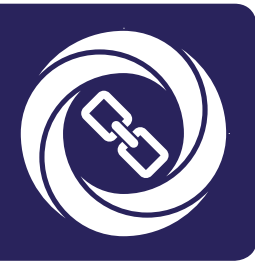
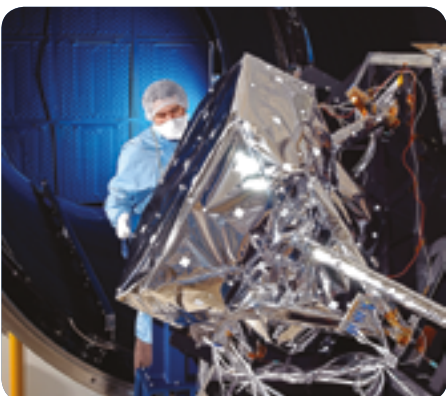
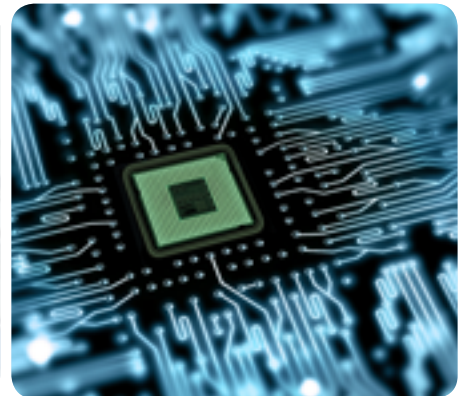


Oxfordshire Skills Strategy

Building a 21st century skills ecosystem





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Foreword

The Oxfordshire Skills Board recognises that people are our most valuable resource in terms of economic growth; they are versatile, adaptable, generally highly skilled and in great demand by our vibrant and virtual full employment economy.

To support Oxfordshire's growth ambition the area requires a skills infrastructure that is fully aware of, and responsive to, sectors of labour and skills shortages and planned growth in our economy, both current and projected. To ensure an economy that works for all, we must focus on engaging and upskilling those furthest from the labour market by providing specialist and intensive support to overcome often multiple and complex barriers to employment.

Getting an improved balance between government funded provision and the needs of our employers is key to continued economic success. Given the 'tightness' of our labour market, significant job creation over recent years with growth projected to continue and the disproportionate costs of housing affecting much of the county, we simply cannot rely on labour migration to address our skills and labour challenges. Therefore it's imperative we maximise the skills and training funding we receive and ensure that the skills infrastructure is more closely aligned to our core and projected growth sectors and that those currently in the education system possess the skills and attributes that employers demand. Employers should also recognise their role and responsibility in developing the skills of both their current and future workforce by clearly articulating the skills they require both now and into the future.

This refreshed Skills Strategy builds on the recent priorities of the Oxfordshire Skills Board which has been working over the past four years to develop a more collaborative and co-ordinated approach to strategic skills development and to lead transformational change in the skills landscape, including laying the ground for the devolution of the Adult Education Budget; working with schools and colleges to more closely align careers information, advice and guidance to economic need; driving growth in apprenticeships, and working with local training providers to increase provision in sectors our employers demand – including science and engineering subjects. Much has been achieved, but there is a lot more to do to achieve our collective ambitions.

There are issues of sustainability and inclusion that must be addressed. There is also a need for greater resilience in the face of increased global risks and uncertainty. Whilst the post Brexit world remains unclear we must ensure we continue to support our community's and businesses to prosper and grow against the backdrop of uncertainty around EU national's employment status which could have significant implications for local employers.

On a national level we await the governments emerging Industrial Strategy, whilst devolution provides an opportunity to have greater influence and determination over existing funding streams to support our socio-economic needs.

Oxfordshire Local Enterprise Partnership (OxLEP) and the Skills Board are supporting negotiations with government for an Oxfordshire devolution deal including devolved Adult Education Budget (AEB) which has the potential to create significant opportunities for skills development locally. With the emerging Apprenticeship Levy policy commencing in April 2017 we are undoubtedly in a time of great change, but also of great opportunity.

This strategy sets out the high level strategic priorities for Oxfordshire to 2020 which will support sustainable economic growth and that offers opportunity for all to participate in our thriving economy.



Adrian Lockwood,
Chair, Oxfordshire Skills Board,
Vice-Chair, Oxfordshire Local
Enterprise Partnership



Nigel Tipple,
CEO, Oxfordshire Local
Enterprise Partnership





Background

The 2016 Strategic Economic Plan (SEP) for Oxfordshire¹ has the following vision:

'Our vision is Oxfordshire as a vibrant, sustainable, inclusive, world leading economy, driven by innovation, enterprise and research excellence'

Oxfordshire is notable for the excellence and scale of innovation, enterprise and research within the county, and for the dynamism of its economy; both employment and GVA (Gross Value Added) are growing strongly, activity and employment rates are high, and there is very low unemployment.

Our economy is truly knowledge based and is growing rapidly. We possess world class innovation clusters and a thriving environmental sector. We contribute hugely to the country's output at the same time as being custodians of outstanding natural assets. Our labour market is hungry for skills at all levels. Our district councils have, or are developing, Local Plans that will lead to significant new residential and employment-generating development to 2031. Over 85,000 new jobs and in excess of 100,000 new homes were planned to 2031 in the SEP and we're well on the way to delivery.

Yet we could deliver much more. Our growth potential has been inhibited by inadequate infrastructure and poor connectivity. Our transport system often slows us down. Business success is often held back by a lack of skilled workers and lack access to adequate sources of finance; whilst at the same time we have small but stubborn pockets of long term unemployment, concentrated in particular localities, often where school performance is also struggling. Affordable housing is at a premium, some rural areas are poorly served with essential services, whilst broadband connectivity is patchy in certain areas.

These challenges are being addressed through a variety of policy led interventions brought together under OxLEP's Strategic Economic Plan (SEP). SEP outcomes will be achieved through four wide-ranging programmes, each with priorities to 2020, and a number of key action areas. The programmes are:



People – delivering and attracting specialist and flexible skills at all levels, across all sectors, as required by our businesses, filling skills gaps, and seeking to ensure full, inclusive, employment and fulfilling jobs



Place – ensuring a strong link between jobs and housing growth, and providing a quality environment that supports and sustains growth; and offering the choice of business premises and homes (including more homes that are genuinely affordable) needed to support sustainable growth whilst capitalising on and valuing our exceptional quality of life, vibrant economy and urban and rural communities

¹ The Strategic Economic Plan for Oxfordshire, Executive Summary, 2016



Enterprise – emphasising innovation-led growth, underpinned by the strength of Oxfordshire’s research, business collaboration and supply chain potential; recognising and reinforcing the significant contribution made by all sectors, all parts of Oxfordshire and all types of business



Connectivity – enabling people, goods and services to move more freely, connect more easily; improving broadband and mobile coverage and capacity; and providing the services, environment and facilities needed by a dynamic, growing and dispersed economy.

Central to the continued transformation of Oxfordshire’s knowledge based economy to a world leader in technology and business innovation, is the need for higher skills attainment.

It is the ‘People’ aspect of the SEP programme that is the focus for our strategy. Central to the continued transformation of Oxfordshire’s knowledge based economy to a world leader in technology and business innovation, is the need for higher skills attainment. Local residents need to be better skilled than ever before with local employers demanding people with the right skills sets.

Driving up the skills capacity of the local population is linked to a more flexible and productive workforce which in turn is a key driver of productivity improvements. For young people in particular, it can lead to better employment opportunities, improved pay prospects and a better quality of life. For business, it means success with improved productivity, innovative practices and quality products. For the county, it represents sustained future prosperity.

