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Oxfordshire LEP Skills Advisory Panel

Skills and Labour Market Research

A Report by Hatch Regeneris

October 2019

Oxfordshire Local Enterprise Partnership

Oxfordshire Skills Advisory Panel

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Executive Summary

Oxfordshire is one of the UK's economic success stories, with strong foundations and world-leading assets, giving it a reputation as one of the best locations in the world to innovate. Oxfordshire has bold ambitions to continue its recent economic trajectory, by delivering transformative growth which is clean and sustainable and delivers prosperity for all communities across the county.

Key to ensuring the success of the county's ambitions will be ensuring the area has the talent to capitalise on emerging industries. The Oxfordshire Local Industrial Strategy recognises that developing 'people' and 'skills' will be critical to ensuring economic success. The development of the Skills Advisory Panel (SAP) requirements, with the support of the Department of Education (DfE), provides Oxfordshire LEP (OxLEP) with the analytical support needed to inform the area's skills agenda. This will help OxLEP fulfil its local leadership role within the skills system and prioritise actions to address skills issues. In turn, this can give more people in the local community access to high quality skills provision that leads to good jobs.

This report follows the structure set out in the SAP Analytical Framework and Toolkit to ensure it addresses many of the key questions relating to skills in Oxfordshire.

- Stage 1: Analysis and definition of local landscape
- Stage 2: Analysis of skills demand
- Stage 3: Analysis of skills supply
- Stage 4: Mapping of skills demand and supply
- Stage 5: Conclusions

Themes

Through the evidence and analysis undertaken to meet the SAP requirements, there are several key and recurring themes:

- Oxfordshire has been a **strongly performing economy** in recent years, with strong economic growth across a range of high-value sectors. There has been strong employment across many of Oxfordshire's target sectors, with an expansion in managerial and associate professional occupations. However, this economic success has led to a **tight labour market**, with high levels of economic activity and low levels of unemployment. This has led to a **small pool of labour** being available to support Oxfordshire's economic growth aspirations.
- Oxfordshire's recent growth has largely been **concentrated in higher-value sectors** typically requiring degree-level (or higher) qualifications. However, the **greatest**

shortage of workers is currently within elementary occupations¹, which are struggling to recruit the right type of workers into this sector. This is worrying considering the high proportion of overseas workers who currently work in elementary occupations across the South East, whose long-term future in the UK is uncertain (given the low pay typically associated with these occupations which typically fall below thresholds set in the European Union Settlement Scheme).

- **Not all sections of society are benefitting** from Oxfordshire's growth and from the increased economic success of Oxfordshire. There are areas of overall and labour market deprivation in the City of Oxford, which **prevent residents being able to access opportunities** being created through recent economic growth. Working with these communities to ensure they have the right skills to participate will help alleviate some of these challenges.
- Although employer investment in skills is relatively high, there are questions about the **appropriateness of this training** for bridging skills gaps which exist in the workforce. A third of employer reported skills gaps are the result of staff not having received the appropriate training for their jobs. There is a need to ensure that employers are aware and able to access the appropriate training for their workforce, and that training providers are providing courses which meet the skills demanded by local employers.
- In common with the rest of the country, the **number of apprenticeships undertaken has declined** over the last four years. This must be seen in the context of poor national performance, with the introduction of the Apprenticeship Levy reducing employer demand for apprenticeships. An increased take-up of vocational courses and apprenticeships locally could do much to address technical skill shortages.
- The area has a relatively strong skills ecosystem but **doesn't retain enough of the talent that institutions nurture in the area**. Low levels of local graduate retention have partly led to the decline in those aged between 16 and 45 across Oxfordshire, as graduates leave the area in search of alternative opportunities and more affordable housing.

Current Mechanisms – What Is Working to Date?

Oxfordshire has had several successful mechanisms in recent years, which have supported skills improvements across the area.

- The implementation of the **Oxfordshire Skills Strategy**, which aimed to build a 21st century skills ecosystem within Oxfordshire. The LEP is currently developing a Skills Priority Statement, which is aligned to delivering growth ambitions as suggested in the Local Industrial Strategy.

¹ Elementary occupations consist of simple and routine tasks, which typically require the use of hand-held tools and some physical efforts. Examples include: street vendors, domestic helpers and cleaners, building caretakers, window cleaners, porters and garbage collectors.

- Securing £19.6 million of **European Structural and Investment Funds (ESIF) funding** of which £8.1 million is in **European Social Fund (ESF) funding** was allocated to drive forward skills and employment programmes across Oxfordshire.
- A number of wider programmes being delivered by the OxLEP Skills Team which support the development of skills across Oxfordshire. This includes, working in partnership with the Government-backed Careers and Enterprise Company (CEC) to create a **Careers Hub** and **Enterprise Advisors Network, Oxfordshire Apprenticeships** (including an Ambassadors programme and Awards Ceremony), a **work experience team**, a range of **Community Employment Plans** and hosting an annual **Careers Fest**.

New Mechanisms – Emerging Recommendations

To address some of the skills priorities identified through the evidence collection, there is a need for several new mechanisms which build on some of the existing programmes already taking place across Oxfordshire. Each priority responds to the challenges identified previously:

- **Strengthen the provision of vocational / technical skill provision:** ensure that the skills and training by local providers matches that demanded by local employers. Look for opportunities to engage local employers within the curriculum, particularly in designing and promoting apprenticeships and T-Levels.
- **Mitigate impacts of an increasingly ageing population:** there is a need for Oxfordshire to expand the size of its workforce, providing the workers needed for both its higher- and lower-value sectors. There are several strands needed to do this, including: a focus on retaining talent in the local area (partly linked to housing supply); reskilling and replacement labour strategies; and the promotion of career progressing routes, particularly in those sectors expecting high levels of replacement.
- **Inspire local young people to access local employment opportunities:** there is a need to promote and inspire Oxfordshire's young people to show them the range and breadth of opportunities available within Oxfordshire. Raising aspirations and giving young people the skills needed to participate in Oxfordshire's future economic trajectory will give them a pathway to employment locally.
- **Ensure there is adequate housing supply to support growth aspirations:** housing affordability is restricting the ability of graduates and lower-paid workers to be able to live and work in Oxfordshire, thereby limiting the pool of labour available to Oxfordshire's businesses. This has been hindering their ability to grow, damaging overall economic growth.
- **Raising digital capacity:** there is a need to prepare the workforce for increasing levels of automation and digitalisation. Although Oxfordshire already has strong adaptation of many new technologies, it is important to ensure that all workers can benefit from new opportunities, including older workers, disadvantaged groups and those working in Small and Medium-sized Enterprises (SMEs).
- **Ensure equitable access to opportunities:** there is a need to ensure that local people can access local opportunities being created by Oxfordshire's economic success.

