

Oxfordshire Cotswolds Garden Village Employment Study

West Oxfordshire District Council

Final Report

April 2019

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Executive Summary (1) This study provides independent advice on the most appropriate employment role for the proposed Oxfordshire Cotswolds Garden Village

West Oxfordshire District Council commissioned Lichfields to advise on the potential employment role that could be played by the Oxfordshire Cotswolds Garden Village (OCGV), proposed for land north of the A40 near Eynsham.

The study is intended to inform a forthcoming Area Action Plan for the garden village, as well as other strategic planning considerations. It follows a four stage approach to analysis, with the overall findings and conclusions as follows:

- a. Context and rationale: OCGV is ideally positioned to take advantage of a number of key strategic policy drivers and wider growth ambitions for Oxfordshire which have emerged over a number of years, by providing much needed spatial capacity to help capture wider economic opportunities, as well as helping West Oxfordshire to achieve a step change in its economic performance, attractiveness as a business location and its portfolio of high skilled local job opportunities. This includes the national Industrial Strategy with its focus on strengthening productivity and innovation, the emerging Local Industrial Strategy (LIS) for Oxfordshire which recognises OCGV's potential to contribute to the overarching vision for an Oxfordshire living laboratory, and the Cambridge-Milton Keynes-Oxford corridor which has been identified by Government as a nationally significant location for growth over the coming years.
- Economic drivers: The economic potential and role of OCGV will develop over time as the garden village is built out and becomes established. However the economic credentials are strong; Eynsham represents one of West Oxfordshire's largest business locations and accommodates an existing presence of high tech employers, capabilities and supply chain networks and latest economic projections imply strong levels of future job growth potential. From a property market perspective, whilst the site and area around it represent a largely untested market location, there could be scope for OCGV to help accommodate unmet demand from elsewhere across Oxfordshire (including the spatially constrained Oxford City) and latent inward investment demand exists at the Oxfordshire-wide level, in particular amongst science and technology sector occupiers.
- Science park proposition: The development and operation of science parks has evolved considerably over the last few decades, with civil society actors playing an increasing role in the wider innovation ecosystem. Four broad science park typologies have been identified through this study and provide a guide or model for provision of a new science park at OCGV. Each comes with risks and opportunities and it will be critical to identify the USP or series of USPs that can be attached to OCGV and a new science park onsite in light of anticipated competition from existing science parks in Oxfordshire and planned new developments. Given that no immediate opportunities have been identified through this study for an onsite research or higher education institute at OCGV, and that the more commercially facing models risk dilution of the science park concept, we suggest that some hybrid form of science park typology represents the most realistic approach, taking advantage of opportunities associated with university spin-outs that have out grown incubator style space within University facilities. Ideally this would focus on established, but still growing, companies that no longer require intensive incubator style support but distinctly operate within science and R&D related sectors.
- **Delivery strategy:** Provision and delivery of employment space will need to be structured carefully as part of the overall masterplanning process for the science park and wider garden village, reflecting the different types of space that could be provided and their respective (sector) locational drivers. Place making and high quality urban design is central to the overall strategy for OCGV, while delivery of a science park at OCGV will need to build in flexibility by establishing and maintaining a 'ladder' of premises of different sizes and price points to allow businesses to expand and be retained within the site. A number of different delivery models have been considered, including being led by a single developer, institutional investor or through a joint venture between the public and private sector.
- e. Alternative options: Other forms of employment provision could create jobs and business floorspace at OCGV such as flexible live-work space either in dedicated clusters or dispersed evenly across the settlement, or a focus on mixed-use development within the allocated business area. These alternative approaches would however be less well suited to capture high value science and technology growth, thereby constraining the District's ability to more effectively contribute to the high value Oxfordshire knowledge cluster.

Executive Summary (2)

A series of key questions provide an overarching framework for taking forward a future strategy for the employment component of the garden village

1. Is this an appropriate, strategic location for the type of new campus style science park envisaged to date?

The new garden village proposed for land north of the A40 near Eynsham does represent an appropriate location for the type of new campus style science park envisaged, for a number of reasons. Oxfordshire represents a proven business location for science and technology businesses and accommodates one of the largest clusters of science parks in the country. The OCGV site benefits from close proximity to the Oxfordshire 'knowledge spine' and provides an excellent opportunity for West Oxfordshire District to play a more direct and meaningful role within the high value science and technology ecosystem that surrounds it, in turn benefiting from the economic prosperity that this can bring.

The site already benefits from strong strategic connectivity and this will be enhanced further through provision of a park and ride facility within the garden village and effective links to Hanborough Station, providing direct rail connections to Oxford and London.

From a broader strategic perspective, a range of national, sub-regional and local policy and strategy objectives provide strong support for measures to boost productivity and high value business growth. This includes maximising the economic potential of existing clusters of innovation and globally leading technologies/activity by providing the right space in the right location to enable these sectors to grow and diversify.

Competition in the development pipeline from other existing and newly emerging science park locations, as well as the global focus of many of Oxfordshire's strategic growth objectives, means that OCGV will need to develop a clear and distinctive brand and proposition in the marketplace, raising the profile of the location (and West Oxfordshire more generally) to attract potential inward investors (as indigenous demand is unlikely to be sufficient in itself to require a c.40ha science park allocation). Leveraging the credentials associated with the 'garden village' brand will also be helpful, albeit not necessarily essential for the type of campus style science park proposed.

2. To what extent does the supporting evidence justify and support the delivery of a new science park of the type and scale proposed both in the period to 2031 and in the longer-term beyond?

Existing evidence and strategic policy supports the delivery of a new science park of the type and scale proposed from a qualitative, supply side perspective. It represents a key mechanism and spatial opportunity to implement ambitious plans for Oxfordshire to become one of the top three global innovation ecosystems by 2040 (as set out in the emerging Oxfordshire trailblazer LIS). The science park proposal offers synergy with the wider architecture of the Oxfordshire 'knowledge spine', with OxLEP specifically identifying the potential for a garden village at Eynsham to contribute towards this objective. At a more macro level, the national Industrial Strategy sets out an overarching objective to boost productivity, challenging local areas to articulate how they can contribute towards the national imperative.

Whilst the science park concept has been prevalent since the 1950s, it has evolved considerably since then. With this growing focus on collaboration between civil society, education, industry and government, OCGV's challenge will be how best to respond to the next generation of science parks over the coming years. The emerging LIS for Oxfordshire provides some key pointers in this respect, particularly around developing living laboratories across Oxfordshire, using the area's world-leading science and technology clusters to innovate in the transformative technologies that are shaping the twenty first century.

In quantitative terms, recent job projections suggest that previous growth assumptions commissioned by the Council may have been conservative, and that the overall level of provision set out in the Local Plan (74ha) addresses this, provides flexibility and choice and will also help to meet needs beyond 2031. The current Local Plan period runs to 2031, yet the type and scale of science park proposed at OCGV represents a longer term opportunity for accommodating business growth and employment needs that extends well beyond the next 12 years. It represents one of the largest employment interventions within the Cambridge-Milton Keynes-Oxford corridor and provides West Oxfordshire with an excellent opportunity to raise its economic profile and gain real traction within the world class innovation ecosystem that continues to drive economic growth across Oxfordshire.

Executive Summary (3)

A series of key questions provide an overarching framework for taking forward a future strategy for the employment component of the garden village

3. What evidence is there that the proposed science park is likely to be commercially successful and what would be the most appropriate strategy for bringing the site forward to market and ensuring sustainable rates/levels of occupancy?

Under the right conditions and with the right support in place, there is every chance that the proposed science park at OCGV can be successful. But Oxfordshire is already a crowded market place, and success at OCGV will depend upon a clear USP and distinctive offer to prospective science park occupiers. This could include provision of 'grow on' space for relatively early stage University spin-outs that have out-grown dedicated incubator facilities but still require proximity/access to the research and collaboration opportunities associated with the Universities.

Lessons learned from other science park developments across the wider sub-region underline a number of critical success factors that are useful for framing a potential delivery strategy for a science park at OCGV. This includes active linkages with academia, the presence of an anchor institution which provides a distinctive offering, and scale and size of site to provide both critical mass and opportunities for future expansion.

There are a number of options for bringing the science park site forward for development, and delivery of employment space needs to be structured carefully as part of the overall masterplanning process for the wider garden village, reflecting the different types of space that could be provided and their respective (sector) locational drivers. A key component of the place making strategy will be high quality urban design to enhance the market appeal of the science park and create a premium environment to support higher values and, in turn, improved viability of commercial development. Recognising that business and market needs can change quickly and evolve, delivery of a science park at OCGV will need to build in flexibility by establishing and maintaining a 'ladder' of premises of different sizes and price points to allow businesses to expand and be retained within the site.

4. Are there more appropriate, alternative ways of meeting the stated aim of providing additional business land and job opportunities as part of the garden village proposal, for example through a more dispersed approach, flexible living/working space, mixed-use development etc?

In terms of the garden village's employment element, the Council anticipates a strong emphasis on high quality local employment opportunities to encourage high levels of self-containment and to reduce the need for out-commuting. Beyond the concept of a campus style science park, there are a number of alternative forms of provision that could be pursued to meet this objective, although these would provide a less effective way of addressing the existing deficit of science park provision within West Oxfordshire, and enabling the District to more effectively compete within the high value Oxfordshire knowledge cluster and take advantage of its proximity.

This study concludes that the OCGV site represents an appropriate strategic location for a science park development; it represents a once in a generation opportunity to fully integrate West Oxfordshire into the wider Oxfordshire innovation ecosystem in a way that a more generic business park would not be able to achieve. The Council has made provision for more general business space and land through allocations elsewhere in the District, and the OCGV site should provide a distinct and unique development opportunity.

Provision of science park space through a more dispersed approach characterised by a number of smaller employment clusters could prove effective in meeting the Council's stated employment aim for OCGV, although scale of site is an important success factor in allowing a critical mass of complementary research, education and commercial activity to co-locate onsite. A campus style concept would be beneficial in this respect, and is recommended as the approach to pursue and test further. This would ideally be complemented by a range of broader employment opportunities (such as jobs created in local services to serve the new population) that can be accommodated across the wider garden village site, for instance within smaller scale local hubs and centres that are well connected and accessible.

Structure

1 Introduction

- 2 Context and rationale
- 3 Economic drivers
- 4 Science park proposition
- 5 Delivery strategy
- 6 Alternative options
- 7 Conclusions

Appendix 1 & 2

1. Introduction

Lichfields was appointed by West Oxfordshire District Council to advise on the most appropriate employment role for the Oxfordshire Cotswolds Garden Village

Introduction

West Oxfordshire District Council (WODC, "the Council") commissioned Lichfields to advise on the potential employment role that could be played by the Oxfordshire Cotswolds Garden Village (OCGV), proposed for land north of the A40 near Eynsham.

The West Oxfordshire Local Plan 2031 allocates the garden village for around 2,200 homes together with about 40 hectares of business land (B-class) in the form of a 'campus-style' science park and other supporting facilities including education, transport and green infrastructure. The more detailed development of the garden village will be led by an Area Action Plan (AAP) and the intention is for this report to feed into that process alongside other supporting evidence.

The employment element of the garden village is considered by WODC to be a key issue and specific advice is sought in relation to a number of key questions as follows:

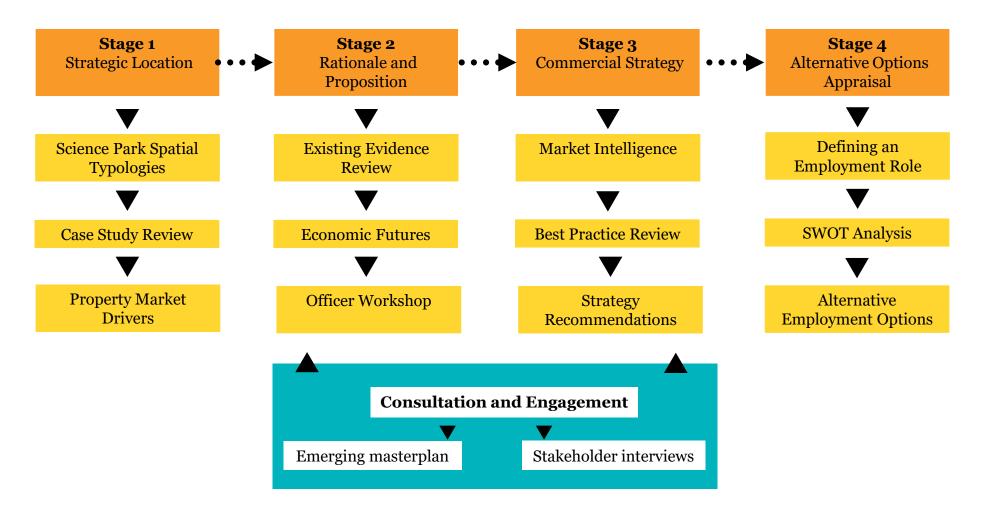
- Is this an appropriate, strategic location for the type of new campus style science park envisaged to date?
- 2. To what extent does the supporting evidence justify and support the delivery of a new science park of the type and scale proposed both in the period to 2031 and in the longer-term beyond?
- 3. What evidence is there that the proposed science park is likely to be commercially successful and what would be the most appropriate strategy for bringing the site forward to market and ensuring sustainable rates/levels of occupancy?
- 4. Are there more appropriate, alternative ways of meeting the stated aim of providing additional business land and job opportunities as part of the garden village proposal, for example through a more dispersed approach, flexible living/working space, mixed-use development etc?

The brief also requires the key findings of the study to be drawn together in order to consider overarching conclusions and implications for the OCGV, alongside a series of policy recommendations to help inform the Council's AAP.

The overall methodology for the study is shown overleaf.

1. Introduction

The study follows a four stage approach to define an appropriate employment role for the garden village and a potential future strategy to support its delivery



1. Introduction

The study provides a long-term strategic perspective based on policy, economic growth and market demand factors, in the context of an emerging Area Action Plan

Basis of assessment

The purpose of the study is to gather together the various evidence that is required to inform and underpin the approach to the employment element of the garden village. It doing so, it seeks to 1) appraise the locational basis for the type and scale of employment provision that is proposed; 2) consider the evidence for the delivery of a new science park to 2031 and beyond; 3) assess the most appropriate commercial and delivery strategy for bringing the science park forward in a sustainable manner; and 4) to test whether there are other more appropriate, alternative or complementary options for providing employment land and business space through the garden village proposal.

It is prepared in the context that initial masterplanning and other technical work is currently in progress, including staged public consultation on emerging proposals. The assessment draws on a review of existing policy and related evidence base reports, and a range of economic and property market data including:

- Office for National Statistics (ONS);
- Valuation Office Agency (VOA);
- Experian proprietary employment and GVA datasets (2018 base); and
- OxLEP inward investment data.

An important consideration for any work of this type is that it is inevitably a point in time assessment. The work has incorporated the latest data, assumptions and other available evidence at the time of preparation. The accuracy of data derived from third party sources have not been checked or verified by Lichfields.

The work will inform a new 'Area Action Plan' (AAP) for the garden village and other strategic planning considerations, however it should be noted that the findings of this assessment do not represent formal policy of WODC and are subject to due statutory processes, including relevant planning and other factors.

Structure of report

This report is structured as follows:

- Section 2.0 sets out the **rationale and context** for the OCGV;
- Section 3.0 reviews the **economic drivers** that will influence the future economic role of the OCGV;
- Section 4.0 considers the science park rationale and proposition in the context of West Oxfordshire and the OCGV site;
- Section 5.0 sets out recommendations about the most appropriate delivery strategy for bringing the science park proposal forward;
- Section 6.0 considers alternative options for employment provision at the OCGV; and
- Overall **conclusions** are set out in Section 7.0.

A list of key reference documents is provided at the end of the report.

The study draws upon consultation with a range of local stakeholders including members of the local business community and commercial agents operating in West Oxfordshire and the surrounding area, as detailed in Appendix 1.

Structure

- 1 Introduction
- 2 Context and rationale
- 3 Economic drivers
- 4 Science park proposition
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- 6 Alternative options
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Appendix 1 & 2

2. Context and rationale: introduction

Oxfordshire Cotswolds is a proposed new garden village comprising around 2,200 new dwellings and 40ha of business land adjoining the A40 near Eynsham

Expression of Interest

In response to the Government's prospectus for *Locally-Led Garden Villages*, *Towns and Cities*, in July 2016 WODC submitted an *Expression of Interest* for a new garden village, now referred to as the Oxfordshire Cotswolds Garden Village. The proposal is for a new sustainable community comprising around 2,200 dwellings and an estimated 40 ha science park/ business park, building on the longstanding strength of the Oxfordshire economy. It is intended to create new integrated housing and employment hubs next to a planned and funded transport hub, the Eynsham Park and Ride site, which is to be funded primarily from the Local Growth Fund.

In January 2017, the Government announced that it would contribute funding towards the OCGV under its Locally Led Garden Village, Town and City Programme, alongside 13 other garden villages and 3 garden towns. Grosvenor Developments Ltd has been appointed as land promoter on behalf of the landowners and is now undertaking initial work to develop a masterplan and outline planning application for the site which is expected to be submitted in 2019. It is anticipated that following the planning application process, the first homes will be completed at the garden village in 2021/22.

As part of the newly adopted West Oxfordshire Local Plan 2031, land north of the A40 near Eynsham has been allocated as a Strategic Location for Growth (SLG) to accommodate a garden village (Policy EW1), comprising new homes, business space and supporting facilities and infrastructure. The new Local Plan covers the period 2011 to 2031. It intends that the new homes provided (around 2,200) would make a substantial contribution towards West Oxfordshire's agreed apportionment of Oxford's unmet housing need (2,750 homes in total). The site was also identified as having the potential to deliver a significant amount of new business land to meet employment needs to 2031 and beyond.