To ensure our skills interventions are targeted effectively we have used a range of evidence to identify a number of broad priority sectors for Oxfordshire which are either forecast to grow or that are experiencing particular skills challenges and warrant attention. These are listed below:

Significant sectors	Sectors facing skills challenges – i.e. labour shortages/ projected skills shortages
Education	Health and social care
Business Administration and Finance	Engineering and science
Health and social care	Digital & creative technologies (ICT)
Professional, Scientific and Technical	Construction and built environment
Sales and Retail	Hospitality and catering
Digital & creative technologies (ICT)	Logistics (Distribution and Wholesale)
Hospitality & catering	



Executive Summary

The Oxfordshire Skills Board published its first skills strategy in 2013 which set out a high level vision for skills development in the area. The pace of change since its launch has been significant across many areas – for example we are delivering our City Deal funded apprenticeship programme, we have commissioned elements of our European Social Fund programme aimed at supporting those furthest from the labour market and we have delivered capital investment in our skills infrastructure through Local Growth Funds.

Looking forward the introduction of the Apprenticeship Levy; some localities now agreeing devolution deals with government including responsibilities for elements of the skills infrastructure, and, of course, Brexit all add significant levels of uncertainty to the already complex landscape.

Our stakeholders are varied and have a wide range of interests, from national government, to young people; from training providers, businesses and those that advise young people throughout education to parents and peers.

Within this context the role of employers cannot be underestimated. We have virtual full employment alongside continued significant growth ambitions. Therefore it's vital we maximise the economic potential within our existing and future labour market in order to support continued growth. Employers require a flexible, skilled and productive workforce in order to grow. Whilst the education and skills system' provides a consistent supply of (mainly) young people into the workplace we require more employers engaged in helping shape curriculum design; we need more employers helping inspire and influence young people through deeper and more meaningful interactions between education and employment; and we need more employers engaged in training and development initiatives across their workforce.

It is against this backdrop that the Oxfordshire Skills Board has refreshed our skills strategy. In developing this strategy we have reviewed the available evidence and data which have been used to underpin our refreshed strategic priorities which in turn will support and drive continued economic growth.

The strategy sets out the key priorities that will help address our skills challenges to 2020. This Strategy is not accompanied by an action plan; it's envisaged that stakeholders will develop their own responses to the particular strategic priorities that are relevant to them. The aim of this strategy is to provide an overview of the high level interventions required to support our economy which are likely to have greatest impact in terms of addressing skills deficits and supporting growth.

It is envisaged the strategy will:

- Provide a clear direction of travel to skills commissioners, our provider networks and employers
- Influence local skills provision and curriculum design
- Become a vital tool in setting priorities, allocating resources and potential funding.

The Oxfordshire LEP and Skills Board are committed to working closely with all partners and stakeholders to support delivery against our ambitions.



Refreshed Strategic Priorities:

SP1: To meet the needs of local employers through a more integrated and responsive approach to education and training: developed in partnership with our provider network, to encourage more training provision in identified priority sectors - both current and projected.

SP2: To ensure that young people are prepared for the world of work through delivery of high quality CEIAG, by well-informed careers leaders in schools supported by qualified careers advisers. This will include multiple encounters with employers and use of up to date local labour market information.

SP3: To address Oxfordshire's tight labour market and skills shortage areas by

- i) ensuring those marginalised or disadvantaged from work are moved closer to the labour market
- ii) supporting and encouraging older workers to consider vacancies in areas of skills shortage

SP4: To support the government's agenda to increase the number of apprenticeships offered, and apprenticeship uptake, particularly within small to medium sized businesses.

SP5: To investigate how Oxfordshire as a place of employment is promoted to graduates in our HE organisations and how more graduates can be retained to meet the demand our businesses have for higher level skills.

1.0 Introduction

Oxfordshire's people are the county's principal resource in supporting the next phase of economic growth: They are versatile, adaptable, generally highly skilled and in great demand.

Employers, however, are struggling to recruit the people they need² with the skills that they require against a backdrop of (close to) full employment. Moreover, particularly for younger working age residents, Oxfordshire is a very expensive area to live and work, and retention problems are widespread in the early adult age groups.

The affordability of housing across the county is a major concern for local people who are not already home-owners, and those wanting to move to jobs in the county. The challenges are acute for younger people and those in less well-paid jobs. For example, there is clear evidence³ that high housing costs are affecting Oxfordshire's ability to recruit and retain nurses and teachers – key professions in terms of the county's overall quality of life.

ONS's sub-national population projections suggest that within Oxfordshire, the population aged 20-64 is set to decline through to 2037 (whilst the overall population will increase by over 13%). However, this will depend on the scale of housing growth actually achieved.



2 According to the UKCES Employer Skills Survey, in Oxfordshire 2015, 10% of employers (c. 2,200 businesses) were reporting hard to fill vacancies (compared to 8% nationally).

3 http://www.oxfordmail.co.uk/news/13439073.New_homes_for_key_workers___could_be___affordable___at_last/

In addition, there are very challenging issues with regard to social inclusion. The scale is not great overall – but in many respects, that makes the challenges harder as the issues of exclusion can easily be overlooked against a background of general prosperity. There is a need for excellent and creative responses to help more disadvantaged Oxfordshire residents to move into the local labour market.

Self-employment is increasingly important, particularly in Oxfordshire's rural areas, and there is a need to support the distinctive needs of the self-employed, for example through the provision of on-line advice and guidance for remoter businesses and sole traders, and encouragement to build homes which are designed to enable home working.

Delivery against previous priorities

In developing the original skills strategy we were conscious of the need to align our skills priorities to the emerging Oxfordshire growth ambition which began to crystallise in parallel. Policy initiatives such as City Deal, European Structural Investment Fund and Local Growth Fund have enabled us to make good progress in recent years.

SP1: To meet the needs of local employers through a more integrated and responsive approach to education and training, particularly in science, technology, engineering and mathematics (STEM).

Having initiated the conversation as part of our City Deal negotiations we continue to make the case for devolution of skills budgets locally – particularly the Adult Education Budget in line with SFA policy.

The Skills Board also supported the recent government led 'Area Review of Post-16 Provision' across the Oxfordshire, Buckinghamshire and Berkshire area which seeks to better align government funded provision to LEP priorities. Whilst no significant college mergers in Oxfordshire resulted from the Area Review it nevertheless provided the platform for LEPs to restate the skills needs of businesses.

The **Local Growth Fund** supported three capital projects which are aligned to addressing skills shortages locally and particularly in STEM:

- Development of a Technology and Innovation Training Centre in Oxford (Activate Learning)
- Development of an Advanced Engineering and Technology Skills Centre (Abingdon and Witney College)
- Establishment of the Activate Care Suite to improve adult social care and healthcare in Oxfordshire (Activate Learning)

We also supported UK Atomic Energy Authority (UKAEA) in their £12m bid for a skills training facility at Culham Centre for Fusion Energy – the Oxford Advanced Skills Centre (OASC) – a new employer led apprentice training facility for Oxfordshire's hi-tech businesses.

Policy initiatives such as City Deal, European Structural Investment Fund and Local Growth Fund have enabled us to make good progress in recent years.

OxLEP has developed strategic relationships with the major training providers delivering in Oxfordshire and regularly shares information on local skills and training needs across the group.

SP2: Creating the 'skills continuum' to support young people through their learning journey

Labour Market Information (LMI) reports have been developed to help inform young people, and those that advise them, of the job opportunities and local employment landscape so that they are better equipped to make informed choices about future career opportunities (www.o2i.org/content/lmi)

O2i - Opportunities to Inspire creates and supports links between employers and education providers to inspire our future workforce. O2i offers an online platform which makes it easier for volunteers from any sector to discover opportunities to inspire and inform young people (www.o2i.org).

O2i is also leading the development of the national **Enterprise Advisor (EA) programme**. EAs are volunteers from businesses who work with school's leadership teams to develop effective enterprise and employer engagement plans.

Last academic year **Oxfordshire Work Experience** supported 6,625 placements offered by 3,027 employers across the county to provide young people with a taste of employment.