Targeting interventions in those areas which currently underperform relative to the Oxfordshire (e.g. parts of the City of Oxford and Cherwell) will enable people to get the skills needed to participate in higher-skilled opportunities being created in Oxfordshire.

- **Continue to encourage employers to invest in training at all levels:** continue to promote training opportunities to employers to increase the number of workforce training days, particularly as training budgets are restricted due to ongoing economic uncertainty in the wider economy. This should continue to include improved signposting to funding sources and relevant training courses as started through the ESF Skills for Business programme.

1. Introduction

Oxfordshire is one of the UK’s economic success stories, with strong foundations and world-leading assets, giving it a reputation as one of the best locations in the world to innovate. Oxfordshire has bold ambitions to continue its recent economic success by delivering transformative growth which is clean and sustainable and delivers prosperity for all communities across the county.

Key to ensuring the success of the county’s ambitions will be ensuring the area has the talent to capitalise on emerging industries. The Oxfordshire Local Industrial Strategy recognises that developing ‘people’ and ‘skills’ will be critical to ensuring economic success. The development of the Skills Advisory Panel (SAP) requirements, with the support of the Department of Education (DfE), provides Oxfordshire LEP (OxLEP) with the guidance needed to inform the area’s skills agenda. This will help OxLEP fulfil its local leadership role within the skills system and prioritise actions to address skills issues. In turn, this can give more people in the local community access to high quality skills provision that leads to good jobs.

In building the guidance on the development of SAPs, the Department for Education has produced an Analytical Framework and Toolkit which is designed to support Local Enterprise Partnership (LEP) areas to carry out high quality local skills analysis, which will be used by SAPs to identify their existing and future skills gaps and employment priorities. This guidance focuses around five key stages, with further analysis accompanying each of these stages. Within each stage a list of data sets has been provided that, whilst not exhaustive, provide a reasonable baseline from which skills performance can be measured.

This report follows the structure set out in the Analytical Framework:

Stage	Analysis
Stage 1: Analysis and definition of local landscape	<ul style="list-style-type: none"> • Examination of the current economic landscape in the area • Determine performance benchmarks within and across multiple geographical levels
Stage 2: Analysis of skills demand	<ul style="list-style-type: none"> • Identification of the strengths and weaknesses in labour markets • Exploration of skill needs based on current and future demand • Insight into business and employer environments
Stage 3: Analysis of skills supply	<ul style="list-style-type: none"> • Determine available skills against those required in the area • Identification of potential challenges that may restrict skills supply
Stage 4: Mapping of skills demand and supply	<ul style="list-style-type: none"> • Assessment of the types of skills gaps and the causes • Ascertain whether learner provision and business development meets demand • Assessment of the likelihood in meeting future demand through current supply
Stage 5: Conclusions	<ul style="list-style-type: none"> • Derive skills priorities for the local area to improve economic efficiency

- Outline the available or required mechanisms to support the delivery of the skills and employment priorities

Source: Skills Advisory Panels – Analytical Toolkit for Local Skills Analysis, 2018

Throughout this assessment, we have closely followed the guidance shown in the Skills Advisory Panel’s toolkit, primarily using Office for National Statistics (ONS) datasets which have been supplemented by other datasets where applicable (e.g. Emsi, Department for Education (DfE) Skills Data Cube). As far as possible, these datasets have analysed the county’s performance relative to the Oxford-Cambridge Arc, comparable local LEP areas and national data. Some datasets do not provide data at the OxLEP level. In these instances, regional or national data has been presented to show high level trends which could be applicable to the LEP.

Figure 1.1 Oxfordshire LEP relative to other LEPs

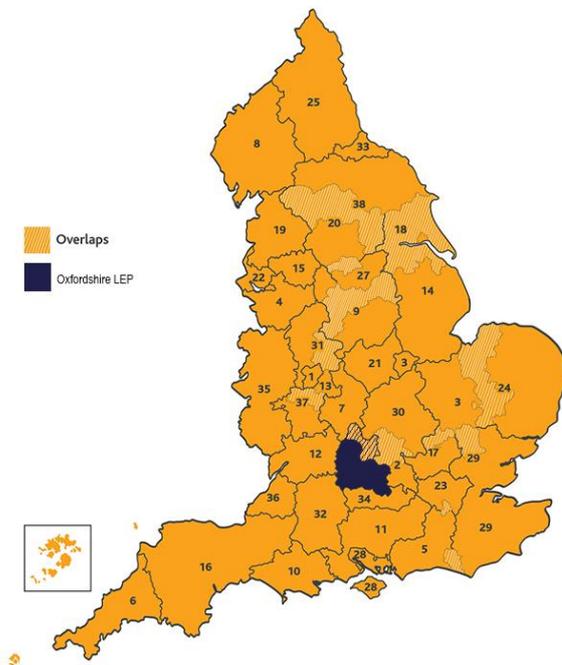
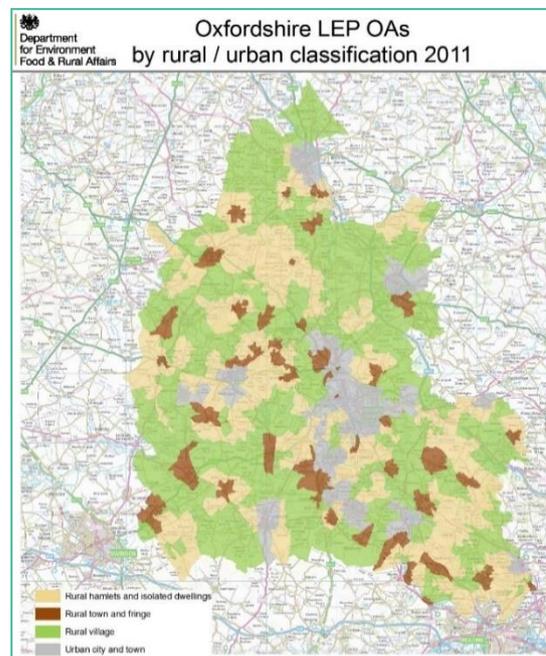


