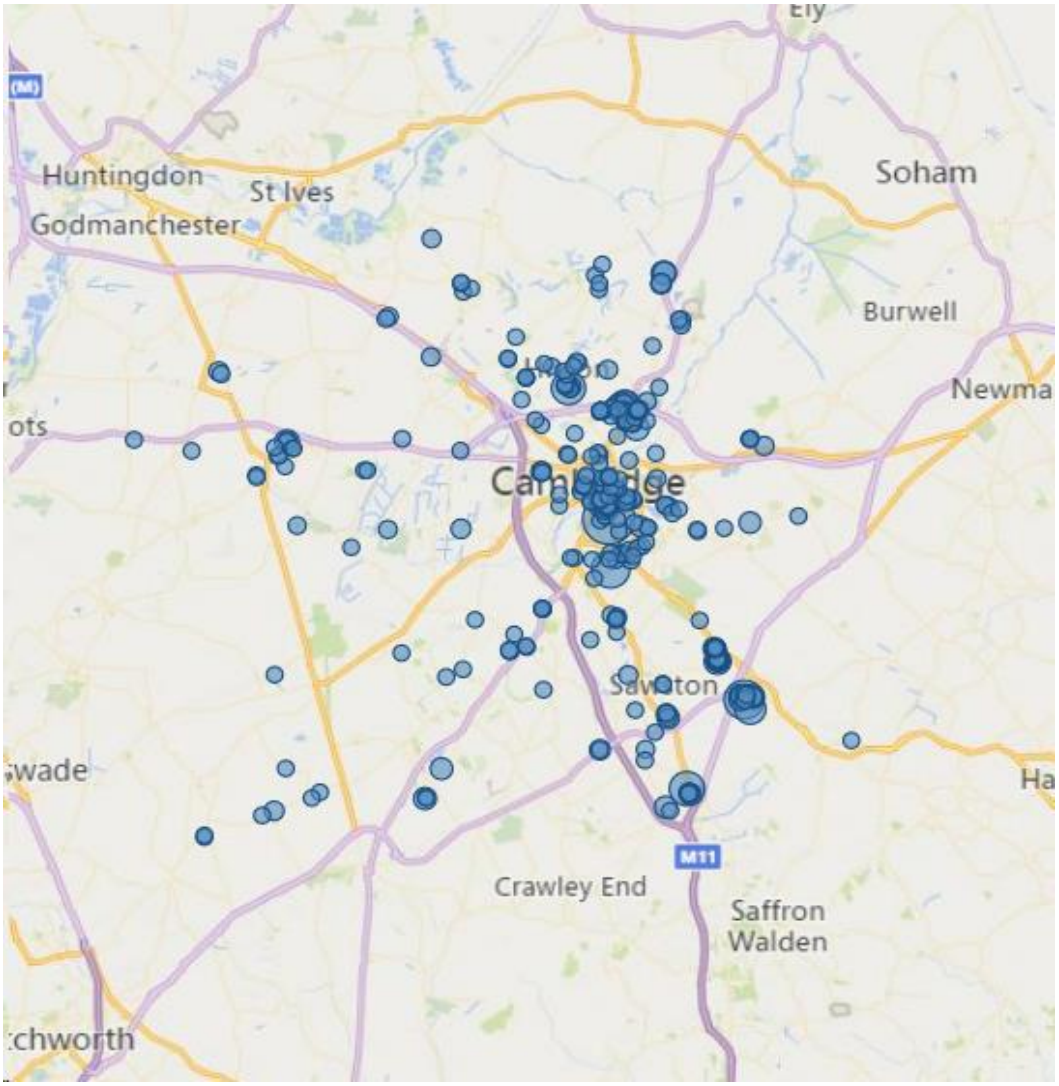
3.50 The Park is located at junction 9a M11, to the south of the village of Hinxton, 8 miles south of Cambridge. The campus has three cafes and an onsite restaurant, sports hall and gym, social sports clubs and a nature reserve.

Life Sciences

3.51 The map below, as reported by Cambridge Ahead / Cambridge Cluster Insights, shows the location of life sciences businesses within Greater Cambridge, with the size of the bubble reflecting company size by employees. In line with the analysis of parks as discussed above, there are clusters of life sciences businesses at:

- Babraham Research Campus
- Wellcome Genome Campus
- Granta Park
- Cambridge Science Park
- Cambridge Biomedical Campus
- Melbourn Science Park
- Unity Campus, Sawston

Figure 3.2 Life Sciences Companies by Location



Source: Cambridge Cluster Insights, Cambridge Ahead

3.52 There are a number of incubator space and accelerator programmes for the life sciences sector including:

- Accelerate@Babraham
- Biodata Innovation Centre (BIC), Wellcome Genome Campus
- Frame Shift Bio-incubator, Milner Therapeutics Institute
- Mill SciTech Park, Hauxton Mill site
- TusPark Bio-Innovation Centre, Cambridge Science Park

ICT Sector

3.53 The map below shows the location of ICT businesses across Greater Cambridge. The bubbles reflect the size of the company by employees – most companies have 9 or less employees.

3.54 There are clusters of ICT businesses in numerous locations including around:

- Cambourne Park Science and Technology Campus a range of business sizes and stages including Aferian Plc;
- Cambridge Station and Hills Road (CB1), with flexible workspace and corporate offices supporting smaller ICT firms up to global businesses including Microsoft;
- Cambridge Business Park typically offering larger corporate space and hosting occupiers such as the BBC, RED Gate Software and wider professional services;
- Cambridge Science Park, with a diverse range of ICT and life science occupiers typically medium and large scale such as Toshiba,Huawei and Napp Pharmaceuticals;
- St John's Innovation Park, tending to support small and medium sized businesses at the Innovation Centre with larger ICT occupiers in other buildings including Darktrace, Quallcomm and Samsung;
- Vision Park, Histon;
- other city locations including at the eastern edge Peterhouse Technology Park where ARM reporting over 2,000 staff; and
- a range of activity in surrounding settlements like Great Shelford, Sawston, Cottenham.

3.55 There are a considerable number of established business support incubator spaces that businesses with the professional services and ICT sector use:

- Allia Future Business Centre, King Hedge's Road, Cambridge

- Barclays Eagle Labs, Chesterton, Cambridge
- Deeptech Labs
- ideaSpace City / South / West
- Founders at the University of Cambridge
- The Bradfield Centre, Cambridge Science Park
- St John's Innovation Centre

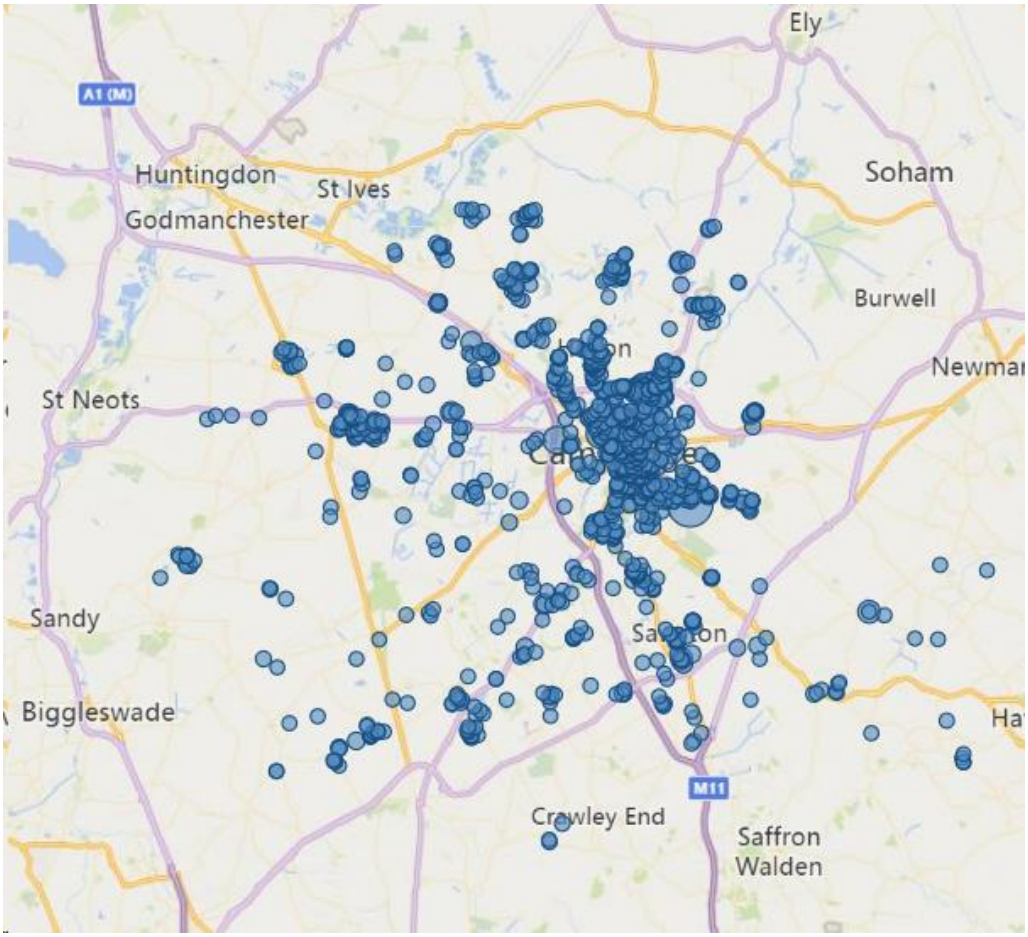
3.56 There are many locations across Greater Cambridge that provide start-up and serviced office floorspace for early stages in the business cycle. One example is St John's Innovation Centre where there are around 95 units designed to accommodate from two to 40 people. At St John's Innovation Centre, there is a central reception and shared common areas which support knowledge sharing and collaboration.

3.57 Outside of the city centre, Cambridge Business Park, St John's Innovation Park, Cambridge Innovation Park (Waterbeach) provide incubator space. At Cambridge Innovation Park, Stirling House provides for start-up and small businesses in a co-working office layout. This space predominately hosts businesses in high-tech, IT and professional services and occupiers benefit from the collaborative environment. At Cambourne Park Science and Technology Campus, Regus provides flexible floorspace and offers short term let arrangements. Businesses in IT, telecommunications, research and development and professional services occupy space at Regus.

3.58 Larger scale serviced or independent managed office accommodation – consistent with the needs of substantial ICT and professional service firms – is available at (for example) Capital Park (Fulbourn), Cambridge Business Park and Cambourne Park Science and Technology Campus. Cambridge Science Park provides various sizes of office floorspace – including multi-occupier buildings at around 40,000 sq. ft or floors ranging from 10,000 sq. ft. to 17,000 sq. ft. CB1 in Cambridge city centre is made up of six new office buildings ranging in total floorspace supply. For instance, One Station Square provides 129,000 sq. ft, accommodating Amazon, Deloitte and Carter Jonas;

while 22 Station Road provides a total of 64,800 sq. ft hosting businesses such as Mott MacDonald, Slater and Gordon, Stace and Birketts.

Figure 3.3 ICT Companies by Location

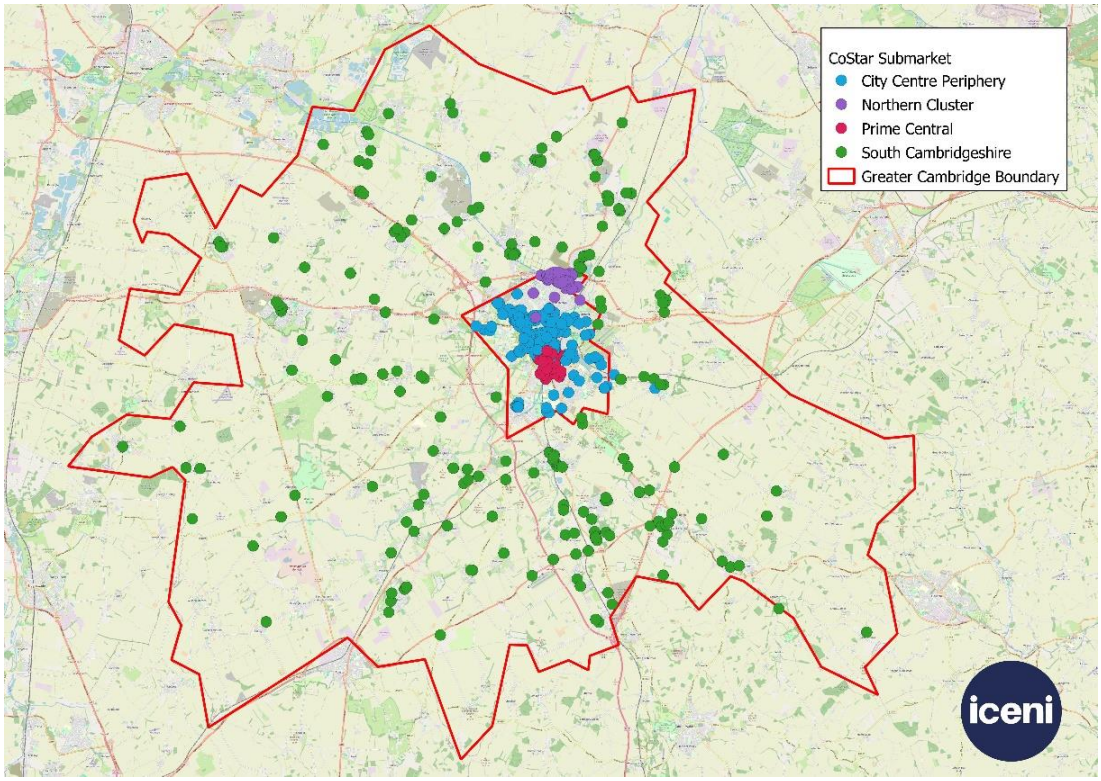


Source: Cambridge Cluster Insights, Cambridge Ahead

3.59 A similar pattern emerges when mapping the office stock in Greater Cambridge and the CoStar submarkets[56], with dense concentrations in the city centre, the Science Park and then spread more widely across South Cambridgeshire.

[56] Costar recognised submarkets that represent a division of a primary market and outlines a core area that is competitive with other submarkets, representing similar property types.

Figure 3.4 Office Stock by Submarket



Source: CoStar (2024)

3.60 Average market asking rents for the submarkets reflect their primacy. Prime Central (City Centre) rents are highest at £42.12 psf. The Northern Cluster (Cambridge Science Park) sees a premium over the rest of the City Centre Periphery (wider City) with rents of £35 psf compared to £32. Office rents across South Cambridgeshire are more affordable at a rate of £26 psf.

4. Business evolution and requirements

4.1 This section considers typical business growth patterns and accompanying accommodation requirements. It covers:

- Types of space: wet lab, dry labs and offices.
- How accommodation needs typically change over business evolution for life science and ITC businesses.

Space types

4.2 Life science research often takes place in wet labs. Wet labs involve biological matter – these are controlled environments where drugs, chemicals and biological matter can be analysed and tested. Conducting experiments with these substances requires additional features, such as drain and vent services, chemical fume hoods and materials resistant to chemicals and bacteria. These are often high cost to develop and maintain. Life science research often requires wet lab space alongside office space.

4.3 Generally ICT businesses operate in an office based environment be that flexible workspace or more corporate offices.

4.4 Dry labs in the context of this report are required for genomic research and sequencing and some advanced tech research and development. However dry lab space is usually more associated with physical sciences and cross over to advanced manufacturing R&D.

Dry labs focus on applied or computational mathematical analyses via the creation of computer-generated models or simulations in computing, engineering and physics. These tend to be lower cost and can be used by a range of sectors. Dry labs are different from offices as they are still about experimental activity and often still require “clean rooms” that may involve testing dry equipment or materials. Examples include the testing of electro-magnetic noise, semi-conductor development, computational modelling of space theories and quantum state analyses. Dry labs often require humidity and temperature control and dust control to ensure that any electronics are well maintained.

4.5 Both wet and lab types typically require back office space for administration and write-up functions.

Funding

4.6 Start-ups in all sectors require funding to grow their ideas and business. This is typically referred to as series ABC.

4.7 Seed funding is the first official equity funding stage. It typically represents the first official money a business venture raises and can involve equity options.

4.8 The first round after the seed stage is Series A funding. Series A funding typically provides businesses with money to pay employees and scale across the market. It is generally the first or second round of funding for a startup, depending on whether the founder went through a seed round or if the business was self-funded. While angel investors are known for investing seed funds in a business during the concept phase, Series A funding generally requires proof of concept. The percentage of startups that graduate from seed to Series A is small. For life science, Series A funds mean moving to clinical trials.

4.9 After a business has launched its initial products and started making money, founders can pursue Series B funding. They seek a cash injection to expand their market a brand or develop new product lines.

4.10 Series C funding has the goal of preparing a company to be acquired, go public on the stock market or undergo significant expansion, possibly through acquisition. Businesses that raise Series C funding are already quite successful. These companies look for additional funding to help them develop new products, expand into new markets, or even acquire other companies.

Life Science

4.11 The table below summarises key information about the growth stages and requirements of life science businesses. The report 'Constructing Science: Guidance for Life Science Labs' 2023 available on the MEDCITY website (London's Life Science cluster group) provides useful information regarding wet lab specifications.

4.12 Life science requirements tend to be for a ratio of around 60:40 lab to office which would make up the composition of floorspace below. Start-ups and smaller companies might be closer to a 70:30.

4.13 It is of note that the definition of scale-up used below and throughout this report is in reference to the below and not the OECD definition relating to "enterprises with at least 10 employees at the beginning of a 3 year period that saw average annual growth of over 20%".

Table 4.1 Life Science Stages

	Incubator / Start-up	Scale-up	SME	Large
Staff	1-10	11-100	100-250	250+
Space sq.m	<200	200 – 2,500	2,500 – 5,000	5,000+

Fund	Typically grant- and/or founder-funded, pre-seed	Raised or raising some equity funding alongside grant funding. Series A. Most commonly in space under 1,000 sq.m.	Reached some commercial milestones, generating revenue. Series AB	IPO / listing or move to trade sale. Series C
Property	Short term lets given the level of uncertainty and risk	Improved leasing but remains risk.	Strong lease covenants.	Strong lease covenants / freehold
Support	Business incubators / bench space, fully fitted	Small lab space and back office.	Can be more isolated from established institutions, although many still prefer the proximity.	Labour market cluster / or specific research proximity depending on type

Source: Stakeholders; Med CITY / Constructing Science: Guidance for Life Science Labs 2023; Review of Wet Lab Space and Incubator Space for the Life Sciences in the Cambridge Area, Cambridge Ahead, 2017

4.14 Whilst the above trajectory may be typical, businesses will frequently diverge depending on their specific requirements. This might include company footprints growing larger at Series A (startup stage) and needing a lot of wet lab space for R&D, but actually scaling down their space needs and reducing lab space as they grow due to outsourcing wet lab activity to Contract Research Organisations.

Specifications and Requirements for Wet Lab Space

4.15 The requirements for wet lab space are more specific than dry lab space, making viability a key issue for stakeholders. Design specifications for wet lab spaces include specialist equipment, air handling, and higher slab-to-slab heights - all of which increase costs. This is why wet lab space for early-stage companies has been supported by public or charitable funds.

4.16 These requirements, particularly higher slab-to-slab height requirements for wet labs, can create issues when repurposing office space. Additionally, equipment requirements are sometimes missing from wet lab spaces, with freezer farm space reportedly being missing from many labs despite its ability to substantially reduce costs.

4.17 The energy demands from wet labs can be up to 10 times more than a typical office and designing ‘green labs’ can be challenging.

4.18 Start-ups tend to be reliant on funding rounds and university support, therefore the transition into a Series A stage company can be challenging if there is a lack of affordable lab space. Additionally, shorter term leases are often necessary due to the rapidly changing composition and needs of life science companies over their first five years, contrasting the traditionally long-term and inflexible laboratory leases on offer.

Life science lifecycle narrative

4.19 Series A and B stage companies typically make up multi-occupancy building laboratory space and can be seen as risky to landlords due to the ‘incubator’ needs from supporting infrastructure, as well as the typically long periods of time before a profit is first made.

4.20 Series C stage companies are ideally looking for their own building to lease with larger unit sizes, with the ideal scenario being they are able to expand with little disruption into a nearby site. A lack of larger laboratory spaces constrains growth in the sector because growing companies cannot release smaller unit sizes for SMEs to take their place – and there are examples of where this has happened in Cambridge.

4.21 An example of a supportive 'incubator' environment for Seed and Series A life science businesses is the Babraham Research Campus, which recognises the long-term growth potential of fostering a clustered ecosystem of life science companies, and therefore focuses on providing a strong network for small R&D business and providing greater investor reassurance when applying for investments and funding.

ICT

4.22 The table below summarises key information about the growth stages and requirements for ICT businesses.

Table 4.2 ICT Stages

	Start-up	Scale-up	SME	Large
Staff	1-5	6-30	30-250	250+
Space sq.m	0-10	11-500	501-2,000	2,001+
Fund (varies)	Early stage / pre seed / Series A	Series A/B	Series B/C	Series C
Property	Hot desk / very short let	Improved leasing but remains risk.	Strong lease covenants.	Strong lease covenants / freehold
Support	Business incubators / commercial hot desk space.	Smaller – medium office multi-let space	Larger scale serviced or independent managed office accommodation	Larger scale serviced or independent managed office accommodation

Source: Stakeholders

Specifications and Requirements for Dry Lab

4.23 In reality, the vast majority of ICT businesses require the general office environment, the characteristics of which are not repeated here.

4.24 A limited number of ICT businesses require dry labs, and this crosses into physical science research. A dry lab is essentially a computer lab, its structural requirements are considerably less than those for a wet lab. Nevertheless, a dry lab still has some specific requirements for it to function properly and safely. While multiple data ports are obviously necessary, a dry lab also requires the following:

- Dust suppression system
- Humidity and temperature control system
- Fire suppression system

4.25 Electronic equipment can be very sensitive and can become a fire hazard if it becomes overheated. The systems listed above allow researchers to complete their work and maintain safe conditions for them as well.

4.26 ICT dry labs and advanced computing offices need secure data centre type environments that have sufficient power, air conditioning and structurally suitable flooring for hardware racking. This is increasingly important for some of the deep tech software development where they rely on specific hardware rather than general purpose computing. There are examples of AI companies building their own datacentres with AI optimised equipment. In the Cambridge area is a burgeoning number of quantum computing start-ups who will need specific hardware local to the office space.

4.27 Whilst many incubator /start-up locations refer to dry labs, stakeholders suggest that only Wellcome provides advanced computing dry lab serviced space and there is some feedback that this is lacking in the market.