Following adoption of the new Local Plan in September 2018, the intention is that the garden village proposal is taken forward in more detail through a separate 'Area Action Plan' (AAP) which WODC is aiming to submit for examination in 2020.

General location

The garden village site is located to the north of the A40 near Eynsham, as indicated by the blue outline on the map below. It is located between Oxford city and the market town of Witney (both c.6 miles away) and within a couple of miles of the nearest train station at Long Hanborough. The precise site boundary is yet to be fixed but a broad area has been identified covering approximately 215 ha. The location of the OCGV within the wider context is shown in Figure 2.5 on page 18.

Whilst relating closely to nearby Eynsham and Oxford, the garden village will be a distinct new settlement in its own right and will make a major contribution to meeting identified strategic housing and economic needs through an ambitious, accelerated programme of delivery.

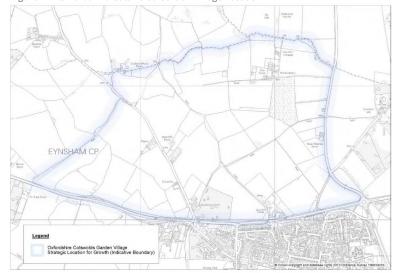


Figure 2.1: Oxfordshire Cotswolds Garden Village Location

Source: WODC, West Oxfordshire Local Plan 2031 (September 2018)

2. Context and rationale: strategic policy drivers (1) The national Industrial Strategy provides a number of key opportunities for OCGV to harness, including the Government's commitment to support innovation

Industrial Strategy: Building a Britain fit for the future

Published in November 2017, the Government's Industrial Strategy sets out the long-term plan to boost productivity and earning power throughout the UK. It provides an important macro policy backdrop to the OCGV proposals, and identifies five overarching 'foundations of productivity', each of which becomes the focus of long-term strategic policies:

- 1. 'Ideas' pledges to strengthen the UK's R&D activities and ensure that discovery is translated into commerce, including investment of £725 million in new Industrial Strategy Challenge Fund programmes to support innovation.
- 2. 'People' sets out aspirations to develop the UK's technical education system to stand alongside the world-class higher education system. This includes investment of £406 million in maths, digital and technical education, helping to address the shortage of science, technology, engineering and maths (STEM) skills.
- 'Infrastructure' outlines a number of funding streams to boost transport, housing and digital infrastructure, including an increase of £31 billion to the National Productivity Investment Fund.
- 4. Business Environment' pledges to launch and roll-out Sector Deals (partnerships between government and industry), with the first being in life sciences, construction, artificial intelligence and automotive sectors. Meanwhile the Government outlines plans to drive in excess of £20 billion investment in innovative and high potential businesses.
- 5. 'Places' outlines the introduction of Local Industrial Strategies (LIS) which will set out the long-term strategy and priorities that build on local strengths, address weaknesses and deliver on economic opportunities across all parts of the UK.

Figure 2.2: Five Foundations of Productivity



Source: HM Government, Industrial Strategy: Building a Britain fit for the future (November 2017)

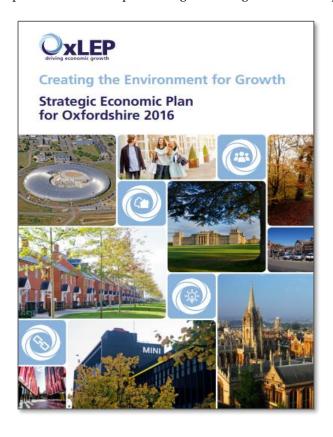
2. Context and rationale: strategic policy drivers (2) OxLEP places innovation and research at the forefront of its overarching economic strategy, identifying OCGV as a key location to support this vision

OxLEP Strategic Economic Plan (2016)

Oxfordshire Local Enterprise Partnership (OxLEP) set out its overarching economic vision for Oxfordshire to 2020 within an updated Strategic Economic Plan (SEP) in 2016, which will be achieved through four key priority areas of 'People', 'Place', 'Enterprise' and 'Connectivity'. The SEP describes how the economic competitiveness of Oxfordshire will be driven by innovation, enterprise and research excellence, with five key sectors identified as having significant growth potential:

- 1. Automotive & motorsport Oxfordshire is part of the UK's Motorsport Valley, which provides a comprehensive supply chain of locally based world-class design and high performance engineering. The county is home to a number of high profile names such as Williams F1 and Renault Sport F1.
- 2. Creative and digital Oxfordshire's digital industry is worth £500m and is strengthened by the presence of world class universities and sector specific skills, alongside an active start-up arena driven by university students the wider entrepreneurial community.
- 3. Electronics & sensors Oxfordshire is home to a globally-established electronics industry, with a diverse range of activities encompassing R&D, design and manufacturing. Both Harwell Campus and Culham Science Centre provide world class R&D and testing facilities.
- 4. Life sciences Oxfordshire supports a vibrant life sciences cluster with activities ranging from R&D to medical technology and digital health. The cluster includes global leaders in the pharmaceutical industry, alongside rapidly growing biotechs (e.g. Oxford Nanpore) and an increasing pool of start-up enterprises, many of which are spin-outs from Oxford University.
- 5. Space technologies Oxfordshire lies at the heart of the UK's space industry and has successfully attracted leading global space technology companies. Activities within the sector are largely concentrated to the south of Oxfordshire, at Harwell Campus.

Supporting the design and delivery of innovation districts in suitable locations across the county is identified as a particular priority within the SEP, with the OGCV cited as a potential location as part of the garden village's wider development.



2. Context and rationale: strategic policy drivers (3) Oxfordshire's emerging Local Industrial Strategy unveils strong ambitions to become a leading global innovation ecosystem

Oxfordshire Local Industrial Strategy Trailblazer

Following publication of the Government's national Industrial Strategy, Oxfordshire has been invited to produce a Local Industrial Strategy (LIS), with submission to the Government anticipated for March 2019. The LIS will provide the strategy for longterm economic growth in Oxfordshire as a county, with the overarching vision "for Oxfordshire to be one of the top three global innovation ecosystems by 2040".

On 21 December 2018 OxLEP submitted a technical negotiating draft Oxfordshire LIS document to Government setting out the overall plan to deliver inclusive growth across Oxfordshire. It sets out four priority areas or pillars (shown to the right) in which critical investment is needed from across the public and private sectors. These pillars are designed to bolster Oxfordshire's proposition as a global innovation ecosystem, strengthen the foundations of productivity set out in the UK Industrial Strategy, tackle the UK's Grand Challenges, address the structural challenges that are hindering growth and create the conditions for inclusive growth.

The emerging OCGV development in West Oxfordshire (alongside garden town developments at Didcot and Bicester) is identified by the LEP as offering a key opportunity to respond to some of the overarching challenges set out in the draft LIS, including the challenge to future proof Oxfordshire's energy infrastructure by developing new and innovative energy solutions for instance around low carbon. The garden village is also identified as offering potential to achieve the third vision pillar of developing Oxfordshire as a living laboratory, using the area's world-leading science and technology clusters to innovate in the transformative technologies that are shaping the twenty first century and developing solutions to the UK's Grand Challenges of ageing society, mobility, data and artificial intelligence, and clean growth.

Figure 2.3: Four Pillars of Oxfordshire's LIS Vision

A globally connected and competitive innovation economy

Oxfordshire's ecosystem will be internationally renowned due to the strength and concentration of world class assets and innovation. This pillar focuses on developing the critical components and infrastructure of the innovation ecosystem to increase international connectivity and competitiveness. It focuses on internationalising Oxfordshire, connecting our innovation to world wide opportunities and ecosystems.

A powerhouse for commercialising transformative

technologies

Oxfordshire will be a commercial hub, known globally for being a place which brings researchers, businesses and innovators together. This pillar focuses on maximising technology innovation, R&D and commercialisation by putting in place mechanisms throughout the business lifecycle to support and accelerate global leadership in critical emerging sectors and technologies.

A living laboratory solving the UK's Grand Challenges

Oxfordshire's environment and demographics, together with its ambitions for planned housing growth, will create the platform for developing new innovation in place making, at scale. This pillar focuses on developing Oxfordshire as a globally recognised sustainable, liveable place with healthy communities, utilising new technologies and services developed within the ecosystem to tackle the four Grand Challenges set out in the Industrial Strategy.

IV

A skills system creating opportunities at every stage of life

Oxfordshire's economic success is tied to the dynamic and skilled workforce it is able to access, develop, nurture and retain. As a cross-cutting priority, the focus of this foundation pillar is to build an education and skills system that is agile and responsive to the needs of Oxfordshire's businesses and innovation ecosystem, and which creates the pathways that can provide young people and local communities with the skills needed to access new employment opportunities.

Source: OxLEP, The Oxfordshire Industrial Strategy: Working Draft for Discussion with Government (Dec 2018)

2. Context and rationale: strategic implications for OCGV The strategic policy context provides an opportunity for West Oxfordshire to take advantage of support for scientific and technology sectors and skills development

Industrial Strategy: Building a Britain fit for the future

The Industrial Strategy provides a number of key opportunities for the employment strategy at OCGV to consider and/or respond to, namely:

- Increased funding opportunities for R&D activities are set to strengthen and increase the UK's innovation activities;
- The potential to incorporate onsite technical education facilities that respond to STEM skills shortages;
- The potential to harness growth supported through Sector Deals, especially given existing strengths within the life sciences and automotive sectors across Oxfordshire; and
- The emerging Oxfordshire LIS will provide an early stage opportunity for a new science park at OCGV to tap-into potential sources of funding and investment.

OxLEP Strategic Economic Plan Update

OxLEP's long-term economic strategy for the County offers an opportunity for OCGV to harness, especially given the SEP's focus upon high-value sectors:

- Opportunity to for West Oxfordshire to harness OxLEP's strategic focus on innovation, enterprise and research excellence through creation of a new science park;
- OCGV could seek to draw upon investment in skills development should on-site education facilities be provided; and
- Employment provision at OCGV can benefit from investment in connectivity, making the site more attractive to potential occupiers.

Oxfordshire Local Industrial Strategy

The emerging LIS for Oxfordshire offers a significant opportunity for OCGV, especially given aspirations to create a new science park as part of the new settlement:

- OCGV could benefit from investment in the wider Oxfordshire innovation ecosystem, with the potential to draw upon investment in new sectors and business/research space, as well as associated/supporting infrastructure;
- The emerging LIS specifically identifies West Oxfordshire as a key location to develop new well-connected world-leading innovation hubs and clusters; and
- The development of a new community at OCGV offers potential to contribute to the overarching vision for an Oxfordshire living laboratory, for instance by integrating transformative technologies into delivery of healthcare services for an ageing society.

Summary

The above summary identifies multiple opportunities for West Oxfordshire to harness and contribute towards recent and emerging strategic policy aspirations at the national and sub-regional level. Development of a new garden village and associated on-site science park provides a significant spatial opportunity and the scale or critical mass required to enable Oxfordshire to seize these various opportunities with a particular focus on innovation and R&D as key drivers of growth and demand. However, given the global focus of many of these strategic objectives, it will be important to establish an economic role and vision for the OCGV – and science park specifically – to enable the site to compete with other more established locations for occupiers and investment.

2. Context and rationale: policy background (1) The newly adopted West Oxfordshire Local Plan allocates the OCGV site to include a c.40 ha 'campus style' science park

West Oxfordshire Local Plan 2031

The West Oxfordshire Local Plan 2031 was formally adopted on 27 September 2018 and sets out the overall planning framework for future growth and development within the District up to 2031.

The OCGV forms a key component of the newly adopted plan, which identifies the site as a 'Strategic Location for Growth' (SLG). The Council's vision to 2031 specifies that:

"A new 'Garden Village' will be created to the north of the A40 near Eynsham comprising an exemplar development of the highest environmental and design standards based around a mix of compatible uses including housing, employment, transport, new schools and other community and leisure uses. The new village will be self-contained seeking to complement and enhance the current role of nearby Eynsham."

The Local Plan sets out the working assumption that the OCGV SLG will provide approximately 2,200 homes over the period 2021 to 2031, which will assist in meeting neighbouring Oxford City's unmet housing need. A key influencing factor in the decision to allocate the site was the existing proposals for a park and ride facility as well as the site's proximity to Hanborough Station, both of which provide the opportunity for effective links to the wider area.

Policy EW1 'Oxfordshire Cotswolds Garden Village Strategic Location for Growth' outlines the overarching strategy for development of the garden village:

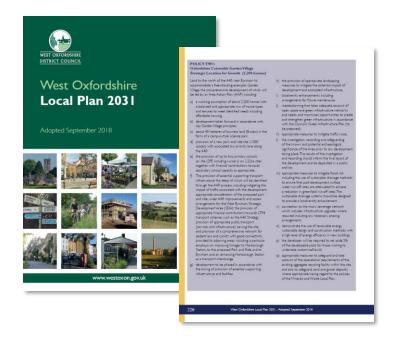
"Land to the north of the A40, near Eynsham to accommodate a free-standing exemplar Garden Village, the comprehensive development of which will be led by an Area Action Plan (AAP)".

The policy includes "about 40 hectares of business land (B-class) in the form of a 'campus-style' science park".

Implications for OCGV

The newly adopted West Oxfordshire Local Plan provides the overarching policy direction for inclusion of a 40 ha 'campus style' business park as part of the garden village development. This is intended to create a major long term opportunity for businesses that capitalises on the site's strategic location including the proposed park and ride and associated A40 improvements.

In order to take Policy EW1 forward, an effective delivery strategy is now required to consider the most appropriate role for the designated business area and how this can best complement the new settlement as a whole and the wider area.



2. Context and rationale: policy background (2) The emerging Area Action Plan identifies employment provision at the garden village site as a key opportunity to create the District's first science park

Area Action Plan (AAP)

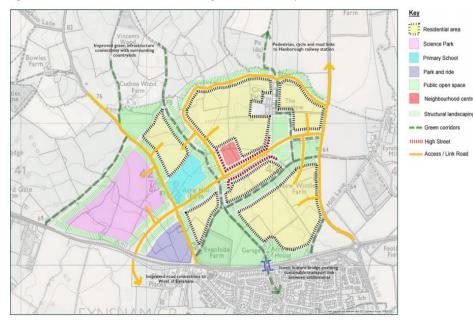
The Oxfordshire Cotswolds Garden Village Area Action Plan (AAP) Issues Paper was published on 22 June 2018, with consultation running until 3 August 2018. The Issues Paper represented the first step in preparing the AAP, providing an overview of the proposed garden village site and outlining the potential opportunities it offers. Views will subsequently be sought on a draft 'vision' together with the preferred options for the site dealing with key issues such as points of access and the distribution of land uses.

The final AAP will set out how the new development will be delivered, what it will look like and how it will function. Once adopted, it will sit alongside the Local Plan and will act as the planning policy route to guide development of the garden village.

The Issues Paper sought initial views on a range of employment related issues including the creation of a range of new local jobs, development of labour force skills and provision of business investment opportunities. The scale of the 40ha business site would enable creation of a significant level of B-class floorspace and provide development capacity up to 2031 and beyond. The AAP Issues Paper considered the potential for a new 'campus style' science park at the site, stemming from Eynsham's economic relationship with Oxford and Oxfordshire's 'knowledge spine' and addressing the lack of existing science parks in West Oxfordshire. An indicative concept plan for the site – showing a broad potential location for the science park – is shown to the right, as set out in the Expression of Interest.

Consultation responses to the Issues Paper* highlighted a need to quantify the requirement for a science park at this location, especially given perceived vacancy levels within surrounding employment areas. Concerns regarding the site's connectivity were also noted, with respondents highlighting both the site's distance from existing concentrations of scientific activities and its location on the congested A40 corridor. Others responses recognised the potential to increase innovation and creativity in West Oxfordshire, alongside generating high skilled jobs and partnership opportunities with local education providers.

Figure 2.4: Oxfordshire Cotswolds Garden Village Indicative Concept Plan



Source: West Oxfordshire District Council

^{*}Full responses to the consultation can be found on the Council's website: https://www.westoxon.gov.uk/residents/planning-building/planning-policy/local-development-framework/garden-village/

2. Context and rationale: local provision OCGV could provide West Oxfordshire's first dedicated science park and longer term capacity for future knowledge based growth across Oxfordshire

Wider Oxfordshire contribution

A key element of the garden village will be the provision of 40 ha of business land, with the draft Local Plan Policy EW1 specifying that this will take the form of a 'campus style' science park. This employment area will create new jobs, develop skills, act as a magnet for inward investment and provide expansion opportunities for existing business.

The strategic location of Eynsham makes it a strong opportunity for new employment provision given its proximity to Oxford, with much of the economic activity taking place within and surrounding Eynsham forming part of the wider Oxford City region economy. More specifically, the site's direct link to the Oxfordshire 'knowledge spine' via the A40 means that it has been identified by Oxfordshire County Council as a preferred location for a new park and ride facility together with associated bus priority measures, with a planning application expected to be submitted in spring 2019. This will significantly enhance accessibility to and from Oxford, enabling the site to respond to the need for further high quality business land to support the commercialisation of research and innovation undertaken by the universities.