Figure 1.2 Oxfordshire in Context



The data analysis undertaken to support the development of this report is available in a Presentation Pack available from Oxfordshire LEP. This report provides an analysis of skills and labour market performance across the local enterprise region and the key skills challenges which face local businesses, learners and policy makers. A range of different evidence has been used to develop the data shown in this report. This includes:

- DfE (Apprenticeship, Schools, FE)
- Employer Skills Survey
- Ofsted
- Mid-Year Population Estimates
- Labour Market Statistics, ONS
- Census, ONS, 2011
- Labour Market Productivity Statistics, ONS
- Annual Population Survey, ONS
- Population Estimates, ONS
- Annual Survey of Hours and Earnings, ONS
- ONS Labour Force Survey, ONS
- Business Register and Employment Survey
- UK Business Demography, ONS
- Index of Multiple Deprivation, MHCLG

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- ONS Housing Affordability
 - Working Futures, UKCES
 - Higher Education Statistics Agency (HESA)
 - Department for Transport Journey Time Data
 - Job Posting Analytics, EMSI
 - Social Mobility Index, Social Mobility Commission
 - Individualised Learner Records, DfE
 - UCAS
 - Burning Glass
 - Centre for Cities Research
-

2. SAP Stage 1: Analysis and Definition of Local Landscape

Stage 1 provides an overview of the current economic and skills landscape in OxLEP and its performance relative to other sub-regional and regional geographies. The work highlights the strengths and weaknesses which help determine the success or failure of learners and employers across the Oxfordshire economy and labour market.

Key Questions to be Answered	Objectives
<ul style="list-style-type: none"> • What is the labour market and skills performance of the local area? • How does that compare with neighbouring or similar areas, and how does it sit regionally and nationally? • Is there potential for the local area to be comparable to various geographical levels (e.g. international, national, and regional)? 	<ul style="list-style-type: none"> • Increasing awareness of the volume and depth of strengths and weaknesses in the local area • Understanding the factors that influence labour demand and supply

Evidence from Presentation Pack

- There are **687,500** people living in Oxfordshire LEP, of which 63% are of working age (between 16 and 64%). Oxfordshire has a **relatively balanced population structure**, with a high proportion of those at student age (18-25), largely driven by the high numbers of students in Oxford City. Apart from Oxford City, all the other local authorities in Oxfordshire have a higher proportion of people of retirement-age than the national average.



687,500
people living in
Oxfordshire

- Oxfordshire has a **wide range of education provision**. At higher education level, the area is home to two universities – the University of Oxford and Oxford Brookes University. Further education provision is provided by a



Wide range of education
provision across Oxfordshire

wider range of institutions, with two of the largest in the county being Abingdon and Witney College and Activate Learning.

- There are **36 state-funded secondary schools and 240 state-funded primary schools** across Oxfordshire. The Ofsted rating of these schools is average, with two thirds of secondary schools rated as 'good', but only 16% rated as 'outstanding'.


240 primary schools in Oxfordshire
36 secondary schools in Oxfordshire
- There are currently **525 people across Oxfordshire recorded as Not in Education, Employment or Training (NEET)**, accounting for 4.2% of young people aged 16 or 17. This number has declined in recent years and sits below levels experienced in Buckinghamshire and Reading.
- Productivity in Oxfordshire has been **growing strongly** in recent years, although growth still **lags behind comparator areas**. Earnings are generally strong, although a comparison of residency based and employment-based data suggest high levels of in-commuting to local cities (e.g. Oxford, Reading, Slough and London).


Good productivity growth recently, but **lagging behind** comparators
- Oxfordshire has **mixed patterns of commuting**, heavily influenced by the City of Oxford in addition to Reading, Slough and London. Areas to the North and West of Oxford, typically have high levels of out-commuting to Oxford, whereas areas to the South and East of Oxford have high levels of out-commuting to Oxford as well as Reading, Slough and London. **Nearly a quarter of people in South Oxfordshire work outside of Oxfordshire.**
- There are **low levels of economic inactivity**, particularly in the City of Oxford which is surprising given the higher proportion of students in the City. Economic activity is lowest in the Vale of White Horse, where 24% of the working aged population are currently economically inactive.


Low levels of economic inactivity
- Incomes for those living in Oxfordshire are **above the national average by 13%**, with the average full-time worker earning £34,400. Apart from the City of Oxford, residents in the other Oxfordshire local authorities earn more than those who work in those areas. This reflects the high level of out-commuting from these local authorities into the City of Oxford, where the average worker earns £35,500.


Wages **13%** higher than national levels, but **low workplace earnings** outside of City of Oxford / Vale of White Horse

- There has been a **reduction in the number of elementary occupations**² across Oxfordshire over the last five years. Occupations growth has concentrated around managerial, associate professional and sales and customer services. There has been a **surprising fall in the number of professional jobs** in Oxfordshire over the last five years relative to national figures.
- The Oxfordshire economy supports **433,000 jobs** and **31,000 VAT registered businesses**. Employment growth has been **strong** in recent years, growing by 12% over the last five years.