ICT lifecycle narrative

4.28 Early stage ICT businesses typically seek flexible office floorspace often on short term let arrangements or are hosted in dedicated incubators. Requirements include office buildings that offer a choice of private offices, workspace that is shared with other businesses and hot desks; equally though, if businesses do start to grow, the scope for in situ expansion is often welcomed.

4.29 Spaces that are typically required at the early stage are floorspace densities of less than 1 employee per 100 sq ft (9 sqm). The typical floorspace requirements of start-up businesses can be just a few desks within a hot desking environment that has a range of supporting facilities and community spaces for interaction, knowledge sharing and business support.

4.30 In both ICT and professional services, the relationship between floorspace and growth are increasingly indirect. Through remote and home working, effective densities are increasing quickly and business models are evolving to be more virtual in character; many businesses will see growth without a commensurate increase in floorspace. Equally though, within these sectors, some businesses may grow very quickly. In these circumstances, it is important that appropriate office space is available so a supply of flexible offices or managed workspaces in the marketplace is needed.

5. Locational and accommodation needs

Overview

5.1 This section provides recommendations on locational and accommodation priorities for the life science and ICT sectors, which have been developed through stakeholder interviews, business survey and literature review. Whilst acknowledging differing individual organisational requirements, there are clear overarching needs which are further dependent on their organisational stage and size. Key findings include:

Life science locational needs

- Trend towards integrated ‘place’ based locations that encompass quality premises with amenity offer and connectivity including commuting via public transport.
- Life science centres require sufficient ‘space and scale’ recognising that facilities tend to be lower density and therefore space hungry as well as potentially having some bad neighbour characteristics such as deliveries, waste disposal and extraction.
- Companies invariably look to edge-of-centre campuses and out of town science parks where there may be greater levels of supply and flexibility in accommodation. Urban settings are increasingly popular but may be space restricted in terms of scale / critical mass and unit sizes.
- A significant critical mass to create a community that can attract and retain a concentrated labour pool on site, creating a network and community of workforce, as well as a viable offer of facilities, both technical and amenity focused.
- For smaller businesses and start-ups, the need to be located with institutions or research centres that can provide appropriate space at

affordable cost, which is often not viable in fully commercialised centres

- For some businesses, the need to be in close proximity to clinical research centres such Cambridge Biomedical Campus, but others require a location with academic research or in a broader commercial non-clinical campus, depending on sector specific focus.
- Amenity offer as a part of a place making strategy including cafes / restaurants, green spaces, gyms, sustainable / functional transportation and market housing that is affordable.
- Sustainable, affordable and reliable transport connections are highly desirable across the occupier spectrum however many of the science parks in reality are accessed and accessible by car which requires parking space and enables in-commuting from a range of locations.
- Space for interaction and collaboration, particularly for start-up / scale-up businesses

ICT locational needs

- Focus on premium locations providing quality stock and amenity over periphery locations and older stock. This is important in attracting staff back to the office in an increased work from home culture.
- City centre / urban locations or high quality edge of centre parks being preferred over fringe / rural locations.
- Locations offering a range of amenities are a priority particularly for larger businesses to attracted and retain talent.
- Public transport is important. Rail connections are a priority for businesses needing a London connection. Others in the sector in Greater Cambridge require locations with good road network access and parking for commuting purposes.
- For start-ups and smaller businesses, there are specific needs in terms of incubator or innovation centre support and potential mentoring; and as a minimum flexible hot desking space. In Greater

Cambridge, this is largely provided in existing business parks or centres such as Cambridge Science Park, CB1 as well as the the University of Cambridge.

- Immediate proximity clustering and collaboration is beneficial for start-ups and smaller businesses but for larger businesses this occurs at a labour market level through provision of a highly skilled workforce.
- Access to market housing that is affordable is a concern for ICT businesses.

5.2 The business survey indicated that access to public transport is a key locational priority for the life sciences and ICT sectors. Some existing periphery locations have struggled to be successful even in high demand periods as they lack the connectivity and integrated offer that the sectors seek.

5.3 While cost was regarded by survey respondents as an essential factor, when probed, life science stakeholders both large and small appeared to regard amenity and clustering as more important features.

5.4 Community, collaboration and clustering were considered essential by stakeholders to the life science story and enable growth through interaction, shared research, skillsets and knowledge. Larger campus environments therefore maximise growth potential.

5.5 Locationally, larger R&D life science organisations tend to gravitate towards edge-of-centre campuses and out-of-town science parks, taking advantage of space / land availability, but there is a sense that urbanised life science hubs are increasingly popular, due to their proximity to labour and city centre amenities.

5.6 For smaller organisations and start-ups (for ICT and life science), there is an emphasis on the importance of incubators and proximity to institutions in supporting early growth. Institutions with innovation centres can play a pivotal role through the provision of dedicated affordable and flexible space, as well

as a wider range of facilities and knowledge / expertise. For life science, start-up wet labs are typically not viable as a standalone proposition.

5.7 Stakeholders consistently reported that in recent years there has been a constraint in the supply for lab / R&D premises across Greater Cambridge and this persists into 2024. There are requirements across the spectrum of lab sizes.

5.8 There is a continued shortage of space reported for start-up and particularly scale-up firms. While facilities such as Babraham and TusPark Bio-Innovation Centre are intended to address the requirements of early-stage firms, stakeholders noted that the existing stock of specialist and smaller laboratory workspaces has proven insufficient to meet the current and forecast level of demand. The lack of available next stage scale-up space has been particularly acute and meant smaller firms cannot move up. In some instances larger firms are taking scale-up space due to a lack of alternative options.

5.9 For the ICT sector, access to public transport and amenities were key, with city centre locations preferred over out-of-town campuses. Stakeholders noted the success of CB1 at Cambridge Station was due in part to the proximity to the rail network. In an environment where working from home is common, a quality amenity offer (e.g. green space, food and beverage, entertainment, high quality public realm) helps to bring staff to the office to collaborate.

5.10 Institutional support was of lesser importance to the ICT sector than for life sciences, particularly for larger organisations, however clustering was regarded by ICT firms as a priority. Feedback suggests that interaction and collaboration was particularly applicable to start out / start-ups, who also benefit from wider business support structures.

5.11 Demand for ICT space was regarded as likely to increase, as ICT companies increasingly require staff to be in the office three days a week. Agents interviewed by Iceni reported a high demand for the smallest spaces (under 500 sq.m) which are invariably in flexible or managed workspace

environment. The mid (1,000 to 2,000 sq.m) and larger office footprints are still expected to see an ongoing healthy level of demand in the medium term.

Approach

5.12 This section highlights insights from literature, stakeholder interviews and the business survey on the specific locational and spatial needs of the sectors.

5.13 The following reports by commercial agents, institutions and government research have been considered:

- The Cambridge Bioscience Impact Assessment Study (2015) Institute of Public Health, University of Cambridge
- UK Life Sciences Industrial Strategy – A report to the Government from the life sciences sector (2017)
- UK Life Sciences Industrial Strategy Update (2020)
- Review of Wet Lab Space and Incubator Space for the Life Sciences in the Cambridge Area (2017) Cambridge Ahead
- Life Science Strategy for the Cambridgeshire and Peterborough Combined Authority (2021)
- UK Digital Strategy – DCMS (2022)
- Delivering R&D: Potential for the UK (2019) Bidwells
- ARC Market Databook: Offices & Labs Cambridgeshire (2022) Bidwells
- EMEA Life Sciences Cluster Outlook 2023 (JLL)
- Life Sciences UK Real Estate Market Outlook 2024 (CBRE)
- Investor Attitude Tracker 2023 (Digital Catapult)
- Digital Economy Monitor H1 2023 (techUK)
- The future UK tech built – Tech National Report (2021)

- A Digital Sector Strategy for Cambridgeshire and Peterborough (2019) (Cambridgeshire & Peterborough Combined Authority)

5.14 Discussions took place with the following stakeholders, in addition to direct conversations with a limited number of occupiers from both sectors.[57]

- Babraham Institute
- Bidwells
- Biomed Reality / Granta Park
- Bradfield Centre
- British Land
- Brockton Everlast
- Bruntwood SciTech (Melbourn Campus)
- Cambridge&
- Cambridge Ahead
- Cambridge Angels
- Cambridge Biomedical Campus
- Cambridge Innovation Capital
- Cambridge Science Park
- Cambridge University Health Partnership
- Cambridge Wireless
- Dr Andy Williams (Cambridge Biomedical Campus/ Astra Zeneca)
- Knight Frank
- Mission Street Property
- Prologis

[57] All views are reportedly collectively and are intentionally non attributable.

- Royal Society of Chemistry
- St John's Innovation Centre
- Wellcome Sanger

5.15 A business survey was also circulated to business park managers and other umbrella stakeholders to be issued to their occupier contacts. Overall 55 responses were received from a range of business sizes across the ICT (n=17), life science (n=22) and other (n=16, of which 10 high tech manufacturing) sectors. The results are detailed in Appendix A1 and summarised below.

Life science

Locational and space needs

The business survey conducted for this report finds, the following locational priorities reported by 22 life science businesses (both large and small) in Greater Cambridge:[58]

1. **Essential / Highly desirable:** Access to public transport
2. **Essential:** Cost / affordability of premises
3. **Highly desirable:** Access to amenities such as cafes / restaurants
4. **Highly desirable:** Proximity to housing
5. **Highly desirable / Desirable**: Proximity to learning / research institutions

[58]Respondents include a range of business sizes and locations with wet / dry lab and office components

6. **Highly desirable / Desirable:** Proximity to similar firms

7. **Highly desirable:** Conferencing / meeting facilities

8. **Highly desirable:** Access to a range of spaces for scale-up

9. **Highly desirable:** Access to strategic road network

10. **Desirable:** Access to supply chains

11. **Desirable:** Urban location

12. **Desirable:** Innovation centres / hubs / co-working

13. **Desirable:** Access to hotel

14. **Low priority:** Access to market / customers

5.16 The table below highlights the literature findings (appendix A2) on the specific facilities and amenities which life science organisations prioritise:

Table 5.1 Top priorities for life science organisations

Start-up/ small organisations	Larger R&D organisations
Purpose built spaces	Public transport hubs
Proximity to research institutions	Meeting facilities
Presence of local contacts and networks for funding or other form of support to allow them to focus on their R&D	Proximity to housing
Feeling part of a community / like minded cluster	Feeling part of a community / like minded cluster

Locational Priority: Collaboration, clustering, critical mass

5.17 Community, collaboration and clustering were considered essential by stakeholders to the life science story and enable growth through interaction, shared research, skillsets and knowledge. It allows companies to attract and retain talent. Collaboration is delivered where occupiers can agglomerate. At the ‘macro’ level this occurs across Greater Cambridge but at the ‘micro’ level occurs within facilities such as through the provision of collocated facilities and amenity / shared meeting spaces.

5.18 For Cambridge Science Park as an example, the park has an international reputation and is able to offer a holistic solution on a single site, is large enough to create a "buzz" that means talent stays once is arrives, creates a network and community of people in a permeable space and close enough to cycle to Cambridge city centre, access the A14 and reach Cambridge North. The scale of providing a solution on one site – which is also applicable to the other major parks – generates an important successful critical mass across small, medium and large firms.

5.19 Smaller scale more isolated facilities will have weaker micro collaboration opportunities and will be less attractive to occupiers who want to benefit from a direct community of shared knowledge and research that larger parks offer.

5.20 Micro level collaboration is more applicable to small and medium sized businesses, with larger businesses having their own internal collaboration space. Typically, whilst larger companies do not require shared collaboration space in the same manner as the smaller companies at the earlier stage of the lifecycle, they recognise the benefits this brings. As such, there an increasing recognition for porous spaces. An example of this is the AstraZeneca R&D headquarters which opened in 2023 at Cambridge Biomedical Campus. This includes a porous ground floor with collaboration and amenities space, to share rather than silo talent.

5.21 Stakeholders expressed concern about whether ‘new entrants’ to development proposals expanding the life sciences offer in Greater Cambridge will be successful given the strength of existing parks and the agglomeration of talent and critical mass they have. Some existing periphery locations have struggled to be successful even in high demand periods as they lack the integrated offer the sector seeks. This applies to proposals for new isolated rural as well as urban locations, that may be space limited and lack the scale to provide a range of spaces and depth of offer to be successful.

5.22 The potential of small / mid scale urban development remains unclear. Some commentators, as well as the case studies in the next chapter, point towards a future sector focus on urban / edge of urban locations that provide a comprehensive offer with more sustainable and integrated solutions in terms of place, particularly amenity and connectivity. Sufficiency of scale is therefore likely to be a determining success factor, with proposals of ‘several hundred thousand sqft’ of commercial space alongside appropriate supporting operations and amenities being required to create a place based development.

5.23 In the above context, JLL note that while R&D businesses have historically been located on edge-of-centre campuses and out of town science parks due to spatial needs, there has been an increased emergence of urbanised life sciences hubs[59]. City centre locations offer an advantage in terms of the concentrations of labour, along with the amenities, transport, and services that are attractive to employees.[60]

[59] EMEA Life Sciences Cluster Outlook 2023 (JLL)

[60] Delivering R&D: Potential for the UK (2019) Bidwells

Locational priority: Connectivity

5.24 Life science stakeholders agreed that connectivity was a priority, both ensuring that employees could reach the site as well as for managing deliveries / waste. Sustainable transport connections were noted as highly desirable across the occupier spectrum.

5.25 Cambridge South Railway station was welcomed by those interviewed; “this is exactly the infrastructure being sought by the sectors which will enhance the connection of the Cambridge Biomedical Campus to potential destinations such as London, Stansted Airport and Birmingham”.

5.26 Some businesses reported that staff commute from the wider east/south east region and London, meaning that functional transport links are required to maintain this talent pool to ensure the sectors can continue to grow.

5.27 In terms of the current Cambridge offering, stakeholders noted that some of the science parks in reality are primarily accessible by car. Concerns were raised that existing transport infrastructure constraints may restrict economic growth and the delivery of successful new facilities.

5.28 Individual parks and institutions are continuing to work to improve their transport offers. The shuttle bus to Babraham / Granta Park from Cambridge is well used. Future transport infrastructure investment and delivery will be required, with potential options including Cambridge South East Transport scheme and the anticipated East West Rail link, as well as other schemes planned /potential schemes (Cambourne to Cambridge, Cambridge Eastern Access, Waterbeach to Cambridge).

Locational and space requirements: large vs small organisations

5.29 The locational and space needs of startups and smaller businesses can differ from those of larger R&D businesses. Life sciences incubators typically provide low cost laboratory and office space and equipment, which may be shared, to start-ups to enable and support new enterprises in carrying out research, translation and building their businesses; facilities may be offered on short leases or on a day-to-day basis. Additionally incubators can facilitate

knowledge transfer, mentoring, advice including on finance and networking, which are crucial to research-intensive industries. The specific requirements of life sciences start-ups can often only be met by specialist providers – and the start-ups are crucial to the ecosystem of innovation.

5.30 There is evidence to suggest that companies based in incubators have a better survival rate and attract more investment than those that are not. Insufficient supply of space for new start-ups and early-stage firms can slow the creation and growth of new start-ups, as well as harming the benefits of clustering effects.

Locational priority: Proximity to / role of research institutions

5.31 The presence of and proximity to existing institutions including most notably Babraham and Wellcome Sanger is reported as being of considerable importance and a major attraction to the life science sector occupiers at the start-up-phase – but is limited for mature businesses unless seeking clinical research access.

5.32 Institutions with innovation centres and support can play a pivotal role most critically through the provision of dedicated affordable and flexible lab space, a wider range of facilities and knowledge / expertise. This is focussed at the earlier stages of those in the eco system, start-ups into scale-ups. These support growth and agglomeration by providing space for life science start-ups that is generally not available elsewhere (although can be provided by the private sector particular within a sufficient scale cross-subsidised development), alongside first-class knowledge and shared research across these facilities.

5.33 Research indicates that there are some particular challenges associated with supplying premises for smaller organisations that highlight the importance of

an institutional/benevolent role in supporting this essential part of the life cycle:[61]

- **Finance and funding:** most small start-up companies are funded through a series of capital raisings which is not compatible with longer-term funding of property.

- **Leasing:** in their early stages, company requirements are likely to change substantially. Longer term leases are therefore inappropriate and early-stage firms are unwilling/unable to commit to standard leases (5 years+);

- **Limited returns on creating multi-occupancy buildings for early-stage firms due to business uncertainty and changing requirements**: in addition to costs of the 'incubation' infrastructure

5.34 Stakeholders endorsed these findings, noting that smaller lab space under around 200 sqm for start-ups is usually not commercially viable to provide due to uncertainty in lease covenants and is more readily achievable through subsidised institutions.

5.35 Institutions typically intervene in this market failure and provide a dual role of appropriate facilities alongside wrap around support. In that sense it is not readily possible to separate support and space.

5.36 Clinical research institutes play a different role, where cutting edge clinical research takes place and becomes a magnet for specific businesses participating and partnering with institutes or wishing to engage in direct knowledge exchange. Cambridge Biomedical Campus is the optimum forum in Greater Cambridge and a national / global leading location.

[61] Review of Wet Lab Space and Incubator Space for the Life Sciences in the Cambridge Area (2017) Cambridge Ahead

Locational priority: Amenity land and placemaking

5.37 The concept of place making is increasingly central to the life sciences sector and has arguably been historically overlooked. It enables an environment which can attract, retain and support sector and cluster growth. This includes facilities within a walkable distance such as cafes / restaurants, green spaces, gyms, support for families (including childcare), sustainable and functional transportation and quality affordable housing. Occupiers are reportedly expecting more from their surrounding environment, and this is necessary to attract and retain of all types of staff, particularly in a competitive environment on the regional, national and global stage. World leading science parks (see case studies) thrive to integrate their offer across amenity, research and quality workspace to attract world class talent. Larger scale developments generate the greatest viability and can therefore offer multi facility and amenity solutions.

5.38 Stakeholders consider the importance of a high quality “place” to become more essential as occupiers move up in terms of scale, with start-ups seeing these facilities as ‘desirable’ whereas larger businesses considering them ‘essential’ in attracting and retaining employees (although small businesses in the survey did prioritise amenity above all else after transport and affordable premises).

5.39 There is some divergence in views in terms of how ‘place’ operates in a rural vs urban context. The former provides separation, visual amenity and tranquillity. The latter delivers typically more sustainable forms of transport and a range of cultural amenities. A number of stakeholders do see the next generation in life sciences being attracted to urban / edge of urban locations which offer sustainable movement between home and work and a wide amenity offer – subject to the physical availability of space.

5.40 Greater Cambridge science parks are considered to have ‘more to do’ in their ‘place offer’ to maintain and grow a world class platform. Current Cambridge science parks can be regarded as lacking amenity offer: ‘Cambridge

Biomedical Campus currently lacks vibrancy or a heart. It needs somewhere for people to gather and bump into each other'[62].

Demand and supply for premises by size

5.41 Stakeholders consistently reported that in recent years there has been a constraint in the supply for lab / R&D premises across Greater Cambridge and this persists into 2024. There are requirements across the spectrum of lab sizes.

5.42 Stakeholders perceive that the number of 'ideas' stemming from Greater Cambridge's key sectors at the current time is at a high level. This is entirely independent to macroeconomic factors and suggests a strong forecast for growth in these sectors notwithstanding a weaker venture capital / seed funding environment. Due to its reputation, Greater Cambridge is considered a safe place for risky investment, and so the demand will continue for as long as it is able to lead the way.

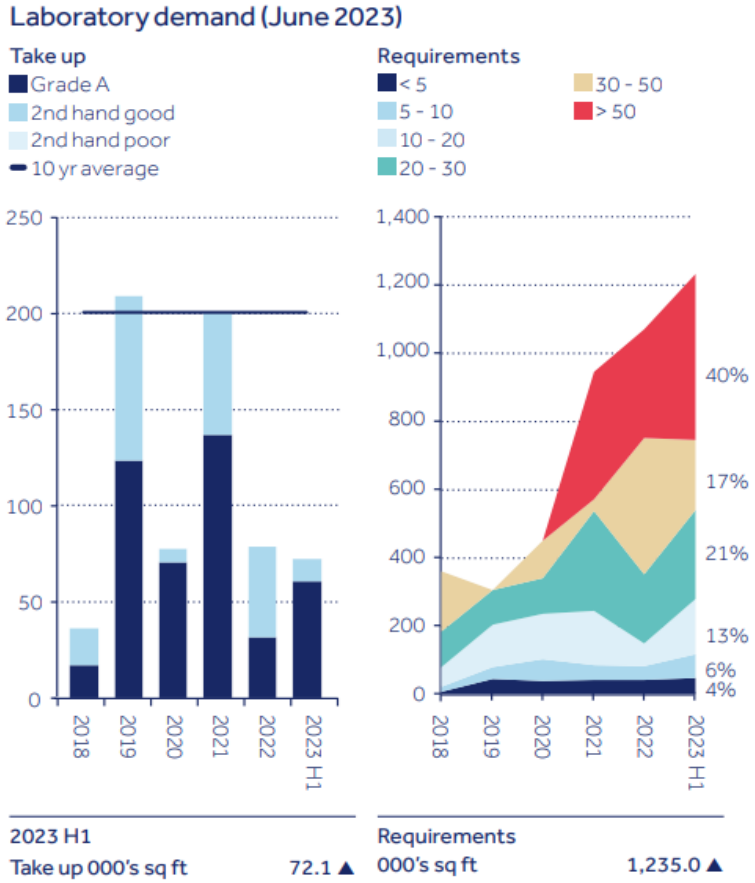
5.43 Research by Bidwells[63] suggests an increasing demand for larger scale laboratory requirements occurring since the COVID-19 pandemic. This is particularly notable for units being sought over 20,000 sqft (1,850 sq.m). Stakeholders endorsed this finding, outlining that Covid-19 has led to greater demand due to new research in the health sector, accompanied by an increase in venture capital enabling research and organisational expansion. Although the financial capital access associated with Covid-19 has slowed, demand for lab premises still remains robust.

[62] Life Science Strategy for the Cambridgeshire and Peterborough Combined Authority 2021

[63] ARC Market Databook: Offices & Labs Cambridgeshire (2022 / 2023) Bidwells

5.44 Notwithstanding the focus of requirements being on the larger units in recent years, deals completed data provided by Carter Jonas suggests that the majority of transactions still take place at the smaller end of the scale (see section 8) which will reflect the supply side availability constraints.