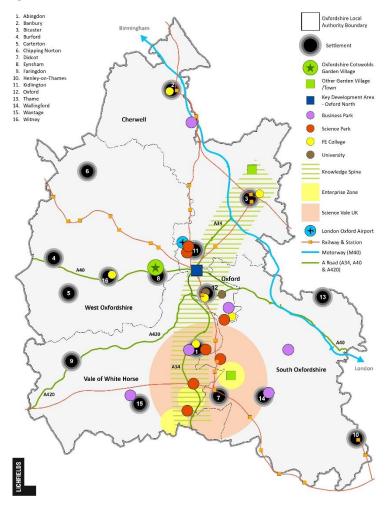
Oxfordshire is globally renowned for the excellence and scale of innovation, enterprise and research that takes place within the county. It benefits from a dynamic and successful economy with a variety of global assets including a number of sizeable 'campus style' science parks (as shown in the map to the right).

However, the western part of Oxfordshire is notable for its absence of business areas of this type; the proposed OCGV therefore provides a unique opportunity to capitalise on Eynsham's strategic economic role and location within the Oxford city region by providing future capacity for the next phase of Oxfordshire's growth.

In line with a number of existing science parks across Oxfordshire including Begbroke Science Park, the garden village employment component could also include educational and/or training facilities linked to the County's further/higher education institutions.

Figure 2.5: Wider Oxfordshire Economic Context

Source: Lichfields analysis



2. Context and rationale: economic evidence

The Eynsham Woodstock sub area's strong functional relationship with the spatially constrained Oxford City Region offers significant opportunities for growth

West Oxfordshire Economic Snapshot (2015)

The West Oxfordshire Economic Snapshot study was produced to advise on the District's current and future economic development needs and priorities to inform the pre-submission draft Local Plan.

Based upon job growth projections to 2031, the Snapshot forecasts that an additional 27 ha of employment land would be required within West Oxfordshire over the plan period. At the time the study was prepared, 28 ha of employment land was allocated, although just 3.3 ha of this was considered available for development. For this reason, the recently adopted Local Plan identifies the need to consider additional provision to provide sufficient flexibility. The Local Plan includes a long term provision of 40ha of business land in the OCGV.

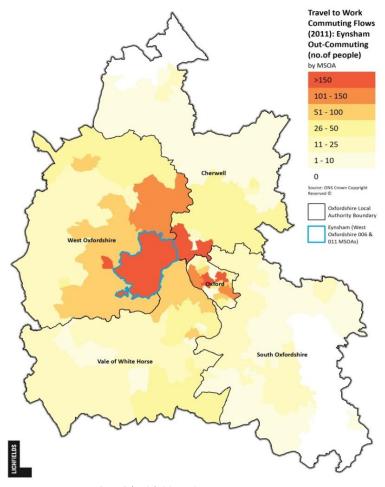
Eynsham Woodstock sub area

Furthermore, the spatial balance of available land was considered to be misaligned with future growth potential. In particular, the 2015 Economic Snapshot study suggests that further land should be found to meet the growth potential of the Eynsham Woodstock sub area which supports 25% of all employment in West Oxfordshire, over a third of which operating within the manufacturing and professional and scientific sectors.

Around 30% of residents within the Eynsham Woodstock sub area commute into Oxford city for work, and the map to the right illustrates the strong functional relationship that West Oxfordshire shares with Oxford City and the surrounding area from a labour market perspective. Provision of more locally based jobs (including high skilled jobs) could help to reduce existing out-commuting and support economic self-sufficiency and sustainability within the District.

The village of Eynsham is a key commercial centre and is home to one of West Oxfordshire's largest employers, Siemens Magnet Technology. As such, the 2015 study recommends that Eynsham (alongside Carterton, Chipping Norton and Witney) caters for the majority of commercial demand as well as supporting the wider growth of Oxford city through provision of suitable expansion opportunities.

Figure 2.6: West Oxfordshire Out-Commuting Flows



2. Context and rationale: Oxfordshire growth potential (1) Oxfordshire's growth ambitions are supported by a range of Government funding streams that seek to unlock the significant potential that exists

Oxfordshire Housing and Growth Deal

Announced in November 2017, the Oxfordshire Growth Board has secured £215 million of Government investment for new homes and infrastructure across the County. The Oxfordshire Housing and Growth Deal will provide £60 million for affordable housing and £150 million for infrastructure improvements. The funding, structured over a 5-year period, will support the county-wide ambition to build approximately 100,000 new homes across Oxfordshire to 2031. The deal also offers ongoing Government commitment to strengthening Oxfordshire's knowledge-intensive economy. Skills development will also be prioritised in collaboration with employers and education providers.

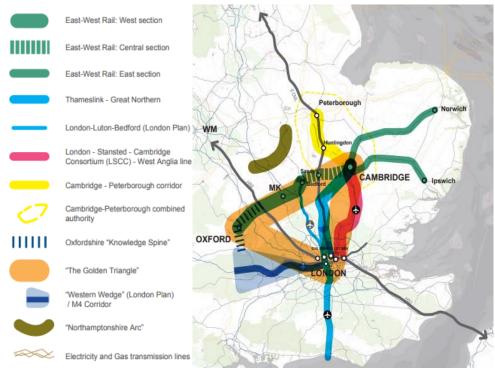
Oxfordshire Local Growth Fund

Oxfordshire has benefited from all three phases of the Government's Local Growth Fund (LGF1, LGF2 and LGF3), which supports projects seeking to benefit the local area and economy. This includes:

Oxford Science Transit Phase 2 (LGF1) - £40 million (including £35 million LGF1 funding) to expand the integrated public transport system along the 'knowledge spine' (as shown in the map to the right). Through delivery of major enhancements to the A40 between Oxford, the Northern Gateway and Witney, the system will connect the area's centres of innovation with Oxfordshire's universities. A key element of this plan is to alleviate the heavily congested A40, between Witney and Oxford, including priority bus lanes and junction improvements. These upgrades will provide a key opportunity for OCGV, increasing the site's connectivity to Oxford. Funding for longer term improvements to the A40 is also being sought via the Housing Infrastructure Fund which could include westbound bus priority from Oxford to Eynsham and additional duelling of the A40 from Eynsham to Witney.

LGF3 – OxLEP has been awarded a further £24.16 million of LGF3 funding, which will be focused upon skills development to build on Oxfordshire's strengths in research and development. As a priority of OxLEP, skills development will need to be a key consideration in the development of an employment strategy for OCGV.

Figure 2.7: Oxfordshire's Role in the Wider South East Growth Context



Source: National Infrastructure Commission (2017)

2. Context and rationale: Oxfordshire growth potential (2) The OCGV site will benefit from increased connectivity as a result of strategic upgrades to the transport network across Oxfordshire and the wider South East

Cambridge-Milton Keynes-Oxford Corridor

The Cambridge-Milton Keynes-Oxford corridor comprises three of the most successful and fastest growing cities in the UK. The corridor has a central role to play in the future of the UK economy, attracting international high-tech and science investment, containing concentrations of information technology, life sciences, automotive engineering and professional services activities. In Autumn 2017, the Government announced a vision for the corridor to stimulate economic growth, supported by dedicated funding streams such as the Oxfordshire Housing and Growth Deal. Those sites with capacity for housing and employment growth, including the OCGV, will be crucial to achieving this wider corridor ambition.

Oxford to Cambridge Expressway

Investment in new infrastructure will be central to unlocking the growth potential of the Cambridge-Milton Keynes-Oxford Growth Corridor, with a particular priority to overcome the poor east-west connectivity that currently severs the global knowledge centres of Oxford and Cambridge. The proposed Oxford to Cambridge Expressway will support this connectivity by providing a single route to connect the two centres, enhancing economic growth across the region. In September 2018, Highways England announced that of the three route options (A, B and C), Corridor B is to be taken forward due to its potential to offer greater benefits to the region in terms of better links to jobs, education, leisure and health services. Its route alongside the East West Rail link (see opposite) will offer further potential for commercial and housing development. The route that the Expressway will take past Oxford remains unclear due to the width of the corridor, however two options have been identified to be taken forward for public consultation in 2019: Corridor B1 which passes to the west of Oxford and Corridor B3 which passes to the south east of the city.

Should Corridor B1 be selected, this would be a key opportunity for the creation of an employment cluster at OCGV, increasing connectivity and firmly placing the site within the knowledge-focused Oxford to Cambridge Corridor.

East West Rail

East West Rail is another major infrastructure project that seeks to re-establish a rail link between Oxford and Cambridge and to improve rail services between East Anglia, Central and Southern England. Alongside the Oxford to Cambridge Expressway, East West Rail will improve connections between two of the UK's principal knowledge centres, catalysing economic growth across the region.

While the rail link will not pass in close proximity to the site, proposed improvements to the transport network to the west of Oxford (e.g. Oxford Science Transit Phase 2) will improve connectivity to this strategic route and allow sites such as OCGV to benefit from growth in the wider Oxford to Cambridge Corridor.

Cotswold Line Upgrades

Alongside wider strategic improvements, proposed upgrades to the Cotswolds Line will offer significantly improved connectivity with Oxford City and its knowledge-based economy. Of key importance to the connectivity of the garden village site will be the proposed redoubling of the track at either end of the line to allow two trains to pass at a time. At present, the sections of single track act as a barrier to increased services.

A key element of these improvements will be upgrades at Hanborough Station to support rail links to the south. This will include extension of the existing platform, creation of an additional platform and introduction of passenger facilities. These improvements will be supported by redoubling of the track on the wider line, permitting increased connectivity into central Oxford from the north west.

These improvements to Hanborough Station will be critical to employment provision at OCGV, and connections between the station and the garden village will be a key issue for the AAP to consider and address.

2. Context and rationale: synthesis The proposal for a new science park at OCGV responds to a range of strategic policy drivers and wider growth ambitions for Oxfordshire

Synthesis

The proposal for a new science park at OCGV responds to a range of strategic policy drivers and wider growth ambitions for Oxfordshire which have emerged over a number of years. In this context, the key pointers from the preceding analysis in this section can be summarised as follows:

- The allocation of a new garden village adjacent to the A40 near Eynsham primarily represents West Oxfordshire's response to Oxford's unmet housing needs. But with development of a new settlement also comes a 'once in a generation' opportunity to develop a new science park in the District of the scale and critical mass to enable West Oxfordshire to fully compete within Oxfordshire's globally renowned knowledge economy for the first time, as well as complementing the wider garden village vision and encouraging sustainable local growth. This is supported in planning policy terms by Policy EW1 in the recently adopted West Oxfordshire Local Plan, and in due course by an emerging AAP for the new garden village.
- Economic evidence that was prepared to inform the new Local Plan suggests that West Oxfordshire has a successful, buoyant economy with the Eynsham area supporting an important cluster of employment and economic activity, home to some of the District's largest employers, including many operating in the technology sector. It also recommends that additional land is made available in the Eynsham Woodstock sub-area to accommodate the growth potential associated with the area's proximity to Oxford and to help provide more locally based jobs to stem strong patterns of out-commuting amongst residents to nearby economic centres.

- West Oxfordshire has not historically accommodated any significant clusters of science and R&D activity and has lacked supply of sites of the scale genuinely required to attract these types of occupiers. Meanwhile, a number of dedicated science parks have developed across the rest of Oxfordshire to cater for spin-out activity and enterprise from the University of Oxford and wider innovation ecosystem. Without intervention, this pattern of growth is likely to continue under the status quo or a 'business as usual' scenario.
- But at the national and sub-regional level, strategic policy direction is focused upon increasing productivity and fostering innovation. In Oxfordshire, as set out in the emerging Local Industrial Strategy, this will be achieved through exploiting and maximising Oxford's global economic strengths and competitive advantage, investing in new business and research space to ensure that Oxfordshire remains at the forefront of innovative technologies across a number of leading sectors.
- This is supported through Oxfordshire's designation as a key growth location in the UK context lying at the eastern end of the Oxford-Milton Keynes-Cambridge Corridor supported by dedicated funding and infrastructure investment through a Growth Deal, Oxford to Cambridge Expressway, and East West Rail link in an attempt to realise its full growth potential.
- Within this context, OCGV is ideally positioned to take advantage of these strategic policy drivers and provide much needed spatial capacity to help capture wider economic opportunities, as well as helping West Oxfordshire to achieve a step change in its economic performance, attractiveness as a business location and its portfolio of high skilled local job opportunities.

Structure

- 1 Introduction
- 2 Context and rationale
- 3 Economic drivers
- 4 Science park proposition
- 5 Delivery strategy
- 6 Alternative options
- 7 Conclusions

Appendix 1 & 2

3. Economic drivers: overview

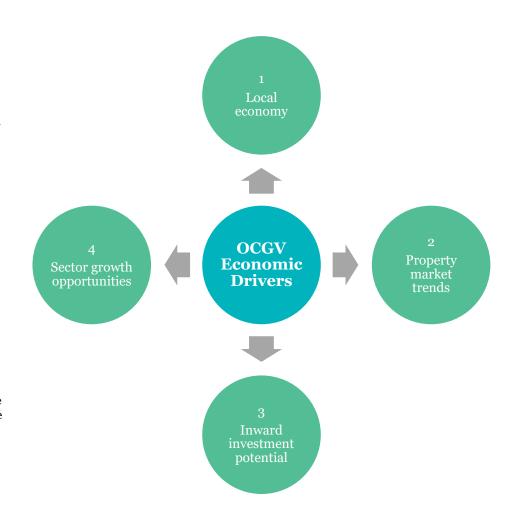
This section considers the economic and property market drivers across West Oxfordshire within the context of wider Oxfordshire

Economic drivers

This section explores West Oxfordshire's economic context alongside property market signals and dynamics to identify the key drivers of demand for science park provision and strategic scale business space more generally within Oxfordshire and the wider area. This review includes:

- Exploration of the local business base within and surrounding Eynsham to identify the types of occupiers the area currently supports;
- Analysis of property market trends across Oxfordshire, and West Oxfordshire more specifically;
- Patterns of recent inward investment within West Oxfordshire in terms of business sectors, investment type and source;
- Identification of any sectoral advantages within West Oxfordshire when compared with Oxfordshire as a whole; and
- Analysis of the latest employment forecasts to determine whether the scale and type of science park proposed is justified, or whether an alternative scale and form of employment should be pursued.

This review is intended to place subsequent analysis regarding science park typologies into the local context, in order for conclusions to be drawn regarding the suitability of the garden village site as a strategic location for a campus style science park.



3. Economic drivers: local business base

Eynsham and the surrounding area has a growing concentration of technologyfocused activities, with a number of high profile companies operating in the area

Overview

A large proportion of businesses within the Eynsham parish boundary operate within the services sector, as demonstrated in the map opposite. Meanwhile Oakfields Industrial Estate to the south of the village accommodates a range of industrial, manufacturing and warehousing related activities. Eynsham also has a concentration of technology-focused businesses, particularly within the advanced engineering sectors. Feedback from local market agents suggests that, although this cluster is still evolving, Eynsham's proximity to Oxford, wider connectivity and supply of housing for key workers are important drivers for tech based businesses to locate here, although there is a key risk that transport pinch points (especially along the A40 corridor) could constrain further growth of technology-focused activities if left unresolved.

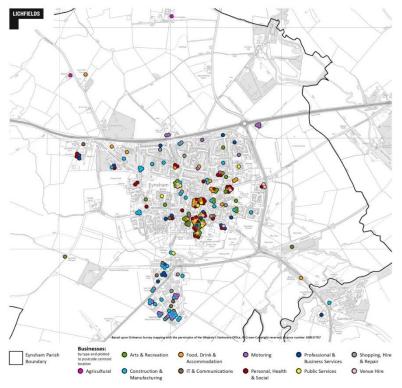
There are a number of high profile technology-based employers in the area surrounding Eynsham, including:

- Meta Vision Systems a global manufacturer of laser vision systems for welding applications. Meta is widely acknowledged as the world leader in providing laser systems for pipe welding.
- Integrated Sensor Systems (ISS) a subsidiary of Meta Technologies, ISS designs, manufactures and supplies laser seam tracking systems for pipe and tube mills.
- Owen Mumford an industry leader in the design and manufacture of medical devices for pharmaceutical and diagnostic companies, Owen Mumford's global operations are headquartered in Woodstock.
- **Zetica** a UK leader in engineering and environmental geophysics, operating across the world and headquartered on Southfield Road in Eynsham.
- **Polar Technology** delivers products and technology based around advanced composite materials, emerging processes and metallic fabrications.
- **Siemens Magnet Technology** a manufacturer of superconducting magnets used in MRI scanners at the company's Eynsham manufacturing plant.

Other technology and research based firms include Oxford Cryosystems and Wolfram Research, both based at nearby Hanborough.

This indicates a clear opportunity to further develop the existing technology-focused business cluster within the Eynsham area if suitable sites and space can be made available. However, success will be reliant on improvements to existing transport links if Eynsham is to grow as an attractive and sustainable business location.

Figure 3.1: Eynsham Businesses by Sector and Location



Source: Eynsham Parish Council (2018) / Lichfields analysis
Note: Based on Eynsham Online business directory at September 2018
(https://eynsham-pc.gov.uk/cats.aspx)

3. Economic drivers: office property market West Oxfordshire has a relatively modest office market with a limited supply of high quality provision suitable for modern occupiers

Office market characteristics

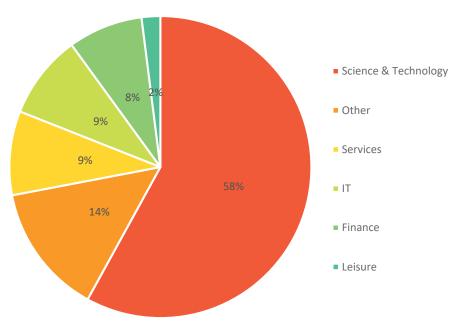
During 2017, office take-up across Oxfordshire totalled around 500,000 sq.ft, which represents the highest level of take-up over the ten years since 2007. The primary driver of this growth has been Oxfordshire's knowledge-based economy, with over 70% of office transactions being attributed to innovation-related firms and activities. This is directly related to the continued dominance of the University of Oxford within world rankings.