433,000 jobs supported in Oxfordshire



12% job growth over the last 5 years



High concentration of activity in **high-value sectors**
- Oxfordshire has a **high concentration of employment within high-value sectors**. Sectors with a higher concentration of activity in Oxfordshire compared to nationally, include education (and particularly Higher Education, ICT, professional services, life sciences, motorsport, digital (particularly data & software) and science instrumentation).
- Overall patterns of deprivation show that, in general, **deprivation is relatively low across Oxfordshire**. Around 27% of local geographies across Oxfordshire are among the 10% least deprived areas nationally, with 83% of local geographies among the top 50% least deprived geographies nationally. However, challenges remain, particularly in the City of Oxford where **40% of local geographies are among the bottom 50% most deprived nationally**.



Generally **low levels** of deprivation, but **challenges** in City of Oxford
- There are challenges relating to **education inequality**, particularly in the City of Oxford and Cherwell. The City of Oxford performs particularly poorly on the Social Mobility Index for Early Years and Schools, ranking 306th and 300th respectively out of 324 local authorities nationally.



Particular concern around **education inequality** in the City of Oxford
- House prices continue to be high in Oxfordshire, with the average house now costing 10.2 times the average resident earnings. This ratio is considerably higher within Oxford ring road³ with house prices 17 times local earnings. The **unaffordability of housing**, particularly in an area with a high number of graduates, presents challenges in



House prices **increasingly unaffordable**, particularly for recent graduates

² Elementary occupations consist of simple and routine tasks, which typically require the use of hand-held tools and some physical efforts. Examples include: street vendors, domestic helpers and cleaners, building caretakers, window cleaners, porters and garbage collectors.

³ Oxfordshire LEP Local Industrial Strategy, 2019

retaining those graduating from local further and higher education institutions. There are ambitions to deliver 100,000 new homes across Oxfordshire by 2031 as part of the Oxfordshire Housing and Growth Deal, agreed with government in 2017.

- The eight Gatsby Benchmarks (set out in 2014), provide an evidence informed view on **good careers provision** in schools and colleges. **Oxfordshire is currently one of the worst performing LEP areas** (sixth worst out of 38 LEPs) in the country, with schools and colleges reporting they are only meeting an average of 2.6 Gatsby Benchmarks compared the national average of 2.9⁴. This has improved in recent years, with the 2019 State of the Nation report showing that careers provision has improved reflecting the positive steps taken by OxLEP and its partners through its Careers and Enterprise Company contract.

Implications for the Oxfordshire Skills Board

The evidence suggests that Oxfordshire is a **strongly performing economy**, experiencing strong economic growth across a range of **high-value sectors**. This economic success has made the area a model for other parts of the country to follow. There has been **strong employment growth** in Oxfordshire's target sectors, with strong expansion in managerial and associate professional occupations. Productivity growth across Oxfordshire has been high in recent years, although there is the **potential for some improvement** to match levels seen in comparator areas (e.g. Thames Valley Berkshire and Enterprise M3).

The economic success of Oxfordshire has created a **tight labour market**, with relatively low levels of economic inactivity and unemployment meaning there is a relatively small pool of workers for local employers to pick from. The **ageing nature of the population** outside of the City of Oxford means that there is likely to be a **shrinking pool of labour** for employers to recruit from.

Securing **inclusive growth** and ensuring that all can participate in the opportunities being created by Oxfordshire's economy is an important concern. **Despite the area's recent economic success**, not all sections of society have been able to benefit from the increasing success of the area. There are areas of persistent **labour market deprivation**, particularly relating to education, skills and training. This is most prominent in the City of Oxford, where **40% of local geographies are among the bottom 50% most deprived nationally**. Ensuring these residents can access education and training opportunities relevant to those sectors growing locally will be important to create **inclusive economic growth**.

The **affordability and availability of housing** is also a pressing concern for the city if it wants to attract and retain those graduating from Oxford's two universities. Although Oxford is one of the most common destinations for graduates, there is a need to ensure that the pool of talent created within the city is fully exploited. **Retaining and better utilising this pool of talent** will provide Oxfordshire with the skills needed to support its economic growth ambitions.

⁴ Note that the results are based on state-funded schools and colleges within each LEP area who have completed Compass during 2018/19. This does not reflect schools which have Special Educational Needs (SEND) or are at a Pupil Referral Unit (PRU) which can reduce levels of impact.

Ensuring there is a **strong provision of careers and enterprise support** is also important in ensuring that young people are able to build the skills and knowledge needed to manage their careers. Oxfordshire is **currently one of the worst ranked areas** nationally against the Gatsby Benchmarks⁴, with a need to improve the provision and quality of careers services offered to young people (although this has been improving in recent years with interventions through the OXLEP partnership with the Careers and Enterprise Company).

3. SAP Stage 2: Analysis of Skills Demand

Stage 2 provides an in-depth analysis of the current and future demand for skills in the OxLEP area. It provides an insight into the current business and employer environments and how these impacts on the demand for skills. It also identifies the current strengths and weaknesses in the local labour market and variation between sectors and occupations.

Key Questions to be Answered	Objectives
<ul style="list-style-type: none"> • What barriers are preventing businesses from securing the labour to meet their skills needs? 	<ul style="list-style-type: none"> • Defining the stock of employment and skills that employers are requesting • Building a picture of overall business conditions, whilst also examining specific factors for particular sectors and occupations • Identifying the changes and factors that could impact businesses recognising the wide diversity among businesses (e.g. small employers, large employers, and both private sector and public sector).

Evidence from Presentation Pack

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In general, only 12% of employers across Oxfordshire **report there being any significant skills gaps**, with **specialist skills** being the most in demand by local employers. This reflects a mismatch between the skills being delivered and the skills demanded by employers.

Specialist skills currently a challenge for local employers
- 

Oxfordshire’s employers say that the **hardest occupations to recruit are elementary and administrative occupations**. This is a bigger challenge in Oxfordshire than nationally, with over a third of businesses who report skills problems citing this as an issue. This is despite a recent decline in employment in those sectors where these jobs are concentrated across Oxfordshire. **The affordability of Oxford as a place to live may be putting pressure on those with the right skills profile to fill these roles**, alongside the costs and challenges of commuting from further afield.