Figure 5.1 Cambridge market breakdown of demand for laboratory space



Source: Bidwells, 2023, ARC Market Databook

5.45 Research by the Combined Authority[64] in 2020/21 found that there is an acute shortage of space for start-up and scale-up firms (across the Greater Cambridge and Peterborough / Huntingdonshire area). According to stakeholder interviews, some of these scale-ups are having to use existing

[64] Life Science Strategy for the Cambridgeshire and Peterborough Combined Authority (2021)

networks to effectively *"beg, borrow or steal"* space and will often make sometimes ineffective space work.

5.46 The 2021 findings are at 2024 even more acute with a consistent message from stakeholders being the need for space for start-up and more so scale-up companies. There are companies across these stages seeking expansion but are not able to move on to larger more independent premises - which is causing a blockage in the ecosystem.

5.47 As one stakeholder noted: "Series A to series B investment has been very active. However they have not had enough space. This is demand for 5,000 - 15,000 sqft or above being for 30-50 staff up to 100+ staff. Around 10,000 sqft is the sweet spot and the most commonly sought space at the UK level." "Space for chapter 1 start-ups is urgent". Historically Cambridge has provided better for larger corporates or start-ups, but seen limited deliver of intermediate space.

5.48 Scale-up space (200 to 2,500 sq.m) is typically viable for private developers however has not seen significant provision in recent years in Greater Cambridge and has often been 'swallowed' by larger businesses when provided, due to lack of alternatives and their buying power. The new influx of permitted supply is reported to be much more favourably targeted at the scale-up sector, although in many instances this will not be clear until final designs are in place.

5.49 While facilities such as Babraham are intended to address the requirements of early-stage firms, stakeholders noted that the existing stock of specialist laboratory and flexible workspaces for these businesses has proven insufficient to meet the current level of demand. Babraham (as Tus Park) is essentially 'at capacity' in terms of its commercial accommodation and this is often the case, resulting in businesses being turned away. One of the key challenges at Babraham is that start-up companies on the site grow without space to accommodate the next generation of businesses.

Supply constraint issues

5.50 Bidwells report[65] that in Cambridgeshire there is demand for laboratory space of 1.2m sqft (1.1m sqm), and that only one third of this demand will be met between 2023 and 2025. Take up fell in 2022 (from 2021) and this is due to supply side constraints rather than lack of demand.

5.51 One of the effects of supply constraint is that big firms have "eaten up space planned for smaller and mid sized occupiers – Discovery Drive being the case in point". At Cambridge Biomedical Campus (CBC) 1000 Discovery Drive is delivering 11,200 sq m of a wet dry lab mix. This was designed with the intention of attracting varying sizes of life science companies (potentially four floors of c.2,500 sqm) but has ultimately been leased by a single corporate occupier (as well as part to the NHS Trust) – squeezing out mid size corporate occupiers. Future planned buildings at his location will be designed in a similar way with the intention of a multi let premises. An improvement in overall supply levels is anticipated to ease supply across all market segments as the development industry responds to market demand.

5.52 This unmet laboratory demand can lead to office-to-lab repurposing. Bidwells report that this is primarily evident with mid-to large life science companies which are fuelling much of the increased demand in laboratory employment space. This is exemplified by Nuclera taking the c. 2,700 sq m offices on the Vision Park in Histon for lab repurposing. Bidwells also cite smaller life science companies looking at office space for laboratory repurposing, shown with Transition Bio moving into a converted city centre location.

5.53 The trend of office-to-laboratory (and other spaces such as retail) repurposing may be set to continue. Consequently, there may be increasing discourse on whether the quality of repurposing office space for laboratories

[65] ARC Market Databook: Offices & Labs Cambridgeshire (2022 / 2023) Bidwells

provides the same quality as purpose-built laboratory space for the life science ecosystem.

5.54 There is divergence in views as to the degree to which the supply imbalance will persist taking into account committed supply through the 2024-2028 period. Some consider that the committed supply will balance the market particularly for mid and larger requirements, highlighting that listed enquiries for space (from agents) do not always translate to take up, and that in fact there is likely to be an oversupply / overcorrection if all space is delivered. The difference between supply and deliverability has also been highlighted by some stakeholders with high land prices in 2021/22 alongside rising construction costs and stabilising rents meaning that delivery and viability of some permitted schemes may be in jeopardy.

5.55 Other parties are bullish that the demand will persist both for home grown and inward investment opportunities and that the only constriction on growth are space constraints across the size bands.

5.56 Some stakeholders considered that one or two sites should be identified to accommodate a global headquarter facility, similar to AstraZeneca, to continue to enable Cambridge to thrive and be in a position to maintain its global position in these sectors. These large institutions help feed into the ecosystem in a positive way by supporting supply chains and spin offs. The expansion of CBC is anticipated to play a central role – many argue the key role - in expanding the heart of the life science offer in Cambridge as it combines the commercial, academic and healthcare opportunity.

5.57 More start-up specific space is expected to come forward in due course – with further opportunities proposed at Babraham accelerator space and long term plans for CBC / AstraZeneca to develop incubator space.

ICT

Locational preferences

5.58 Iceni business survey responses (n=17) for ICT businesses of all sizes reflected these findings and indicated a number of other preferences, including:

1. **Essential**: Access to public transport
2. **Highly desirable:** Access to amenities such as cafes / restaurants
3. **Essential / Highly desirable:** Cost / affordability of premises
4. **Essential:** Innovation centres / hubs / co-working
5. **Highly desirable:** Access to market / customers
6. **Highly desirable:** Access to conferencing / meeting facilities
7. **Desirable:** Urban location
8. **Desirable:** Proximity to learning / research institutions
9. **Desirable**: Access to housing
10. **Desirable:** Access to strategic road network
11. **Desirable**: Proximity to similar firms

Access to a range of spaces for scale-up, access to hotels and access to supply chains were regarded as low priorities.

5.59 The British Property Federation (BPF)[66] reports that in 2021, a city-centre location was top of the list in terms of the search criteria for a new office (all occupier types), particularly among largest occupiers. Major cities are outperforming other areas in the UK as office locations, with Centrick reporting that Grade A office vacancy had fallen from 2022 to 2023 in major

[66] BPF: A more flexible future: redefining the role of the office 2021

cities. [67] This suggests that whilst office demand is fallen post COVID-19, city locations such as Cambridge remain in higher demand and are likely to continue to do so.

5.60 Other preferences for the ICT office market identified by the literature include:

- Tech requirements (eg access to faster broadband)
- Strong transport links and/or access to electric charging points
- Access to cafes, restaurants, bars, shops and green spaces

Locational and space requirements: large vs small organisations

5.61 A 2023 YouGov national survey of the technology sector found that 28% of respondents work in coworking or flexible workplaces, driven by a growing demand for flexible and collaborative environments. Micro and small business (<50 employees) spend more days in the office than larger ICT companies[68]. According to the Iceni business survey, the need for innovation centres / hubs / co-working space was a key requirement for smaller firms.

5.62 Greater Cambridge does offer a wide range of start-up and co-work spaces, however feedback from stakeholders report continuing demand growth and the potential for further provision.

5.63 Both literature and stakeholder findings indicate that the COVID-19 pandemic and associated increase in hybrid working has changed the demand and usage of offices.

Locational priority: Connectivity

5.64 Transport links are a priority for the ICT sector. Feedback suggests that business relationships with their customers and markets can influence

[67] Centrick: The Future of Office 2023

[68] The Scaleup Culture Report 2023, Techspace

whether they prioritise different transport links and this can vary by size. Those with a need to access London (often larger or global businesses) prioritise the rail network. This is reflected in the success of CB1 at Cambridge Train Station as well as the expected success of Cambridge North “once the cranes are done, it will be like CB1”.

5.65 Other firms and typically smaller ones are more flexible in their relationship with rail. Cambridge Science Park offers good road based links facilitating in commuting from a range of destinations. Whilst bus or other services are desirable, occupiers are realistic about the availability of this as a comprehensive network. The guided bus connection between Cambridge Science Park and Cambridge North Station is important.

Placemaking and amenity

5.66 Stakeholders interviewed by Iceni suggested that the ICT sector places a high value on amenity and ‘place’ as part of the overall offer of a destination. This encompasses green space, high quality public realm, cafes / restaurants and other services such as gym / retail. In an environment where working from home is common, a quality offer helps to bring staff to the office to collaborate.

5.67 The literature indicates that, to encourage employees to return to the office, ICT companies have invested more in amenities as well as workplace technology.

5.68 ‘Flight to quality’ has been a phenomenon that has seen high quality offices receive strong demand whilst unmodernised stock has underperformed. Savills report[69] that in 2022 68% of space transacted in Greater London and the South Eastwas Grade A standard. This trend is expected to continue with

[69] Greater London & South East Offices

https://pdf.euro.savills.co.uk/uk/office-reports/greater-london-and-south-east-market-watch-jan-2023.pdf

occupiers seeking high quality work environments to attract and retain staff in a competitive labour market and support the return to the office. This is particularly evidence amongst larger occupiers; in 2022, 75% of deals recorded over 20,000 sq ft were located in Grade A buildings.

For Greater Cambridge, this suggests the locations with the best multi amenity offer such as Cambridge Station CB1 will continue to thrive. .

Institutional support

5.69 Fostering a successful ICT sector means providing a high level of support at the early stages to maximise success prospects. Greater Cambridge offers a wide range of facilities and networks that critical to the ecosystem. This includes, for example, the multi locational IdeaSpace from the University of Cambridge providing space and access to advisors and founders advising on business growth and investment, as well as the Bradfield Centre and St John's Innovation Centre.

Collaboration and clustering

5.70 Literature indicates that the colocation of digital business and provision of affordable space within which start-ups can grow remains critical to the establishment of effective knowledge transfer in Cambridgeshire[70] . The Combined Authority's Digital Sector Strategy highlights for the need to ensure the presence of high-quality supportive co-working or launchpad spaces for start-ups to grow.

5.71 Feedback suggests that interaction and collaboration is more applicable to start-up rather than medium / larger businesses who have their own internal collaboration space. Many of the area's innovation centres provide opportunities for between-firm collaboration. For larger businesses there is a

[70] A Digital Sector Strategy for Cambridgeshire and Peterborough (2019)

greater reliance on the wider knowledge and talent pool offered by the Greater Cambridge labour market.

Demand for premises

5.72 Portfolio reduction was the trend for ICT clients in 2022 at the global level. Tech leaders remain divided on real estate strategy for the next 3-5 years, with 36% saying their portfolio will expand. However smaller technology companies (participating in part of JLL's research) anticipate expanding their footprints by about 50% in the future[71].

5.73 JLL note 79% of tech companies encouraging employees to be in the office at least part-time. By late 2023, there was a move towards a minimum of three days in the office, citing advantages of in-office work for collaboration, culture, retention and training.

5.74 According to stakeholders, post pandemic, demand for office space has returned to around 80% of pre COVID-19 levels in Greater Cambridge, with a greater emphasis on small and mid sized space of quality and in the right locations.

5.75 Literature suggests that this demand outlook is expected to remain strong. Healthtech dominates global tech investment ($64 billion in 2020) and tech investment in core parts of the economy, such as energy and education, is on the rise[72]. Cambridge's health and tech synergy is therefore expected to maintain ongoing demand for the office market.

5.76 Savills note that the composition of demand from technology occupiers in London and the wider South East is predominantly from the expansion of smaller to medium-sized technology companies rather than increased

[71] JLL: Shifting to future-focused workplaces: Tech office space trends (2023)

[72] The future UK tech built – Tech National Report 2021

expansion of large technology occupiers, with 81% of deals recorded by the sector in the last five years below 20,000 sq ft.

5.77 For Cambridge, higher value locations in the City Centre and City Fringe - part of existing clusters - can expect demand to maintain. Secondary locations may see weaker demand unless there are particular amenity or cluster benefits.

5.78 In Cambridgeshire, Bidwells[73] report an uptick in office floorspace demand post-covid occurring from the growing ICT industry and its increasing convergence with the life science sector. Knowledge intensive businesses accounted for 85% of all space acquired in the first half of 2023. Office rents have continued to climb.

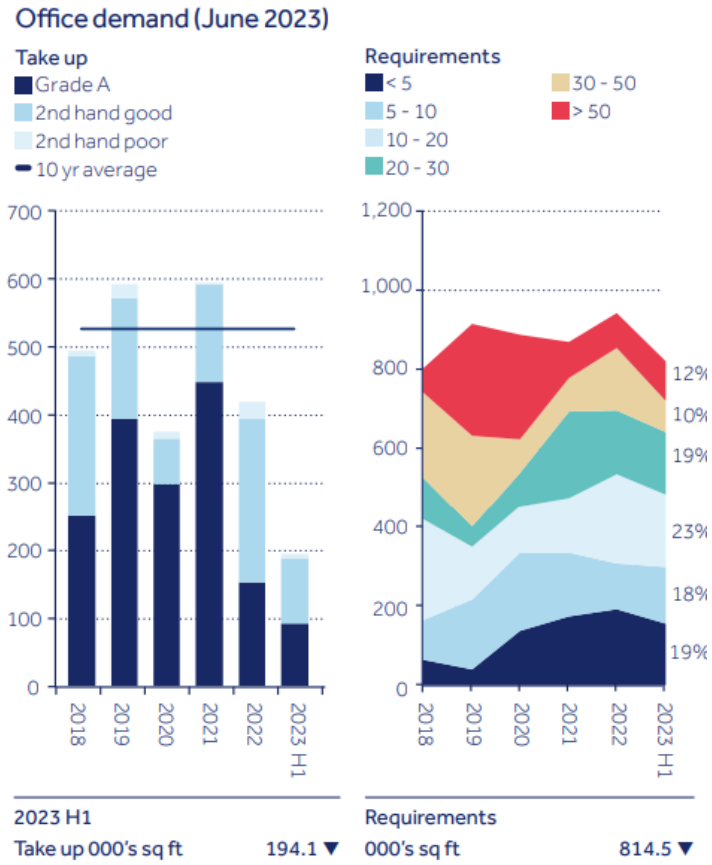
5.79 Bidwells report[74] that overall office take-up in 2023 was almost identical to 2022, supported by the expansion of Cambridge based tech occupiers and serviced offices catering for start-ups.

5.80 Figure 4.3 below suggests an increased demand for smaller office spaces occurring since 2020, correlating with changes in working preferences.

[73] BIDWELLS: Offices and Labs: Arc Market Databook CAMBRIDGE SUMMER 2023

[74] BIDWELLS: Offices and Labs: Arc Market Databook CAMBRIDGE 2024

Figure 5.2 Cambridge market breakdown of demand for office space



Source: Bidwells, 2023 (ARC Market Databook)

5.81 Agents interviewed by Iceni reported a high demand for the smallest spaces (under 500 sq.m) which are invariably in flexible or managed workspace environment. The mid (1,000 to 2,000 sq.m) and larger office footprints are still expected to see an ongoing healthy level of demand in the medium term.

5.82 Some stakeholders report a lack of quantum computing enabled (high powered computing) dry lab start-up / serviced provision outside of the University / Wellcome Campus that some start-ups are seeking.

Supply

5.83 Availability was relatively high in the Cambridge market at 9.5% (summer 2023) but this is reportedly (Bidwells[75]) due to a high supply of second hand rather than Grade A space. Looking to 2024, a considerable amount of better quality office space is already under offer and availability is likely to fall.

5.84 A notable transaction was a 34,000 sq ft letting to Samsung on a 10-year lease outside Cambridge North Station (building total size 94,500 sq ft). This is the first new office building to be delivered at Cambridge North and adjacent to the station and indicates good demand for this high accessibility location.

Cross sector issues

Housing

5.85 Greater Cambridge has one of the least affordable housing markets in the country, and Cambridge has a higher proportion of households living in the private rented sector when compared to the regional and national average.

5.86 Stakeholders noted that the delivery of new housing is perceived as not keeping pace with employment growth - demand is outstripping supply.

5.87 The requirement for affordable homes within easy access to the workplaces is important in attracting and retaining staff across all sectors and life cycle stages. Whilst top paying roles can achieve home ownership, there are a diverse range of roles including technical and entry level which need to be catered for. There is also a perceived need for student accommodation/ young persons housing in the city centre to retain the talent pool.

[75] BIDWELLS: Offices and Labs: Arc Market Databook CAMBRIDGE 2024

5.88 Some institutions are taking matters into their own hands. The Wellcome Genome Campus will provide 1,500 new homes as part of its new development which will only be available to campus employees.

National Trends

5.89 Cambridge and Oxford are the established science/ tech cities within the UK, and it is considered that there is sufficient demand for both cities to thrive without there being competition.

5.90 London, the third part of the “golden triangle” has a less developed life sciences offer but is growing quickly for example developing labs at Canary Wharf. Its success is due in some part to its excellent transport links and it being an easily recognised investment market for international inwards investment. However, the likely future growth in London is anticipated to be broadly confined to the ICT sector, with Cambridge and Oxford being the firm preference for life science and deep tech.

6. International Case Studies

Overview:

6.1 Four international case studies (Silicon Valley in San Francisca, Kendall Square in Boston, Gateway of Pacific in San Francisco and Innovation Park in Basel). These are exemplar locations and their most distinct successful features all resonate closely with the findings of the previous section. These features and the implications for Greater Cambridge include:

- **Proximity to research institutions:** all successful cases benefit from the proximity to world-famous universities, generating a graduate workforce and research to prompt start-up concepts. This tends to be at the city scale rather than necessarily in 'park' but there are consistently examples of on site collaboration between academia and industry.
- **Clustering:** all case studies are of a significant scale which enables on site clustering and critical mass. They also form part of established ecosystems at the city level. The scale of facilitates enables collaboration and places to attract staff.
- **Strong transport links:** public transport connectivity is increasingly important for attracting and retaining staff. Having public and active transport options is seen as positive for promoting environmental sustainability.
- **Quality amenity land and facilities:** All cases indicate the importance of green space and landscaping for improving staff wellbeing, as well as providing opportunities for informal networking between organisations. In addition, all sites have a variety of quality food and drink and leisure offerings, enhancing the overall attractiveness of sites for staff.

Case Study: Stanford Research Park, Silicon Valley, San Francisco, CA (ICT / life science)

6.2 Silicon Valley is a region in the southern part of the San Francisco Bay Area incorporating several cities most notably San Jose - the San Jose Metropolitan Area having the third-highest GDP per capita in the world[76]. It is home to over 30 multinational companies, world leading tech giants and thousands of start-ups.

6.3 Stanford Research Park is a technology park established in 1951 as a joint initiative between Stanford University and the City of Palo Alto, one of the world's first university research park. It has more than 150 companies, including Hewlett-Packard, Tesla Motors, TIBCO and Lockheed Martin. It is known as "the epicenter of Silicon Valley".

6.4 The park covers a 280-hectare area and has 10 million square feet of commercial floorspace in a low density set up. By January 2018, the park's 140 buildings housed over 150 different companies and their 23,000 employees[77]. Stanford University is two miles away from Stanford Research Park.

6.5 Stanford University and the City of Palo Alto partnered to found the park, which was initially named Stanford Industrial Park with the first tenants in 1953. The name was changed in the 1970s to Stanford Research Park to

[76] https://www.bizjournals.com/sanjose/news/2015/01/23/san-jose-has-worlds-third-highest-gdp-per-capita.html

[77] Co-Evolution of Stanford University & the Silicon Valley: 1950 to Today https://www.wipo.int/edocs/mdocs/arab/en/wipo_idb_ip_ryd_07/wipo_idb_ip_ryd_07_1.pdf

highlight "the focus of cooperation between the university and the tech companies"[78].

6.6 There has been a considerable focus in recent years on improving sustainable transportation including a free shuttle bus system connecting to rail services as well as car pooling support. Cyclists are well catered for in terms of road space and on site servicing.

6.7 Provides life science and traditional tech hosting including the new Alexandria LaunchLabs, a purpose-built incubator for Life Science to accelerate innovative life science start-ups that spin out of the University's academic labs.

6.8 Key features include:

- **Commercial offer:** including large scale offices and laboratories including multi tenant options.
- **Sustainable solutions:** expanding the solar panel offer working on transportation to remove car traffic. Cyclists well catered for.
- **Amenity:** including cafes, farmers market, playing fields and tennis & swimming club. Lunchtime learning activities at the community Hub. Close to California Avenue with retail and restaurants.
- **Connectivity:** free shuttle bus system connecting to rail services, car pooling support.

[78] http://www.paloaltohistory.org/stanford-research-park.php

Figure 6.1 Stanford Research Park

Source: https://stanfordresearchpark.com

Case study: Gateway of Pacific, San Francisco, US (life science)

6.9 Gateway of Pacific is a new, state-of-the art life sciences cluster in a university region, with a focus on quality amenity space and facilities to attract a young workforce.

6.10 It is a 36 acre premier laboratory and office space campus located in part of urban South San Francisco effectively at the urban fringe, north of the airport and south of San Bruno Mountain State & County Park. Located on a former warehousing site, the campus has been developed into a hub for biotechnology, pharmaceuticals and medical research.

6.11 The aim of this five-phase life science park is to cluster biotech together, to catalyse partnerships between research institutions, private sector companies, government departments and charities. Current tenants include Amgen, AbbVie, California Life Sciences, GenEdit and Circle Pharma.

6.12 The park benefits from its proximity to academic institutions (such as UCSF, UC Berkeley and Stanford University), enabling companies to access leading research institutions and a skilled life science workforce.

6.13 It has access to South San Francisco train station (300m), the Bay Ferry (1.5km), the airport (3km) and near highway 101.

6.14 Key features include:

- **High-quality research facilities:** including laboratories and incubator spaces, with the aim of providing companies with opportunities for cross-sector partnerships.
- **A focus on environmental sustainability:** including on-site generation, rainwater capture, grey water collection and electric vehicle infrastructure.
- **Amenity land:** the aim of the park's developers is to provide a 'inspiring urban park setting' where staff can socialise and meet, which is regarded as important following changes to working arrangements post Covid-19
- **Quality amenities:** the park centres around a high-end amenity centre, which includes a food hall, meeting facilities, social activities and a spa and health club.
- **Connectivity:** the campus can be accessed by road, air, ferry and train

Figure 6.2 Gateway of Pacific

Source: BioMed Realty

Case study: Switzerland Innovation Park, Basel Area, Switzerland (life science)

6.15 Switzerland Innovation Park, Basel Area, encompasses four interconnected sites across the city of Basel. The main campus is a 10 ha science park on a brownfield site at the west edge of the city, with a focus on clustering similar life science and biotech companies in a single city location.

6.16 Switzerland is the HQ location of over 20% of Europe's life science companies. Basel is becoming one of the most dynamic life sciences clusters in Europe, with over 31,000 employees working across biotech, digital health, medical technology and advanced manufacturing.