We have continued to support **Careers Fest**, an annual two day careers event which attracts over 1600 young people and over 50 employers and training providers showcasing opportunities.

SP3: Up-skilling and improving the chances of young people and adults marginalised or disadvantaged from work

The Oxfordshire Skills Board has been at the forefront of championing and delivering Community Employment Plans (CEPs) on major developments. CEPs provide the opportunity to work closely with developers to maximise local training and skills outcomes arising from major developments within a planned and structured way. Whilst we are currently working to have CEPs embedded in planning policy across our local authority partners we have already achieved some significant success with the CEP on the £440m retail led Westgate development in Oxford generating over 700 training and skills outcomes, with many opportunities focussed on those furthest from the workforce.

OxLEP works closely with Oxfordshire County Council to ensure that vulnerable groups of young people e.g. those with special education needs or those leaving care are not disadvantaged when entering the world of work. An example of this joint work is the implementation of a supported internship programme aimed at young people with learning difficulties and/or disabilities.

The Skills Board previously allocated funding from the **skills reward grant** to community based job clubs who worked within Oxfordshire's most deprived wards with individuals to support them into work.

Following on from this Oxfordshire's ESIF strategy has allocated £1.2m of ESF funding to fund a three year project that will "work in communities to help the long term unemployed move closer to the labour market".

SP4: To increase the number of apprenticeship opportunities.

Oxfordshire City Deal funds supported the **Oxfordshire Apprenticeships** (OA) team to strengthen its work with schools, employers and parents to raise awareness of Apprenticeships and supports employers (particularly SMEs) to take on Apprentices (www.oxfordshireapprenticeships.co.uk).

OA has engaged with over 1,400 employers and has supported all Oxfordshire secondary schools to ensure young people have an increased awareness of Apprenticeships.

OA also commissioned the following pilots projects to help drive growth in Apprenticeships and for us to better understand the opportunities and challenges:

1. Setting up of an Apprenticeship Training Agency in construction.
2. Promoting the construction sector as a career to young people with a particular focus on girls.
3. Supporting young people who expressed an interest in Apprenticeships whilst at school but who are not in employment, education or employment.
4. Developing of an Apprenticeship programme within the University of Oxford.
5. Encouraging more Retail, Hospitality, and Health and Social Care employers to engage with Apprenticeships.
6. Developing and delivering a summer science and engineering Apprenticeship placements programme for young people at the end of their first year of post-16 education.
7. Delivering taster sessions in engineering and science to those at school who haven't yet decided what they want to do
8. Delivering a project focused on providing Apprenticeship and Traineeship opportunities for disadvantaged and disabled young people.
9. Raising awareness with employers and young people, of the opportunities for Apprenticeships for those with learning difficulties and/or disabilities

SP5: To explore how we can better retain graduates within Oxfordshire to meet the demand for the higher level skills our businesses need.

We commissioned research to look in depth at graduate retention in Oxfordshire compared with other areas. Its results were encouraging.

A third of Oxford Brookes graduates and nearly a fifth of University of Oxford graduates remain in Oxfordshire to work.⁴ This equates to 26 per cent overall remaining locally and contributing to economic growth.

49 per cent of Oxfordshire residents came back to Oxfordshire to work, regardless of where they went to University. We also attract significant numbers of graduates from institutions based in London, the West Midlands, Milton Keynes, Southampton and Nottinghamshire.

The research showed that where location of institution equals location of employment, Oxfordshire fares better than comparable areas in terms of retaining graduates, showing significantly higher retention of its graduates than Bristol and Bath and above our statistical neighbours of Berkshire, Buckinghamshire and Cambridgeshire where the pull of the bright lights of London is great. In fact it is no surprise that the UK's big cities: London, Manchester, Newcastle, Liverpool and Birmingham that have the greatest success in retaining graduates.

With a refreshed and widely-consulted-on SEP, it is timely to review our priorities against the ever changing national growth and skills landscape, to take stock of progress and updated evidence and to realign our skills vision to continue to drive sustainable economic growth.

It is timely to review our priorities against the ever changing national growth and skills landscape, to take stock of progress and updated evidence and to realign our skills vision.



4 Based on 1.2m respondents Destination of Leavers from Higher Education Survey from 2009-2013 www.hesa.ac.uk.

2.0 The national and local context

The 'Skills System'

The Skills System is an umbrella term encompassing a wide range of vocational education and training in both the private and the public sector. It covers all levels and life stages, and the diverse network of groups that provide, support, and benefit from these opportunities.

Vocational education and training ranges from the informal accrual of skills by exposure to work-like environments or tasks, to formally certificated and long term courses. Levels of training also range from the provision of basic English and maths skills at Entry Level or Level 1, through to highly technical degree-based apprenticeships, and everything from employability and offender learning in between.

The system is sometimes viewed as two overlapping systems: a private system of skills development led and funded by employers and individuals; and a public system supported and funded by government. The private system meets market needs and the public system has a duty to ensure people are sufficiently skilled for the labour market, supporting productivity and economic growth.

The ultimate goal of policymakers is to strengthen both these systems, and crucially the links between them, whilst seeking to ensure that provision is increasingly aligned to the needs of the local economy; both current and projected.

The system covers multiple policy areas and government departments. Here, education, further and higher education, innovation, adult skills, employer engagement, welfare, and industrial strategy all converge.



It is helpful to conceptualise the system as a mixed and diverse ecology. Policymakers and decision makers need to understand the roles and requirements of large employers and FE colleges, alongside those of SMEs and microbusinesses, independent training providers, universities and the needs of individuals in the labour market.

Although the skills system is not truly 'systematic', the interdependencies within it require us to think about its varied components and relationships holistically. Changes to the school curriculum, for example, will impact industry several years down the line, and the unforeseen consequences of seemingly isolated reforms can risk underqualified individuals or skills gaps in the economy.

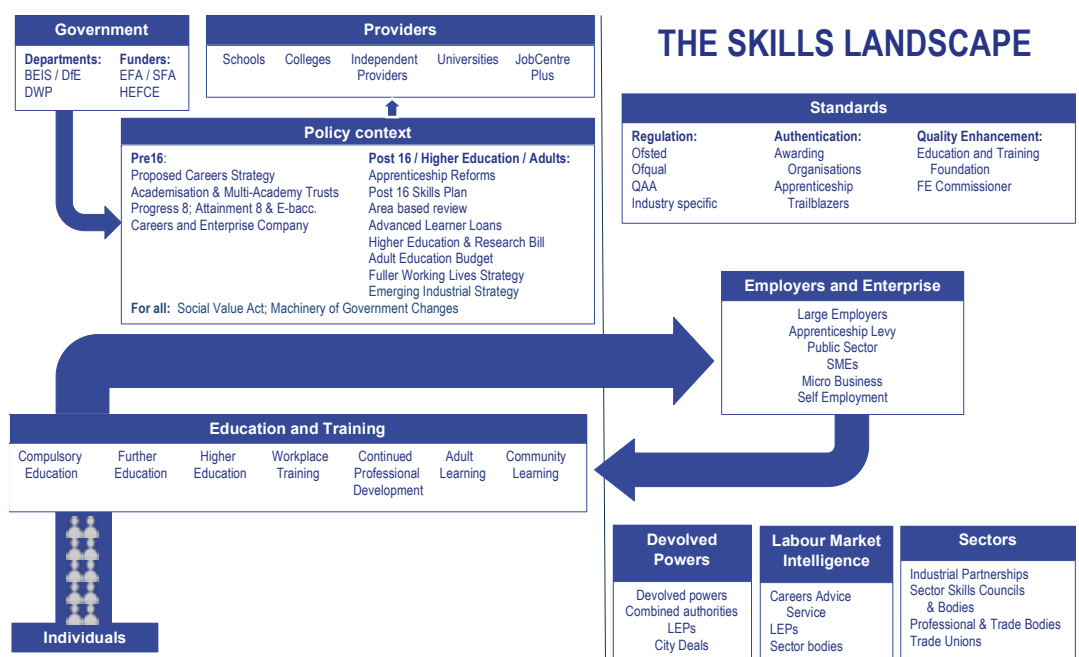
Devolved responsibilities for skills

In England, the Department for Education (DfE) is responsible for education and training policy up to the age of 18 while the Department for Business, Energy & Industrial Strategy (BEIS) manages skills policy, including 16-18 apprenticeships.