Local employers struggle to recruit **elementary and administrative** occupations
- 

Recent jobs growth has occurred across a wide range of different sectors, with the most prominent being the **education, professional and construction sectors**.

Recent jobs growth has occurred in **education, professional and construction** sectors
- 

Employment growth has been strong across Oxfordshire, with strong growth in the **City of Oxford** (+13% over the last five years) and **Cherwell** (+11%). South

Strong jobs growth recently in **City of Oxford** and **Cherwell**

Oxfordshire, by comparison, has had a rate of employment growth below the national average (+5%).

- Employers across Oxfordshire are willing to invest in training, with a higher proportion of employees receiving above 3-4 days of training than other areas.  Employers generally invest well in training

- In the future, there is expected to be strong demand for those with degree-level qualifications and above, with a decline in demand for new jobs requiring qualifications below degree-level. The economy is likely to become increasingly capital-intensive⁵, with technological developments and automation being more prevalent within certain sectors.  Strong future demand expected for those with degree-level qualifications and above

- Within Oxfordshire, different areas are more at risk from automation with 71% of jobs in Cherwell and 64% of jobs in West Oxfordshire being at a medium risk of being lost due to new technologies.

- Oxfordshire has a range of sectors which are expected to generate strong demand for employment into the future. These are summarised in the table below:

Table 3.1 Sectors with Potential for Strong Growth in Oxfordshire in the Future	
Growth Sector	Current Presence & Future Sector Demands
Space & Satellite	<ul style="list-style-type: none"> • Oxfordshire has a significant space sector, including the Harwell Science and Innovation Campus, comprising over 90 space organisations and is the largest space cluster in Europe. • <i>Future demand within this sector is likely to focus on those with the highest skills qualifications, typically degree-level or higher. Skills needed include mathematics, physical sciences and engineering⁶. It is expected that the sector needs to recruit and/or train an additional 30,000 employees in the future to support the growth of the sector (with 38,000 people currently employed).</i>
Life Sciences	<ul style="list-style-type: none"> • Oxford is one of the most productive life sciences hubs globally, with an estimated 180 Research & Development (R&D) companies and over 150 companies in associated industries. There are four new innovation centres at the Oxford BioEscalator, the Begbroke Accelerator, Harwell Science and Innovation Campus and Culham Science Centre.

⁵ 'Capital intensive' refers to methods of production being involving more machinery and/or plan as opposed to more labour. It generally means that the same output can be produced by machines, but using less labour.

⁶ Prosperity from Space: A Partnership Strategy for the UK, Space Growth Partnership, 2018

	<ul style="list-style-type: none"> • <i>Highly skilled workers are at the heart of almost every aspect of Life Sciences⁷. The skills base needed includes biomedical science, engineering, computer science, data analytics and chemistry. There is a need for 180,000 to 260,000 more workers nationally by 2025.⁸</i>
Advanced Manufacturing	<ul style="list-style-type: none"> • Oxfordshire has a strong specialism within this sector, particularly relating to high-performance technology and motorsport engineering. • <i>It is expected the manufacturing occupations will continue to become higher skilled, with the growing complexity of the production process likely to increase demand for production and process engineers. The importance of R&D will also lead to increased demand for engineers, scientists, biochemists and software developers.⁹</i>
Creative & Digital Industries	<ul style="list-style-type: none"> • Oxfordshire has a number of strengths within the sector, including computer games, software development, cybersecurity, high performance computing as well as film and TV (with a new £78m studio facility opened by Rebellion at Didcot). • <i>Future creative roles are likely to need a breadth of skills including advanced numeracy, coding, physical and digital design and drawing skills and creative storytelling and problem solving. A combination of STEM and arts-based subjects will provide this balance of capabilities.¹⁰</i>

Implications for the Oxfordshire Skills Board

Oxfordshire continues to have a **strong and growing economy**, which is expected to need an increasing number of workers. The highest growth experienced across Oxfordshire has been in sectors requiring **professional-level and above qualifications**. However, the greatest **need** remains in elementary occupations, for which Oxfordshire's employers report **significant challenges in being able to recruit the right sort of workers**. This challenge is only expected to get worse considering the high proportion of overseas workers in elementary occupations (which may be subject to increasing restrictions in the aftermath of Brexit).

Evidence from employers suggests that the **current provision of training is not necessarily meeting the skills needs of Oxfordshire's workforce**. **Specialist skills** are most cited as the largest skills gaps as well as more **softer skills**. Those recruiting elementary and skilled trades (e.g. construction workers) report some of largest skills gaps. There is a need to ensure that training providers and the courses that are offered **better reflect the needs of local employers** and that they bridge the skills gaps that exist in the workforce to support the growth of local businesses. Employers are showing a willingness to invest in employee skills, at least, if not better than, nationally.

⁷ Life Sciences Industrial Strategy, 2017

⁸ Life Sciences Industrial Strategy, 2017

⁹ Sector Insights: Skills and Performance Challenges in the Advanced Manufacturing Sector, UKCES, 2015

¹⁰ Creative Industries Sector Deal, 2018

Given the expected increase in demand for those with degree-level qualifications over the next ten years and the reduction in demand for those with lower qualifications (apart from the current workforce supply issues in elementary occupations), there is a **need to ensure Oxfordshire's workforce have the skills needed**. This is particularly important given **high levels of education deprivation** in the City of Oxford and Cherwell, and the need to ensure that these residents can access future jobs (especially if their qualifications already don't match those needed by local employers).

4. SAP Stage 3: Analysis of Skills Supply

Stage 3 provides analysis of the current skills supply and availability in the OxLEP. This includes identifying the current characteristics of the workforce, future demand for skills across the Oxfordshire region and outlining the challenges which the region faces in meeting these demands.