Within this total, 58% of take-up during 2017 was comprised of businesses within the science and technology sectors. To a large extent this can be attributed to increased commercialisation of academic research and significant funding opportunities becoming available through investment vehicles, the most high profile being the Oxford Sciences Innovation (OSI) Plc. Launched by the University of Oxford in 2015, the OSI provides funding and research expertise to the next generation of spinout businesses.

In line with this sector demand, development activity has concentrated within Oxfordshire's three key science and technology hubs: Oxford Science Park, Milton Park and Harwell. The dominance of the science and technology sectors has supported the continued success of Oxford Science Park, which had experienced high vacancy rates during early 2017. Take-up by Oxford Nanopore and IVI Plc has seen availability at the Park decrease significantly. Meanwhile a large proportion of the 110,00 sq.ft speculative development at Milton Park was already pre-let or under offer prior to completion in early 2018.

At the more local level, latest intelligence from market agents indicates that the office market in the Eynsham area is relatively muted, with a limited supply of Grade A floorspace and relatively high vacancy levels within existing stock. Eynsham's proximity to Oxford could offer an opportunity to respond to unmet demand for high quality space within the city centre, although the garden village may struggle to replicate the high density urban environment which makes Oxford city centre particularly attractive to occupiers.

Figure 3.2: Office Take-Up by Sector in Oxfordshire, 2017 (no. of deals)



Source: VSL & Partners (2017) / Lichfields analysis

3. Economic drivers: industrial property market West Oxfordshire has a strong industrial market supported by the presence of high profile technology-focused businesses

Industrial market characteristics

Industrial floorspace take-up during 2017 reached a total of 1,155,00 sq.ft across Oxfordshire; representing the highest annual take-up figure since 2003. This level of take-up was significantly above the 10-year average of 760,000 sq.ft and is projected to continue during 2018.

Take-up of industrial floorspace has been driven by a wide mix of occupiers, with no one sector dominating. However, science and technology businesses comprised around 30% of total transactions. As such, development activity has included a number of state-of-the-art science buildings, including the Zephyr Building at Harwell which incorporates office, laboratory, R&D, light engineering and assembly floorspace with opportunities for both start-up and established businesses. Hybrid units containing a high office content, most suitable for technology-based occupiers, were the key driver of industrial floorspace take-up during 2017.

Market agents consulted as part of this study have indicated that West Oxfordshire has a strong industrial market, supported by the presence of a range of high profile technology businesses including Owen Mumford and Siemens Magnet Technology. As such, agents identified a key opportunity to harness these existing strengths in creating a distinctive offering focused towards high value technologies. In terms of sectors, agents also highlighted the need to develop an offer that would be attractive within the wider Oxfordshire context, in which there are a number of strong existing sectoral concentrations. It was considered that competing with these existing concentrations would pose a high level of risk for a new employment area such as the one proposed at OCGV.

Agents identified Eynsham's existing connectivity weaknesses as a key barrier to integration within Oxfordshire's knowledge-focused economy. However, given its location only 6 miles west of Oxford and the presence of high profile occupiers in the area, it was suggested that an attractive market proposition could be created should existing transport issues be addressed.

Figure 3.3: Industrial Take-Up by Sector in Oxfordshire, 2017 (no. of deals)

Science & Technology
Industrial
Distribution
Other
Retail/Trade

Source: VSL & Partners (2017) / Lichfields analysis

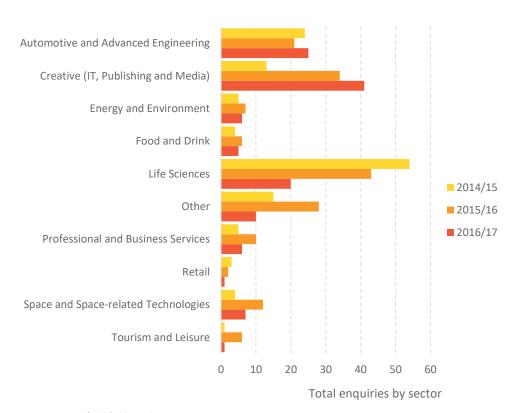
3. Economic drivers: inward investment potential (1) Demand for employment floorspace in Oxfordshire is dominated by high value science and technology-based occupiers

Oxfordshire inward investment

Oxfordshire as a whole has experienced fluctuating levels of inward investment enquiries across a range of sectors in recent years, with a clear focus of demand coming from occupiers seeking accommodation for high value science and technology-related activities. Data provided to Lichfields by OxLEP shows that while there has been historically significant levels of enquiries from life sciences occupiers, 2016/17 saw a drop in the number of enquiries for accommodation to support this sector. It is important to caveat that enquiries levels are likely to fluctuate partly as a result of the development pipeline and resultant levels of availability. Enquiries from automotive and advanced engineering occupiers have remained steady and experienced an increase during 2016/17. Meanwhile, the creative industries have seen continued growth over recent years. While the data indicates that enquiries from space and space technologies occupiers have been historically low, it is important to note that OxLEP data is largely focused on Oxford City. As such, there is likely to be an over-representation within the data of those sectors and activities that can take place within the spatially constrained urban area.

Investment source	Proportion of enquiries to Oxfordshire		
Europe	UK	41%	
	Other	21%	
North America	14%		
Asia	10%		
Australasia	3%		
Middle East	3%		
South America	3%		
Unknown	3%		
Africa	2%		

Figure 3.4: Oxfordshire Inward Investment Enquiries by Sector



Source: OxLEP / Lichfields analysis

3. Economic drivers: inward investment potential (2) Inward investment to West Oxfordshire has been dominated by the creative and digital sector since 2015

West Oxfordshire inward investment: key sectors

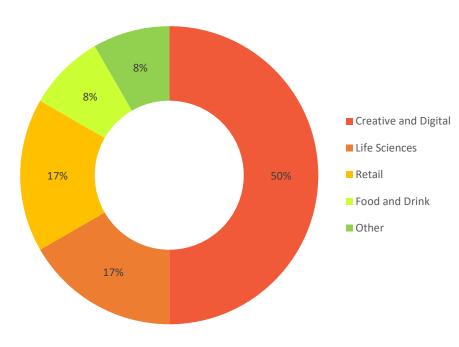
Since 2015, half of all inward investment across West Oxfordshire has come from occupiers operating within the creative and digital sector, while c.17% of inward investment came from life sciences companies.

It is important to note that inward investment information for West Oxfordshire comprises only 12 individual projects given OxLEP's limited involvement with projects in the District. As such, it would be misleading to directly compare trends within West Oxfordshire with the wider county. However, there are a number of key sectoral concentrations notable across different local authorities in Oxfordshire:

- Oxford City has seen concentrations of inward investment within a range of high value sectors, reflecting its status as an international centre of knowledge, including life sciences, automotive and advanced engineering, and creative and digital. Given the high level of investment from creative and digital occupiers within West Oxfordshire, there may be an opportunity to respond to unmet inward investment demand within the City boundary.
- Vale of White Horse has experienced a high level of inward investment from space and space-related technologies occupiers, which accounts for over 50% of inward investment. This reflects the presence of Harwell Campus within the District.
- South Oxfordshire has also experienced a high level of digital and creative investment accounting for 65% of inward investment, albeit OxLEP holds limited information on the District.

West Oxfordshire has historically attracted a relatively small share of overall inward investment into Oxfordshire but to a large extent **this reflects the District's limited portfolio of employment land supply**, particularly sites of a strategic scale. OxLEP data suggests that latent demand exists amongst national and international investors for a business presence within Oxfordshire and this provides a clear opportunity for OCGV to help attract further investment into the District.

Figure 3.5: West Oxfordshire Inward Investment by Sector (2015 to 2018)



Source: OxLEP / Lichfields analysis

3. Economic drivers: inward investment potential (3)

A large proportion of inward investment over recent years has come from existing businesses looking to expand within West Oxfordshire

West Oxfordshire inward investment: type and source

Since 2015, around two thirds (65%) of inward investment into West Oxfordshire has come from expansion of existing businesses (i.e. investment from elsewhere into firms already based in the District), while 25% represents investment from new businesses into the District. The high level of expansion transactions within Oxfordshire reflects market intelligence gained as part of this study that the District is well-located to accommodate need that cannot be met elsewhere. There is also an opportunity to increase provision of high quality space within West Oxfordshire to attract a higher level of new investment from a wider geographical area.

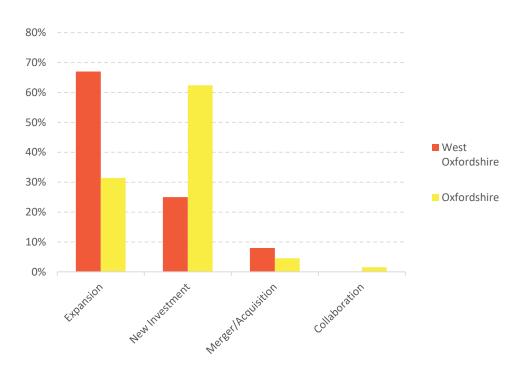
In comparison, investment across wider Oxfordshire has been dominated by new investment (62%), with only 31% of transactions being from expanding businesses. However, it should be noted that the limited data for West Oxfordshire may impact on the reliability of this comparison.

As highlighted by market agents consulted as part of this study, increasing the level of new investment will require a genuine step change in the provision of new employment areas, such as at OCGV, to demonstrate why potential occupiers should choose to locate within West Oxfordshire as opposed to elsewhere in the County.

Investment source	Proportion of transactions to West Oxfordshire		
Europe	UK	50%	
	Ireland	8%	
Asia	17%		
Australasia	17%		
North America	8%		
Italy	8%		

Source: OxLEP / Lichfields analysis

Figure 3.6: West Oxfordshire Inward Investment by Type (2015 to 2018)



Source: OxLEP / Lichfields analysis

3. Economic drivers: sector strengths and advantages There is an opportunity to address West Oxfordshire's current underrepresentation of professional, scientific and technical sectors

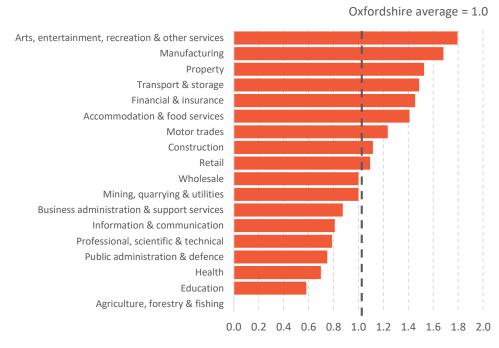
Sector strengths and growth opportunities

West Oxfordshire's economy is characterised by a high representation of manufacturing employment (1.8 times the Oxfordshire average), reflecting an existing concentration of activities within this sector including a cluster of high value advanced manufacturing companies operating within the District (including Siemens Technology, Owen Mumford and Polar Technology).

This represents an obvious immediate sector opportunity for any new employment provision as part of the OCGV, especially given the national and international status of existing companies. Drawing upon recent patterns of inward investment into the District, the OCGV employment area could offer expansion opportunities to existing occupiers within these sectors, helping to retain businesses within West Oxfordshire. There could also be scope to build upon this existing concentration of activities to attract new manufacturing investment into the District.

At the same time, there is currently an under representation of employment and economic activity within the professional, scientific and technical sectors when compared with Oxfordshire as a whole. As such, there is clear scope to increase activity within these areas, if the existing deficit of high quality office floorspace in West Oxfordshire can be addressed. New, high quality provision at OCGV could enhance the District's ability to respond to unmet demand from science and technology based firms within Oxford City through additional provision for land hungry science-based activities, if connectivity to Oxford city can be enhanced to fully integrate the garden village into the Oxford science and technology cluster. The creation of a new park and ride facility on the A40 and the provision of effective links to Hanborough Station as part of the new OCGV settlement is likely to provide an important component of this.

Figure 3.7: West Oxfordshire Sector Location Quotients



Employment location quotient (2016)

Source: BRES (2016) / Lichfields analysis

3. Economic drivers: employment land supply The new West Oxfordshire Local Plan makes provision for at least 74 ha of employment land to accommodate future business needs

Employment land provision

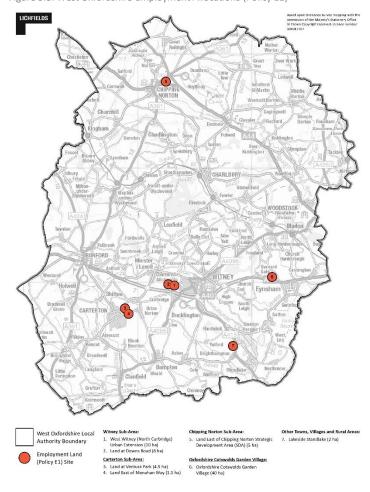
The Council's most recent economic evidence prepared to inform the recently adopted Local Plan (i.e. the 2015 West Oxfordshire Economic Snapshot study) suggested that around 27 ha of employment land is needed within the District over the 20 year period 2011 to 2031 to meet the Council's preferred economic growth scenario (which also underpins the Council's identified housing need).

The Local Plan identifies around 24.5 ha of employment land within existing planning permissions and previous Local Plan allocations, but also notes that not all of this land is genuinely available for various reasons. In response, and to ensure choice and flexibility for businesses, the new Local Plan allocates additional employment sites across the District through Policy E1, amounting to at least 74 ha in total, including 40 ha at the OCGV. The spatial distribution of these employment allocations is shown on the map to the right, with particular concentrations evident on the edge of the settlements of Witney and Carterton.

The Eynsham – Woodstock sub-area is identified in the Local Plan as being particularly important for the local economy by benefitting from proximity to Oxford and the Oxfordshire 'knowledge spine', and the 40 ha new science/business park is provided to meet both current and future long-term needs (including those beyond 2031).

The recently adopted Local Plan for West Oxfordshire therefore allocates a higher quantum of employment land than identified as being required by the Council's evidence, partly in response to wider economic growth opportunities and partly as a qualitative supply side intervention to help deliver a step change in West Oxfordshire's economic performance. Some of this employment land is intended to meet longer term needs arising beyond the end of the Local Plan period (i.e. 2031).

Figure 3.8: West Oxfordshire Employment Allocations (Policy E1)



3. Economic drivers: economic growth potential Latest economic projections imply higher future job growth potential in West Oxfordshire than identified by the Council's Local Plan evidence in 2015

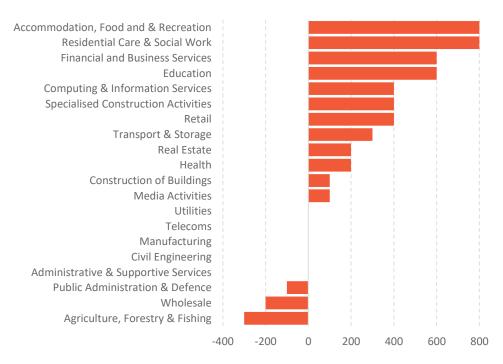
Job growth potential

The requirement for an additional 27 ha of employment land in West Oxfordshire identified by the 2015 West Oxfordshire Economic Snapshot study was based on an assumed level of 6,900 total job growth in the District between 2011 and 2031, as implied by Cambridge Econometrics economic forecasts available at the time of study preparation. More than half of these jobs were expected to be created within B use class sectors, in particular office based sectors.

More recent projections compiled by Experian (in June 2018) imply a 50% increase in job growth potential over and above the forecasts analysed back in 2015; this is equivalent to an increase of 10,600 workforce jobs in West Oxfordshire by 2031, and suggest that the forecasts prepared back in 2015 may underestimate the District's economic growth potential.

Over the remaining Local Plan period between 2018 and 2031, the latest Experian projections assume that much of the job growth in West Oxfordshire will be driven by financial and business services (which include some R&D activity), computing and ICT sectors (see right), which are currently reported to be under-served by high quality, modern business accommodation within West Oxfordshire. It should be noted that these projections provide just one view about how West Oxfordshire's economy and business sectors might grow in future, based largely upon past trends in the District and a macroeconomic perspective on key sectors (mainly service based) that are expected to drive national level growth.

Figure 3.9: West Oxfordshire Job Growth Forecasts by Sector (2018 to 2031)



Projected employment change by sector (2018-2031)

Source: Experian (2018) / Lichfields analysis

3. Economic drivers: synthesis The economic potential and function of OCGV will reflect the interface between a number of economic drivers as set out in this section

Synthesis

The economic potential and function of OCGV will, to varying degrees, reflect the interface between a number of economic drivers as considered in this section. Other factors will also be relevant, and the economic role of OCGV is likely to develop over time as the garden village is built out and becomes established. In this context, the key points from the preceding analysis in this section can be summarised as follows:

- Eynsham represents one of West Oxfordshire's largest business locations and accommodates a diverse range of economic sectors and jobs. It is home to a notable cluster of technology based companies operating to the south of the village which provide a potential source of latent demand for new business space at OCGV as well as potential to grow if sites of the right size in the right location can be made available.
- From a property market perspective, West Oxfordshire does not have a particularly significant office market and lacks high quality office space suitable for modern occupiers. The office market across Oxfordshire as a whole is much stronger and is dominated by science and technology occupiers. A number of established science and business parks in Oxfordshire have recently built new space (e.g. Milton Park) to accommodate growing occupier demand. There could be scope for OCGV to help accommodate unmet demand from elsewhere across Oxfordshire (including the spatially constrained Oxford City) although as it stands the site and area around it represent a largely untested market location.
- West Oxfordshire's industrial market is comparatively stronger but suffers to an extent from congestion and strategic accessibility. There is considered to be scope to expand the District's existing sectoral strengths in high value technology, in particular connected to engineering and manufacturing. Across Oxfordshire as a whole, the industrial market is also strong, with science and technology occupiers driving demand as well as businesses operating in the industrial and distribution sectors.