Skills policy is also being devolved across England. The 38 Local Enterprise Partnerships (LEPs), have an increased role in directing local skills strategies and working with colleges, training providers, employers and the SFA to set skills priorities. Government will devolve responsibility for Adult Education Budgets to localities that meet readiness conditions.

The skills system is best conceptualised as an ecosystem made up of varied yet interdependent components adapting their behaviours to an ever changing environment. The repercussions of change at one level will impact upon functions further along the chain, sometimes in unexpected ways. The diagram below shows some of the key components of the policy led system.

Figure 2: The skills landscape; an overview



Oxfordshire LEP - who are we and what do we do?

The Oxfordshire Local Enterprise Partnership (OxLEP), formally launched by the Business Minister, Mark Prisk MP, in March 2011 is responsible for championing and developing the Oxfordshire economy. Now in its sixth year of operation, OxLEP has made considerable progress in strengthening Oxfordshire's economy by establishing robust and effective relationships between businesses, academia and the public sector.

This strong partnership is reflected within our board - a body of Non-Executive Directors who are leaders within education, business and local authorities across Oxfordshire. With their support OxLEP can act as an informed, independent advocate for those driving innovation and growth across the county. In addition, we are also able to prioritise the key programmes needed to address priority deficiencies identified in Oxfordshire.

Our activities may broadly be described as:

- **Leadership** – influencing decision-making processes (at central government as well as local levels) by representing the “voice of business” from Oxfordshire. For example, we will be leading on Oxfordshire’s input and response to the emerging national Industrial Strategy;
- **Delivery** – where there is no natural partner we will take on responsibility for directly delivering key activity. For example, we directly deliver the Oxfordshire Business Support Service and Oxfordshire Apprenticeships;
- **Brokerage** – linking partners and projects with each other and helping access funds through National Government (such as City Deal and Growth Deal Funding) to deliver the objectives of the Strategic Economic Plan. For example, we worked with a range of partners for the Local Growth Fund 3 submission;
- **Facilitation** – working in partnership with partners and wider stakeholders, including the Local Authorities, private and third sector organisations, Universities, FE Colleges and others through our sub groups. This is how we will work with others to implement our related Investment Plans and Strategies, and to support local arrangements for the delivery of new housing.

The role of Oxfordshire Skills Board

Oxfordshire Skills Board brings together a range of public and private employers, secondary, further and higher education skills providers and stakeholder groups. Working closely with the Oxfordshire Local Enterprise Partnership, we are driven to developing a strategic & coordinated approach to skills development aligned to Oxfordshire's economic growth ambitions, as articulated in the Strategic Economic Plan.

Key responsibilities

- OSB will develop and encourage the delivery of a skills strategy that will articulate the skills ambition and priorities necessary to support Oxfordshire's economic growth ambitions;

- To understand the skills and growth challenges of Oxfordshire businesses to help shape emerging policy and delivery;
- To lobby and promote Oxfordshire's skills ambitions and challenges to various audiences including national and local government and training providers;
- OSB will develop, support, influence and co-ordinate a series of interventions that support Oxfordshire's economic growth;
- Provide 'oversight' of the OxLEP skills team in regard to the development and delivery of skills strategy objectives where appropriate;

Our mantra; communicate; co-ordinate; collaborate.

3.0 Economic overview

Oxfordshire is one of the best-performing and most innovative LEP areas in England. It has unique assets to support growth in the national economy. It is a dynamic and varied county that boasts one of the world's leading universities, a burgeoning knowledge-based economy, and high quality urban and rural lifestyles. Sitting on the western axis of the UK's 'Golden Triangle'⁵ Oxfordshire has outstanding and unique 'big science' and technology-based credentials that drive economic growth, locally, nationally and internationally.

Overall, Oxfordshire generates output to the value of about £21.9bn (data for 2015, in current prices, from ONS) from about 417,000 jobs (including both employees and self-employment jobs).

Oxfordshire performs well on key metrics of productivity and it is consistently in the upper echelons of league tables relating to the economic performance of LEP areas:

- in 2014, GVA per hour worked in Oxfordshire was an estimated £32.70 – compared to a UK average of £31.00
- in 2013, GVA per filled job was estimated to be £51.2k; the UK average was £48.8k.



In the year to March 2016, some 358,000 residents aged 16-64 were in employment (whether employed or self-employed). Both activity and employment rates are higher than the regional average – and substantially higher than the national average. The rate of unemployment is very low; in reality Oxfordshire is currently operating at virtual full employment.

The largest employment sectors in Oxfordshire are education (51,000 employees, 14.9% of all employees in employment), professional, scientific and technical (41,000, 12.1%), health (40,000, 11.8%) and retail (32,000, 9.4%). Employment in tourism – which is cross sectoral – also accounts for around 32,000 jobs (9.5%)⁶.

Over the last few years, Oxfordshire's economy has performed strongly, and the scale of recent investment bodes well for future growth. Between 2011 and 2014, the number of jobs in Oxfordshire – including employee and the self-employment jobs – grew by 7.8 per cent, compared to growth of 6.2 per cent nationally. Within this total, employee job numbers grew by 6.3 per cent to 341,500 (compared to 5.3% nationally), while the number of self-employment jobs grew slightly faster. The rate of GVA growth from 2011-14 was also above the national average (15.6%, compared to 12.1% for the UK).

⁵ Centred around the leading universities of Oxford, Cambridge and the London universities

⁶ Sectoral employment is taken from the Business Register and Employment Survey (BRES) – latest data is for 2014, published in the autumn 2015. Employment in tourism is based on figures in the Oxfordshire Creative, Cultural, Heritage and Tourism Investment Plan.

We have created over a third of the total estimated job creation to 2031 in less than 4 years.

Recent employment growth in Oxfordshire has been much faster than was expected in the forecasts used as the basis for the Strategic Housing Market Assessment⁷. Overall the economy created over 29,000 new jobs within that period. To put that into context we have created over a third of the total estimated job creation to 2031 in less than 4 years.

The sectors with the biggest increase in employees 2011-14 were professional, scientific and technical (an increase of nearly 7,000 employees), construction (5,500 increase), business administration and support services (3,300 increase) and transport and storage (2,200 increase). The number of employees in manufacturing and public administration and defence declined by just over 1,000 in each sector over the 2011-14 period.

Science and technology based clusters in Oxfordshire are particularly strong and distinctive, nationally and internationally. By 2014, there were 46,100 employees in high tech sectors in Oxfordshire, 13.5 per cent of total employee jobs in Oxfordshire. GVA growth in key high tech sectors was well above the national average (e.g. GVA in 'information and communication' grew by 29.3% in Oxfordshire between 2011 and 2014, compared with 8.4% in UK). In the 12 months to July 2015, Oxford's technology firms received a reported £1.4bn in investments - more than five times the previous year's total of £250m. Over 20 new Oxford technologies and ventures received a record £2.6m in proof-of-concept funding in 2014 alone. This bodes well for future growth and could generate additional employment opportunities.

Some 85% of Oxfordshire residents are in work with a large percentage working within the county. However, both inbound and outbound commuting increased between 2001 and 2011 for all Oxfordshire districts with the exception of South Oxfordshire, where there was a slight fall in out-commuting. In 2011, 57,000 people commuted into Oxfordshire, 10,000 more than in 2001, and there was a daily net inflow to Oxford of nearly 30,000 workers, up 16 per cent since 2001.