Key Questions to be Answered	Objectives
<ul style="list-style-type: none"> • Are there provisions in place to ensure the labour force will have skills for current and future demand? • What are the reasons that may prevent this? 	<ul style="list-style-type: none"> • Determining the characteristics of the current workforce • Defining skill stocks • Outlining the challenges that restrict the local area from providing the labour force with required skills • Defining potential changes to the local area and labour force that will affect the flow of desired skills for businesses

Evidence from Presentation Pack

- Oxfordshire has **one of the highest skilled workforces** in the country, with over half of its population qualified to degree-level or above (compared to 39% nationally). This has **continued to grow over the last five years**, with a five-percentage point increase since 2013. There are now fewer residents holding no qualifications, accounting for only 4% of all residents.



Oxfordshire has one of the **highest skilled workforces** in the country
- The level of skills obtained by residents varies across Oxfordshire, with 63% of residents in the City of Oxford holding a degree-level qualification or above, compared to 40% of residents in Cherwell.
- Oxfordshire has an **increasingly ageing population**, which has **accelerated** over the last five years. There are now 30% more people living over the age of 65 in Oxfordshire compared to ten years ago. By comparison, there has been a **decrease in the number of people aged between 16-24 and 25-49** over the last ten years. This is a **critical challenge** facing the area, with one of the key issues likely to be the area's unaffordability for younger people.



An **ageing workforce** presents challenges for the future



Decrease in the number of people aged **16-24** and **25-49**

- Population growth in Oxfordshire over the last ten years has **lagged behind the national and Oxford-Cambridge Arc**, with growth now 2 percentage points behind the growth experienced across the Arc over the last ten years. Of concern, is the **slow growth in the overall working age population** (as referenced above), which now lags considerably behind the Arc's growth rate.

Population growth lagging behind the national and Oxford-Cambridge Arc, particularly working age population growth
- Graduates from the University of Oxford undertake **a range of activities**, with many of those from the University of Oxford continuing to stay in academia and full-time education. The most popular destinations for students include London, Oxford and the M4 corridor.
- There is a **diverse range of courses and training providers** within Oxfordshire providing a range of different skills and subjects. The combination of the University of Oxford and Oxford Brookes University provides Oxfordshire with graduates from across a broad range of subjects at higher education level. At further education level, there is **less provision of STEM-related courses¹¹**, with a high proportion of further education courses being in the arts, media, publishing, languages and culture. Whilst these subjects remain important, there is a need to ensure that there is a strong uptake in STEM-related courses, particularly to support Oxford's growth sectors.

Less uptake of STEM-related courses at further education level
- In common with the rest of the country, the **number of apprenticeships undertaken has declined** over the last four years, with 22% less apprenticeships started in 2017/18 compared to 2014/15. This must be seen in the context of poor national performance, with the introduction of the Apprenticeship Levy dampening employer demand for apprenticeships. An increased take-up of vocational courses and apprenticeships locally could do much to address technical skill shortages.

Number of apprenticeships fallen by 22% over the last four years
- There is a risk to the supply of labour in Oxfordshire, particularly given the **high dependency of some occupations and sectors on migrant workers** to fill some of the gaps within the local labour market. Although the Government has made some reassurances for the long-term future of those already in the UK, there are concerns regarding the **long-term ability to source labour from outside the UK, particularly within lower paid and skilled roles**. Within Oxfordshire, of greatest concern is the relatively high concentration of workers within **elementary occupations**. Oxfordshire's employers already cite this as

High dependency on migrant workers within lower paid jobs. Already challenges recruiting within these occupations

¹¹ STEM refers to Science, Technology, Engineering and Mathematics

the hardest occupation to recruit, and there are concerns this could be **exacerbated** if further restrictions are placed on these firms recruiting EU workers.

- There is a **complicated pattern of commuting, residency and employment** across Oxfordshire, with high levels of commuting taking place. This suggests there is a **mismatch between the supply of skills in Oxfordshire** (particularly within higher-value jobs in the City of Oxford) **and the demand for skills in Oxfordshire** (particularly in higher-value jobs the City of Oxford).



Complicated pattern of commuting, residency and employment across Oxfordshire – leading to longer commutes

Implications for the Oxfordshire Skills Board

Oxfordshire's **ageing population and the population decline** of those aged between 16 and 49 should be a concern, particularly if Oxfordshire is going to **continue supplying the labour force demand by employers into the future**. Relative to the rest of the Arc and nationally, Oxfordshire is falling behind its competitors.

Encouraging more young people to move to and stay in Oxfordshire is important to ensuring a strong supply of labour for the future. **Retaining graduates** will be key to this, especially given the strong academic qualifications many of them have obtained and the connections they have made in the area. Having **an attractive offer to encourage young people to stay**, including affordable houses and graduate-level jobs will be key to achieving this.

Elementary occupations are of greatest concern, as Oxfordshire's employers already report challenges in recruiting labour at this level. There is a need to Brexit-proof the economy, understanding which sectors are most likely to be impacted by Brexit and how to ensure the right supply of labour continues to be provided.

There is an **under-representation of STEM-related subject provision**, particularly at further education level. Given the economic specialisms of the area and the wider Oxford-Cambridge Arc, there is a need to ensure that there is a **strong supply and uptake of STEM-related courses**.

There is a **complicated pattern of commuting, residency and employment** in the area, especially for higher-value jobs. Enabling more of this talent to be able to live and work close to centres of employment will reduce the need for long commutes and reduce congestion challenges.

5. SAP Stage 4: Mapping of Skills Demand and Supply

Stage 4 brings together much of the evidence gathered across the first three stages to provide an assessment of the types of skills gaps and the causes, to find whether learner provision and business development meets demand and to provide an assessment of the likelihood in meeting future demand through current supply.