- Latest inward investment data supplied by OxLEP underlines the dominance of life sciences, creative, automotive and advanced engineering sectors in terms of enquiries to Oxfordshire as a whole over the last few years. At the more local level, creative and digital has tended to account for most enquiries to West Oxfordshire (albeit based on a small dataset). Inward investment interest in West Oxfordshire mainly relates to expansion of existing businesses; a clear distinction from the rest of Oxfordshire which attracts the majority of inward investment enquiries from new businesses (i.e. without an existing base there).
- To a large extent, historic trends in inward investment reflect availability of land and development opportunities, which West Oxfordshire has traditionally lacked. OxLEP data suggests that latent inward investment demand exists at the Oxfordshire-wide level, in particular amongst science and technology sector occupiers.
- West Oxfordshire accommodates a high representation of manufacturing employment, reflecting the District's cluster of high value manufacturing based companies. At the same time, its employment base is characterised by an under-representation of professional, scientific and technical sectors compared with Oxfordshire as a whole, with significant scope to expand this pool of job opportunities through development of a new science park and attraction of science and technology based employers. The Eynsham Woodstock sub area of the District accommodates an existing presence of high tech employers, capabilities and supply chain networks.
- The recently adopted Local Plan for West Oxfordshire allocates a higher quantum of employment land than identified as being required by the Council's evidence, partly in response to wider economic growth opportunities, and as a qualitative supply side intervention to help deliver a step change in West Oxfordshire's economic performance. Latest economic projections now imply higher future job growth potential, helping to further justify the provision of business land made by the Council.

Structure

- 1 Introduction
- 2 Context and rationale
- 3 Economic drivers
- 4 Science park proposition
- 5 Delivery strategy
- 6 Alternative options
- 7 Conclusions

Appendix 1 & 2

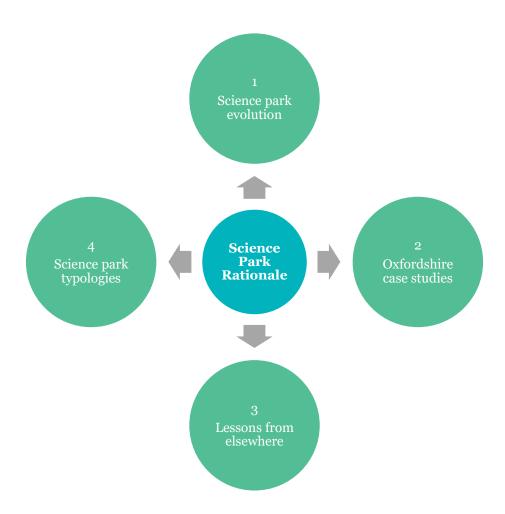
4. Science park proposition: overview This section examines the concept and characteristics of science parks in the context of opportunities associated with the OCGV site

Science park characteristics and proposition

This section examines the rationale and proposition of science parks in the context of wider Oxfordshire and the OCGV site. This review considers the following:

- The evolution of science parks and their role as centres of innovation in the 21st century;
- A selection of case studies of business and science parks across wider Oxfordshire to identify ownership and management strategies, delivery approaches, sector specialisations, presence of onsite institutions and occupancy rates, amongst other key factors;
- Lessons drawn from successful and less successful business and science park models elsewhere to identify critical success factors for OCGV;
- Collation of the above in drawing together a range of potential science park typologies for OCGV; and
- An appraisal of each typology against the OCGV site and its wider context to consider their suitability, drawing upon lessons learned from case studies in both Oxfordshire and elsewhere.

This analysis can then be used to identify the most appropriate type of employment role that OCGV could play.



4. Science park proposition: evolution of science parks Science parks have experienced ongoing evolution and change since their introduction in the 1950's

	1 st generation (1950s-60s)	2 nd generation (1970s-90s)	3 rd generation (2000s onwards)
Aim	Broaden university economic and commercial opportunities	Support the creation and growth of innovation orientated businesses	Provide environment for innovation and disruptive technologies
Operating model	Spin-outs from research projects and programmes	Create technologies suitable for commercialisation and new business growth	Foster start-ups and scale- ups, support cross-sector links
Location	University campuses	Stand-alone, low density sites	Re-imagined standalone sites / urban innovation districts
Catalyst	Mainly universities	Universities, R&D institutes, some commercial businesses, public sector intervention (e.g. Enterprise Zones)	Universities, commercial 'sponsors' and some public sector seed investment
Management regime	Organisation created and run by university	Private operating companies	Private operating companies / partnerships

Source: Lichfields analysis, based on Norbert Buzás and Miklós Lukovics, Generations of Science Parks in the Light of Responsible Innovation, Responsible Innovation, August 2014

4. Science park proposition: evolution of science parks Science parks are continuing to evolve, with the emergence of a "quad helix" model recognising the increased role of civil society as innovation becomes more complex

The "quad helix" model

The traditional 'purist' model of science parks combines three key institutional elements, popularised as the "triple helix" model during the 1990s, comprising:

- 1. Education;
- 2. Government; and
- 3. Industry.

More recent research suggests that this purist model has continued to evolve over recent years, with the emergence of the "quad helix" model which recognises the greater role of civil society actors (e.g. think tanks, cross-industry groups, etc) within the wider innovation ecosystem (see diagram to the right).

The "quad" framework emphasises the societal responsibility of universities, in addition to core functions of education and research. As a result, the science parks of the 21st century increasingly gain competitiveness through supporting academic research and its subsequent commercialisation for societal benefit, such as environmental and clean technologies. This has seen an increased focus on support of the start-up and spin out enterprises that can support this commercialisation.

This recent evolution will be a vital consideration in developing the employment strategy for OCGV given aspirations to create a new science park proposition, especially in relation to both the types of institutions and activities that could be supported onsite. The specific focus on developing Oxfordshire as a living laboratory ('living lab') through the emerging LIS (as discussed in Chapter 2) provides a further rationale for framing the science park at OCGV around a "quad helix" model with a key emphasis upon civil society, given the collaborative approach that will be needed to enable Oxfordshire to contribute towards tackling the UK's Grand Challenges including an ageing society.

Figure 4.1: Quad Helix Science Park Model Funding and New Product Ideas. Strategic Demands Innovations Higher **Education** Industry / R&D **Civil Society** Park Government / Policy / Funding Environment Jobs, Taxes. and Society Infrastructure

Source: Lichfields analysis, based on Josphert Ngui Kimatu, Evolution of strategic interactions from the triple to quad helix innovation models for sustainable development in the era of globalization, Journal of Innovation and Entrepreneurship, April 2016

4. Science park proposition: Oxfordshire context Oxfordshire has a strong concentration of high value activities within existing business and science parks

Oxfordshire employment areas

Reflecting its role as an international hub for knowledge-based activities centred around Oxford City, Oxfordshire is home to a high concentration of employment areas that support a range of high value operations within the science and technology sectors.

In particular, Oxfordshire accommodates sizeable clusters of science parks, many of which are located to the south of Oxford within Science Vale. Key characteristics associated with some notable examples are described over the following pages.

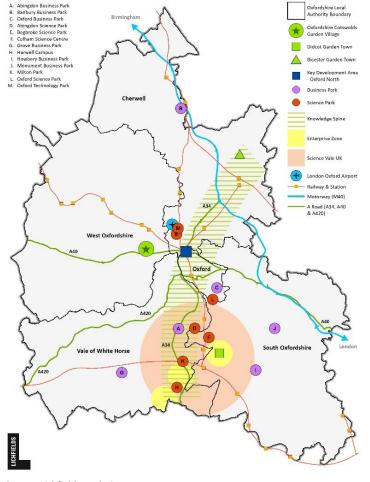
There is also a cluster of science and technology activities to the north of Oxford, which is set to expand through the proposed Oxford North development. West Oxfordshire is the only Oxfordshire District not to currently have a science park. There is also a number of strategic employment developments currently under construction or in the pipeline, the most significant of which for the garden village site are:

- Oxford North;
- 2. Bicester Garden Town; and
- 3. Didcot Garden Town.

This underlines the strong, yet crowded market place that currently exists across Oxfordshire for science, R&D and more general business accommodation, but also the spatial opportunity that exists for the western fringes of Oxford City (extending into West Oxfordshire District) to more effectively integrate into the successful greater Oxford knowledge economy.

It also points to the need for any new science park at OCGV to develop a clear and distinctive offer, given the number of other new settlements and knowledge sector developments proposed to come forward across Oxfordshire over the next few years.

Figure 4.2: Key Oxfordshire Employment Locations



Source: Lichfields analysis

4. Science park proposition: Oxfordshire case studies (1) A number of existing science parks in Oxfordshire have direct links with higher education institutions, both through ownership and direct management

	Begbroke Science Park	Oxford Science Park		
Location	5 miles north of Oxford (Cherwell District)	3 miles south of Oxford (Oxford City)		
Size	8 Ha	14 Ha		
Ownership and management	 Owned and actively managed by University of Oxford Maximises links between science-based spin outs, established businesses and University researchers 	 Owned and managed by Magdalen College Operated as a joint venture with M&G Real Estate prior to December 2015 when Magdalen College acquired M&G's 50% interest in the Park 		
Sector specialism(s)	 Big data and energy efficient computing Life sciences, genomics and synthetic biology Advanced materials and nanotechnology Energy generation, capture and storage Automotive research and development 	High-tech science, technology and business activities		
Employment uses	B1 (office, workshops, laboratories) Start-up and SME space, including virtual offices	B1 (office, laboratories, R&D)		
On-site institutions	Range of University of Oxford research facilities on-site, including Begbroke Innovation Accelerator. Direct involvement with University of Oxford	Oxford Academic Health Science (a collaboration between industry, universities and the NHS)		
Policy direction	Policy Kidlington 1 'Accommodating High Value Employment Needs' identifies Begbroke Science Park's role in supporting the provision of land for hi-tech university spin-outs and the development of a wider high value economic base	Policy SP43 'Oxford Science Park at Littlemore' and Policy SP44 'Oxford Science Park at Minchery Farm' specify that planning permission will be granted for B1 employment uses that directly relate to Oxford's key employment sectors		
Use restrictions	No more than 20% of floorspace to be occupied by uses falling within B1a use; with the remainder of floorspace to fall within B1b, B1c and ancillary D1 uses	B1 floorspace for uses related to Oxford's key employment sectors		
Occupancy	30 companies and >20 research groupsHigh occupancy rate	High vacancy rates at the beginning of 2017, although occupancy has improved since loosening of sector restrictions		
Expansion plans	Limited opportunity for expansion due to spatial constraints of site	Plans to create 27,870+ sq.m office/laboratory space on the remaining undeveloped land by 2025		

4. Science park proposition: Oxfordshire case studies (2) Science and technology-related activities at Culham Science Centre and Harwell Campus have developed around central research institutions

	Culham Science Centre	Harwell Campus		
Location	9 miles south of Oxford (South Oxfordshire)	17 miles south of Oxford (Vale of White Horse)		
Size	80 На	290 Ha		
Ownership and management	 Owned and managed by the UK Atomic Energy Authority (UKAEA) Wider site has developed around anchor institution 	 Decommissioned Atomic Energy Research Establishment site, relaunched as the Harwell International Business Centre in 1996 2006 – Government investment of £26.4 million to transform the Harwell International Business Centre into the Harwell Campus 		
Sector specialism(s)	Science and technology, with a focus on fusion energy research, development and technology	 5 core sectors: Space and satellite applications Life sciences and healthcare Big data and supercomputing Energy and environment Advanced energy and materials 		
Employment uses	B1 (office, laboratories) Start-up space, including virtual offices	B1 (office, laboratories, R&D)		
On-site institutions	UK Atomic Energy Authority	 Public Health England Medical Research Council Science & Technology Facilities Council 		
Policy direction	 Policy CSEM3 'Culham Science Centre' specifies that the redevelopment and intensification of the site for research and science based activities will be supported Science Value UK Enterprise Zone status 	 Core Policy 15 'Spatial Strategy for South East Vale Sub-Area' identifies Harwell Campus as a strategic employment site (safeguarding the site's allocation in Policy E7 'Harwell Science and Innovation Campus' of the Local Plan 2011) Science Vale UK Enterprise Zone (Harwell) 		
Use restrictions	Restricted to research and science related activities	None		
Occupancy	45 companiesHigh occupancy rates	High occupancy ratesPremium floorspace rents		
Expansion plans	15 ha expansion, planned to create 1 million sq.ft office and lab space	Ongoing expansion, with new units recently developed and under construction		

4. Science park proposition: Oxfordshire case studies (3) Commercially managed employment areas in Oxfordshire tend to be more mixed without specific sectoral activities

	Howbery Business Park	Grove Business Park
Location	13 miles south east of Oxford (South Oxfordshire)	17 miles south west of Oxford (Vale of White Horse)
Size	36 Ha	13 Ha
Ownership and management	Owned and managed by HR Wallingford (civil engineering and environmental hydraulics organisation)	Owned and managed privately
Sector specialism(s)	 No specific sectors, with a diverse range of occupiers Growing cluster of environmental and geoscience businesses 	 No specific sectors High concentration of high-tech and service sectors
Employment uses	B1 (office)	B1 (office)
On-site institutions	Environment Agency	None
Policy direction	No specific policies	Core Policy 15 'Spatial Strategy for South East Vale Sub-Area' identifies Grove Business Park as a strategic employment site (safeguarding the site's allocation in Policy E4 'Grove Technology Park' of the Local Plan 2011)
Use restrictions	None	None
Occupancy	Currently no vacant unitsGrowing waiting list reported	Limited vacancy
Expansion plans	Land available for development Outline planning permission for scheme has lapsed	 Only 50% of site built out with a range of expansion plans: 30,000 sq.ft development scheduled to commence in Autumn 2018 Three planning applications in the pipeline

4. Science park proposition: future developments A number of proposed strategic developments across Oxfordshire will provide additional capacity for science and technology based growth



Oxford North

Oxford North is a proposed new urban district located to the north of Oxford City centre, which will provide 480 new homes alongside c.87,000 sq.m of employment floorspace. This will include office, laboratories, co-working space and an incubator facility in order to provide accommodation for start-up through to global businesses. Employment areas will be 'pepper-potted' throughout the development to create a mixed urban community.

The employment element will support a range of technology and science based activities (including life sciences, pharmaceuticals and engineering) through an innovation district environment.

The site is owned and being promoted by St John's College, Oxford who wish to encourage collaboration between academia and commerce.



Bicester Garden Town

Bicester was awarded Garden Town status in 2014, and is expected to deliver 13,000 new homes and 150 Ha of employment land for high-value, high-tech activities.

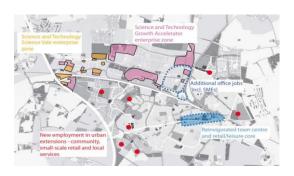
A mixed community is being created, with employment space dispersed across a range of distinctive yet complementary areas throughout the settlement.

Proposed employment areas include:

Bicester Gateway – a 20 Ha site comprised of predominantly high-quality B1a office space

Network Bicester – a 25 Ha site with plans to create HQ, manufacturing, R&D and distribution activities (B1, B2, B8)

Graven Hill – a 26 Ha site with plans to create 1 million sq.ft office, industrial and logistics accommodation (B1, B2, B8)



Didcot Garden Town

Didcot Garden Town was awarded its status in 2015, with aspirations to build on the concentration of science-based activities within Science Vale UK (including Culham Science Centre, Harwell Campus and Milton Park). Didcot will provide an environment which promotes collaboration between academic, public and private sector stakeholders, with activities focused on the commercialisation of science.

The Garden Town benefits from two Enterprise Zones onsite (Science Vale UK and the Didcot Growth Accelerator), both dedicated to supporting science and technology development opportunities. It is anticipated that employment will be focused within these two areas.

Didcot is served by Didcot Parkway rail station, which directly connects the settlement to Oxford, Reading and London.

4. Science park proposition: lessons from elsewhere (1) Lessons from the wider South East demonstrate the importance of strategic connectivity and relationships with surrounding employment clusters

Cambourne Business Park

Cambourne Business Park is a 50 ha employment area forming part of the Cambourne new settlement located 9 miles to the west of Cambridge. The business park is comprised of c.28,000 sq.m of Grade A office space, providing accommodation for a relatively mixed occupier base. Around 30 companies are currently located onsite, including some science related activity.

Despite its strong strategic location adjacent to the A428, Cambourne Business Park has attracted limited levels of occupier demand in recent years. At present, approximately 30,000 sq.ft of office space lies vacant, with limited immediate prospects for securing large-scale B1a or B1b development given general lack of demand at this location. As with Oxfordshire, there is a strong-knowledge based economy surrounding Cambridge and distinct clustering of science and technology activities. These clusters exhibit a strong spatial pattern, with a large proportion of activities clustered to the north and south of Cambridge. Cambourne Business Park's more peripheral location outside of the Cambridge Science Cluster renders provision at this site less attractive to prospective occupiers.

Haverhill Research Park

Haverhill Research Park is a 8 ha science-focused employment allocation located 17 miles to the south east of Cambridge (within St Edmundsbury Borough). Floorspace will largely comprise of B1 office and laboratory space to be occupied by businesses across a range of sectors including bioscience, electronics, advanced materials, engineering and clean technologies. The proposal seeks to bring the Cambridge science park environment to Haverhill.