One reason for increased commuting into Oxfordshire is the high housing costs and associated issues of affordability⁸. It is therefore encouraging that housing completions have increased by 74 per cent over the five years to 2015, compared with a national average of 15 per cent⁹. However, completions remain well below the objectively assessed need: a total of 3,760 new homes were completed in the county in 2015/16, compared with a need averaging approximately 5,000 per year¹⁰. In addition, there is a pressing need for more genuinely affordable homes across the county.

As at November 2016, some 2,700 people in Oxfordshire were claiming Job Seekers Allowance (JSA), or Universal Credit (UC). This equates to an unemployment rate of just 0.6 per cent, compared to 1.8 per cent for Great Britain.

7 The Planned Economic growth employment forecasts envisaged growth between 2011 and 2021 of just under 50,000 jobs, which is equivalent to just under 15,000 over the period 2011-14. This compared with actual growth of just over 30,000 jobs – twice the rate forecast.

8 It is notable also that several of the businesses that were consulted in the course of refreshing the SEP commented specifically on the growing incidence of long distance commuting, particularly from the Midlands, as result of housing pressures and prices. The businesses considered that this was not sustainable long term, not least because employees typically "got fed up" after about a year and then moved onto other jobs

9 Sources: local authority annual monitoring reports for the Oxfordshire figure, DCLG for the national figure.

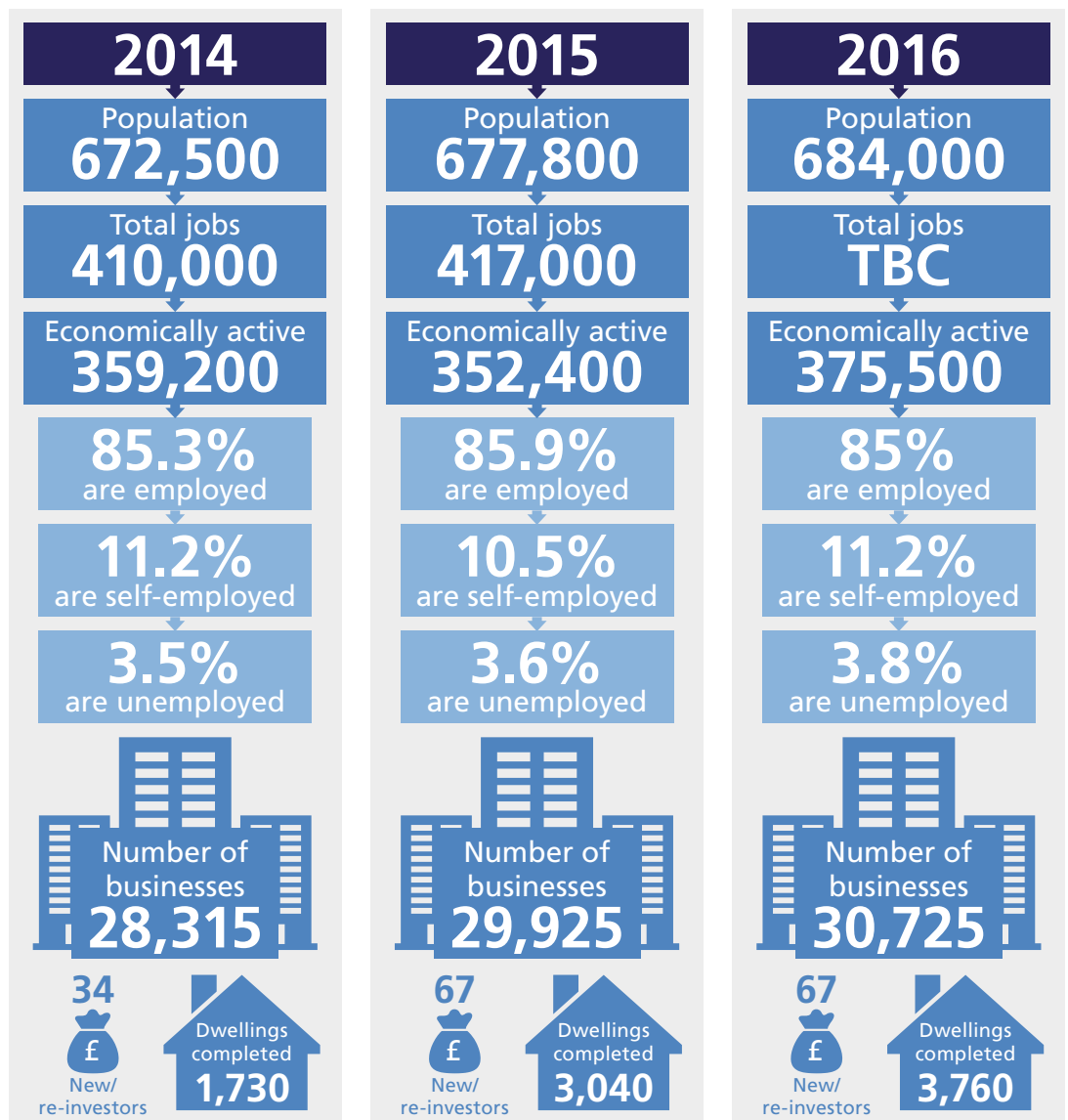
10 The 'objectively assessed need' for the period up to 2031 was identified in the 2014 Strategic Housing Market Assessment for Oxfordshire, commissioned by the Oxfordshire local authorities.

We operate in a very tight labour market with a job density of 0.96, that is 96 jobs for every 100 working age residents, compared to 0.83 nationally.

We operate in a very tight labour market with a job density of 0.96, that is 96 jobs for every 100 working age residents, compared to 0.83 nationally. There are 19,930 people currently out-of-work¹¹. These are both unemployed and actively seeking work or economically inactive and want to work. This is about 5 per cent of the working age population and much lower than national proportions of 9 per cent.

Since March 2014, when the first SEP was published, the number of Oxfordshire residents on JSA/UC has declined by nearly 40%. This is to be welcomed. However it does point to the challenges for growing and new businesses seeking to recruit staff from a small pool of potential labour, particular as there are also continuing skills shortages in some key areas (for example, in jobs requiring expertise in STEM subjects¹²). Furthermore, the people claiming benefits are likely to be those who face particular challenges in accessing training and work, meaning that they will need additional and targeted support to help them move closer to the labour market.

Figure 3: Our economic performance



11 Claimants of the main out of work benefits, DWP benefit claimants, 2016

12 STEM - science, technology, engineering and maths

Enterprise

Oxfordshire is home to c.30,725 businesses. We are a micro to small enterprise led economy with 89 per cent businesses employing 9 employees or fewer. Only 0.4 per cent of businesses in Oxfordshire employ over 250 people.

Education, publishing and health businesses and organisations are located around Oxford City and manufacturing is mostly in the north of the county, especially the motor sports and food production industries.

Bicester, also in the north of the county, is a major focus for growth with significant housing and job creation planned including the development of an eco-town, with the focus for jobs centred on environmental technologies, advanced engineering and logistics.