Key Questions to be Answered	Objectives
<ul style="list-style-type: none"> • How responsive is the skills system? • Do the labour force supply the skills to meet current and future demand? • Where does the skill supply fail to meet the demand at different levels (e.g. sectoral and occupational)? • Is there significant demand for the current and future supply? Does the demand provide opportunity to fully exploit the supply of skills available now and in the future? 	<ul style="list-style-type: none"> • Ascertaining issues that may exist with the offer available from education providers and the effect of under-utilisation of skills on businesses • Understanding the factors that could increase fragility to labour supply and business demand • Identifying barriers that prevent the skills system adjusting to changing business demand

Evidence from Presentation Pack

- Skills shortages which are reported by Oxfordshire's firms appear to be in **lower paid occupations**, suggesting that those working in these sectors struggle with the unaffordability of Oxford. Within Oxfordshire, **elementary occupations** are noted as being in **short supply** by employers, with 37% of businesses looking to recruit elementary staff reporting this as a problem.



Skills shortages in lower paid occupations
- The most common 'hard' skills required in job postings within Oxfordshire includes **management skills, communication, sales, training and recruitment**. The most common 'soft' skills required by Oxfordshire's businesses includes **learning, leadership, literacy and project management**. These skills are regularly reported as being the most needed across the country. Skills which are more demanded in Oxfordshire, relative to nationally, include **finance and budget management, engineering and research skills**, reflecting the strong presence of these activities in the Oxfordshire economy.
- Analytical skills** are highly demanded in Oxford relative to other urban areas, with demand for science, writing, active learning, critical thinking and complex



Analytical and interpersonal skills most sought after by Oxford's employers

problem-solving skills. **Interpersonal skills** are also highly demanded by local employers, which includes instructing, speaking and personnel management skills.

- Around a third of Oxfordshire's employers reported that skills gaps are the result of **staff not receiving the appropriate training to be job ready**.



Skills gaps being caused by staff **not receiving the appropriate training** to be job ready

This rate is higher than experienced in the Oxford-Cambridge Arc and nationally. This suggests a **skills mismatch** between the qualifications obtained by students and the skills demanded by employers.

- Nationally, skills which are reported as being most demanded includes digital skills, specialist skills needed to perform specific tasks/roles, solving complex problems and basic to advanced IT skills.



Nationally, demand for **digital / IT skills, specialist skills** and **problem solving**

- Oxfordshire's **largest sectors are generally those which have experienced the strongest**



Strong growth in **professional, education, health** and **construction**

growth over the last ten years, including professional, education and health. There has been strong growth within the construction sector over the last five years reflecting strong demand for the sector with new house building and infrastructure investment.

- The **labour market participation rate is strong** in Oxfordshire and has improved over the last five years. Oxfordshire's rate of labour market participation (83%) is above the Oxford-Cambridge Arc (82%) and the national level (79%). This is impressive given the high proportion of students based in the City of Oxford, many of whom are economically inactive during their studies.



Strong labour market participation

- Wage growth has occurred across the majority of sectors across the South East, with a spread of wage growth across higher and lower paying sectors.

Implications for the Oxfordshire Skills Board

Oxfordshire has a number of **skills gaps**, with many of these relating to lower paid occupations. Gaps in the provision of these skills **limits the ability** of local businesses to recruit those needed to support their business' ambitions. Oxfordshire's employers repeatedly cite **elementary occupations as being the hardest occupation to recruit**. These difficulties are only expected to increase with migrant workers accounting for a high proportion of the elementary workforce, and uncertainty over their long-term future in the UK (particularly given the low-pay associated with these occupations).

Many of the skills most demanded by Oxfordshire's employers are similar to those demanded nationally, including management skills, communication, sales, training and recruitment. It is important to ensure that these skills are being developed alongside academic qualifications.

More specific to Oxfordshire is the **need for engineering and research skills**, many of which are demanded by Oxfordshire's high-value sectors. Many of these skills broadly fit into STEM subjects, which are currently underprovided at further education level across Oxfordshire.

A number of Oxfordshire's employers report skills gaps relating to staff having not received the **appropriate training** to be ready for work. There is a need to ensure that training provided prepares people for the workforce in line with the skills being demanded by employers. Ensuring strong employer engagement with further and higher education institutions will help bridge this gap between employer need and the skills being delivered.

6. SAP Stage 5: Conclusions

This report has carried out analysis of the skills and employment needs and priorities of OxLEP, with the intention of improving economic efficiency and performance. This section sets out how the LEP can work with its partners to address some of the skills priorities facing the area, and outlines the mechanisms needed to support the delivery of appropriate skills and employment initiatives.

Key Questions to be Answered	Objectives
<ul style="list-style-type: none">• What are the main skills priorities?• What current policy levers and initiatives, at both local and national level, can help deliver the priorities?• Are new policy levels or initiatives required to ensure the skills and employment priorities are achieved?	<ul style="list-style-type: none">• Understanding current and future skills and employment priorities to have greater impact on the local area• Outlining the actions needed locally and nationally to address skills and employment priorities• Understanding how actions will achieve economic efficiency and a reduction in skills mismatches

Skill Priorities Arising from the SAP evidence

Oxfordshire continues to be a **strongly performing economy**, with strong economic growth across a range of high-value sectors. The area is one of the economic success stories within the UK and sets an example for other towns and cities to follow.

Although much of this recent economic success has been positive for the Oxfordshire's economy, the labour market faces a number of challenges if it is to continue its current economic trajectory. These include:

- Oxfordshire has a **tight labour market**, with high levels of economic activity and low levels of unemployment. This has led to a **limited pool of labour** being available to support Oxfordshire's economic growth aspirations.
- Oxfordshire's recent growth has largely been **concentrated in higher-value sectors** typically requiring professional-level (or higher) qualifications. However, the **greatest shortage of workers is currently within elementary occupations**, which are struggling to recruit the right type of workers into this sector. This is worrying considering the high proportion of overseas workers who currently work in elementary occupations across the South East, whose long-term future in the UK is uncertain (given the low pay typically associated with these occupations which typically fall below thresholds set in the EU Settlement Scheme).
- **Not all sections of society are benefitting** from Oxfordshire's growth and from the increased economic success of Oxfordshire. There are areas of overall and labour market deprivation in the City of Oxford, which **prevent residents being able to access opportunities** being created through recent economic growth. Working with

these communities to ensure they have the right skills to participate will help alleviate some of these challenges.