6.17 Switzerland Innovation, the Swiss national network of science parks, established a Main Campus HQ in Basel in 2022. The Campus, due to expand further by 2029, offers offices, co-working spaces and labs for one-500 people, specifically designed for the needs of life sciences companies.

6.18 Key features include:

- **Proximity to research institutions and global headquarters of large pharmaceutical organisations**: across the city including the University of Basel, Novartis, Roche, University Hospital Basel, Swiss Tropical and Public Health Institute and Friedrich Miescher Institute. In addition, the park can take advantage of the 700 other life sciences firms currently operating in the wider area. The area also benefits from venture capital from large investors (such as BioMedPartners and Versant Ventures) and the government-based BaseLaunch incubator, which are key for supporting the development of new companies.
- **Strong transport links:** The Campus is 15 minutes from Basel airport and train station, enabling transport connectivity for staff, clients, researchers and investors. Bus connection on site and multiple tram stops within 1km.
- **Shared facilities for start-ups:** these include coworking areas, innovation lounges, printing and meeting spaces across each of the sites in Basel. Business support is also provided, including start-up advice and courses.

Figure 6.3 Hortus, Main Campus, Switzerland Innovation Park, Basel Area

Source: Switzerland Innovation Park Basel Area (maincampus.ch)

Case study: Kendall Square, Boston, US (ICT / life science)

6.19 Kendall Square is a well-established biotech campus, with strong academic involvement, which can demonstrate the factors critical to ensuring success and longevity.

6.20 Located in Cambridge, Massachusetts, the area is defined as 'the most innovative square mile on earth'. Built on former wasteland in the 1990s and 2000s, Kendall Square is renowned as one of the world's leading biotech and life sciences innovation hubs, and is home to over 250 biotech companies, including Pfizer, Astrazeneca, Amgen, Bayer and Baxter. The Cambridge Innovation Centre is a shared office space for startups and venture capital firms and is currently occupied by 400 start-ups.

6.21 Key features include:

- **Strong government support:** a 10 year, $1 billion government investment was made in 2008 for companies developing breakthrough therapies in the region. This was augmented by a further $600 million of investment in 2018.
- **Involvement of academic institutions:** As a key landowner, MIT has played a significant role in the development of the site and has been actively constructing space for new high-tech tenants. In addition, the location is attractive to MIT and Harvard graduates.
- **Opportunities to network:** the density of biotech organisations has a positive impact on networking and collaborative opportunities, referred to as the Kendall Square "bump factor". Kendall Square offers retail and public spaces: such as cafes, restaurants; and streets, sidewalks, plazas, and open spaces which are considered to be part of the catalyst to the success of this innovation district.
- **Prestige:** For many biotech organisations, the Massachusetts address is key during late-stage development. The number of venture capital organisations operating in the Boston area has also increased prospective tenants' interest in the area.

- **Mixed-use:** over time, the site has developed to include residential areas and community facilities (including schools)
- **Connectivity**: there is a dedicated Kendall/MIT underground station at Kendall Square that runs into central Boston as well as city bus connectivity.

Figure 6.4 Kendall Square, Boston

Source: MIT News

Insights for Cambridge

6.22 The case studies are of differing scale from 10 ha and above, all effectively large scale parks or districts enabling a significant clustering of industry and sector capability – with the smallest being the Basel Main Campus although this forms part of a larger ecosystem within the city as does Gateway of Pacific. The case studies do indicate the benefit of **significant scale and clustering** to bring together the interaction of ideas, a range of occupier sizes as well as the **viability of enabling amenity**. For Greater Cambridge, this may lend to the idea of expanding and reinforcing the existing park

locations rather than a diffusing of the locational offer. Equally, the case studies are not the only location for ICT / life science in the city areas, which reinforces to an extent Greater Cambridge's concept of a network of parks and their differing roles.

6.23 The case studies are all **urban or edge of urban** rather than rural. Basel and Gateway schemes are brownfield redevelopments. Kendall Sq is urban and Stanford urban fringe. The positioning enables high levels of connectivity to the surrounding urban areas.

6.24 Connectivity and **public transport** is a major theme of the case studies that offer multi modal connectivity including tram, bus, train and support for bicycle and lift share. Greater Cambridge's parks have a mixed position on public transport which may be an area of continued focus.

7. Land / Space Requirements

Overview

7.1 This report has established clear ongoing demand for ICT (office based) and life science (labs) in Greater Cambridge. This section looks at the modelled requirements alongside market data and ONS data to provide conclusions on size band segmentation.

7.2 In considering sector land requirements by sector, it draws on the employment forecasts in the Greater Cambridge Employment and Housing Evidence Update 2023 (EHEU). Two modelled 'central' and higher' employment scenarios are set out in the EHEU which take a trend based approach.

7.3 The EHEU recommends that looking from 2020 to 2041 for offices a future need of 289,700 sqm (3.1 m sqft) for offices. For R&D premises a position of around 600,000 sqm (6.5m sqft) is recommended.

7.4 Key findings on space needs as a part of the total requirement are set out below. This is not to say that each development should show these proportions but that they are required of the ecosystem as a whole:

7.5 **Life science requirements**

- Requirements will change over time and through business cycles, however overall it is recommended that towards 50% of total new R&D space should be for start-up / scale-up provision.
    - Startup provision would be in dedicated specialist incubator space usually with under 10 employees and more like bench / flexible labs and might account for 5-10% of total demand.
    - A further 40% would be for 200 sq.m up to 2,500 sq.m for scale-ups. Towards the smaller end this should be viable for commercial provision where part of a larger development.

- The remainder of requirements would be for larger floorplates over 2,500 sq.m potentially c30% of demand for 2,500 sq.m to 5,000 sq.m and 20% demand for over 5,000 sq.m. This is based on more recent market data and would be a greater emphasis on larger footprints than in the past.

7.6 **ICT office requirements**:

- Around 20% of demand sub 500 sq.m (potentially under 50 employees) typically in flexible or managed space;
- around 30% 500 to 2,000 sq.m (up to c250 employees); and
- c.50% for larger businesses of 250+ staff.

Land requirements by sector

7.7 In identifying and required for the sectors, this report relies on the evidence in the EHEU. The calculations for land use quantum are defined in the EHEU and are reported but not revisited here. The EHEU sets out jobs forecast scenarios and multiples these by anticipated floorspace densities for different sectors. The definition of key sectors for Greater Cambridge are defined in the EHEU as being:

- IT
- Head offices & management consultancy
- Architectural & engineering
- Life science R&D

7.8 To calculate the floorspace requirements for the sectors the following assumptions are used, the justification being set out in chapter 5 of the EHEU:

- The density used for R&D floorspace is 28 sqm per Full Time Equivalent worker (FTE) for blended wet/dry lab space (Gross External Area - GEA)
- The densities used for offices is 11 sqm per FTE worker (Net Internal Area - NIA) / 14 sqm per FTE (GEA)
- Life science jobs are 85% R&D jobs and 10% office jobs
- Head offices & management consultancy / architectural & engineering jobs are 100% office workers (subject to work from home adjustments)
- Jobs in the ICT sector are 70% office jobs and 25% R&D dry lab jobs (with 5% Use Class B8 for distribution requirements)

7.9 The jobs based modelled results are reported below with. The life sciences sector dominates the laboratory requirements. The 'need' figure for R&D premises is rounded up to 600,000 sqm in the EHEU which is higher than the modelled 443,900 in the preferred central scenario, allowing for some flexibility in densities and increasing market choice. This 'stretch' towards 600,000 sqm is captured below and included in section 9 when considering future needs vs supply.

Table 7.1 Floorspace requirements by sector (sqm)

	R&D Central Scenario	Office Central Scenario	R&D High Scenario	Office High Scenario
Life science	415,400	24,400	554,200	32,000
ICT*	28,500	212,900	36,900	234,200
Other**	-	52,400	-	55,800
Total	443,900	289,700	560,500	322,000
Recommended to plan for	600,000	289,700	-	-

Source: EHEU 2023 / Iceni analysis

* including Head offices & management consultancy / Architectural & engineering

** The floorspace modelling in the EHEU study also includes a wider range of sectors contributing to demand that fall outside of the ‘key sector’ definitions

7.10 The following sections explore the amount of land for different occupier size bands.

Land requirements by occupier size band: Life sciences

7.11 To establish requirements for occupier size bands consideration is given to market data, stakeholder feedback and ONS data on business size bands.

7.12 Stakeholder feedback identified occupier requirements across the size spectrum but particularly acutely for scale-ups of 200 to 2,500 sq.m Take up data (table 8.3) suggests poor take up in this segment most likely due to lack of availability.

7.13 In taking a quantitative perspective, we consider first ONS published UK Business Counts – enterprises by industry and employment size bands; and then commercial data from Carter Jonas and Bidwells.

7.14 The table below sets out ONS data on business by size band (first two columns) for the life sciences sector as considered best represented by “SIC72.1: Scientific research and development” for the South Cambridgeshire and Cambridge City districts. This shows the distribution of business by size.

7.15 Employment estimates are generated by Iceni using the upper threshold of the size band. This leads to a total employment of 15,520 jobs, whereas the Business Register and Employment Survey separately estimate 18,000 jobs in this sector (and CBR 19,000) – so there is a significant mismatch in the data sets. Some but not all of this will be due to non registered VAT businesses. Future work on this topic might include greater analysis of the CBR raw datasets on business and employment size bands or accessing IDBR data from ONS. Caveats also need to be applied to ONS data vs

market data given the issue of static (non premises based businesses, long lease or freehold) vs dynamic (new lease requirements) occupation.

7.16 The ONS data suggests that whilst most businesses (68%) are under 10 employees, these are likely to make up less than 10% of the sector workforce. Larger businesses over 250 employees account for only 2% of businesses but are likely to account for around half of the workforce.

7.17 Stakeholders report the shortest supply for both start-ups - businesses under 10 persons – and scale-ups up to 100 persons. These smaller groups could make up around 35-40,z% of total employment when aggregating the bands below although this may not translate directly to occupation requirements.

Table 7.2 Business counts and employee estimates by size band, Greater Cambridge / SIC72.1: Scientific R&D sector 2023

ONS size band	ONS business count	ONS business %	Iceni estimated employment (upper size)	Iceni employment percent	Grouped type
0 to 4	220	58%	880	6%	Start-up
5 to 9	40	11%	360	2%	Start-up
10 to 19	45	12%	855	6%	Scale-up
20 to 49	40	11%	1960	13%	Scale-up
50 to 99	15	4%	1485	10%	Scale-up
100 to 249	10	3%	2490	16%	SME
250 to 499	5	1%	2495	16%	SME
500 to 999	5	1%	4995	32%	Large
Total	380	100%	15,520	100%	Large

Source: ONS UK Business Counts, Iceni calculations / estimates

7.18 Commercial agents Carter Jonas has provided data on the deals by size band for lab premises over the last 5 years as set out below.

7.19 Deals data differs from enquiries / requirements, as may be supply constrained, subject to availability. Requirements may also not always materialise even if space is available. This data reports deals excluding lease breaks, so is the gross space absorbed rather than net. Carter Jonas data below differs to a degree from Bidwells take up in Fig 6.1 (total by year)

which is inevitable with different agents logging different datasets, but is useful nonetheless.

7.20 The deals data shows a strong bias towards the smallest occupiers (under 5,000 sqft / 460 sqm) averaging nearly 70% of space taken. This would capture start-up and smaller scale-ups. The larger category of 15,000 sqft+ (1,400 sqm) covering larger scale ups and above, accounts for just under one third of take up, although rises to nearer 50% in 2021. The smallest units are likely to see the greatest churn and be on potentially shorter leases than larger units.

7.21 Supply side constraints are likely to feature heavily on this data, with availability reportedly to have remained low for several years and the take up of larger spaces occurring when they become available. There is a notable gap in the 5,000 sqft – 15,000 sqft (460 – 1,400 sqm) band that would suit scale-ups and stakeholders report having poorest availability.

7.22 Although not presented here, Carter Jonas also supplied Iceni Projects with deals data for the Oxfordshire area. This shows a much stronger bias towards the 5,000 - 10,000 sqft units (460 sqm – 930 sqm) accounting for over 70% of floorspace for the same period. This is considered to reflect the better availability of space in Oxfordshire rather than the type of occupiers in that market, thus reinforcing the sense of lack of scale-up space in Greater Cambridge.

Table 7.3 Lab take up (deals) by size band 2019-2023 (sq.ft) Greater Cambridge

Sq.Ft range	2019	2020	2021	2022	2023	Average
0-5,000	100%	100%	49%	62%	100%	69%
5,001-9,999	0%	0%	8%	2%	0%	4%
10,000-14,999	0%	0%	0%	0%	0%	0%
15,000+	0%	0%	43%	35%	0%	27%
Total	61,325	13,619	196,963	151,733	82,400	506,040

Source: Carter Jonas

7.23 The table below provides broad recommendations on split by size band as interpreted by Iceni Projects considering the various datasets from ONS,

Bidwells, Carter Jonas and stakeholder commentary. This is intended as a guide and will change over time and across market cycles.

Table 7.4 Life Science Stages

	Start-up	Scale-up	SME	Large
Staff	1-10	11-100	101-250	250+
Space sq.m	<200	200 – 2,500	2,500 – 5,000	5,000+
Percentage of total floorspace	5-10%	40%	30%	20%
Provider	Institution	Market	Market	Market
Comments	Bench / incubators	Bidwells report 20% of recent requirements but historically make up closer to 50% of enquiries and deals. Dynamic segment.	Around 30% of recent requirements but historically less so.	Historically accounting for only a small market share but provides a platform for inward investment.

Source: Iceni Projects

Delivering start-up space

7.24 As noted in section 6, start-up occupiers are less reliable in rental income terms and therefore difficult to provide for in commercial terms. Scale-up needs are usually viable, particularly as part of an overall campus development, but may be squeezed out by larger firms if alternative accommodation is not available.

7.25 In terms of how additional smaller space provision could be funded, there are planning policy precedents. Affordable workspace policies emerging in

London boroughs[79] considers that affordable lab provision falls under a wider affordable workspace contribution, with an expectation that a percentage of commercial space or a section 106 financial contribution be made to aid the delivery of affordable space via commuted sums. Viability work undertaken in these areas indicates that affordable workspace contributions should be achievable subject to location specific rents / values – although this may not have been costed at wet lab fit out rates. Exploration of the feasibility of policy or planning conditions in Greater Cambridge should be explored. However, it is recommended that if this is pursued, commuted sums are appropriate rather than a proliferation of isolated spaces.

7.26 The management of start-up space should be provided by dedicated institutions or the university, that are able to offer a full range of services beyond just physical space and not be wholly concerned with the commercial viability of their operation. Further work would be required in considering institutions and funding routes best placed to cater for additional start-up offering.

Land requirements by size: ICT

7.27 The ONS dataset for ICT business is reported below.

7.28 A majority of ICT businesses are SMEs with 88% with less than 9 employees, making up 25% of the sector total. These are likely to require flexible accommodation and start-up space, and a proportion will simply not utilise any formal office space due to home working.

[79] See Hammersmith and Fulham Affordable Workspace Supplementary Planning Document Consultation Draft 2021; and OPDC & LB Ealing Affordable Workspace Study

7.29 Business groups by size band from 10 to 49 make up around 21% of the total employment. These are likely to require flexible or managed space.

Table 7.5 Business counts and employee estimates by size band, Greater Cambridge / ICT Sector

Size Band	Business Count	Business %	Estimated Employment (upper size)	Employment Percent	Grouped type
0 to 4	1,195	80%	4,780	22%	Start-up
5 to 9	115	8%	1,035	5%	Scale-up
10 to 19	75	5%	1,425	6%	Scale-up
20 to 49	65	4%	3,185	14%	Scale-up / SME
50 to 99	30	2%	2,970	13%	SME
100 to 249	15	1%	3,735	17%	SME
250 to 499	10	1%	4,990	23%	Large
500 to 999	0	0%	0	0%	Large
Total	1,495	100%	22,120	100%	

Source: ONS UK Business Counts, Iceni calculations / estimates

7.30 Business from 50 staff and notably over 100 staff are likely to be looking to move from flexible or managed space to more permanent leasing solutions.

7.31 It is useful to compare this data with Bidwells market data on requirements (Bidwellls 2023 databook), recognising the relationship between firm size and space needs has become weaker post covid. Bidwells report:

- around 20% of demand sub 500 sq.m (potentially under 50 employees),
- around 30% 500 to 2,000 sq.m (50 to approximately 250 employees) and
- c.50% for larger businesses of 250+ staff.

7.32 Agents may be less likely to capture smaller start-up requirements that would not be placed with a commercial agent. Notwithstanding, commercial data may be the most useful in terms of future space needs given that many small businesses simply use no formal space.

8. Premises supply and demand balance

Overview

8.1 This section considers the supply of premises and how this responds to the assessment of demand, including the scale, location and type of needs relevant to the key sectors considered. It invariably involves a range of assumptions and judgements about future supply, the details of which may not be fully known at present.

- At March 2024 there was around 1,105,000 sqm committed supply being:
- Office (Class E(g)(i)) 16% notably at: around Cambridge Station (Devonshire Road, Station Road, Hills Road and Clifton Road); Cambridge Science Park / St John's Innovation Park: Peterhouse Technology Park; and Cambridge Innovation Park.
- Dry lab ICT / tech (Class E(g)(ii)): 27%; West Cambridge 170,000 sqm (commercial non-academic components) and 40,000 sqm at Eddington.
- Wet / dry lab life sciences (Class E(g)(ii)): 48%: Cambridge Biomedical Campus; Cambridge Science Park / St John's Innovation Park / Merlin Place; Grafton Centre; Wellcome Genome Campus; Granta Park; and Melbourn Science Park[80].
- Mixed use / uncategorised sector or type 8% (Class E(g)):
- **Office** provision in terms of general requirements reports a c.25% undersupply – however when taking into account the other office / dry lab elements relating specifically to ICT and life sciences - as assumed or reported in applications - there is a potential over supply.

[80] Including those with Section 106 to be signed

This suggests that there is a good office supply but in the longer term post 2030 there may be a need for more general high quality offices. Supply is spread across a balanced future trajectory and will be supplemented by further First Proposals space at North East Cambridge and later at Cambridge East.

- **Dry labs,** including for ICT and physical sciences, have a large supply and a technical oversupply based on modelled need. Some of this provision is likely to fall under demand related to advanced manufacturing requirements rather than ICT/Tech.
- **Wet lab** (including dry lab space at the Wellcome Genome Campus) needs have a committed supply shortfall against modelled demand for the period to 2041. Supply indicated in the emerging Local Plan therefore makes a critical contribution and has the potential to fill the shortfall including sites at Cambridge East, CBC, North East Cambridge and Babraham - which combined could deliver over 380,000 sqm of labs against the shortfall of around 150,000 sqm (table 9.2). There has been relatively limited delivery in the 2020-2023 period at a time when demand for life science research has risen. The pipeline is now much stronger looking at the 2025-30 period, and some schemes may more realistically be brought forward post 2030. Even so, additional space commitments will be required in the 2030s, which highlights the importance of the availability and deliverability of the emerging Local Plan supply. Despite improved anticipated scale-up provision for wet labs, there is likely to be an ongoing requirement for this size of provision – although this will be subject to the detailed design / reserved maters applications arising from a range of existing commitments.

Supply

8.2 Greater Cambridge Shared Planning has provided a trajectory of commitments at May 2024. Commitments are those sites that have planning

permission for employment uses and/or have been allocated for employment uses in the Cambridge Local Plan 2018 or the South Cambridgeshire Local Plan 2018. This includes approvals subject to S106 agreements and currently held up by Environment Agency objection.

8.3 Iceni Projects has undertaken analysis of the supply of relevant land use classifications being B1/B1a/B1b/Class E. These have been segmented to align with broad demand side categorisations – the type of space (office, wet lab, dry lab) and sector (ICT, life science etc) using:

- the description of development in the planning application; and
- wider promotional material.

8.4 The assumed categorisation of each proposal is set out in appendix A3. Inevitably the categorisation of proposals involves professional judgement and it is of note that proposals can change, particularly where applications are outline or for E(g) or B1 mixed components. Notwithstanding, the following is considered a good representation of the supply picture and movement between categories is unlikely to be highly significant in considering the picture as a whole.

8.5 The following table sets out the floorspace supply for each employment type.

Table 8.1 Floorspace supply by type (committed), March 2024

Type	Floorspace (sqm)	Floorspace %
Office	177,162	17%
Dry lab / ICT	77,784	7%
Dry lab tech / science (inc. West Cambridge)	210,000	20%
Office / dry lab (dedicated to life science)	154,522	15%
Wet labs general	130,884	13%
Wet/dry lab genomics (inc. Wellcome Genome Campus)	102,000	10%
Wet labs clinical (Cambridge Biomedical Campus)	104,226	10%
Mixed / uncategorised	87,761	8%
Total	1,044,338	100%

Source: GCSP, Iceni analysis

8.6 The overall aggregate totals are:

- Offices: 177,162 sqm / 17%
- ICT / tech: dry labs: 287,784 sqm / 27%
- Life sciences: Wet and dry labs: 491,632 sqm / 47%
- Mixed / uncategorised: 87,761 / 8%

8.7 In addition, the emerging Greater Cambridge Local Plan supply proposes a significant amount of potential additional provision. This is based on the 'First Proposals' Regulation 18 (Preferred Options) consultation consulted on in 2021. Further stages of consultation will be required and the Plan examination to be undertaken before this supply is adopted and can be considered in the assessment here:

- Cambridge East: c200,000 sqm divided between office / labs
- Cambridge Biomedical Campus: c250,000 sqm labs
- North East Cambridge: c170,000 sqm office / labs (including Cambridge Science Park, although much of the capacity is now permitted)
- Babraham Research Campus: c30,000 sqm labs

Overview of demand / supply by type

8.8 The table below compares the overall supply to the demand side position set out in section 8.

Table 8.2 Demand vs floorspace supply by type, March 2024 (excluding First Proposals)

Type / notes	Demand 2020-41 (sqm) (see table 8.1)	Floorspace supply – commitments (sqm)	Completions 2020-23*	Balance
Office (inc losses)	265,300 **	177,162	27,552	-60,586

Dry lab / ICT / physical science inc. West Cambridge	28,500	287,784	20,966	+280,250
Office / dry lab (dedicated to life science)	24,400	154,522		+130,122
Wet labs (including CBC / genomic dry labs)	423,800	359,795	24,845	-39,160
Mix / not categorised		87,761		+87,761
R&D stretch	147,700 ***			-147,000
Total	889,700	1,044,338	73,363	+228,001

Source: EHEU 2023 / GCSP, Iceni analysis

* Based on review of monitoring data 2020-23 and CoStar completions

** See table 8.1 including 'other' sectors, exc. 24,400 arising from life science office need

*** Gap between labour demand sector models and recommended need (see section 8)

8.9 The balance by type is briefly discussed below.

8.10 **Office** provision in terms of general requirements reports a c.25% undersupply – however when taking into account the other office / drylab elements relating specifically to ICT and life sciences - as assumed or reported in applications - there is a potential over supply. This suggests that there is a good office supply but in the longer term poste 2030 there may be a need for more general high quality office. The current supply is expected to be supplemented by further Local Plan allocated space in due course at North East Cambridge and later at Cambridge East.