Despite forming part of Cambridge Compass Enterprise Zone (with business rates relief and other incentives), Haverhill Research has struggled to attract both developer and occupier interest, with two key reinforcing issues identified:

- The perceived distance from Cambridge making the location unattractive to R&D occupiers seeking proximity to Cambridge and the city's wider innovation ecosystem; and
- 2. The lack of critical mass given the site's limited size (a key pull factor for land hungry knowledge-based activities).



Oxfordshire Cotswolds Garden Village Employment Study - Final Report

4. Science park proposition: lessons from elsewhere (2) Experience from science parks elsewhere points to a number of critical success factors that will be relevant for OCGV

Granta Park

Granta Park is a 49 ha life sciences and technology park located 10 miles to the south of Cambridge. As with Haverhill Research Park (as proposed), employment space is predominantly formed of B1 offices and laboratories, alongside smaller units for SMEs and 'spin-out' companies.

Given its location and linkages within the Cambridge Science Cluster, Granta Park has experienced high levels of demand and many occupiers are 'spin-out' companies founded to commercialise University of Cambridge research. The National Structural Integrity Research Centre (NSIRC) postgraduate engineering facility is also located onsite; a joint initiative between TWI (a research and technology organisation with expertise in materials and engineering) and Brunel University London. The facility supports further linkages between academia and commerce within the technology sector.

As a result of its success, Granta Park is experiencing ongoing growth, with a 155,000 sq.ft scientific research building currently under construction.



Lessons for OCGV

Given the knowledge-based context, consideration of the relative success of these three Cambridge-based business and science parks identifies some useful lessons that can be drawn upon in developing an employment strategy for OCGV, including some critical considerations for the creation of a new science park within a highly competitive economy.

It is clear that Granta Park has experienced significant success when compared with both Cambourne Business Park and Haverhill Research Park, underpinned by a number of reinforcing factors:

- Active linkages with academia, especially through the commercialisation of research, which has generated occupiers in the form of 'spin-out' companies. In turn, grow on space may then be provided to encourage occupiers to remain onsite as they grow and expand.
- 2. The presence of an anchor institution with specific sectoral focus (e.g. the NSIRC at Granta Park) further supports the development of a distinctive offering. Brunel University's partnership with TWI at Granta Park suggests that proximity may not be a critical factor for all higher education institutions if an onsite critical mass and wider ecosystem can be created.
- 3. A business/science park located away from existing employment areas must create a USP (e.g. through accommodation, sector specialisms, anchor institutions) that clearly demonstrates to potential occupiers why they should locate here as opposed to more established locations and clusters.
- 4. A critical success factor is the scale and size of site, with the c.50 ha site at Granta Park providing both the required critical mass alongside opportunities for future expansion. At just 8 ha, Haverhill Research Park has struggled to demonstrate this important critical mass.

4. Science park proposition: typologies (1) Drawing on case study examples from elsewhere, it is possible to identify a series of science park typologies that could be replicated at OCGV

(A) Research institute model

Science parks within this operating model generally develop around an anchor research institution, such as a government organisation.

Culham Science Centre is a prime example of this model in Oxfordshire, which has grown up around the United Kingdom Atomic Energy Authority (UKAEA) who opened a purpose-built laboratory for plasma physics and fusion research on the site in 1965. This research programme continues today through the Culham Centre for Fusion Energy (CFE). Centred around this central institution is a range of commercial property, ranging from start-up space in Culham Innovation Centre through to standalone laboratories and offices for large organisations. The location has proved to be attractive to a range of science and technology sectors looking to take advantage of the strong cluster of high tech activities at this location, and proximity to Oxford and its globally renowned innovation ecosystem.

Implications and opportunities for OCGV

Culham Science Centre is testimony to the ability of a research institution to catalyse the development of a strong sectoral cluster, especially those that offer specialist facilities unavailable at alternative locations. However, an employment area of this nature takes a long time to evolve into a genuinely sustainable economic cluster.

There are also more limited funding opportunities in the current financial climate. with the likes of Culham Science Centre being developed pre-recession when public investment opportunities were more readily available.

Catapult centres could be considered the contemporary version of this model, providing the space and facilities to enable collaboration between academia and businesses. The catapult model provides a level of public funding, which must be supported by commercial funding. There are ten existing Catapult centres across the UK, each focusing on a different area of technology (e.g. digital, energy and highvalue manufacturing), including satellite applications at Harwell.

(B) Higher education model

Science parks that operate within this model have links with higher education institutions through a variety of forms, including ownership, management and onsite presence. Across Oxfordshire, there are a number of existing and proposed employment areas within this model, capitalising on the clustering of science-based activities around Oxford. These science parks increasingly support the commercialisation of academic research, with many supporting university 'spin-out' companies by providing small scale business space and specialist research facilities. Science parks within this typology generally require physical proximity to the higher education institution involved, with connectivity between the university and science park being a key requirement for researchers. However, the presence of Brunel University's postgraduate centre at Granta Park suggests that this may not be a critical success factor in all cases.

Implications and opportunities for OCGV

This continues to be a successful model for science parks across Oxfordshire, especially given the concentration of science-related activities within the County. The University of Oxford is the key player, with direct involvement at Begbroke Science Park and the Oxford BioEscalator at its Old Road Campus, while Magdalen College owns and operates Oxford Science Park. Given the University's existing interests and commitments (including at nearby Begbroke), it is unlikely that there would be scope for the University to have a direct on-site role at a OCGV science park, which could instead play an important complementary role in supporting and accommodating the next stage of growth associated with university spin-outs that have out grown incubator style space at Begbroke, the Oxford BioEscalator and other facilities but still need proximity/access to the research and collaboration opportunities associated with the University as well as the wider connectivity offered by the site (including via Long Hanborough station to Oxford and London).

Following the example at Granta Park, it is possible that an institution elsewhere in the UK (i.e. beyond Oxford) may be interested in locating at the OCGV, especially if the site were to be established as a centre of expertise for specific activities and/or sectors closely associated with the higher education institution.

4. Science park proposition: typologies (2) Consideration of science park typologies gives an indication of the type of employment area that could be created at OCGV

(C) Commercial model

Employment areas within this typology are generally focused around high quality office provision, with less of a focus on R&D activities. As a result, they attract a wider range of occupiers across various sectors beyond science specifically. Commercial business parks generally offer lower average occupancy costs than the more high-tech units elsewhere and are able to respond to unmet demand for high quality office provision within constrained urban locations nearby.

Grove Business Park is a highly successful example of a commercial employment area, with the park experiencing ongoing expansion and occupier demand. However, Grove's role as a more traditional business park, with a diverse occupier base, demonstrates the more limited sectoral focus of such employment areas. While Grove represents a successful example of this model, lessons from Cambourne Business Park in Cambridgeshire demonstrate the key risks that come from this type of employment area. It is particularly important to develop a clear and attractive USP at locations away from existing concentrations of employment activity, especially within 'untested' market locations.

Implications and opportunities for OCGV

Given that employment areas of this nature are operated for profit, there tend to be fewer opportunities for collaboration between business and academia and, as such, the growing market for the commercialisation of research. As a result, it may be much more difficult to develop the strong sectoral cluster required to attract high-value science and technology-based occupiers. It would be vital to develop a USP for the OCGV site that clearly identifies why potential occupiers should locate here as opposed to other existing business parks in Oxfordshire.

Creation of a science focused business park of this nature also carries a high level of risk. Flexibility and future adaptability are vital to the longevity of employment provision, yet the priority of commercial developers is predominantly speed of development. The profit requirements of commercial developers limit the potential to develop high-tech R&D facilities and SME floorspace, at least over the short term.

(D) Organic cluster model

Employment areas operating within this typology are comprised of discrete yet reinforcing spatial clustering of business activity, allowing cross-sector working and collaboration between members of the business community from entrepreneurs through to global corporations. Recent focus has been placed upon the creation of 'innovation districts', which are dedicated to the clustering of start ups, business accelerators and incubators focused around specific sectors.

Didcot Garden Town is a key example of the organic cluster model, comprised of a range of sites from office-focused business parks through to areas supporting R&D and manufacturing activities. It also benefits from a number of distinct yet reinforcing Enterprise Zone sites as part of the Science Vale UK Enterprise Zone. This includes the Didcot Growth Accelerator, which comprises of five sites ranging from a high-tech R&D business area (D-Tech) through to a 26 ha distribution park (Giant Didcot Distribution Park). The designation actively supports collaboration and cross-sector working across the five constituent sites.

Implications and opportunities for OCGV

The development of OCGV as a new settlement 'from scratch' provides an opportunity to pepper pot employment areas throughout the settlement and so create a new and distinctive innovation district for West Oxfordshire.

However, it is important to note that successful employment clusters rely on a strong sectoral focus or a range of reinforcing sector activities. While there is a range of high profile technology-focused occupiers in the area surrounding Eynsham, it will be important to consider whether there is a sufficiently strong existing sector concentration in the local area around which to develop a scientific cluster. Development of a new cluster could pose a significant level of risk, especially given the strong spatial concentrations of sectors that already exist across wider Oxfordshire and current proposals for a new innovation district at Oxford North. An employment cluster at OCGV would need to complement rather than compete with existing employment areas.

4. Science park proposition: synthesis Each science park typology comes with risks and opportunities, although for OCGV some combination or hybrid form is likely to be most realistic

Synthesis

The concept of science parks has been prevalent since the 1950's, although their development and operation has evolved considerably since then, with civil society actors playing an increasing role in the wider innovation ecosystem. Four broad science park typologies have been identified and it is useful to consider these in the context of a potential employment role for OCGV. There are examples of each typology in Oxfordshire and this could provide a guide or model for provision of a new science park at OCGV, most likely in some combination or hybrid form:

- Research institute model funding opportunities are more limited in the current financial climate than they have been in the past, with Catapult Centres representing the most feasible model for OCGV. There are ten existing, established Catapult Centres across the UK, including the Satellite Applications Catapult located at Harwell Campus. A new Catapult Centre at OCGV would need a clear sector and/or technology focus that could be linked to existing knowledge and innovation hubs elsewhere in Oxfordshire. This arguably represents a longer term, higher risk option given the overriding requirement for a high profile anchor research institution to establish on site.
- Higher education model this model is already prevalent across Oxfordshire with some notable, successful examples (including Begbroke Science Park and Oxford Science Park). A strong partnership with a higher education institution represents a critical success factor, although no immediate opportunities for collaboration with Oxford based institutions have been identified through this study. Examples from elsewhere show that this model can work through collaboration with higher education institutions based further afield (such as Granta Park's collaboration with Brunel University) and this should be investigated further in the context of OCGV. A reasonable level of risk can be attached to this model, although it would help maintain a strong focus on genuine science related activity onsite, meeting the wider policy aspiration.

- **Commercial model** this typology reflects a more varied mix of occupier with less of a strict focus on onsite science and R&D activity. The overriding focus on operating profit and return on investment inevitably means that the focus on collaboration between business and academia is likely to be less important from an operator perspective. Reflecting the broad range of occupiers that would be targeted to the site, delivery of business space could come forward over the shorter term, but there would be a risk that the opportunity to develop a new science park at OCGV is not realised in full.
- Organic cluster model this flexible model could work well at OCGV if built into the masterplan at an early stage. Attracting the right mix of sectors to cluster at OCGV would be key, and strong competition is likely to exist just a few miles away at Oxford North where a similar 'innovation district' concept is currently planned. The organic cluster model is arguably less well suited to a single 40 ha site allocation, but it offers a lower risk, albeit longer term, option.

Each science park typology comes with risks and opportunities and analysis undertaken as part of this study has identified significant science park competition that is likely to come forward elsewhere across Oxfordshire over the coming years, through planned new developments and garden communities as well as planned expansion of existing sites and campuses. It will therefore be critical to identify the USP or series of USPs that can be attached to OCGV and a new science park onsite, while lessons from other similar developments elsewhere provide some key pointers to consider, including the importance of effective integration into, and connectivity with, surrounding innovation ecosystems.

Given that no immediate opportunities have been identified through this study for an onsite research or higher education institute at OCGV (options A and B), and that the more commercially facing models (C and D) risk dilution of the science park concept, we suggest that some hybrid form of science park typology represents the most realistic approach, albeit and as noted above, with a clear economic role and USP to distinguish OCGV from wider provision and competition.

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5. Delivery strategy: overview This section considers a potential delivery strategy for bringing the science park proposal forward, focusing on practical choices and options

Commercial delivery strategy

Drawing on the various strands of analysis presented above, this section considers the most appropriate strategy for bringing the proposed science park forward to market and ensuring sustainable levels of occupancy. It focuses on:

- A series of urban design and place making principles that could be used to shape a distinctive employment offer at OCGV;
- How flexibility could be built into the design and delivery to ensure that the science park can respond to changing business and occupier needs;
- The supporting infrastructure that is likely to be needed to support a well functioning and thriving business environment on site;
- Potential delivery and operational options for a new science park in this location, including site build-out and investment models; and
- Phasing and timing of science park delivery, linked to the overall timescales for delivery of the garden village and taking account of other nearby proposals for science related employment provision over the coming years.

This analysis is based on discussions with property market operators within Oxfordshire as well as a review of critical success factors from science parks elsewhere, considered in the context of Oxfordshire's unique economic base and USPs.



5. Delivery strategy: place making and urban design Lessons from science parks elsewhere provide a series of design and place making principles that could be used to shape a distinctive employment offer at OCGV

Overarching principles

High quality design is central to the overall strategy for OCGV and the recent AAP Issues Paper underlines the importance of the Garden Village in delivering a step-change in place-making and design quality.

A number of key considerations are presented below for the science park development in the context of 'place-making' and urban design, in order to strengthen the various connections between people and the places they share. This relates to core elements that will make a science park successful and what has worked well elsewhere:

- i. Inclusion of a vibrant central amenities hub to provide a focus within the site for networking and to provide for the needs of workers, for example meeting space, café, crèche, electric car charging points etc.
- ii. Creating a sense of place through attention to amenities such as walking paths, cycle paths and green spaces as well as the provision of public spaces (for occasional lectures and gatherings) to help 'humanise' the employment part of the site. Creating a sense of place will be important from the out-set to allow the science park to develop its own identity.
- iii. Maximising the connectivity between the science park and the rest of the garden village, as well as other parts of the District such as Eynsham, Witney, and connections to Hanborough Station. This will help embed the new development within the District and help foster business linkages and supply chains.

Incorporating these design elements will not only help to maximise the market appeal of a science park at OCGV, but also create a premium environment to support higher values and, in turn, improved viability of commercial development.

An 'innovation district' approach

Innovation districts are a design ethos which seeks to move away from sprawling, isolated and single land use business parks, to more compact and mixed use 'districts' which cluster entrepreneurs, start-ups, business accelerators and incubators. What differentiates these places from more traditional "industrial estates" constructed within the last 40 years in the UK is that these spaces are easily accessible via public transport, are wired for public Wi-Fi, support mixed use development (housing, business and retail space) all with the aim of nurturing collaboration and knowledge sharing.

This concept is promoted by the internationally-recognised design academics Bruce Katz and Julie Wagner, who report three models on how innovation districts can be created in their report for the Brookings Institute, titled '*The Rise of Innovation Districts: A New Geography of Innovation in America*'. These reflect how the location preferences of people and firms are changing and reshaping the linkages between the economy, place-making and social networking, as knowledge and innovation become much stronger drivers of growth.

One of the models referred to is an urbanised science park, commonly found in suburban and extra-urban areas, and is where traditionally isolated, sprawling areas of innovation are urbanising through increased density and an inclusion of mixed activities. Whilst the report focuses on the North American context, it is considered that the third model 'urbanised science park' provides parallels for the OCGV location, context and overarching objectives.

A key design principle taken from the study relates to greater concentration of buildings to increase the density of the scheme thereby increasing the number of people within a smaller area allowing more opportunities for interaction and collaboration. The increased density also reduces the distances between buildings opening up opportunities for pedestrian and cycle journeys within the site, consistent with the OCGV ethos. By its high density nature, it does however reduce the scope for on site expansion of any significant scale amongst business occupiers. This could limit the type of occupier that could be attracted, and would fail to support the Council's ambition to ensure sufficient land for expansion opportunities.

5. Delivery strategy: flexibility As a longer term opportunity, a flexible approach to designing and delivering new science park provision at OCGV will be critical

Responding to changing requirements

Planning for employment space is not an exact science, and business and market needs can change quickly and evolve over time. A key consideration for the OCGV masterplan must therefore be to allow flexibility in a number of respects:

- Change over time the economic role of, and market demand for, employment space at the science park will evolve over time. Occupiers will be attracted as the location becomes more established with a wider range of services and amenities, but also as new businesses start and scale-up. It will be important that a 'ladder' of premises of different sizes and price points is established to allow businesses to expand and be retained within the site.
- Change between uses at a macro level, there is increasing demand for
 hybrid spaces that combine different floorspace types and allow for adaptability
 to change. This means not being overly prescriptive in respect of individual Bclasses in both design and planning policy terms.
- Accommodate temporary uses given the likely long term phasing associated with construction of the garden village and science park, there will be a need to accommodate temporary uses both relating to construction and other business activities over this period.

The degree of flexibility will need to have regard to potential governance and operational arrangements for the science park once complete, in particular the structures set up for strategic and operational decision making as the science park grows and evolves.

A mini case study is shown to the right of Granta Park in Cambridgeshire, which provides a good example of a flexible approach to delivering and managing a high quality science park.

Case study: Granta Park, Cambridgeshire

Granta Park is located south east of Cambridge, within the Cambridge Science Cluster, and is home to industry leading life science organisations ranging in size from 2 to over 400 people. Its range of existing business premises options include office space, R&D/laboratory space and hybrid options.

The site is owned and managed by BioMed Realty and TWI who take a flexible approach to both meet a company's immediate needs and build in options for future growth. Terms begin from just one month through to whatever length of term an occupier requires.