- Although employer investment in skills is relatively high, there are questions about the **appropriateness of this training** for bridging skills gaps which exist in the workforce. A third of employers reported skills gaps are the result of staff not having received the appropriate training for their jobs. There is a need to ensure that employees are aware and able to access the appropriate training for their jobs, and that training providers are providing courses which meet the skills demanded by local employers.
- In common with the rest of the country, the **number of apprenticeships undertaken has declined** over the last four years. This must be seen in the context of poor national performance, with the introduction of the Apprenticeship Levy reducing employer demand for apprenticeships. An increased take-up of vocational courses and apprenticeships locally could do much to address technical skill shortages.
- The area has a relatively strong skills ecosystem but **doesn't retain enough of the talent that institutions nurture in the area**. Low levels of local graduate retention have partly led to the decline in those aged between 16 and 45 across Oxfordshire, as graduates leave the area in search of alternative opportunities and more affordable housing.

Current Mechanisms – What Is Working to Date?

Oxfordshire has a number of successful mechanisms in recent years, which have supported skills improvements across the area.

- The implementation of the **Oxfordshire Skills Strategy**, which aimed to build a 21st century skills ecosystem within Oxfordshire. Key priorities within this strategy included:
 - Meeting the needs of local employers through a more integrated and responsive approach to education and training
 - Ensuring young people are prepared for work through delivery of high quality Careers Education, Information, Advice and Guidance (CEIAG)
 - Addressing Oxfordshire's tight labour market and skills shortage areas
 - Supporting the government's agenda to increase the number of apprenticeships
 - Investigating how Oxfordshire is promoted to graduates in its HE organisations and how more graduates can be retained.
- OxLEP is currently developing a **Skills Priority Statement**, which is aligned to delivering growth ambitions as suggested in the Local Industrial Strategy.
- Securing £19.6 million of **ESIF funding** of which £8.1 million is in **ESF funding** used to drive forward skills and employment programmes across Oxfordshire.

- The Careers & Enterprise Company (CEC) is an employer-led organisation that has been set up to inspire and prepare young people for the fast-changing world of work. OxLEP has jointly funded two programmes with the CEC which include the **Enterprise Advisor Network** and **Careers Hub**. The **Oxfordshire Careers Hub**, one of 20 new 'Careers Hubs' around the country, which is made up of 24 education establishments (which include 19 secondary schools, 1 college, 3 SEND and 1 Pupil Referral Unit) working together with universities, training providers, employers and career professionals to focus on all eight Gatsby Benchmarks. The **Enterprise Advisers Network** is formed by senior business volunteers working in schools/colleges. They help to unlock relationships with other local employers and provide strategic counsel to develop an effective careers strategy.
- Oxfordshire Apprenticeships promotes awareness of apprenticeships and traineeships to young people, parents and employers. This includes a range of engagement methods, including the **Apprenticeship Ambassadors programme** to bring together current and former apprentices to share best practice and the annual Apprenticeships Awards, which is sponsored, judged and awarded by local employers.
- OxLEP's **Work Experience team** supports schools across Oxfordshire to provide 5,000 meaningful placements for young people across a variety of business sectors including hospitality, engineering, retail and social care.
- There are a range of **Community Employment Plans** in place on larger scale developments to develop a shared approach on recruitment to ensure that local people get better access to employment and training opportunities in Oxfordshire.
- An annual **Careers Fest**, which enables young people from Oxfordshire schools to understand the entry level and apprenticeship routes into employment.
- **Labour Market Intelligence** has been developed to help inform school careers leaders and young people on the local employment landscape and job opportunities to allow them to make better informed decisions about their future career options.
- OxLEP's **Skills for Business programme** engages and supports SME's on their skills needs.

New Mechanisms – Emerging Recommendations

To address some of the skills priorities identified through the evidence collection, there is a need for several new mechanisms which build on some of the existing mechanisms already taking place across Oxfordshire. Each priority responds to the challenges identified previously:

- **Strengthen the provision of vocational / technical skill provision:** ensure that the skills and training by local providers matches that demanded by local employers. Look for opportunities to engage local employers within the curriculum, particularly in designing and promoting apprenticeships and T-Levels.

- **Mitigate impacts of an increasingly ageing population:** there is a need for Oxfordshire to expand the size of its workforce, providing the workers needed for both its higher- and lower-value sectors. There are a number of strands needed to do this, including: a focus on retaining talent in the local area (partly linked to housing supply – see below); reskilling and replacement labour strategies; and the promotion of career progressing routes, particularly in those sectors expecting high levels of replacement.
- **Inspire local young people to access local employment opportunities:** there is a need to promote and inspire Oxfordshire’s young people to show them the range and breadth of opportunities available within Oxfordshire. Raising aspirations and giving young people the skills needed to participate in Oxfordshire’s future economic trajectory will give them a pathway to employment locally.
- **Ensure there is adequate housing supply to support growth aspirations:** housing affordability is restricting the ability of graduates and lower-paid workers to be able to live and work in Oxfordshire, thereby limiting the pool of labour available to Oxfordshire’s businesses. This has been hindering their ability to grow, damaging overall economic growth.
- **Raising digital capacity:** there is a need to prepare the workforce for increasing levels of automation and digitalisation. Although Oxfordshire already has strong adaptation of many new technologies, it is important to ensure that all workers can benefit from new opportunities, including older workers, disadvantaged groups and those working in SMEs.
- **Ensure equitable access to opportunities:** there is a need to ensure that local people can access local opportunities being created by Oxfordshire’s economic success. Targeting interventions in those areas which currently underperform relative to the Oxfordshire (e.g. parts of the City of Oxford and Cherwell) will enable disadvantaged groups to get the skills needed to participate in higher-skilled opportunities being created in Oxfordshire.
- **Continue to encourage employers to invest in training at all levels:** continue to promote training opportunities to employers to increase the number of workforce training days, particularly as training budgets are restricted due to ongoing economic uncertainty in the wider economy. This could include improved signposting to funding sources and relevant training courses, and support for businesses looking to unlock and share the Apprenticeship Levy locally.