8.11 **Dry labs** including for ICT and physical sciences have a large supply and a technical oversupply of which over 170,000 sqm is at West Cambridge

(commercial non-academic components) and 40,000 sqm at Eddington. Some of this provision is likely to fall under demand related to advanced manufacturing requirements rather than ICT/Tech, with the requirements for advanced manufacturing being outside the scope of this study. Further discussion with the West Cambridge applicants (University of Cambridge) is recommended to explore expectations around floorspace provision in terms of anticipated demand profile at both West Cambridge and Eddington. In part this may support reported shortfalls in serviced / start-up quantum dry labs.

8.12 **Wet labs** (including dry lab space at the Wellcome Genome Campus) are broadly in balance after taking into account recent significant permissions for lab space in Greater Cambridge. This is positive and shows the beneficial effect of these additional positions. However the 'R&D stretch' component (147,000 sqm) is in the real world to enable stretch for market choice, and with a market focused on life science it would be preferable to see oversupply in the life science category rather than the physical science dry labs (West Cambridge). Future Local Plan proposed supply therefore makes a critical contribution and has the potential to fill this shortfall including sites at CBC, North East Cambridge, Babraham and potentially Cambridge East - which combined could deliver some additional 380,000 sqm[81] of labs.

Demand / supply by type and availability period

8.13 The broad availability of space by type and period is reported below, relying on a range of assumptions around anticipated delivery of sites that have been developed by Iceni with the planning authorities.

[81] CBC 250,000 sqm, assumed 100,000 sqm from Cambridge East and 30,000 sqm Babraham.

Table 8.3 Floorspace supply by type, March 2024

Type	Completed 2020-23	2023-24	2025-29	2030-41	2042+	+ First Proposals
Office	27,552*	7,869	100,717	68,576	-	NEC / Cambridge East
Dry lab / ICT	20,966	1,033	30,973	45,778	-	-
Dry lab ICT / science (West Cambridge)	-	-	96,667	56,667	56,667	-
Office / dry lab (dedicated to life science)	-	8,872	105,691	39,959	-	-
Wet labs general	15,600	3,840	111,409	15,635	-	Cambridge East / NEC / Babraham
Wet/dry lab genomics (Wellcome Genome Campus)	-	4,417	73,083	24,500	-	-
Wet labs clinical (Cambridge Biomedical Campus)	9,245	11,286	58,218	34,722	-	CBC
Mix / unknown type	-	-	72,448	15,313	-	-
Total	73,363	37,316	694,259	301,149	56,667	-

Source: GCSP, Iceni analysis

* Based on review of monitoring data 2020-23 and CoStar completions

8.14 Key matters arising from the availability table are:

8.15 **Office**: Positive recent completions and a healthy trajectory going forward, benefiting from additional Local Plan allocations later in the period.

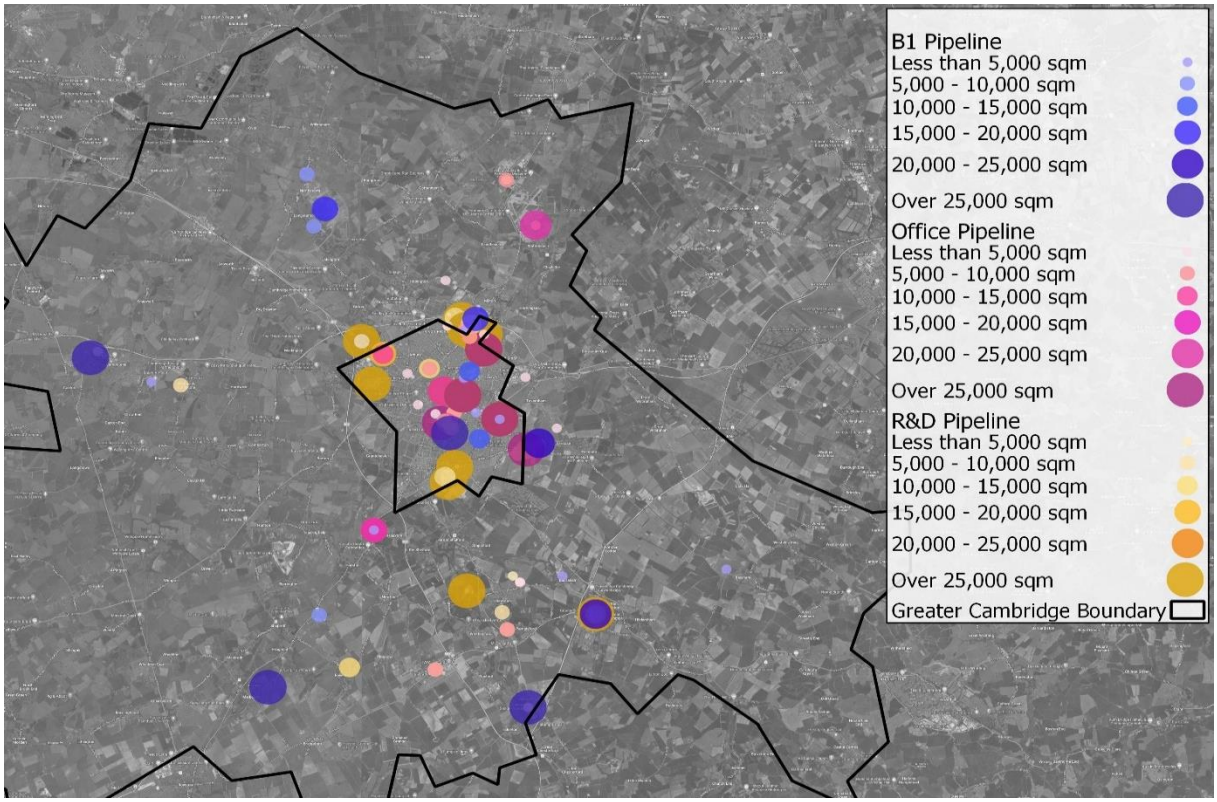
8.16 **Dry lab ICT / R&D space**: Positive recent completions and a healthy trajectory going forward.

8.17 **Wet labs**: A relatively limited delivery in the 2020-2023 period. This has occurred at a time when demand for life science research has risen dramatically in parallel with the COVID-19 pandemic. This has played a part in surge in applications for such spaces in the latter part of the period. Whilst a number of major schemes were committed at 2020, some of these have a longer delivery timeline - such as CBC and the Wellcome Genome Campus. The pipeline is now much stronger looking at the 2025-30 period (potentially an oversupply) although realistically some may by brought forward post 2030 in response to market conditions. Even so, additional space commitments will be required in the 2030s, which highlights the importance of the availability and deliverability of the future Local Plan supply – or alternatives if these are not achievable. It is of note that stakeholders highlighted some current permissions may fail to materialise due to rising construction costs and a cooled occupier market, which the planning authority can monitor via deliveries.

Adequacy of supply by size and location

8.18 The committed pipeline of supply by Use Class is set out below.

Figure 8.1 Committed Supply by Size / Use Class



Source: Iceni Projects / GCSP (March 2024)

Office / ICT Dry Lab

8.19 Key components of the office supply (March 2024) include:

- Cambridge Station: Hills Road, Devonshire Road, Clarendon Road, Station Road and Clifton Road. Office development in this central location has good access to Cambridge Station and amenities at CB1. These are likely to be desirable to major ICT firms.
- Cambridge Science Park / St John's Innovation Park: (North edge of Cambridge). Attractive to major ICT firms and smaller firms. Access to major road network.
- Peterhouse Technology Park (Fulbourn Road East, East edge of Cambridge) – ARM single occupier. Adjacent, Cambridge International Technology Park (Fulbourn Road West).
- Cambridge Innovation Park, Waterbeach (North of Cambridge), Cambridge Research Park (North of Cambridge, adjacent to the

developing Waterbeach new town). Established dedicated science / ICT parks cluster to the north of Cambridge for a range of occupiers and with amenity offer.

- Cambourne West / Cambourne Park Science and Technology Campus (West of Cambridge). Home to a range of occupiers and space sizes. Lower market attractiveness but more competitive rents.
- Northstowe (North of Cambridge). Associated with new town – yet to achieve critical mass.
- West Cambridge, Madingley Road. University associated dry labs.
- Waterbeach New Town (North of Cambridge). Associated with new town – yet to achieve critical mass.

8.20 Office supply is generally well orientated to the central area and existing science/technology parks. This meets key criteria in terms of benefitting from amenities either in the centre of Cambridge or offered at the parks. There also appears to be a reasonable level of space being provided at the smaller end of the market to support start-ups. Some of the more rural locations notably Cambourne and Cambridge Research Park have performed less favourably with a lower concentration of amenities and connectivity particularly for public transport. Over time both of these locations may see evolution with the advent of East West Rail and Waterbeach New Town respectively.

8.21 Demand for central space is leading to the redevelopment of other uses. Whilst this may lead to some displacement of existing traditional occupiers, it will free up space for premium offices for the ICT sector and other professional services. Ongoing redevelopment and intensification of Cambridge Science Park is likely to be a primary source of additional office and ICT space in the future, as well wider North East Cambridge and Cambridge East (Airport) in the longer term. Technology parks to the north of Cambridge also provide spill over space that may be more cost effective, supported by the expansion of new settlements.

Wet labs (and mixed offer)

8.22 Key components of the supply of wet lab spaces (March 2024) include:

- Cambridge Biomedical Campus (South edge of Cambridge). Leading clinical research campus at the local and national level. Mid-large corporates. Benefits from emerging South Cambridge station accessibility, currently under construction to open 2025.
- Cambridge Science Park / St John's Innovation Park / Merlin Place: (North edge of Cambridge). Forming a part of the major science park cluster supporting a range of firms including start-ups.
- Grafton Centre: (Central Cambridge). Large scale development ofew mix of office and labs in urban location including anticipated provision of incubator space.
- Cambridge North (North edge of Cambridge). Future cluster potential as part of North East Cambridge area and directly accessing Cambridge North station, offering mid to large floorplates for ICT and life science.
- Wellcome Genome Campus Hinxton (South of Cambridge). Dedicated to genomics, expansion plans for a range of occupiers. Building on existing world class institute infrastructure.
- Granta Park (South of Cambridge). Expansion of existing large park and facilities for mid – large occupier commercial life sciences occupiers.

- Melbourn Science Park (South West of Cambridge). Redevelopment of existing park for life science campus with new office / labs, provision of new amenities.
- Dales Manor (South of Cambridge). New bio-tech lab / office development. Less established location although forming part of an existing industrial area.
- Burlington Park, Foxton (South of Cambridge). New bio-tech lab / office development, smaller rural location / B road connectivity.
- Land at the Way, Fowlmere (South of Cambridge). New bio-tech lab / office development, smaller rural location / A road connectivity.

8.23 In addition to the above are emerging Local Plan proposed sites at:

- North East Cambridge: encompassing Cambridge Science Park, Cambridge Business Park and St Johns Innovation Park as well as a new brownfield city district to the west towards Cambridge North station. The existing locations provide established opportunities for renewal and intensification to deliver new life science and ICT premises as part of a successful cluster. The Cambridge Waste Water Treatment Plant redevelopment may also be a significant platform for the sector development subject to detailed design proposals, capitalising on proximity to existing parks and the station accessibility.
- Proposals at Cambridge Biomedical Campus and Babraham Research Campus will form suitable extensions to these successful life science locations.
- Cambridge East: a new urban quarter at Cambridge Airport. Proposals for this are in the development phase but expected to include a significant quantum of commercial space. Given the benefits of the ‘place’ / cluster for life science, this proposal may need to either plan comprehensively for such needs, including anchor tenant and connectivity strategy, or potentially focus more on a commercial offer learning towards ICT / engineering, building on the airport legacy.

8.24 The provision of labs is occurring at both established park and campus locations and in a number of new locations. The existing locations provide many of the key locational requirements for life science occupiers including clustering and collaboration as a part of a critical mass, connections to institutions as well as offering amenities and being in accessible /expandable locations. The Genome Campus, Babraham Research Campus, Granta Park, Wellcome Trust, Cambridge Science Park and Cambridge Biomedical Campus all have distinct roles in the overall life sciences ecosystem although the historical development path of some of these in more rural locations means their accessibility to the city is less than urban / urban fringe centres. The prioritisation of additional supply at existing locations – and enhancement of these - is likely to provide an optimum environment for further growth expanding critical mass, assuming that other 'place' locational criteria can be met.

8.25 There is supply in new locations outside of existing parks. In the urban area this includes the Grafton Centre which has the potential to respond to demand for connected and amenity rich urban locations. Critical issues for success may include the components of successful 'place' such as whether scale is sufficient to attract and retain a community, depth of amenity offer, accessibility, interaction with other urban activity (including residential in terms of mechanical / electrical, waste and extraction) and overall management capability. New more isolated rural proposals may find achieving a holistic offer more challenging particularly in terms of scale and connectivity – which is not to say they will not let units but that the developments may be sub optimal in terms of their overall contribution to the Cambridge ecosystem.

8.26 Evidence in this report indicates that scale-up space is lacking in supply. St John's Innovation Park, proposals for Cambridge Science Park and the Grafton Centre are anticipated to support this requirement, as will potentially Babraham in due course through the Local Plan allocations. It is however not clear from a current understanding of further developments that additional scale-up space is guaranteed, due to the nature of outline planning permissions. In theory the market should respond to demand, where viable. If insufficient scale-up space is provided to support the Cambridge life science eco system then further intervention may be required.

9. Conclusions

9.1 This study has been an in depth and wide-ranging review of life science and ICT accommodation requirements in Greater Cambridge. It has involved stakeholder interviews and occupier surveys combined with literature and data analysis to come to its conclusions.

9.2 This section draws on key messages from the work, which are also partly reflected in the executive summary.

i. Greater Cambridge remains one of the most desirable places in the UK *and the world* for both the ICT and life sciences sectors. Its outstanding legacy of academic and research institutions, businesses, science parks, labour and networks continue to support innovation, indigenous growth and attract inward investment.

ii. Greater Cambridge has a well established network of science and technology parks that each play a particular role in the knowledge ecosystem. Many of these have developed over several decades and provide locations of choice for business clusters that benefit from the networks, services and accessibility on offer.

iii. Whilst individual occupiers and organisations have specific needs, there are thematic locational preferences for different sectors and life cycle stages. A reoccurring theme is the importance of integrated ‘places’ that provide the technical premises and facilities but also offer amenity, clustering and connectivity.

iv. Life science lab based businesses benefit from parks that offer amenities, quality accommodation and a clustering / critical mass of similar businesses. Access to public transport is preferred but commuting by car remains a factor. Some occupiers require close proximity to clinical research centres notably at Cambridge Biomedical Campus. Start-ups benefit from locating with institutions or research centres that can provide appropriate space at affordable cost (as well as wider support), which is often not viable in fully commercialised

centres. Scale-up (growing) occupiers thrive in a network / cluster environment.

v. ICT businesses, particularly larger ones, focus on premium locations - city centre / urban - providing quality stock and amenity. This is important in attracting staff back to the office in an increased work from home culture. Public transport is important and rail connections are a priority for businesses needing a London connection. For start-ups and smaller businesses, there are specific needs in terms of incubator or innovation centre support and potential mentoring. Immediate proximity clustering and collaboration is beneficial for start-ups but for larger businesses this occurs at a labour market level. Parts of the ICT sector are closely linked to life science and close proximity is beneficial.

vi. In terms of accommodation requirements and recommendations for the life sciences sector:

    - There has been an undersupply of wet labs (across the size bands) through the 2020-23 period. Whilst there has been a theoretical committed supply, some of this has been long term and not readily deliverable. This has coincided with a period of considerably heightened demand for space due to COVID-19 and an increase in venture capital funding. The need for scale-up space (typically from 200 – 1,000 sqm but also up to c2,500 sq.m) has been particularly acute and less well provided for across the Greater Cambridge portfolio. It is estimated that up to 40% of space should be provided for this size category going forwards.

- With increased permissions now in place, including at Cambridge North, the Grafton Centre and Melbourn Science Park (recognising Section 106 still to be signed at July 2024), the supply for wet lab space through 2025-2030 is now substantial. However, whilst scale-ups appear better provided for, this is subject to the specifics of (and delivery of) development proposals, therefore there may remain a

shortfall in smaller scale-up space provision. There is also likely to remain a shortfall in wet lab commitments overall to 2041 which can be met through the emerging Local Plan First Proposals.

vii. In terms of floorspace requirements for the ICT sector:

- The future supply of general office space appears relatively healthy looking ahead, however there are likely to be additional requirements later in the post 2030 Plan period, depending on the specific details of current supply and how it is configured to the market.
- High quality start-up and moreover scale-up space will remain in demand. How well current supply supports this segment will be subject to the details of development proposals, however indications are that this sector will be better served.

9.3 Looking ahead, Greater Cambridge has a unique role to play on the national and international scale in life science and ICT evolution but will need to continue to evolve its offer to compete on the national and international scale. There are a range of challenges to be faced including the delivery of committed commercial development (to be monitored through completions), enhancing the place offer and tackling infrastructure provision across water, connectivity and affordable accommodation. Key sector priorities emerging from this work to be considered by both the public and private sector partners are:

a) Prioritise ‘place based’ business destinations that offer: high quality modern work spaces; preferably form part of a larger cluster / community to enable knowledge exchange; are in attractive settings either urban or rural; offer a range of amenities including food and beverage; and are well served by public transport as well as car. This applies to the life science and ICT sectors, whilst recognising that ICT occupiers may equally survive in ‘downtown’ locations such as CB1, their office premises requirements tending to be better suited to urban environments than labs. Even Greater Cambridge’s most successful locations such as Cambridge

Biomedical Campus and Cambridge Science Park will need to continue to evolve to provide best in class occupier place based locations by ensuring accommodation across scale, enhanced connectivity and quality amenity.

b) Seek to provide a range of premises in terms of scale, particularly for life science businesses, ensuring that smaller start-ups and scale-ups are provided for. Part of this is likely to be enabled by an improved overall supply. Planning policies or planning conditions may be suitable in achieving this.

- Partnership working is important in delivering a joined up offer and developing integrated solutions for Greater Cambridge. This is already evident across a range of public and private actors including Greater Cambridge Partnership, Innovate Cambridge and Cambridge Forum for Place.

9.4 This study is anticipated to have implications for both plan making and decisions on planning applications.

9.5 Regarding planning applications, officers can consider whether applications on a case by case basis best meet the needs of the sector ecosystems in terms of type of premises, mix of space sizes, locational suitability and overall needs. However, the recommendations of this report in terms of the range of size bands are intended at the Greater Cambridge area and not necessarily for each development. In that sense, it is recommended that the planning authority interrogate and monitor the types of premises being delivered over time, including in terms of size bands, and continue to engage with the sector leaders (for example via the Place Forum) to understand shortfalls in space needs.

9.6 Considering whether proposals are best suited to support the development of the ecosystem in terms of their locational positioning, taking into account the recommendations and priorities in section 6.

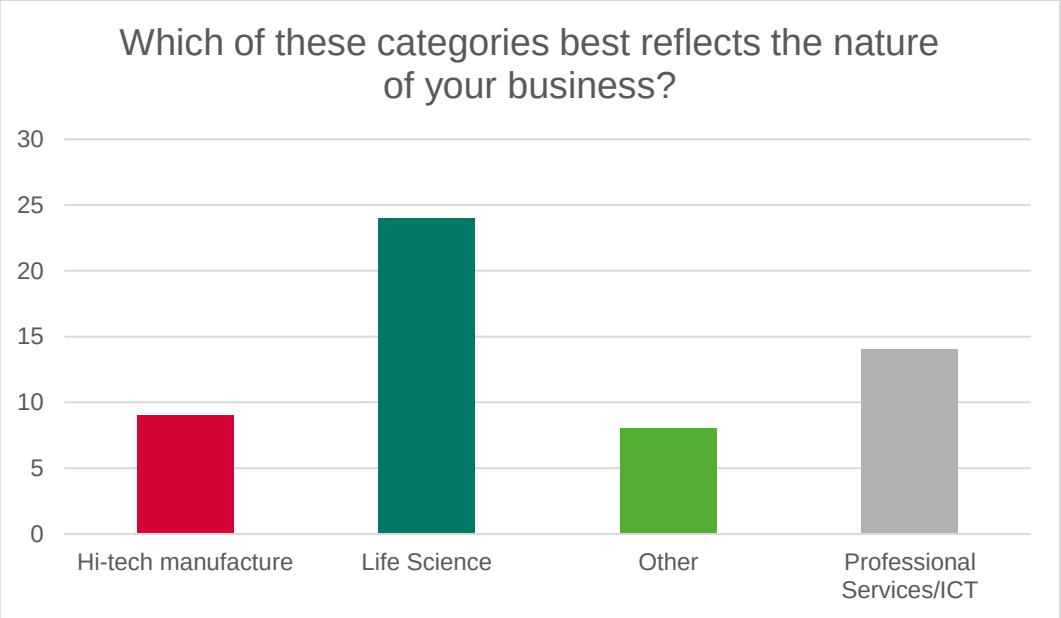
9.7 Regarding overall needs, this study considers that taking into account commitments, the shorter term needs, notably for wet labs, to at least 2030

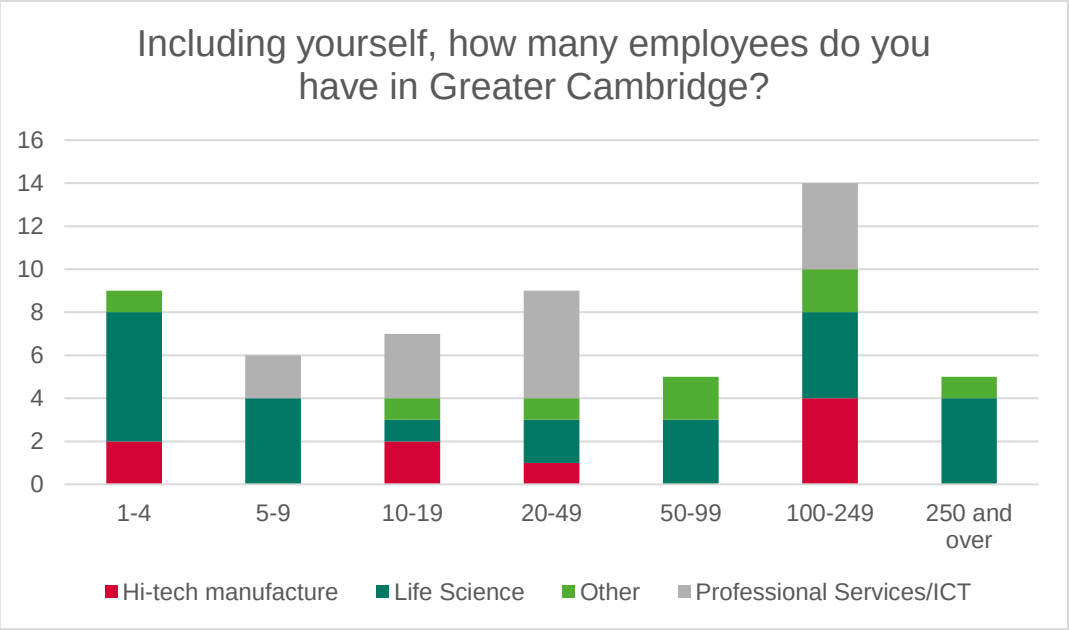
are likely to be met. The recovered appeal[82] at land to the north of Cambridge North Station references relevant points regarding the balance of needs which are worth considering. The decision includes assumptions around supply which Iceni believe should be viewed with caution. For example: para 6.117(7)(b) “disregarding owner occupier space” in supply – which is considered implausible given that any needs based calculation derived from either market or employment based data will include owner occupier take up. Furthermore para 6.118 / 14.120 disregards outline permissions, which evidently form part of the supply and should be considered in the context of ‘when not if’ they are likely to be delivered, unless there is definitive evidence to the contrary.