Granta Park has both outline consent and reserved matters consent on a number of adjoining sites, which gives life sciences companies a choice of locations for their new building within the 200 acre landscaped estate. There are building designs ready for implementation, or a building can be designed bespoke to meet a company's specific requirements.



Source: UKSPA

5. Delivery strategy: supporting infrastructure (1) A mix of commercial premises types will be needed to support a self sustaining innovation ecosystem on site

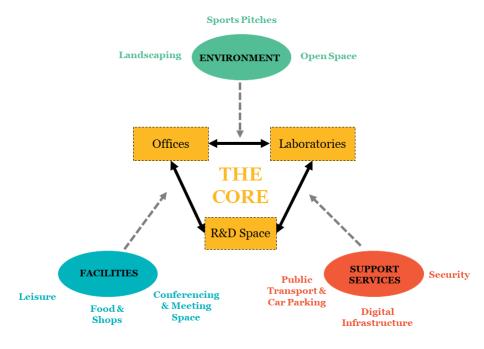
Getting the right mix of space

A new science park 'product' at OCGV should be structured around different business and occupier needs in order to support a self-sufficient and high performing business ecosystem on site. A summary of the typical features, characteristics and built form that can be found on a science park is shown to the right. For OCGV, an optimum balance will need to be struck between single use, large floorplate premises, smaller scale space more suited to start-up and growing businesses, and communal space for networking and fostering a sense of community within the science park environment.

Examples of successful science parks elsewhere across Oxfordshire and the wider South East suggest that a mix of commercial premises types is required in order to facilitate a thriving, self sustaining innovation ecosystem, also recognising the need for occupier flexibility (explored earlier in this section). Bringing forward some small scale shared workspace to cater for science and technology SMEs and start-ups at an early stage of the science park's development could help to catalyse the wider cluster, and this may require initial public sector intervention which in turn can leverage private sector investment. This would then leave opportunities for larger scale occupiers, institutions and organisations to design and customise their own purpose built premises on adjoining, dedicated plots.

Government (local and national) will have a key role to play in enabling early stage investment in infrastructure at OCGV, and this need not be at taxpayer expense if it can be tied to the value uplift captured for the wider community. As a new garden community, OCGV is likely to need early investment in key infrastructure delivery, before new residential and commercial development can take place. This is not just about utilities and roads, but also the elements that make a new community an attractive and sustainable option and the new homes and commercial space marketable, such as early delivery of schools and retail provision.

Figure 5.1: Typical Science Park Features and Characteristics



Source: Lichfields analysis

5. Delivery strategy: supporting infrastructure (2) A range of physical, social and communications infrastructure will be critical in bringing forward a new science park at OCGV

Facilitating a thriving business environment

As a new settlement, provision of the right infrastructure to unlock growth opportunities at the right time will be a critical cross-cutting theme for all aspects of the OCGV development.

The successful growth and development of a science park at OCGV will be predicated by the services it offers to occupiers, notably the infrastructure required for a well functioning and thriving business environment. Supporting infrastructure can be grouped into the following three categories:

- 1. **Physical infrastructure** availability of space and land to accommodate the expected needs of potential tenants and the availability of urban infrastructure services including streets, parking facilities, utilities, and an uninterrupted power supply are the foremost requirements of any science park.
- 2. Social infrastructure wider facilities and amenities such as sports pitches, health centres, gyms, creches, shopping centres, cafes, meeting places etc.
- Communication infrastructure a science park should be able to provide high speed intra-park, domestic and international data and voice connectivity.

Successful science parks tailor their infrastructure to match the needs of existing and potential clients. Further detail about essential supporting infrastructure for the wider garden village will be provided in the forthcoming AAP and supporting Infrastructure Delivery Plan (IDP).

This supporting infrastructure is likely to be required at different points in the science park's development process. Up-front provision will be critical as part of enabling development works (e.g. access roads), while other types of infrastructure will only be required (and viable to provide) as the critical mass of the science park grows (e.g. central meeting hub, leisure facilities etc) and as and when business premises are constructed (e.g. energy and utility services). As shown in the table to the right, there is also a distinction between site wide infrastructure requirements and those that are necessary to unlock specific sites for development.

Infrastructure type	Site / plot specific	Site wide
Transport and highways	✓	✓
Energy	✓	
Utilities, water and waste	✓	
Telecommunications	✓	
Green infrastructure		✓
Social and cultural*		✓

^{*} Includes retail, food and drink, sports facilities, health centres, creches etc.

5. Delivery strategy: developer and delivery model There are a number of different routes for structuring delivery of space at the science park, with the aim to achieve long term stewardship

Delivery model

A development partner – Grosvenor Developments Ltd – is currently working on behalf of the landowners to undertake initial masterplanning work and an outline planning application for the site. Whilst the extent of Grosvenor Developments' involvement in the delivery phase of the garden village remains unclear, a number of broad potential delivery approaches are set out below.

From an investor perspective, the delivery model for a science park at OCGV could take a number of forms, and this will partly be influenced by land ownership which is currently fragmented across the garden village site. It could be led by a single developer, institutional investor or through a joint venture between the public and private sector.

New garden communities are likely to have a strong appeal to institutional investors due to their capacity for long term returns and their planning certainty. Meanwhile, Joint Venture (JV) structures allow the public sector to commit its land interests alongside private sector finance and expertise to facilitate the appointment of professionals, detailed community engagement, the design of high quality schemes and the eventual letting of construction contracts. The use of JV structures can enable resilient project delivery by ensuring that both the public and private sectors are represented properly throughout the process and risks can be readily identified and managed. This could also involve a JV with an anchor education and/or research institute to take the lead on developing key knowledge based assets.

Delivering a successful new community requires a clear understanding of how assets generated by the development process will be managed in perpetuity. In this respect, a new science park at OCGV will need to demonstrate how its management will be undertaken on behalf of the wider garden village community through a long-term stewardship role involving active and positive management of commercial space developed on site. The ability of the science park to achieve this long-term stewardship – as well as other garden village principles such as land value capture – will be directly linked to the form of delivery model and body used.

Structuring delivery

There are a range of potential approaches to support delivery of new employment space at OCGV, and some combination of the following should be considered as part of the emerging masterplan for the wider garden village site:

- Provision of plots to accommodate 'design and build' opportunities to meet
 bespoke requirements or respond to specific investment opportunities. This
 approach would be particularly attractive to the market if plots were made
 available for sale on a freehold basis, reflecting market demand drivers in
 Oxfordshire. Oxford Science Park offers a variety of design and build options for
 larger occupiers across seven plots. Design and build allows companies to have
 buildings constructed to meet their own specific occupational needs.
- Provision of serviced plots (i.e. with enabling infrastructure) that could give
 flexibility to accommodate a range of uses and lower the barriers to entry for
 firms relocating to OCGV. This option is provided at Haverhill Research Park
 near Cambridge, where each of the four plots has full infrastructure installed
 including super-fast broadband capability.
- Public sector **pump-priming** or cross-subsidisation of uses to support employment development on a speculative basis and to encourage new business start-ups. For example, starter businesses typically require affordable rents and unless there are financial incentives in the early phases it may be difficult to foster these types of business. This may also apply in respect of incubator or managed workspace for science and technology occupiers, which could take the form of a joint venture with a private sector provider.

5. Delivery strategy: phasing A new science park at OCGV represents a long term employment opportunity that will need to be delivered over a number of phases

Phasing of delivery

Policy EW1 of the recently adopted West Oxfordshire Local Plan states that development of the overall garden village settlement will be phased in accordance with the timing of provision of essential supporting infrastructure and facilities. The forthcoming garden village AAP will provide further detail about site delivery partners, phasing and implementation but at this stage, detailed phasing assumptions are unavailable.

An overarching objective for the proposed OCGV is to create a major long term employment opportunity that capitalises upon the site's strategic location. In accordance with Garden City/Village principles, there will be a strong emphasis on the provision of high quality local employment opportunities in order to encourage increased self-containment and reduce the need for out-commuting. At c. 40 hectares, the proposed scale of the science park is intended to provide long term capacity up to and beyond 2031 (i.e. the end of the new Local Plan period), so it is reasonable to assume that delivery of the science park will realistically take place over the course of a number of years. The Oxford Science Park officially opened in 1991, has evolved substantially since then, and continues to grow.

Bringing a first stage of the overall science park forward to market during an early phase will provide an important statement of intent regarding the overall balance of uses, whilst also ensuring availability of local employment opportunities to optimise sustainability. If the science park follows a research institute or higher education typology (as described in section 4), it will be important to secure an anchor tenant as early as possible to begin to establish an innovation ecosystem on site. This could be accompanied by a central facilities 'hub' or 'gateway' facility that offers small scale flexible workspace for SMEs and business start-ups and communal meeting/ networking space, with an equivalent example including the Magdalen Centre at Oxford Science Park. This may require some initial investment from the public sector. These early stage facilities could then be accompanied and complemented by a series of larger design and build and/or serviced plots which would be available to science related occupiers over a series of years, helping to gradually build a critical mass of on site business activity and employment opportunities.

Factors influencing delivery

The overall timescale for progress and completion will be subject to market conditions and occupier demand, as well as the extent of any specific interventions that are brought forward by the Council and other public sector partners. Another influencing factor will be timing of provision of key infrastructure that is required to unlock and accelerate delivery of different components of the garden village. This is explored in more detail overleaf. For instance, connectivity of the science park (and wider garden village) will be greatly enhanced by the integrated transport 'hub' based around a new park and ride facility with effective links to Hanborough Station and Oxford City.

Phasing of delivery will also be influenced by the wider science park market across Oxfordshire, and the progress associated with a number of other science and technology related employment developments in the pipeline for the coming years:

- Oxford Science Park: Plans to create over 300,000sq.ft of office/laboratory space on remaining undeveloped land by 2025.
- Culham Science Centre: Expansion plans recently approved to create 1
 million sq.ft office and lab space for hi-tech businesses working in fusion
 technology and related fields, bringing an estimated 200 new jobs to the area.
- Harwell Campus: Ambitious masterplan for expanded life science/HealthTec cluster, Rosalind Franklin Institute and Space Cluster over the next few years.
- **Oxford North**: 936,000sq.ft of office, laboratories, co-working space and an incubator facility accommodating 4,500 new jobs, built out over 10 years.
- Bicester Garden Town: 150 ha of employment land for high-value, high-tech activities by 2031.
- Didcot Garden Town: Various sites to help the Garden Town accommodate a share of the 20,000 high-tech jobs envisaged for Science Vale as a whole, commencing over the next 10 years.

5. Delivery strategy: synthesis

The delivery approach should not be overly prescriptive but accommodate flexibility, responding to phasing and different routes for structuring delivery of space

Synthesis

There are a number of options for bringing the science park site forward for development, and these have been considered as part of this section. Provision and delivery of employment space needs to be structured carefully as part of the overall masterplanning process for the science park and wider garden village, reflecting the different types of space that could be provided and their respective (sector) locational drivers.

The key points from the preceding analysis in this section can be summarised as follows:

- Place making and high quality urban design is central to the overall strategy for OCGV. Core elements that will help to make the science park successful include the inclusion of a vibrant central amenities hub; creating a sense of place through attention to amenities and provision of public spaces to help 'humanise' the employment part of the site; and maximising the connectivity between the science park and the rest of the garden village, as well as other parts of the District and the Oxford science cluster. This will help enhance the market appeal of the science park and create a premium environment to support higher values and, in turn, improved viability of commercial development.
- Recognising that business and market needs can change quickly and evolve over time, delivery of a science park at OCGV will need to build in flexibility by establishing and maintaining a 'ladder' of premises of different sizes and price points to allow businesses to expand and be retained within the site. Successful science parks elsewhere (including Granta Park in Cambridgeshire) combine different floorspace types and allow for adaptability to change, including through provision of hybrid premises and planning consents. There may also be a need to accommodate temporary uses during the construction phase.

- The successful growth and development of a science park at OCGV will require the provision of various supporting physical, social and communications infrastructure. This will need to be tailored to match the needs of existing and potential clients, at different points in the science park's development process. Up-front transport and highways provision will be critical as part of enabling development works, while other types of infrastructure such as a central meeting hub or leisure facilities will be required as the critical mass of the science park grows. Some infrastructure requirements will be site-wide, and others required to directly unlock sites for development.
- The delivery model for a science park at OCGV could take a number of forms including being led by a single developer, institutional investor or through a joint venture between the public and private sector. Delivery of new employment space should combine design and build opportunities and serviced plots, while public sector intervention is likely to be required to pump prime or cross-subsidise employment space on a speculative basis, to encourage occupation by early stage businesses and start-ups.
- The proposed science park at OCGV represents a long term employment opportunity with a strong emphasis on high quality employment opportunities. It will need to be phased over a number of years (including beyond the new Local Plan period to 2031) and further detail about overall timescales for delivery of the garden village will be provided in the forthcoming AAP. Nevertheless, it will be important to secure an anchor tenant at an early stage, to begin to establish an innovation ecosystem on site. Consideration should also be given to potential competition posed by a number of other science park and related employment developments currently in the pipeline across wider Oxfordshire.

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6. Alternative options: appraisal overview Other forms of employment provision could create jobs and business floorspace but are less well suited to capture high value science and technology growth

Alternative employment provision

Within the garden village AAP Issues Paper recently subject to public consultation, the Council identifies an alternative option for employment provision at OCGV which looks to disperse smaller parcels of business land across the garden village site, integrated more closely with new homes and other supporting uses such as education and community facilities. Thus, instead of one single campus site, new business space would be provided at a number of smaller sites across the garden village allowing flexibility and integration with a balanced mix of uses.

Alternative forms of employment provision at the garden village could also include flexible live-work space either in dedicated clusters or dispersed evenly across the settlement, and a focus on mixed-use development within the allocated business area, which seeks to encourage a broader range of business occupiers beyond just the science and technology sectors. Either way, and thinking ahead to future masterplanning work, employment provision will need to be structured to reflect the different types of space to be provided and their respective locational drivers. For instance:

- A **primary business area** could be located to maximise ease of access to the A40 and also to provide proximity to Hanborough Station.
- A network of mixed-use local centres could be identified to provide access
 to services and amenities within walking distance of new residential
 neighbourhoods. These could also provide locations for workspace hubs designed
 to cater for home-based businesses and remote-workers, as well as start-up
 businesses who may not require formal space within the employment district, or
 can migrate there over time.
- An amenities hub could be located close to the site gateway, established to service the needs of the primary employment district. This would support the needs of workers, and could also accommodate shared facilities such as meeting rooms and co-working space.

A high level appraisal is provided overleaf for a number of potential, alternative employment options to a campus style science park, to explore the benefits and drawbacks associated with each approach, and how this compares with the existing campus style science park proposal. These options are not mutually exclusive, and in reality it is likely that a combined approach will need to be taken. A key starting point is the overarching employment vision for the garden village set out in Policy EW1 of the West Oxfordshire Local Plan:

"In accordance with garden city/village principles, there will be a strong emphasis on the provision of high quality local employment opportunities in order to encourage increased self-containment and reduce the need for out-commuting."

In this context, a number of alternative models for employment provision have the potential to meet the stated aim of encouraging high quality job creation on site at OCGV, including a more generic business park concept that provides high quality office space within a landscaped setting. This approach would however provide a less effective way of addressing the existing deficit of science park provision within West Oxfordshire, and enabling the District to more effectively compete within the high value Oxfordshire knowledge cluster.

Provision of science park space through a more dispersed approach characterised by a number of smaller employment clusters could also prove effective in meeting the Council's stated employment aim for OCGV, although lessons learned from science park development elsewhere across the country (such as Haverhill Research Park) suggests that scale of site is an important success factor in allowing a critical mass of complementary research, education and commercial activity to co-locate onsite. A dispersed approach would also make it difficult to provide suitable expansion space to accommodate business growth in future.

Beyond the provision of new 'B-class' employment land, the scale of the proposed garden village means that the development is likely to include other employment generating opportunities, for example within shops and services and other commercial uses which could come forward as part of any district or local centres within the site. The Council are keen to see these commercial uses mixed with other community facilities, health and education to create vibrant community hubs.

6. Alternative options: site typologies

A range of site typologies has been assessed in terms of their potential to meet the Council's aim of providing business land and job opportunities at OCGV

	Science / R&D Park	Office / Business Park	Industrial / Advanced Manufacturing Park	Logistics Hub	Mixed Employment Area	Live-Work Space
	A	В	С	D	E	F
Use Classes	B1a/B1b/B1c	B1a	B1c/B2	B8	B1/B2/B8	B1/B2/B8
Example sectors	Biotechnology, health, pharmaceuticals, chemical engineering	Finance and business services, information technology and media	Advanced engineering and manufacturing, aerospace, motorsport	Distribution and storage, customer fulfilment centres, e-commerce	Various	Various
Design specification	High-quality landscaped setting; scope for separation of 'clean' uses and relevant regulatory design standards	High-quality landscaped setting; ample provision of car parking	Serviced plots for design and build opportunities; flexibility to accommodate supply chains	Large plots with potential for open storage and yards	Separation of uses; design code to maintain quality standards	Flexible, hybrid space, potentially separated from mainstream residential
Infrastructure requirements	Proximity to university/higher education provider or research institute and/or major corporate tenant	Access to road, rail and air connections; broadband connectivity; on site amenities	Access to strategic road network	Access to strategic road network; scope for 24 hour operations; broadband connectivity	On site amenities (i.e. small scale retail and leisure provision)	Proximity to good transport links and supporting amenities
Existing scale of market demand	High	Medium	High	Medium	High/Medium	Medium
Employment density	Low/Medium	Medium/High	Low/Medium	Low	Medium	High
Strategic policy fit [¥]	High	High	High/Medium	Low	Medium	Medium
Overall potential to meet stated aim*	High	High	Medium	Low	Medium	Low

Y Extent to which typology helps to deliver strategic economic objectives identified by the national Industrial Strategy, OxLEP's emerging Local Industrial Strategy trailblazer for Oxfordshire, and West Oxfordshire Local Plan *In accordance with garden city/village principles, there will be a strong emphasis on the provision of high quality local employment opportunities in order to encourage increased self-containment and reduce the need for outcommuting (West Oxfordshire Local Plan Policy EW1)

6. Alternative options: sources of employment Employment within OCGV is likely to be driven by a number of sources, derived from indigenous growth, inward investment and also consumption-led

Sources of employment

Employment generation at OCGV is likely to be driven by a number of different sources, each aligning with the broad site typologies presented on the previous page to varying degrees (see table to the right).