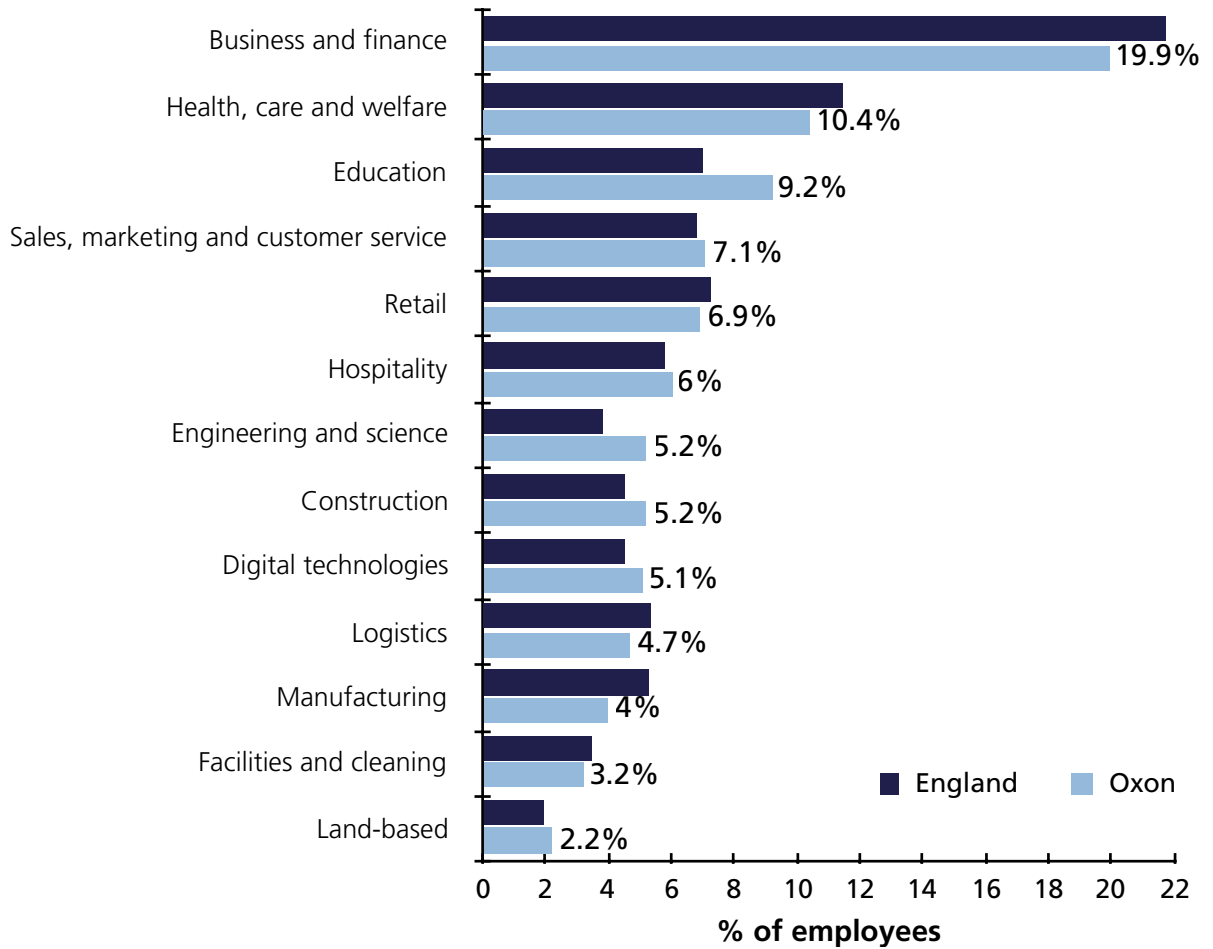
High tech manufacturing shows a greater concentration in southern Oxfordshire but high tech services are more dispersed across the county. Science Vale, centred in and around the Didcot area contains a large concentration of scientific research and development with considerable ICT and engineering support.

The professional, science and technical sector make up over a fifth of all enterprises and have a significant number of employees (12 per cent of the workforce). However it is the wholesale/retail and education sectors are the largest in terms of employee base, with 15 per cent and 14 per cent respectively (see full research findings in appendix 1).

Looking at employment by sector alone does not provide an accurate picture of the skills of the workforce, as occupations can be found across many sectors but share similar skills. Therefore occupations have been grouped, regardless of their sector, within 'job families' of comparable skill sets. This changes the employee picture with a larger proportion of jobs in business and finance, which cross a multitude of sectors, shown in figure 4 opposite.



Figure 4: Employment by job family, 2015*



Source BRES, 201
 *Sector <2% not shown

Oxfordshire has concentrations of certain types of jobs with higher than national proportions of workers in the following job families:

Table 1: Highly concentrated job families

Job family	Jobs	Concentration of workers
Education	32,900	Four times the national average
Engineering and science	18,700	3.5 times the national average
Arts and Media	6,100	3 times the national average
Construction	18,400	2.3 times the national average
Land-based	8,000	Twice the national average
Digital technologies	18,400	1.7 times the national average

Source: EMSI Analyst, 2014

Specific job specialisms concentrated in-county are higher education teaching professionals due to the University presence; scientists from the life science and space technologies sub-sectors; and authors, editors and market researchers from our large publishing and creative industries.

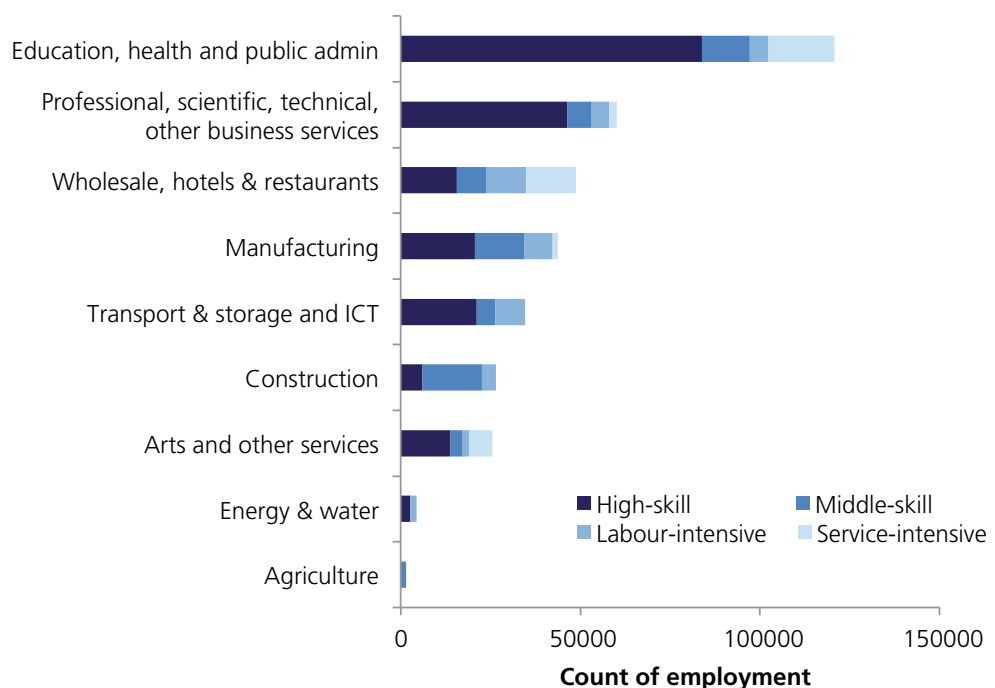
Knowledge economy

Oxfordshire is top for innovation activity in the UK.

Research by the MIT Skoltech Initiative in 2013 identified amongst the top five Technology Innovation Ecosystems in the world¹³ and Oxfordshire is top for innovation activity in the UK¹⁴ coming top in four out of the six benchmarks in product and service; process; strategic and marketing; research and development; and collaborative innovation. It has one of the most substantial, distinctive and important clusters of research based, high value business activities in Europe (with the third highest concentration of research and development workers in the UK), including scientific research and development, higher education, health, car manufacture and motorsports, and publishing. Throughout, the process of innovation is one of Oxfordshire's strengths: a survey by ERC found that firms in Oxfordshire reported the most innovation activity compared to other regions in the UK.

The county has a highly skilled labour force. 54 per cent are employed in managerial, professional or associate professional roles¹⁵, way above the national average of 45 per cent. Figure 5 shows high skills are especially prevalent in the education, digital technologies (ICT) and engineering and science job families and the education, ICT, manufacturing, professional scientific and technical and arts sectors, where high skilled jobs make up at least half of those available.