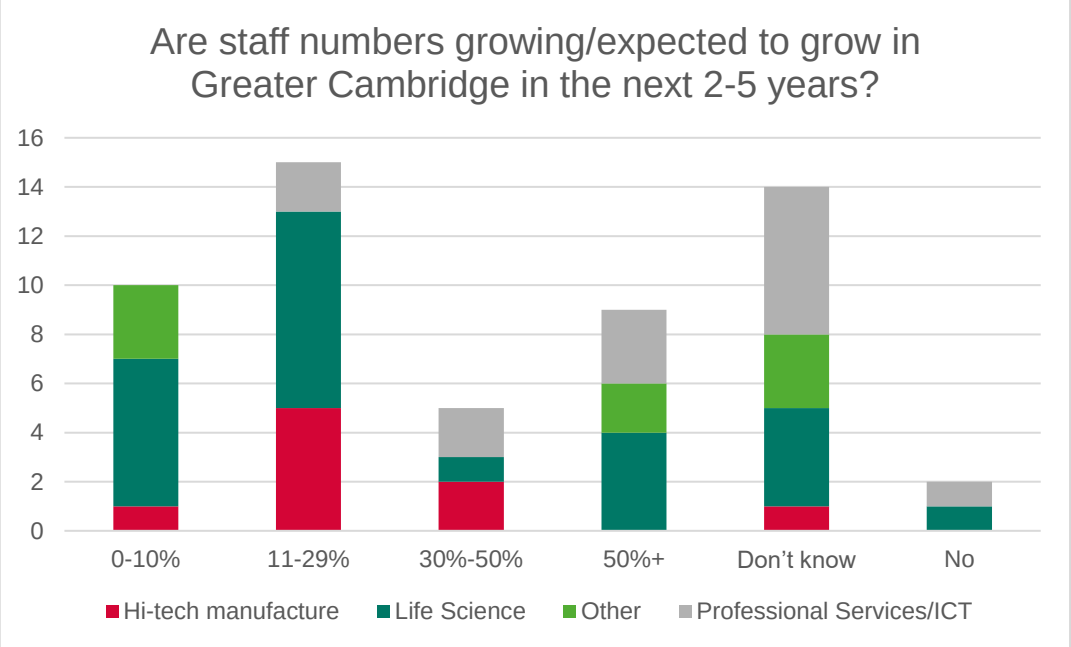
9.8 In terms of how start-up space could be funded - there are examples in London where section 106 contributions are sought for affordable workspace, including lab space. Greater Cambridge could explore the feasibility in viability terms of such policies. If pursued, commuted sums are considered the best way of delivering start-up accommodation so that development can be delivered and managed in an institutional environment rather than proliferated across multiple sites.

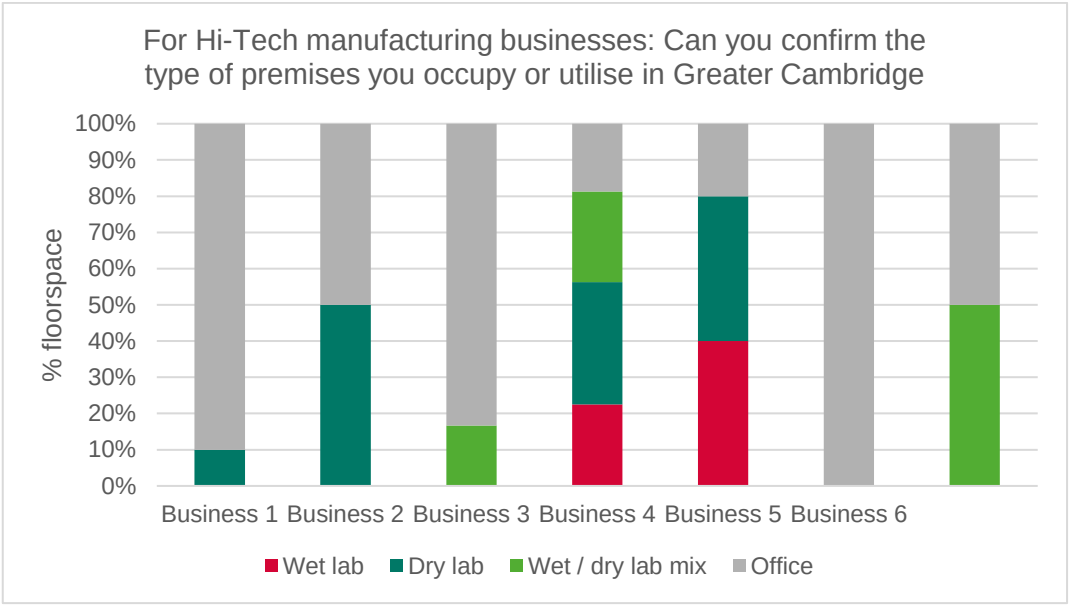
[82] APP/W0530/W/23/3315611

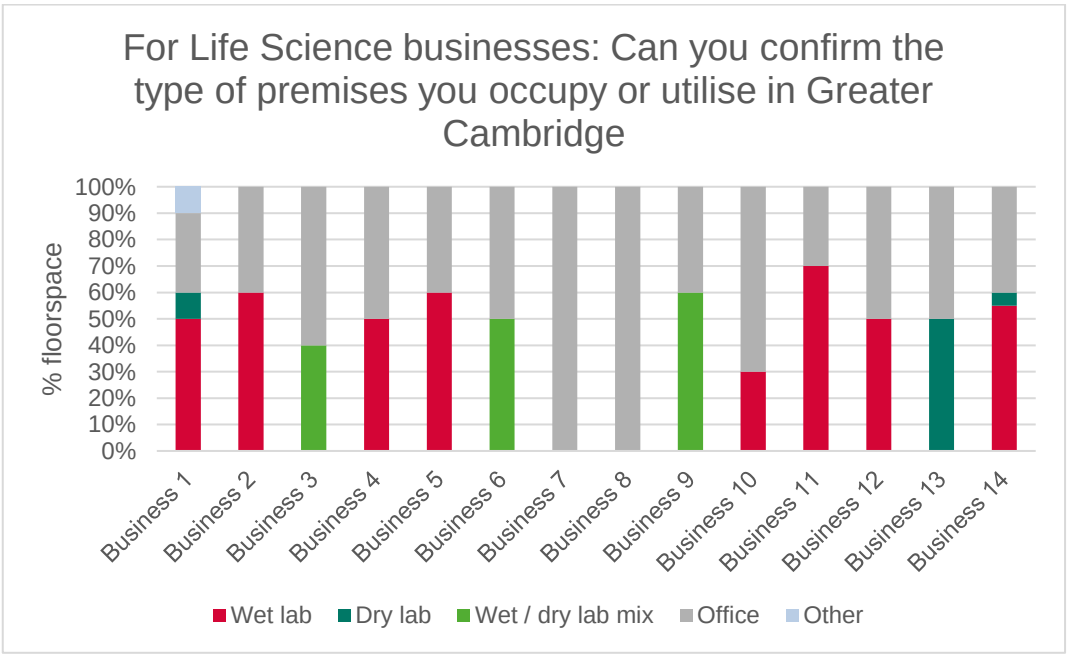
A1. Business Survey Results

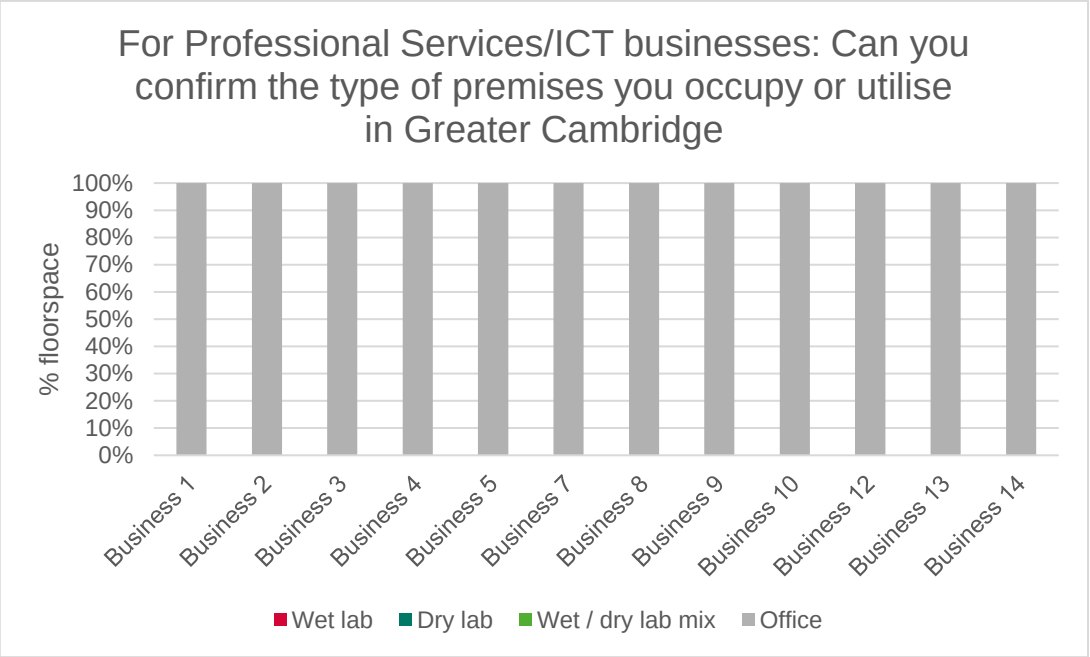


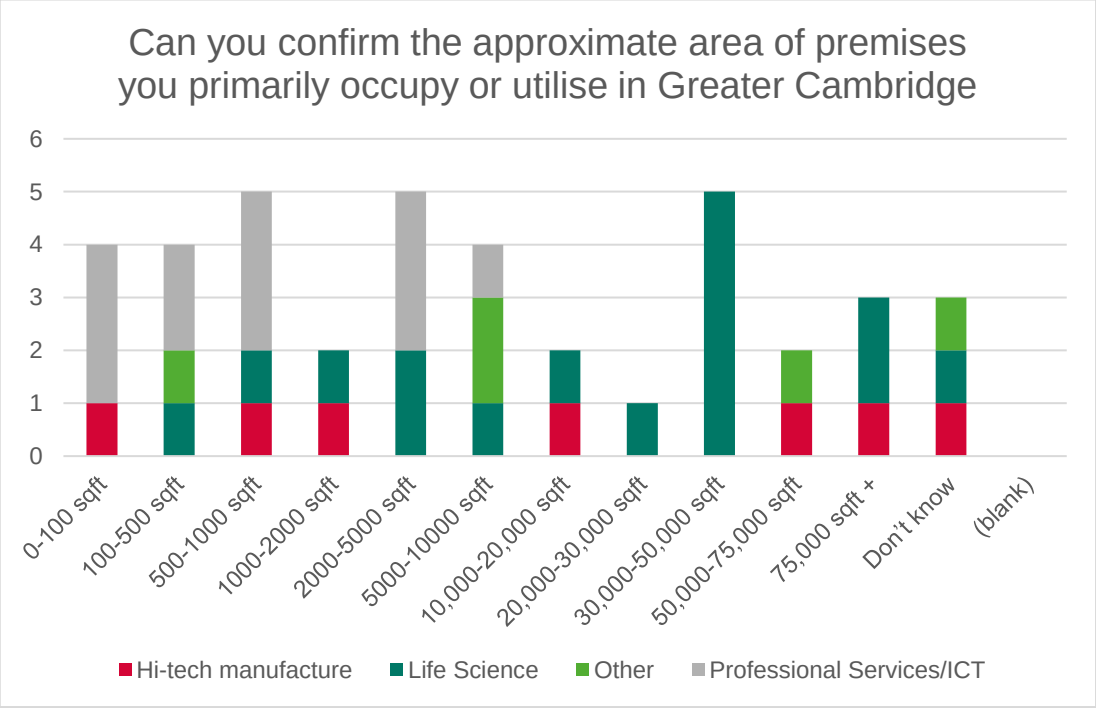

Including yourself, how many employees do you have in Greater Cambridge?
16
14
12
10
8
6
4
2
0
1-4
5-9
10-19
20-49
50-99
100-249
250 and over
Hi-tech manufacture
Life Science
Other
Professional Services/ICT

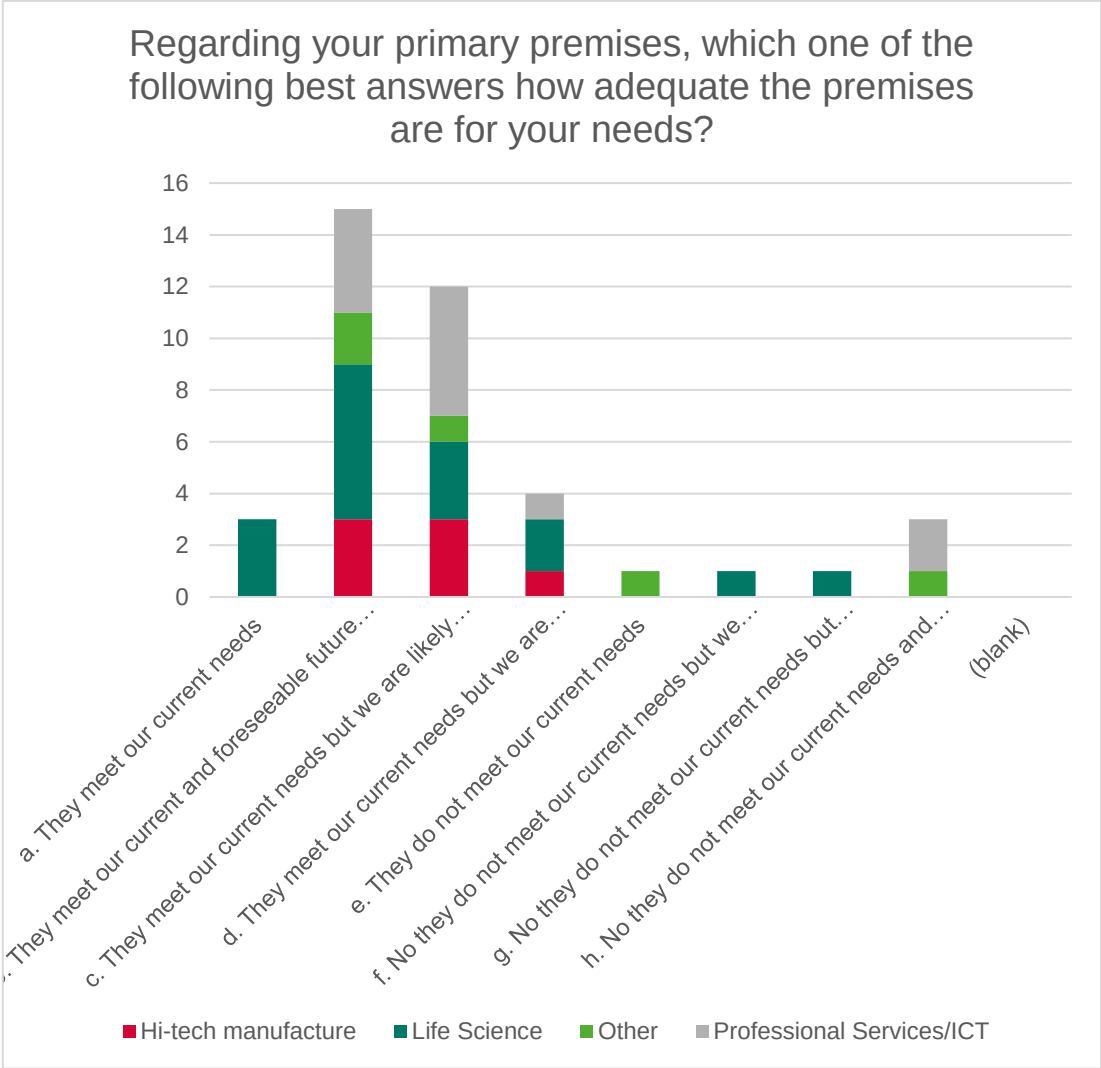

Are staff numbers growing/expected to grow in Greater Cambridge in the next 2-5 years?
16
14
12
10
8
6
4
2
0
0-10%
11-29%
30%-50%
50%+
Don't know
No
Hi-tech manufacture
Life Science
Other
Professional Services/ICT

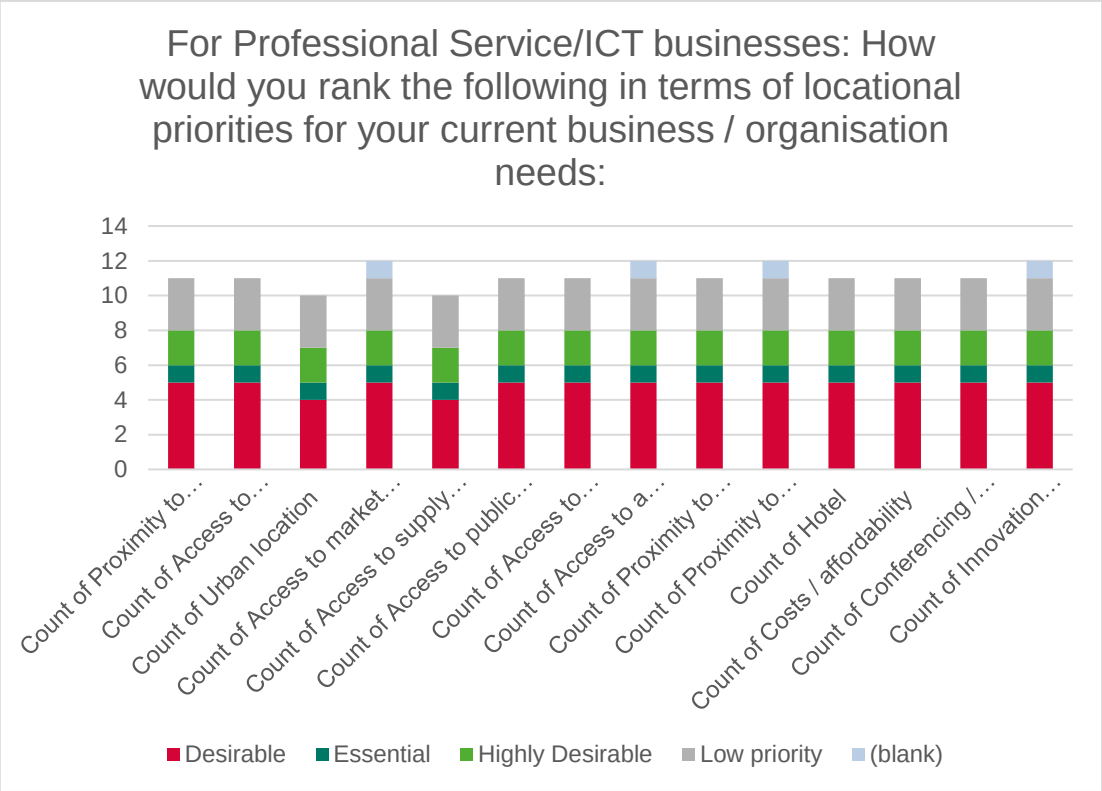

For Hi-Tech manufacturing businesses: Can you confirm the type of premises you occupy or utilise in Greater Cambridge
% floorspace
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Business 1
Business 2
Business 3
Business 4
Business 5
Business 6
Wet lab
Dry lab
Wet / dry lab mix
Office