The main source of employment, particularly in the early phases, is likely to be generated by businesses moving to the site. This could comprise existing local businesses which opt to relocate and/or expand at OCGV because it provides a rare opportunity for new high quality commercial space within West Oxfordshire. Demand could be relatively high, reflecting the importance of Eynsham for employment and business and its functional economic relationship with nearby Oxford City.

Employment could also arise from inward investment attracted to OCGV from other parts of Oxfordshire, the UK and globally. Data analysed in section 3.0 underlines a strong latent demand amongst inward investors for business sites and space within Oxford City and the surrounding county, driven by the life sciences and creative sectors, and OCGV can help to ensure that the District is able to play a more active role in this respect within the Oxfordshire knowledge cluster. Links with further and higher education will be essential not only to help provide skilled workers for new growth sectors, but also to ensure local people are able to access new job opportunities.

The final sources of employment are those generated within the site itself that will increase with the growth of the settlement. These include home-workers and new business start-ups, as well as jobs created in local services to serve the new population.

In addition to the sources of employment noted above, significant employment opportunities will also be created through the construction programme for OCGV.

Drivers of Demand

Source: Lichfields analysis

Employment generator	Main drivers	Likely scale of demand	Potential economic return / strategic fit	Suitable site typology
Indigenous growth	Relocation and expansion of existing businesses in Eynsham and West Oxfordshire	High/Medium	High	All (A-F)
Inward investment	Businesses moving into OCGV/West Oxfordshire from elsewhere	Rest of Oxfordshire = High Rest of UK =High/Medium International = Medium	High	A, B, C, D
Business start- ups	Provision of incubation facilities and flexible space; access to support networks	Medium	High	A, B, C, E, F
Home-workers	Accessibility to major centres and digital connectivity; workspace hubs and housing choices	High/Medium	Medium	F
Consumption- led	Growth of local servicing needs (retail, leisure, community etc)	Medium (incremental with growth of settlement)	Low	E, F

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This study gathers together various evidence to help underpin the approach to employment provision at the Oxfordshire Cotswolds Garden Village

This study was commissioned by West Oxfordshire District Council to provide independent advice on the most appropriate employment role for the OCGV in order to inform a forthcoming AAP for the garden village, as well as other strategic planning considerations. It follows a number of key strands of analysis, with the overall findings and conclusions summarised by theme as follows:

- Context and rationale: OCGV is ideally positioned to take advantage of a number of key strategic policy drivers and wider growth ambitions for Oxfordshire which have emerged over a number of years, by providing much needed spatial capacity to help capture wider economic opportunities, as well as helping West Oxfordshire to achieve a step change in its economic performance, attractiveness as a business location and its portfolio of high skilled local job opportunities. This includes the national Industrial Strategy with its focus on strengthening productivity and innovation, the emerging LIS for Oxfordshire which recognises OCGV's potential to contribute to the overarching vision for an Oxfordshire living laboratory, and the Cambridge-Milton Keynes-Oxford corridor which has been identified by Government as a nationally significant location for growth over the coming years.
- Economic drivers: The economic potential and role of OCGV will develop over time as the garden village is built out and becomes established. However the economic credentials are strong; Eynsham represents one of West Oxfordshire's largest business locations and accommodates an existing presence of high tech employers, capabilities and supply chain networks and latest economic projections imply strong levels of future job growth potential. From a property market perspective, whilst the site and area around it represent a largely untested market location, there could be scope for OCGV to help accommodate unmet demand from elsewhere across Oxfordshire (including the spatially constrained Oxford City) and latent inward investment demand exists at the Oxfordshire-wide level, in particular amongst science and technology sector occupiers.
- **Science park proposition:** The development and operation of science parks has evolved considerably over the last few decades, with civil society actors playing an increasing role in the wider innovation ecosystem. Four broad science park typologies have been identified through this study and provide a guide or model for provision of a new science park at OCGV. It will be critical to identify the USP or series of USPs that can be attached to OCGV and a new science park onsite in light of anticipated competition from existing science parks in Oxfordshire and planned new developments. Given that no immediate opportunities have been identified through this study for an onsite research or higher education institute at OCGV, and that the more commercially facing models risk dilution of the science park concept, we suggest that some hybrid form of science park typology represents the most realistic approach, taking advantage of opportunities associated with university spin-outs that have out grown incubator style space within University facilities elsewhere. Ideally this would focus on established, but still growing, companies that no longer require intensive incubator style support but distinctly operate within science and R&D related sectors.
- Delivery strategy: Provision and delivery of employment space will need to be structured carefully as part of the overall masterplanning process for the science park and wider garden village, reflecting the different types of space that could be provided and their respective (sector) locational drivers. Place making and high quality urban design is central to the overall strategy for OCGV, while delivery of a science park at OCGV will need to build in flexibility by establishing and maintaining a 'ladder' of premises of different sizes and price points to allow businesses to expand and be retained within the site. A number of different delivery models have been considered, including being led by a single developer, institutional investor or through a joint venture between the public and private sector.
- Alternative options: Other forms of employment provision could create jobs and business floorspace at OCGV such as flexible live-work space either in dedicated clusters or dispersed evenly across the settlement, or a focus on mixed-use development within the allocated business area. These alternative approaches would be less well suited to capture high value science and technology growth, thereby constraining the District's ability to more effectively contribute to the Oxfordshire knowledge cluster.

This study examines the most appropriate employment role for OCGV and frames a future strategy to take this forward, responding to a series of key questions

1. Is this an appropriate, strategic location for the type of new campus style science park envisaged to date?

The analysis carried out as part of this study suggests that the new garden village proposed for land north of the A40 near Eynsham does represent an appropriate location for the type of new campus style science park **envisaged**, for a number of reasons. Oxfordshire represents a proven business location for science and technology businesses and accommodates one of the largest clusters of science parks in the country. The OCGV site benefits from close proximity to the Oxfordshire 'knowledge spine' and provides an excellent opportunity for West Oxfordshire District to play a more direct and meaningful role within the high value science and technology ecosystem that surrounds it, in turn benefiting from the economic prosperity that this can bring. The District does not currently accommodate any science parks, and the garden village site therefore represents an untested market location for the type of campus style science park proposed. However, it does benefit from strong representation in high value technology business activity, in particular, in and around Eynsham. These underlying economic strengths leave the garden village well placed to capture some of the latent inward investment demand that exists across Oxfordshire amongst science and technology sectors, by providing employment space of the scale typically required to enable a self-sustaining cluster to form and develop.

The site already benefits from strong strategic connectivity and this will be enhanced further through provision of a park and ride facility within the garden village and effective links to Hanborough Station, providing direct rail connections to Oxford and London. In addition to these transport links, the site's proximity to Oxford city and surrounding innovation clusters make it well placed to capture business investment and demand for space, particularly amongst those firms seeking an operational base near to Oxford city.

From a broader strategic perspective, a range of national, sub-regional and local policy and strategy objectives provide strong support for measures to boost productivity and high value business growth. This includes maximising the economic potential of existing clusters of innovation and globally leading technologies/activity by providing the right space in the right location to enable these sectors to grow and diversify. This is very much supported at the Oxfordshire level by the emerging Oxfordshire LIS which is intended to bolster Oxfordshire's proposition as a global innovation ecosystem, through measures such as developing Oxfordshire as a living laboratory, using the area's world-leading science and technology clusters to innovate in the transformative technologies that are shaping the twenty first century and developing solutions to the UK's Grand Challenges of ageing society, mobility, data and artificial intelligence, and clean growth. As noted above, West Oxfordshire has historically played a relatively peripheral role in driving Oxfordshire's science and technology innovation ecosystem, but the OCGV provides an important opportunity to change this, not least because of its strategic location within the District.

Competition in the development pipeline from other existing and newly emerging science park locations, as well as the global focus of many of Oxfordshire's strategic growth objectives, means that OCGV will need to develop a clear and distinctive brand and proposition in the marketplace, raising the profile of the location (and West Oxfordshire more generally) to attract potential inward investors (as indigenous demand is unlikely to be sufficient in itself to require a c.40ha science park allocation). Leveraging the credentials associated with the 'garden village' brand will also be helpful, albeit not necessarily essential for the type of campus style science park proposed.

This study examines the most appropriate employment role for OCGV and frames a future strategy to take this forward, responding to a series of key questions

2. To what extent does the supporting evidence justify and support the delivery of a new science park of the type and scale proposed, both in the period to 2031 and in the longer-term beyond?

Existing evidence and strategic policy prepared on behalf of both WODC and OxLEP supports the delivery of a new science park of the type and scale proposed from a qualitative, supply side perspective. It represents a key mechanism and spatial opportunity to implement ambitious plans for Oxfordshire to become one of the top three global innovation ecosystems by 2040 (as set out in the emerging Oxfordshire trailblazer LIS). As sites and locations in and around Oxford city become increasingly constrained and congested, locations elsewhere within the Oxfordshire knowledge cluster will need to play a greater role in accommodating the growth and premises needs of high value science and R&D sectors. The science park proposal offers synergy with the wider architecture of the Oxfordshire 'knowledge spine', with OxLEP specifically identifying the potential for a garden village at Eynsham to contribute towards this objective. At a more macro level, the national Industrial Strategy sets out an overarching objective to boost productivity, challenging local areas to articulate how they can contribute towards the national imperative. In this respect, there is a clear opportunity to respond to Evnsham's functional economic role within wider Oxfordshire, capitalising on its proximity to Oxford and the continued expansion of knowledge-based activities.

Whilst the science park concept has been prevalent since the 1950s, it has evolved considerably since then, with civil society actors playing an increasing role in the wider innovation ecosystem. With this growing focus on collaboration between civil society, education, industry and government, **OCGV's challenge will be how best to respond to the next generation of science parks over the coming years.** The emerging LIS for Oxfordshire provides some key pointers in this respect, particularly around developing living laboratories across Oxfordshire, using the area's world-leading science and technology clusters to innovate in the transformative technologies that are shaping the twenty first century.

In quantitative terms, recent job projections suggest that previous growth assumptions commissioned by the Council may have been conservative, and that the overall level of provision set out in the Local Plan (74ha) addresses this, provides flexibility and choice and will also help to meet needs beyond 2031. The current Local Plan period runs to 2031, yet the type and scale of science park proposed at OCGV represents a longer term opportunity for accommodating business growth and employment needs that extends well beyond the next 12 years. It represents one of the largest employment interventions within the Cambridge-Milton Keynes-Oxford corridor – an overarching growth corridor of national importance – and provides West Oxfordshire with an excellent opportunity to raise its economic profile and gain real traction within the world class innovation ecosystem that continues to drive economic growth and property market demand across Oxfordshire.

This study examines the most appropriate employment role for OCGV and frames a future strategy to take this forward, responding to a series of key questions

3. What evidence is there that the proposed science park is likely to be commercially successful and what would be the most appropriate strategy for bringing the site forward to market and ensuring sustainable levels of occupancy?

Evidence assembled as part of this study identifies good prospects for a new science park at OCGV being commercially successful. Recent experience from other existing science parks within Oxfordshire and the wider Cambridge-Milton Keynes-Oxford corridor shows that the science park model has proved to be very successful within a number of different contexts and locations across the sub-region. This study has reviewed the range of existing science parks across Oxfordshire, all of which are generally operating successfully (many at full occupancy) with plans for further growth and expansion over the coming months and years. This indicates that under the right conditions and with the right support in place, there is every chance that the proposed science park at OCGV can be successful. But Oxfordshire is already a crowded market place, and success at OCGV will depend upon a clear USP and distinctive offer to prospective science park occupiers. This could include provision of 'grow on' space for relatively early stage University spin-outs that have out-grown dedicated incubator facilities but still require proximity/access to the research and collaboration opportunities associated with the Universities as well as the wider connectivity offered by Long Hanborough station, but with a slight cost advantage over more central Oxford locations.

Lessons learned from other science park developments across the wider sub-region underline a number of critical success factors that are useful for framing a potential delivery strategy for a science park at OCGV. For instance, recent success at Granta Park near Cambridge has been underpinned by **active linkages with academia** (which has generated a flow of spin out companies, many of which then go on to take-up grow on space and in time larger premises on site), **the presence of an anchor institution which provides a distinctive offering,** and by the **scale and size of site (c.50 ha) which provides both the required critical mass alongside opportunities for future expansion**. By comparison, Haverhill Research Park at just 8 ha has struggled to demonstrate this important critical mass which represents a key pull factor for land hungry knowledge-based activities.

There are a number of options for bringing the science park site forward for development, and delivery of employment space needs to be structured carefully as part of the overall masterplanning process for the wider garden village, reflecting the different types of space that could be provided and their respective (sector) locational drivers. There is no one single definition of a 'science park', with existing examples each characterised by a series of unique attributes. It will also be important to secure an anchor tenant at an early stage, to begin to establish an innovation ecosystem on the science park site. The successful growth and development of a science park at OCGV will require the provision of various supporting physical, social and communications infrastructure, tailored to match the needs of existing and potential clients, at different points in the science park's development process. In light of various competition anticipated from established and emerging science park locations nearby to OCGV, a key component of the place making strategy will be high quality urban design to enhance the market appeal of the science park and create a premium environment to support higher values and, in turn, improved viability of commercial development.

Specific consideration is also required to phasing and how delivery of employment provision is structured to optimise potential and respond to growth over time, reflecting the longer-term focus of the project allowing for growth beyond 2031. Linked to this and recognising that business and market needs can change quickly and evolve, delivery of a science park at OCGV will need to build in flexibility by establishing and maintaining a 'ladder' of premises of different sizes and price points to allow businesses to expand and be retained within the site. In addition to a focus on grow on space for university spin-outs as noted above, there could be a second competent to demand for a science park at OCGV relating to inward investment and accommodating some of the more established, mature companies that are attracted to Oxfordshire (for instance through the emerging and forthcoming LIS efforts) to take advantage of the new technology sectors basing their roots in the county. This combined approach should be explored in due course as part of a more detailed delivery strategy.

This study examines the most appropriate employment role for OCGV and frames a future strategy to take this forward, responding to a series of key questions

4. Are there more appropriate, alternative ways of meeting the stated aim of providing additional business land and job opportunities as part of the garden village proposal?

In terms of the garden village's employment element, the Council anticipates a strong emphasis on high quality local employment opportunities to encourage high levels of self-containment and to reduce the need for out-commuting to reflect garden village principles.

In addition to the concept of a campus style science park, there are a number of alternative forms of provision that could be pursued to meet this objective, and some of these have been tested through this study. This includes a more generic business park concept that provides high quality office space within a landscaped setting. This alternative approach would however provide a less effective way of addressing the existing deficit of science park provision within West Oxfordshire, and enabling the District to more effectively compete within the high value Oxfordshire knowledge cluster and take advantage of its proximity.

This study concludes that the OCGV site represents an appropriate strategic location for a science park development, and that delivery of a science park in this location would make a significant contribution towards Oxfordshire's ambitious vision to be one of the top three global innovation ecosystems by 2040. It represents a once in a generation opportunity to fully integrate West Oxfordshire into the wider Oxfordshire innovation ecosystem in a way that a more generic business park would not be able to achieve. The Council has made provision for more general business space and land through allocations elsewhere in the District, and the OCGV site should provide a distinct and unique development opportunity.

Provision of science park space through a more dispersed approach characterised by a number of smaller employment clusters could prove effective in meeting the Council's stated employment aim for OCGV, although lessons learned from science park development elsewhere across the country suggests that scale of site is an important success factor in allowing a critical mass of complementary research, education and commercial activity to co-locate onsite. A campus style concept would be beneficial in this respect, and is recommended as the approach to pursue and test further through the AAP and any associated masterplanning of the site.

This would ideally be complemented by a range of broader employment opportunities (such as jobs created in local services to serve the new population) that can be accommodated across the wider garden village site, for instance within smaller scale local hubs and centres that are well connected and accessible.

Structure

- 1 Introduction
- 2 Context and rationale
- 3 Economic drivers
- 4 Science park proposition
- 5 Delivery strategy
- 6 Alternative options
- 7 Conclusions

Appendix 1 & 2

Appendix 1: Consultees

Stakeholders

- Jacqui Canton, Abingdon & Witney College
- Ahmed Goga, OxLEP
- David Hartley, Oxford Brookes University
- Sebastian Johnson, OxLEP
- Matt Peachey, Oxford City Council
- Tom Pierpoint, Great Western Railway
- Scott Roberts, Polar Technologies
- Stuart Wilkinson, University of Oxford

Commercial Agents

- Scott Harkness, Carter Jonas
- David Williams, Bidwells

Business Park Operators

- Grove Business Park
- Howbery Business Park
- Milton Park
- Oxford Science Park

Appendix 2: Reference documents

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- Experian Regional Planning Service, Workforce jobs categories (2018)

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