Figure 5: Skill level by broad sectoral group, Oxfordshire, 2015



Source: Annual population survey, workplace analysis 2015

13 Technology Innovation Ecosystem Benchmarking Study: Key findings from Phase 1, Ruth Graham, 2013

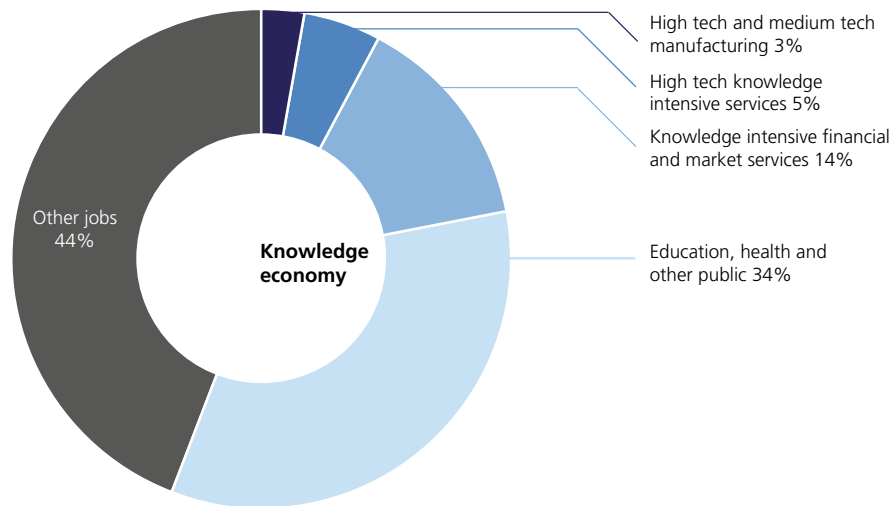
14 Benchmarking Local Innovation: The innovation geography of the UK, 2010-2012, Enterprise Research Council.

15 Annual Population Survey, 2016

56 per cent or 192,000 workers form part of our 'knowledge economy'; associated with high levels of labour productivity and competitiveness in the global economy.

A high proportion of employees, 56 per cent or 192,000 workers form part of our 'knowledge economy';¹⁶ associated with high levels of labour productivity and competitiveness in the global economy.

Figure 6: Percentage of Employees in the 'knowledge economy', 2015



At the core of the economy, and key drivers of innovation, are the two world class universities of Oxford and Oxford Brookes and, 'big science' research institutions in Oxford and, to the south of the county, at Harwell and Culham.

Science Vale Oxford Enterprise Zone (EZ) is amongst the top five technology eco-systems in the world with a concentration of specialised science and technology that is without parallel in the UK. It is larger than both Cambridge and MIT in the U.S. The Science Vale area accounts for 13 per cent of research and development employment in the South East and 4 per cent of R&D employment in England. Its major centres include:

- Harwell Science and Innovation Campus, a developed world-class centre for science, innovation, technology and enterprise. It is host to an array of over £1 billion of world learning research infrastructure on a 710 acre site. Harwell has more than 5,000 people working in some 200 organisations with significant growth ambition.
- Milton Park, which is one of Europe's largest multi-use business parks with 90 buildings on site and hosting more than 250 companies, which employ around 7,500 people in one of the UK's foremost science communities.
- Culham Science Centre, which is home to the Culham Centre for Fusion Energy (CCFE) and the world's largest fusion experimental facility, JET (Joint European Torus). It is home to over 40 resident businesses and supports 2000 jobs in the key sectors of energy, aerospace and technology.

¹⁶ British Register & Employment Survey 2015, using Eurostat NACE Rev. 2 definition, based on 341,500 Oxfordshire residents in employment (including employees and self-employed)

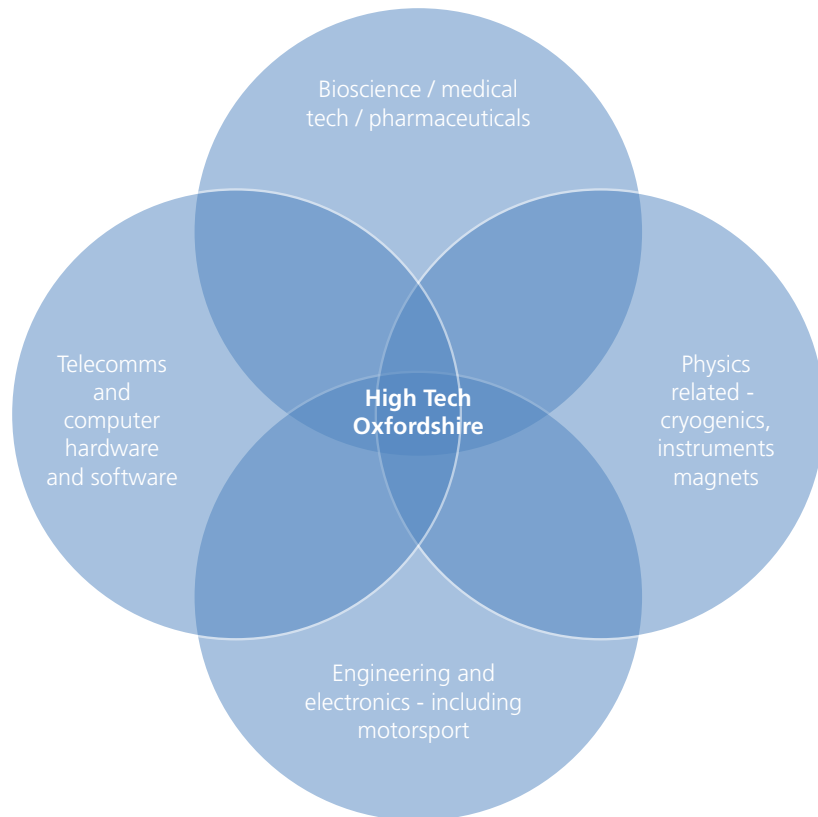
Our Innovation Strategy¹⁷ recognises that innovative businesses need access to the right skills for growth stating:

“A supply of skilled people is a foundational requirement for innovation – we need not only ideas and capital, but also the people. Skilled people with deep technical knowledge, those with management expertise, and also entrepreneurs are important ingredients for businesses at every level.”

Sectors

Oxfordshire is uniquely placed by having sectors that are poised for growth, including medicine and life sciences (bio-technology for example), advanced engineering (cryogenics, space, advanced materials), information technology (cyber security, big data and gaming) and publishing and, environmental technologies. Indeed, of the ‘eight great technologies’¹⁸ the Government has identified to ensure the country leads in science and innovation; big data, space, robotics, synthetic biology, regenerative medicine, advanced materials, agricultural technologies, and energy storage, Oxfordshire has strong and growing capability in the first six.

Figure 7: High Tech Oxfordshire – core overlapping technologies



Source: The Oxfordshire Innovation Engine Update, Realising the growth potential, SQW, October 2016

¹⁷ Innovation Investment Plan, OxLEP, 2016, <http://www.oxfordshirelep.com/content/innovation-investment-plan>

¹⁸ Investing in Britain’s Future (HM Treasury, June 2013) outlines plans to invest in the upgrade and refurbishment of essential research infrastructure to support Big data, space, robotics, synthetic biology, regenerative medicine, agricultural technologies, advanced materials, and energy storage.

Oxfordshire's investment led vision suggests a greater focus in the future on the following established sectors:

- **Life sciences and medical instruments**

The life sciences cluster is one of the largest and most successful in Europe with an estimated 180 companies in R&D and more than 150 companies in associated industries employing approximately 23,000 people. This sub sector in Oxfordshire has unequalled breadth, strength and depth in drug discovery and development; diagnostics; medical devices; digital health, precision medicine and regenerative medicine plus a global powerhouse for clinical trials.