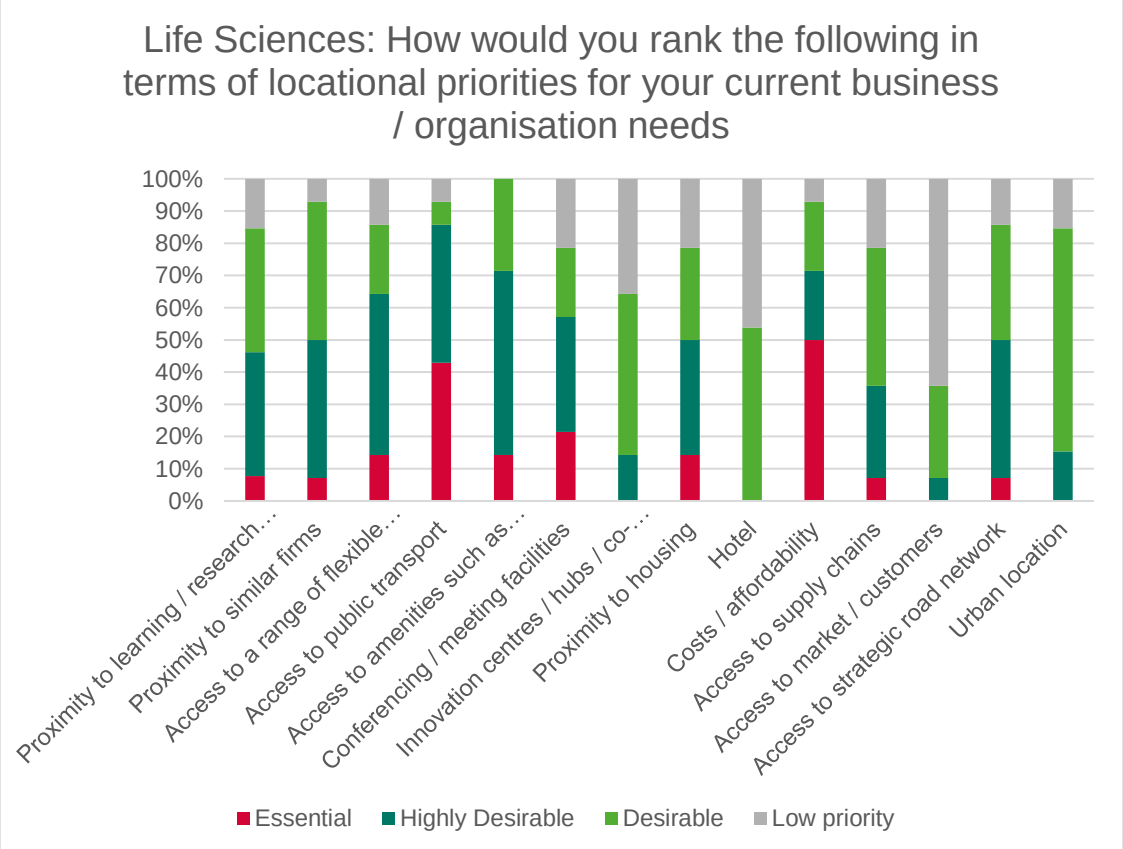

For Life Science businesses: Can you confirm the type of premises you occupy or utilise in Greater Cambridge
% floorspace
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Business 1
Business 2
Business 3
Business 4
Business 5
Business 6
Business 7
Business 8
Business 9
Business 10
Business 11
Business 12
Business 13
Business 14
Wet lab
Dry lab
Wet / dry lab mix
Office
Other


For Professional Services/ICT businesses: Can you confirm the type of premises you occupy or utilise in Greater Cambridge
% floorspace
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Business 1
Business 2
Business 3
Business 4
Business 5
Business 7
Business 8
Business 9
Business 10
Business 12
Business 13
Business 14
Wet lab
Dry lab
Wet / dry lab mix
Office


Can you confirm the approximate area of premises you primarily occupy or utilise in Greater Cambridge
6
5
4
3
2
1
0
0-100 sqft
100-500 sqft
500-1000 sqft
1000-2000 sqft
2000-5000 sqft
5000-10000 sqft
10,000-20,000 sqft
20,000-30,000 sqft
30,000-50,000 sqft
50,000-75,000 sqft
75,000 sqft +
Don't know
(blank)
Hi-tech manufacture
Life Science
Other
Professional Services/ICT


Regarding your primary premises, which one of the following best answers how adequate the premises are for your needs?
16
14
12
10
8
6
4
2
0
a. They meet our current needs
b. They meet our current and foreseeable future...
c. They meet our current needs but we are likely...
d. They meet our current needs but we are...
e. They do not meet our current needs
f. No they do not meet our current needs but we...
g. No they do not meet our current needs but...
h. No they do not meet our current needs and...
(blank)
Hi-tech manufacture
Life Science
Other
Professional Services/ICT


For Professional Service/ICT businesses: How would you rank the following in terms of locational priorities for your current business / organisation needs:
14
12
10
8
6
4
2
0
Count of Proximity to…
Count of Access to…
Count of Urban location
Count of Access to market…
Count of Access to supply…
Count of Access to public…
Count of Access to…
Count of Access to a…
Count of Proximity to…
Count of Proximity to…
Count of Hotel
Count of Costs / affordability
Count of Conferencing /…
Count of Innovation…
Desirable
Essential
Highly Desirable
Low priority
(blank)


Life Sciences: How would you rank the following in terms of locational priorities for your current business / organisation needs
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Proximity to learning / research…
Proximity to similar firms
Access to a range of flexible…
Access to public transport
Access to amenities such as…
Conferencing / meeting facilities
Innovation centres / hubs / co-…
Proximity to housing
Hotel
Costs / affordability
Access to supply chains
Access to market / customers
Access to strategic road network
Urban location
Essential
Highly Desirable
Desirable
Low priority

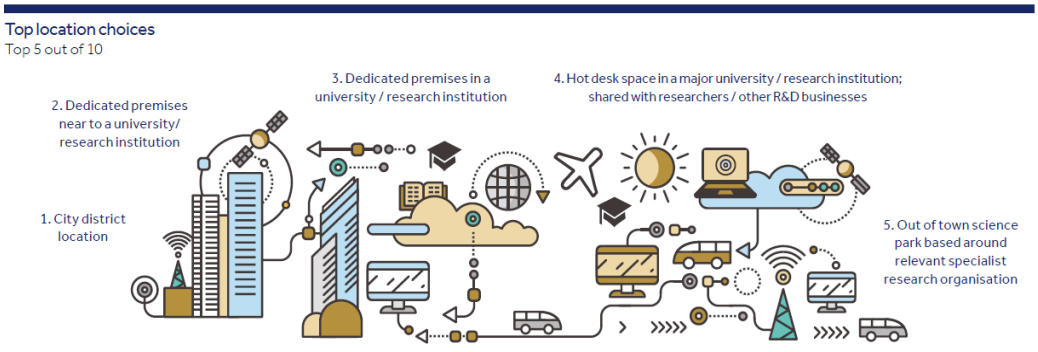
A2. Literature Review

Delivering R&D: Potential for the UK (2019) Bidwells

A2.1 On behalf of Bidwells, YouGov undertook detailed interviews and online surveys of 50 global corporations with some form of occupation in the UK, which spanned a range of business areas including pharmaceuticals, healthcare, and IT. The findings primarily consider the real estate needs of the largest R&D (including life science) companies.

A2.2 The following are considered attractive to large life science companies:

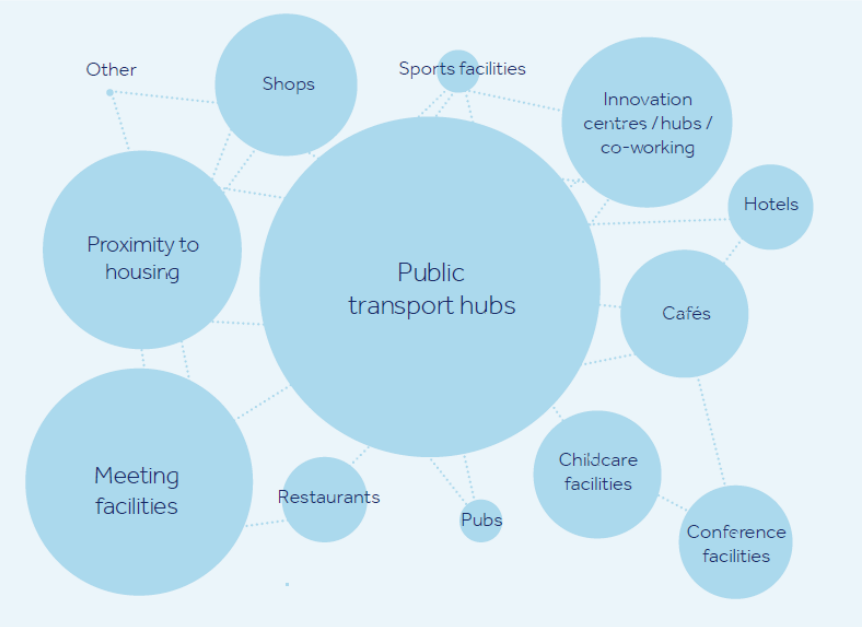
- City district locations;
- Dedicated premises near to university / research institution;
- Dedicated premises in university / research institution;
- Hot desk space within either a major university, research institute or shared with other researchers / R&D businesses;
- Out of town science park based around relevant specialist organisation.



Source: Bidwells, 2019

A2.3 A hierarchy of facilities are represented in the diagram below, with the key influences being public transport hubs, meeting facilities, proximity to housing. Much of the focus is therefore about ensuing facility locations are attractive to potential staff.

Figure 9.1 Hierarchy of facilities important to large R&D businesses (Bidwells, 2019).



Source: Bidwells, 2019

A2.4 Bidwells note that a number of respondents noted the importance of having available space at a location to enable R&D activity to respond to business need. The availability of such space in city centre locations is growing but companies invariably look to edge-of-centre campuses and out of town science parks where there may be greater supply and flexibility. In these locations the quality of transport infrastructure and facilities to attract staff are important.

A2.5 Bidwells highlight that the cost of space was a relatively low consideration, which is applicable to larger companies, as is lease length. This contrasts with start-up R&D where funding may be relatively short-term, so start-ups seek links with large company R&D or accelerators to access incubator space, funding or other form of support.

A2.6 The survey highlighted that 30% of respondents were likely to look for new property over the next 5 years, and 67% of these were looking to do so because of expected business growth.

A2.7 The research reports on a shortage of sought laboratory space of 1.2m sqft (111,000 sq.m), and only one third of this demand will be met between 2023 and 2025.

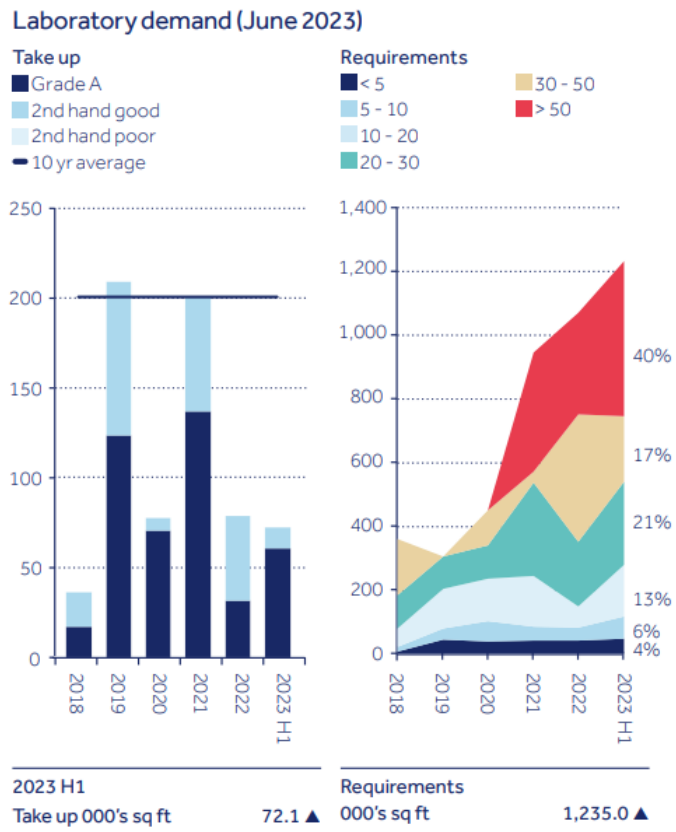
A2.8 This unmet laboratory demand is driving office-to-lab repurposing, despite an uptick in office floorspace demand post-covid occurring from the growing tech industry and its increasing convergence with the life science sector.

A2.9 At summer 2023 there are a range of schemes underway or have potential:

- 200k sq ft of new laboratory stock in 2023 at Cambridge Biomedical Campus, Unity Campus and The Press, the majority is already let or under offer.
- Further schemes at Granta Park & Babraham Research Campus will deliver in 2024 and have good occupier interest.
- Three planning applications are awaiting determination in the Cambridge North area
- Bruntwood SciTech have submitted a planning application for the redevelopment of Melbourn Science Park to provide 390,000 sq ft of new office and lab workspace, with significantly enhanced public space.
- Capital Park secured consent and commenced works to deliver lab space from H2 2024
- The plans for the reimagination of the Grafton Centre were submitted to planning.

A2.10 Bidwells provide data on the enquiries for space by size and type as well as lettings (take up).

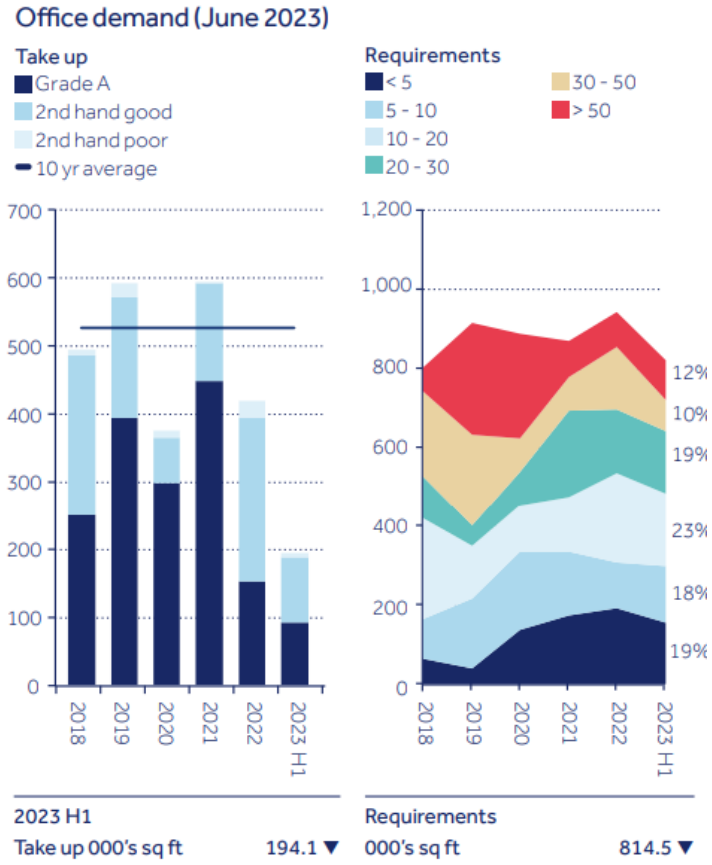
Figure 9.2 The breakdown of demand for laboratory space (Bidwells 2023).



Source: Bidwells, 2023

A2.11 Figure 2.2 suggests an increasing demand for larger scale laboratory requirements occurring since the COVID-19 pandemic that does not appear to be abating. This is notable for units over 30,000 sqft (2,800 sq.m).

Figure 9.3 The breakdown of demand for office space space (Bidwells 2023).



Source: Bidwells, 2023

A2.12 Figure 10.3 suggests an increased demand for smaller office spaces occurring since 2020, correlating with changes in working preferences.

A2.13 Bidwells report that office-to-lab repurposing is becoming increasingly common due to shortages in employment floorspace, with companies at all scales becoming more attracted to this, however primarily evident with mid-to large life science companies which are fuelling much of the increased demand in laboratory employment space. This is exemplified by Nuclera taking the c. 30,000 sq ft offices on Vision Park for lab repurposing. Smaller life science companies are also looking at office space for laboratory repurposing, shown with Transition Bio moving into a converted city centre location.

A2.14 The laboratory employment space that is being developed favours a flexible set-up which enables the potential for multiple companies per floor of a building. This is shown with 1000 Discovery Drive in Phase II of the Cambridge Biomedical Campus, which is expected to provide flexibility through a 50:50 mix of dry lab to wet lab employment space spanning 100,000 sq ft across give floors. Companies can rent laboratory spaces of between 5,000sq ft to an entire floor (21,000 sq ft), with the intention of attracting varying sizes of life science companies [NB – this entire unit was ultimately taken by a single occupier].

A2.15 The trend of office-to-laboratory (and other spaces such as retail) repurposing may be set to continue. Consequently, there may be increasing discourse on whether the quality of repurposing office space for laboratories provides the same quality as purpose-built laboratory space for the life science ecosystem.

Review of Wet Lab Space and Incubator Space for the Life Sciences in the Cambridge Area (2017) Cambridge Ahead

A2.16 This report was commissioned by Cambridge Ahead to help understand the issues and constraints in the provision of wet land space and in particular incubator space for life science companies in and around Cambridge.

A2.17 There is a recognition in the benefits of economic clustering, with life science clustering in Cambridge driving:

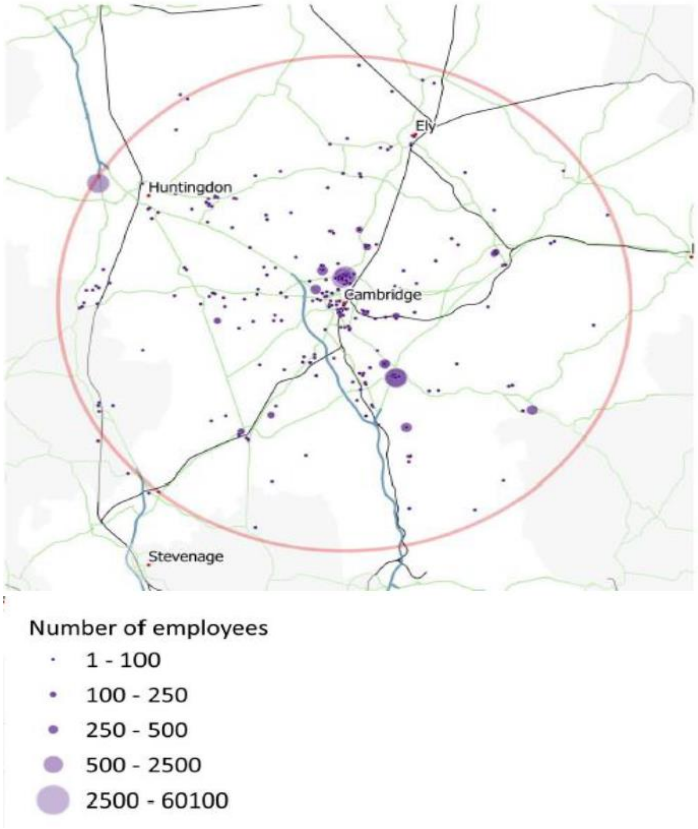
- Access to labour pool and source of entrepreneurs;
- Supplier base (technical, financial etc.); and
- Knowledge spillovers and informal learning.

A2.18 The growth opportunities in Cambridge's life science ecosystem acknowledged, there are potential threats and constraints to the sector:

- Insufficient supply of space for new start-ups and early-stage firms, slowing the creation and growth of new start-ups, as well as harming the clustering effects;
- Early-stage firms are unwilling to commit to standard leases (5 years+) due to their rapidly changing requirements;
- Limited returns on multi-occupancy buildings for early-stage firms, even before considering the supportive infrastructure needed to 'incubate' start-ups; and
- The higher costs associated with wet lab space relative to office space.

A2.19 While growth in laboratory space is being partly fuelled by a small number of large pharmaceutical companies, Figure 10.4 shows there is also a notable increase in the number of small life science companies. This therefore highlights that the needs of both SME and large life science companies should be considered to maintain the clustering effects of an amalgamation economy.

Figure 9.4 Location of life science businesses within a 20 mile radius of Cambridge by number of employees.



Source: Cambridge Ahead, 2017

A2.20 Key priorities shared by all life science companies include:

- need to feel part of a community;
- the cost and lack of quality and choice of housing;
- transport; and
- an available supply of laboratory space

A2.21 The report establishes the sources of agglomeration benefits in Greater Cambridge covering:

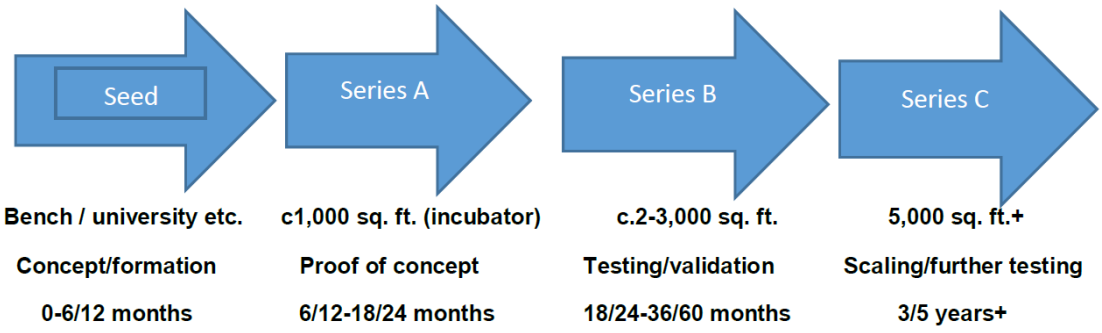
- knowledge spill-overs
- generating a local supplier base of supporting businesses
- a resilient pool of local skilled labour.

A2.22 Providing space for start-ups and to accommodate the growth of small businesses is a key challenge for the area.

Life Science Company Evolutionary Stages

A2.23 A few anchor companies such as AstraZeneca have stimulated the inward movement of other multinational life science firms, and further encouraging the formation of start-ups. Figure 10.5 details the evolution of these start-ups into SMEs and then large companies, highlighting the support these smaller companies need and smaller lab space requirements.

Figure 9.5 Evolution of science companies and their needs.



Source: Cambridge Ahead, 2017

A2.24 Start-ups in the seed phase are reliant on funding rounds and heavy university support, and therefore the transition into a Series A stage company can be challenging if there is a lack of affordable lab space. Additionally, shorter term leases are necessary due to the rapidly changing composition and needs of life science companies over their first five years, contrasting the traditionally long-term and inflexible laboratory leases on offer.

A2.25 Series A and B stage companies typically make up multi-occupancy building laboratory space and can be seen as risky to landlords due to the 'incubator' needs from supporting infrastructure, as well as the typical long periods of time before a profit is first made.

A2.26 Series C stage companies are ideally looking for their own building to lease with large unit sizes of 2.5k-5k+ sq ft, with the ideal scenario being they are able to expand with little disruption into a nearby site. This considered, the lack of larger laboratory spaces being produced in the Greater Cambridge area is constraining growth in the sector because growing companies cannot release smaller unit sizes for SMEs to take their place.

A2.27 An example of a supportive 'incubator' environment for Seed and Series A life science businesses is the Babraham Research Campus, which recognises the long-term growth potential of fostering a clustered ecosystem of life science companies, and therefore focuses on providing a strong network for small R&D business and providing greater investor reassurance when applying for investments and funding.

Supply Issues (for SMEs)

- Rents can be challenging for start-up and small companies several years away from making profits.
- Lack of financial strength of small companies – most start-ups and early stage companies in the life science sector are not able to offer financial guarantees or have significant profits for a substantial period and struggle to meet landlords' requirements
- Scale-ups and flexibility – in their early stages, company requirements are likely to change substantially. Longer term leases are therefore inappropriate.
- Finance and funding – most small start-up companies are funded through a series of capital raisings which is not compatible with longer-term funding of property.
- Need for support infrastructure – organised research centres, such as the Babraham Research Campus, provide a range of support to start-ups and small businesses that allow them to focus on their R&D
- Transport and access by bike / bus / train. Current locations are spread across both on and off campus / park locations. Transportation

and the ability of staff to commute to / from their place of work is an issue for occupiers and campus managers.

Specifications and requirements For Wet Lab Space

A2.28 The requirements for wet lab space are more specific than dry lab space, making viability a key issue for stakeholders. Design specifications for wet lab spaces include specialist equipment, air handling, and higher slab-to-slab heights- all of which increase costs. This is why wet lab space for early-stage companies has been supported by public or charitable funds.

A2.29 These requirements, particularly higher slab-to-slab height requirements for wet labs, can create issues when repurposing office space. Additionally, equipment requirements are sometimes missing from wet lab spaces, with freezer farm space reportedly being missing from many labs despite its ability to substantially reduce costs.

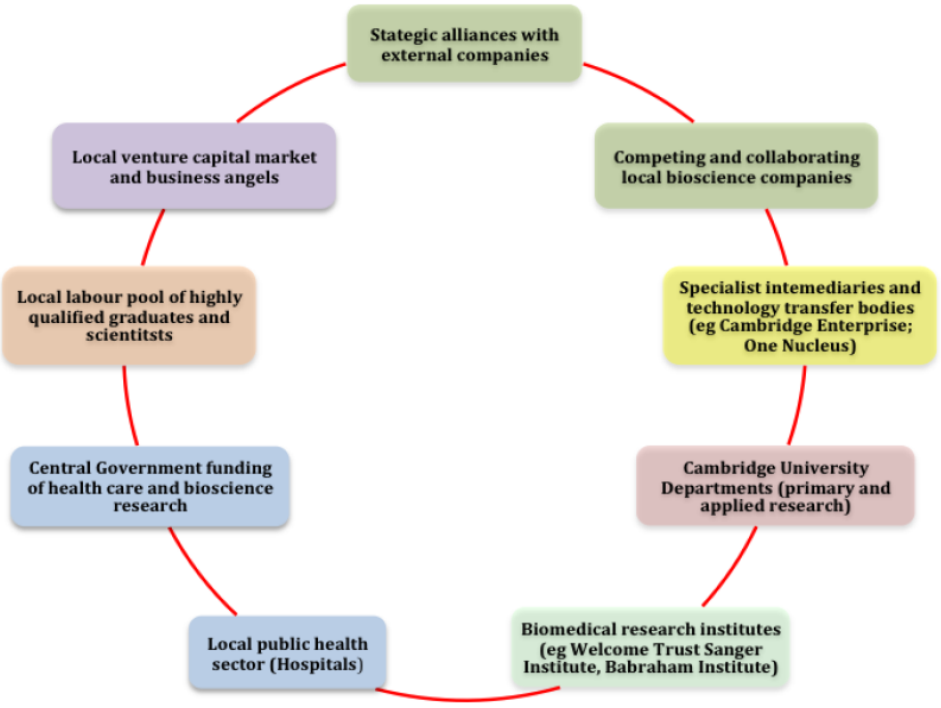
A2.30 Regarding sustainability, the energy demands from wet labs can be up to 10 times more than a typical office and designing ‘green labs’ can be challenging.

A2.31 The literature therefore suggests that greater collaboration is needed with life science companies of all sizes and businesses stages, to identify key needs for future strategic provision of wet lab spaces, as well as ensuring these labs are becoming increasingly sustainable.

The Cambridge Bioscience Impact Assessment Study (2015) Institute of Public Health, University of Cambridge

A2.32 This report by Cambridge Econometrics / Cambridge Economic Associates was commissioned by the NIHR Cambridge Biomedical Research Centre to help understand the needs of the biomedical research community within Cambridge, as well as the subsequent benefits of such a cluster economy if provided the right conditions for growth.

Figure 9.6 Main components of the Cambridge Bioscience Cluster



Source: Cambridge Econometrics / Cambridge Economic Associates, 2015

A2.33 A questionnaire was piloted to a range of companies within the Cambridge Life Science Cluster to understand their needs to achieve continual growth.

The Views of Companies on the Babraham Research Park

A2.34 A business survey was undertaken of all businesses based at Babraham Research Science Park because it was considered to be typical of the bioscience sector.

A2.35 The Babraham Research Park is characterised by start-ups (46%), spin-out companies from research institutions (27%) and existing companies (18%).

A2.36 It was found that 80% of surveyed companies located in the Babraham Research Park considered other Cambridge locations as well. The top key influences on location choice were:

- Presence of local contacts and networks;

- Availability of suitable premises (e.g. purpose built for your company's needs);
- Quality and availability of the local workforce;
- Proximity to research institutions to recruit quality labour; and
- Convenience to your existing employees.

A2.37 This suggests that seed companies require a close network of similar professionals in other companies/institutions, as well as the nearby proximity of a supporting economy.

A2.38 Further to this, while easy access to public transport was not ranked as highly as the points above, convenience to your existing employees was ranked highly as an influencer of where to locate a company, this would include transport methods and proximity to transport hubs.

A2.39 Convenience could also include ease of moving from one building to another, with the literature indicating that the close proximity of larger wet lab units to expand into would make certain locations seem more attractive.

A2.40 Key downsides of locating a life science company in Cambridge are stated by those interviewed in the Babraham Research Park as the fragile core infrastructure, with a particular focus on transport connectivity and housing required to accommodate people within the cluster.

Life Science Strategy for the Cambridgeshire and Peterborough Combined Authority (2021)

A2.41 Of the 470 life sciences business recorded in Cambridgeshire and Peterborough Combined Authority area, 390 are based in Greater Cambridge. The Combined Authority (CA) report that micro firms make up the majority of business in their area, as below.

Figure 9.7 % of life sciences in the Combined Authority by number of employees

Number of employees	% of firms
0-4	46%
5 – 9	16%
10 - 19	10%
20-49	14%
50-99	6%
100-249	6%
250+	2%
Source: Office for Life Sciences	

A2.42 Providing a conducive infrastructure to allow firms to scale, was one of the key themes to emerge during interviews with experts from the local life sciences sector.

A2.43 The presence of larger firms plays a vital role in a successful life sciences cluster, as such firms are able to attract talent and their supply chain partners to relocate locally, as well as making private investment into critical commercial infrastructure, such as laboratories, more viable.

A2.44 The issue of affordable housing and transport was often raised by interviewees.

A2.45 In terms of science parks, many interviewees mentioned the opportunity presented by Cambridge Biomedical Campus and felt that its potential had yet to be realised. A common comment was summed up by one local business leader, ‘Cambridge Biomedical Campus currently lacks vibrancy or a heart. It needs somewhere for people to gather and bump into each other’. This is partly a reflection of the fact that the campus is still in its formative stages, but also presents an opportunity.

A2.46 It was repeated during interviews that there is an acute shortage of space for start-up and scale-up firms. While facilities such as Babraham are intended

to address the requirements of early-stage firms, the existing stock of specialist laboratory and flexible workspaces for these businesses has proven insufficient to meet the current level of demand. One of the key challenges at Babraham is that start-up companies on the site have grown to the point that there is no space to accommodate the next generation of businesses. Supporting and encouraging requested expansions at adjacent sites like Granta Park could alleviate this problem.

Life Sciences Industrial Strategy – A report to the Government from the life sciences sector (2017)

A2.47 Key relevant points from this strategy include the following:

The role of clusters, infrastructure and 'place' in growing life sciences

A2.48 Life sciences clusters are nearly always located around a university or other research institute and in the UK include elements of NHS infrastructure. However, evidence suggests that governments cannot seed technology clusters and their success is usually driven by the underpinning assets of universities and companies, and also by the cultural features of networking and recycling of entrepreneurs and capital.

A2.49 An important component of the infrastructure that underpins new growth in life sciences is the incubator and there is evidence to suggest that companies based in incubators have a better survival rate and attract more investment than those that are not.

A2.50 The specific requirements of life sciences start-ups can often only be met by specialist providers. Life sciences incubators typically provide laboratory and office space to startups to enable and support new enterprises in carrying out research, translation and building their businesses; facilities may be offered on short leases or on a day-to-day basis. Additionally incubators can facilitate

knowledge transfer, mentoring and networking which are crucial to research-intensive industries.

A2.51 The BioCity ‘UK Life Science Start-Up’ 2015 report showed that of the 300-plus life sciences start-ups formed between 2010-2015, 57% are based in bio-incubators. The average investment in those companies located in a bio-incubator was three times more than for those outside a bio-incubator, with around 87% of all funds raised going into these companies.

A2.52 MedCity’s 2016 report ‘Planning for Growth – Demand for healthcare R&D space in London’ showed that demand outstripped supply for mixed biology laboratory and office space; however, incubators can struggle to be economically viable particularly where real estate costs are high.

A2.53 Government, local partners and industry should work together to ensure the right infrastructure is in place to support the growth of life sciences clusters. This includes transport into and across clusters (such as the Oxford-Cambridge rail link announced in autumn 2016, Heathrow expansion & HS2/3); housing and schools to attract skilled and talented people, as well as incubators and science parks to nurture and grow start-ups and SMEs. These need to be underpinned by fast broadband and flexible planning.

Life Sciences Industrial Strategy Update (2020)

A2.54 This report provides an update on the progress made against the targets set in the original life sciences industrial strategy published in August 2017.

A2.55 The make-up of the industry globally is changing: medtech, data and digital-based technologies are informing and changing the sector. The Life Sciences Industrial Strategy (2017) signalled the importance of these activities and the UK is now at the forefront of these changes with strong growth in new and emerging sectors.

A2.56 The Wellcome Sanger Institute is a central part of the UK's Life Sciences Infrastructure in terms of scientific excellence.

EMEA Life Sciences Cluster Outlook 2023 (JLL)

A2.57 This report takes a global look at the life science sector.

A2.58 JLL note that demand across life sciences occupier markets is science-led, spurred by accelerations in company and business growth. Predominately, this growth has come from pharma and biotech companies that need lab space. In addition, expansion of contract research and contract manufacturing organisations (CROs and CDMOs) that service the pharma industry by providing outsourced support, is also a key driver of leasing demand.

A2.59 JLL report that **location** has always been a key real estate focus for life sciences companies. Clustering of like-minded businesses, that benefit from the network effects of efficiency gains, talent pools, infrastructure, academic institutions, and innovation is directly correlated to improved business performance and outcomes.

A2.60 In many clusters across Europe, science has typically been conducted in out-of-town parks and although these parks continue to grow, there has been a noticeable shift in this trend towards increasingly **urbanised life sciences hubs.**

A2.61 City centres have the greatest concentrations of labour, along with the amenities, transport, and services to meet the needs of this employee base.

A2.62 In many clusters across Europe, science has typically been conducted in out-of-town parks, however there has been a noticeable shift towards urbanised life science hubs. In addition, global macro-economic and geopolitical issues are forcing occupiers to rethink their supply chain strategies, onshoring

where possible, or moving towards more localised hubs in well-connected locations.

A2.63 Whilst occupier requirements are highlighting a flight to **quality** of buildings, the limited supply available means that occupier choice is constrained, and expectations cannot always be met. Undersupply is a fundamental issue across the sector and all types of life sciences space.

A2.64 This is driving **rental growth** across markets, particularly for the best space in the strongest clusters. This will take time to balance out, with some new supply coming on stream in some key growth markets. In the interim, flexible options either through flexible space providers, or evolving incubator-type space, offer a level of flexibility for companies that are experiencing above target, or indeed below target growth plans.

A2.65 **Human-centric** design principles and hybrid operating models are also rising up the agenda across all types of life sciences spaces. Whilst scientists need to be in lab settings to do certain tasks, there is still an emphasis on the role of the workplace, and how better companies can support the experience of their workforces, including hybrid working.

UK Digital Strategy 2017

A2.66 The digital strategy applies the principles outlined in the Industrial Strategy green paper to the digital economy and is formed of seven strands which include:

Building world-class digital infrastructure for the UK

A2.67 This includes continued roll-out of 4G and superfast broadband and a Universal Service Obligations, which gives every individual, business and public premises the right to request an affordable high speed broadband connection.

A2.68 To accelerate the development and uptake of next generation digital infrastructure (full fibre and 5G)a £1 billion investment will be made

Making the UK the best place to start and grow a digital business

A2.69 The ambition is for the digital sector to contribute £200 billion to the economy by 2025. This is to be achieve by working with independent regulators to encourage innovation-friendly regulation and investing an additional £4.7 billion in R&D funding by 2020/21 to ensure businesses remain at the cutting edge of scientific and financial discovery.

Helping every British business become a digital business

A2.70 To make sure businesses have the knowledge and means to access technology to drive innovation and productivity there will be a focus on existing initiatives, plug gaps where there are challenges and providing £13 million funding to create a private sector led Productivity Council.

UK Digital Strategy 2022

A2.71 The Digital Strategy sets out the vision for the UK to be the best place in the world to start and grow a technology business and the actions required to deliver it.

A2.72 The digital foundations:

- Robust digital infrastructure
- Unlocking the power of data
- A light-tough pro-innovation regulatory framework
- A secure digital environment

A2.73 **Ideas and Intellectual Property –** includes supporting universities to develop new ideas and technology and incentivising businesses to innovate

A2.74 **Digital Skills and Talent –** strengthening the digital education pipeline, increasing awareness of pathways into digital occupations, developing advanced digital skills, attracting global talent.

A2.75 **Financing digital growth –** encouraging investment in early-stage businesses and improving efficiency of public capital by simplifying regulation

A2.76 **Spreading prosperity and levelling up –** supporting UK buisnesses through digital adoption, improving public services, supporting access to public procurement opportunities, levelling up regional economies and supporting net zero.

A2.77 **Enhancing the UK's place in the world –** increase the UK's formal representation in global technical standards bodies, oppose efforts to bring management of the internet under government control, seek inclusion of digital trade provisions in trade agreements, develop and support international initiatives.

Digital Catapult's Investor Attitude Tracker 2023

A2.78 The report summarises the current view of start-up investors across Europe and considers the characteristics investors seek before committing investment.

A2.79 Amid fluctuating economic circumstances, three quarters of investors in the UK has reviewed their risk strategy, with most UK-based investors more likely to say their risk appetite is lower.

A2.80 For 23% of investors, the UK sits on top of a 'league of investment nations' as a place they'll likely invest, with 25% of investors viewing the UK as an 'epicentre' of deeptech, compared to 24% Germany and 15% France.

A2.81 Generative AI was the biggest investment growth area (18%), followed by Responsible AI (14%), Metaverse (13%) and Spatial Computing (13%).

A2.82 The top 5 skills of start-up founder characteristics were industry knowledge/expertise, strong team-building/mentorship, leadership skills, passion and drive and clear, effective communication.

A2.83 The biggest risks of deeptech investing are lack of knowledge, lack of industry connections, high chance of failure, lack of follow-on investors, limited partner appetite, length of timeline return and companies unlikely to scale.

A2.84 The biggest challenges to tech start-up investment are limited access to talent/skills, regulatory/legal obstacles, competition for large, established firms, lack of funding access, economic uncertainty and lack of founder ambition.

Digital Economy Monitor H1 2023

A2.85 TechUK surveyed their members in Q2 of 2023 seeking to measure and track operational changes, business performance and how techUK members view the UK's economic outlook over the next 12 months.

A2.86 Five key themes emerged from survey results of techUK members:

1. Business outlook has rebounded after a difficult 2022, however wider economic challengers on the horizon could threaten business plans

2. Industry still requires greater support for R&D and innovation, while access to infrastructure has become a greater concern

3. Sales and investment plans are catiously looking up, showing that the industry is in the rebound

4. Businesses are reorienting to focus on efficiency with reductions in headcount access a range of companies planned.

5. When asked about their ambitions for the future, members are focusing on growth, efficiency and sustainability but need Government support to get there.

The future UK tech built – Tech Nation Report 2021

A2.87 The report focuses on what's next for UK tech; the challenges that are being faced by stakeholders; and how scaling companies have the potential to build back in a way that delivers benefit for everyone.

A2.88 UK tech investment is third in the world, hitting $15 billion in 2020 and rose by 17% in 2020, the highest rate of growth globally.

A2.89 Healthtech dominates global tech investment ($64 billion in 2020) and tech investment in core parts of the economy, such as energy and education, is on the rise.

A2.90 Overseas investment made up 63% of investment in 2020, with 'megarounds' investment ($100-250M) dominated by North America.

A2.91 UK tech GVA increased from £104bn to £149bn from 2010-18 and has grown on average by 7%.

A2.92 There are nearly 3 million jobs in the digital tech economy, more than Construction and Financial Services.

A2.93 Edtech saw record investment in 2019 with $184m raised, however this saw a decline in 2020 to $124m, going against national trends. Edtech is essential to growth post-covid and reskilling and upskilling will be imperative for the economy.

A2.94 Createch, saw several impressive deals despite tough economic conditions for creative enterprises, with investment increasing from $1bn in 2019 to

1.3bn. Createch made up 12% of UK service exports in 2018; the largest share was made up of IT, Software, Games and Film and TV.

A2.95 Future sectors offering opportunities for growth include Mobility Tech (automotive, transportation and shipping), TravelTech, FoodTech and InsurTech.

A2.96 In 2020, the number of unique tech jobs advertised per month in the UK outweighed other European countries by 259% per month. Top roles advertised were software developers, engineers, java developers, IT project mangers and front end developers.

CBRE Life Sciences UK Real Estate Market Outlook 2024

A2.97 Investor sentiment around the life sciences real estate is expected to remain optimistic in 2024, in particular for established science and technology assets in Tier 1 locations (such as Cambridge).

A2.98 Take-up rates for 2023 were broadly similar to 2022 and are expected to increase in 2024, as an estimated 2 million sqft (18,600 sq.m) of new commercial lab space becomes available. Rental rates are expected to rise modestly in Tier 1 locations.

A2.99 Venture Capital (VC) funding into the sector has been subdued relative to the peak of 2021, and that is likely to continue into 2024. However, the pension reforms announced this year could unlock billions of pounds of funding for young, fast growing life sciences companies.

A Digital Sector Strategy for Cambridgeshire and Peterborough (2019)

A2.100 At the time of writing Brexit is a threat to the supply of skilled talent, the region is struggling to match ambitious growth plans of local government and

businesses and growth risks being restricted unless steps are taken to deliver affordable housing and fluid transport systems.

A2.101 Recommendations within the report fall within six key areas:

1. **Networking** – enables knowledge transport, generates demand for new technology, introduces new businesses

2. Supply of **skilled workforce** across all levels of the digital sector – talent shortage will increase as vertical industries adopt advance technologies. Attention is needed by the public sector and business commuting to develop STEM skills, retain existing talent and upskill the population

3. **Digital infrastructure** – there is a need to demonstrate world-class digital ambitions to attract businesses and investment. Ultra-fast interest connectivity should be required for all infrastructure or housing projects.

4. **International Environment** – the region needs to stand out against the likes of California and Singapore to seek foreign direct investment. The region needs to develop and professional and strategic approach to increasing and retaining investment.

5. **Colocation of business and provision of affordable space** which start-ups can seed and grow is essential for effective knowledge transfer systems, accelerating growth and increasing impact on vertical markets. The region are supportive of creating sector-led business hubs outside of the Cambridge city that allow the clustering of similar technology businesses and customers.

6. Opportunity to cement the regions position as a global centre of expertise in the development and commercial exploitation of **Artificial Intelligence technology**

The Scaleup Culture Report 2023, Techspace

A2.102 A YouGov national survey of the technology sector found that 75% of tech workers confirmed that their working week is hybrid. 28% of respondents work in coworking or flexible workplaces, driven by a growing demand for flexible and collaborative environments.

A2.103 Micro and small business (<50 employees) spend more days in the office than larger tech companies.

A2.104 Tech employees found it valuable engaging with peers and other leaders from like-minded tech companies. Workers in the tech industry have a strong sense of camaraderie and community, down to their growth mindsets and nature of work. Being surrounded by like-minded peers provides opportunities for learning and professional growth.

A3. Commitments Trajectory Assessment Methodology

A3.1 For each permission Iceni Projects has researched the scheme, looking as applicable at promoter material, planning statements and design and access statements to identify what floorspace type, use class and sector the scheme is providing for. Each application was assigned a floorspace type, use class and a sector. For some sites there was not one dedicated sector and these have been classified as ‘mix’.

A3.2 Included are those sites that have planning permission for employment uses and/or have been allocated for employment uses in the Cambridge Local Plan 2018 or the South Cambridgeshire Local Plan 2018. This includes approvals subject to S106 agreements and currently held up by Environment Agency objection.

A3.3 Sectors as aligned to this report:

- ICT: general ICT / professional services taking place in offices with occasional dry lab requirements
- Tech / Science: physical sciences research, typically in dry labs
- Life Science General: life science in primarily wet labs with ancillary office / occasional dry lab
- Life Science Clinical: life science activities in premises at CBC
- Life Science Genomics: life science activities in premises at Wellcome Genome Campus

A3.4 Floorspace Type:

- B1a / E(g)(i) – office

- B1b / E(g)(ii) (R&D) – either assigned as dry lab or wet lab depending on scheme description
- B1mix / E(g) – assigned as dry lab, wet lab or office
- B1mix / E(g) - Mixed / uncategorised

A3.5 The table below matches the supply typology listed in the report to the type and sector columns in the trajectory table.

Table A3.1 Approach to trajectory classifications

Typology	Broad typology / floorspace type	Sector
Office	Office	ICT
Dry lab / ICT	Dry lab	ICT
Dry lab technology / science (inc. West Cambridge)	Dry lab	Tech/science
Office / dry lab (dedicated to life science)	Office + Dry lab	Life Science General
Wet labs general	Wet lab	Life Science General
Wet/dry lab genomics (inc. Wellcome Genome Campus)	Wet lab + dry lab	Life Science Genomics
Wet labs clinical (Cambridge Biomedical Campus)	Wet lab	Life Science Clinical
Mixed / uncategorised	Office + Dry Lab + Wet Lab	Mixed/Unknown

A3.6 Where a scheme indicates it will provide both wet and dry lab space, the R&D floorspace quantum has been assumed as split 50/50 across both types.

A3.7 Where a scheme provides a mix of office, dry lab and wet lab the floorspace classified under B1a is assigned to office and the B1b floorspace is split between dry and wet lab. If a scheme is classified as B1 floorspace the floorspace is split three ways between office, dry lab and wet lab for the sector.

A3.8 Floorspace that is classified as a mix of sectors is assigned to the mixed typology.