- **Space and satellite applications**

Currently with 12,000 employees, the UK space sector is predicted to grow by 100,000 jobs nationally to 2030¹⁹ with c10,000 of the jobs predicted growth centred around the internationally renowned space cluster at Harwell. The strength of the industry at Harwell is due to the combined presence of the European Space Agency (ESA) and its European Centre for Space Applications and Telecommunications (ECSAT); RAL Space and the Satellite Applications Catapult and has already attracted a number of international space companies including Lockheed Martin, Thales Alenia Space, Deimos Space UK and Neptec Design Group.

- **Advanced engineering**

A centre for R&D and innovation led automotive technologies Oxfordshire has over twice the national proportion of people employed in the manufacture of motor vehicles, with 3,600 specifically employed by vehicle manufacturers along with over 23,000 employed in advanced manufacturing. The enabling technology of cryogenics, advanced materials and nano-technology are used in automotive, energy and space sectors. At the heart of the UK's 'Motorsport Valley' Oxfordshire is home to three F1 teams as well as supply chain companies such as Faurecia and Decoma.



19 A UK Space Innovation and Growth Strategy 2014 to 2030, Space IGS

- **Electronics – sensors and instruments**

World class R&D centres and testing facilities make Oxfordshire the ideal location for global electronics companies. Toshiba, CN Innovations, Sharp Laboratories are all based here as well as indigenous and spin-out companies including Oxford Instruments and Oxsensis. Around 25,000 are employed across a range of disciplines that support the sector with over 3,800 people alone are employed in optoelectronics – 2.5 times the national average.

- **Creative and Digital**

Oxfordshire has the largest centre of publishing and creative industries outside of London. More than 27,000 are employed in the digital industry supporting c4700 businesses that generate in excess of £1.5bn annually. There are significant digital strengths in computer games, software development, cyber security, big data, high performance computing and capabilities in television and film, broadcast and production and sound.

Continued investment is essential to translate innovative R&D into the market, and thus into jobs and careers, recognising that many of the jobs will be in roles that have yet to be determined as new technologies emerge.

In addition our recently approved Science and Innovation Audit focuses on four sector areas with significant global potential and points of intersection; “Digital Health”, “Space-led Data Applications”, “Autonomous Vehicles” and “Technologies underpinning quantum computing”.

These areas reflect OxLEP’s Strategic Economic Plan for innovation-led growth in Oxfordshire and the ‘eight great technologies’ identified by the UK Government for future growth. Although at different stages of maturity and market penetration, these areas are complementary and face similar challenges and opportunities with regards to enabling growth, and developing regional and international capacity. They are emerging, disruptive technologies that could transform their specific sectors as well as the wider economy. There is a global race to lead the market in these areas to benefit from inward investment from users and suppliers and to confer competitive advantages for industries that adopt them. The UK is currently at the forefront, but our world leading research alone cannot sustain this position. Continued investment is essential to translate innovative R&D into the market, and thus into jobs and careers, recognising that many of the jobs will be in roles that have yet to be determined as new technologies emerge.

Sectors: Other assets

The county’s environment and heritage are economic key assets as highlighted in our Strategic Environmental and Economic Investment Plan for Oxfordshire (SEEIP)²⁰. Oxford is a global brand known for its academic excellence and historic significance. The Ashmolean Museum is the world’s oldest public museum.

Our Creativity, Culture, Heritage and Tourism Investment Plan (CCHTIP)²¹ recognises the role that the creative industries and the visitor economy play in driving economic growth, job creation and competitiveness across the county. Blenheim Palace is a UNESCO world heritage site. Bicester Village attracts 6.3 million visitors and generates amongst

20 Strategic Environmental and Economic Investment Plan, OxLEP, 2016, <http://www.oxfordshirelep.com/content/seeip>

21 The Creativity, Culture, Heritage and Tourism investment plan, OxLEP, 2016, <http://www.oxfordshirelep.org.uk/content/cchtip>

the highest sales densities of any shopping centre (full price and outlet) worldwide. It is estimated that Oxfordshire's growing visitor and cultural sectors contribute approximately £1.86 billion to the local economy, seeing 2 per cent growth since 2013²².



© Blenheim Palace

New jobs (many of which have yet to be invented) and new skills are likely to be required in these and other sectors. There is, for example, growing demand for skills in the context of the green economy covering eco/green construction methods (related to the planned development of 6,000 new dwellings and employment at Bicester), resource efficiency, the low carbon industry, climate resilience and skills to manage natural assets²³ Employment in our agricultural sector is predicted to grow by 8.5 per cent to 2020 with support required for an increasing Agri-tech industry. In order to support growth our skills eco-system must better understand the projected skills requirements of these sectors and ensure the necessary provision is in place.

Training Provider network

There are nearly 320 providers delivering government funded education and training in Oxfordshire²⁴ with around 570 providers in total training Oxfordshire residents.

For 16-18 year olds the largest providers are the two Further Education colleges (Activate Learning and Abingdon and Witney College) and Henley Sixth Form College. Other providers delivering to this age group include 39 maintained or academy school sixth forms, 25 independent school sixth forms, 11 special schools with post-16 provision, 150 training providers delivering apprenticeships and alternative niche providers who target those not in education, employment or training. Just over half of this age group study A' levels.

22 Economic Impact of Tourism in Oxfordshire, Estimates for 2014, Tourism South East, August 2015

23 Skills for a Green Economy, HM Government October 2011

24 Skills Funding Agency and Education Funding Agency Oxfordshire delivery 2014/15

For 19+ provision there are 420 training providers, with 16 providers that enrolled 200 or more (in most cases considerably more) Oxfordshire residents in 2014/15. The largest numbers of enrolments were delivered by Oxfordshire's two further education colleges, the sixth form college and the County Council. The balance is delivered by private training providers (both local and national).

Universities have a strong role to play in the availability of workforce skills; as well as in collaborative research with businesses, transfer of intellectual properties (via spin-outs and licensing), access to specialist facilities, and raising the profile of the area internationally.



© David Fleming, Careers Fest 2015

Research undertaken in Oxfordshire is outstanding. The University of Oxford and Oxford Brookes University, are well established. Together they educated over 45,000 students with about a third of these at postgraduate level²⁵. Furthermore, over a third of students who study at the universities take STEM and medical related subjects, which are in high demand²⁶. Indeed, universities have a strong role to play in the availability of workforce skills; as well as in collaborative research with businesses, transfer of intellectual properties (via spin-outs and licensing), access to specialist facilities, and raising the profile of the area internationally.

The University of Oxford is ranked first place in the world in the Times Higher Education World University Rankings in 2016. In the QS university rankings it is ranked second in Europe and sixth in the world. It is in the top five globally in eighteen of the thirty-one subjects covered (all but two subjects are in the top ten), and in seven out of 14 STEM subjects²⁷. It attracts students from 140 countries with 34 per cent of its students from overseas.

25 HE students by HE provider, Higher Education Statistical Agency (HESA), 2014/15

26 15,400 in 2013/14 in Oxfordshire, Higher Education Statistical Agency (HESA), October 2015.

27 Quacquarelli Symonds (QS) University World Rankings 2015

In 2014/15 the University secured over £522.9 million in grants for its research, whilst being ranked top in the UK for research quality²⁸. Oxford University Innovation is one of the UK's most prolific and best regarded technology transfer companies.

The proximity of major research facilities to the University is unique in Europe and possibly worldwide²⁹. These facilities contribute strength to our economy in a number of ways, including:

- Direct use by business for research and development;
- They transfer knowledge through supply contracts and direct assistance to businesses;
- The business space, and associated innovation support, they are providing;
- Highly skilled engineers to design, construct, maintain and operate the facilities;
- More generally, raising the profile of science as a career, and promotion through extensive outreach programmes;
- Further adding to global connectivity. ISIS and the Diamond Light Source in particular attract global interest from industry and academia.



28 Research Excellence Framework 2014

29 The Oxfordshire Innovation Engine: Realising the Potential, October 2016, SQW

4.0 Oxfordshire's labour market and skills challenges

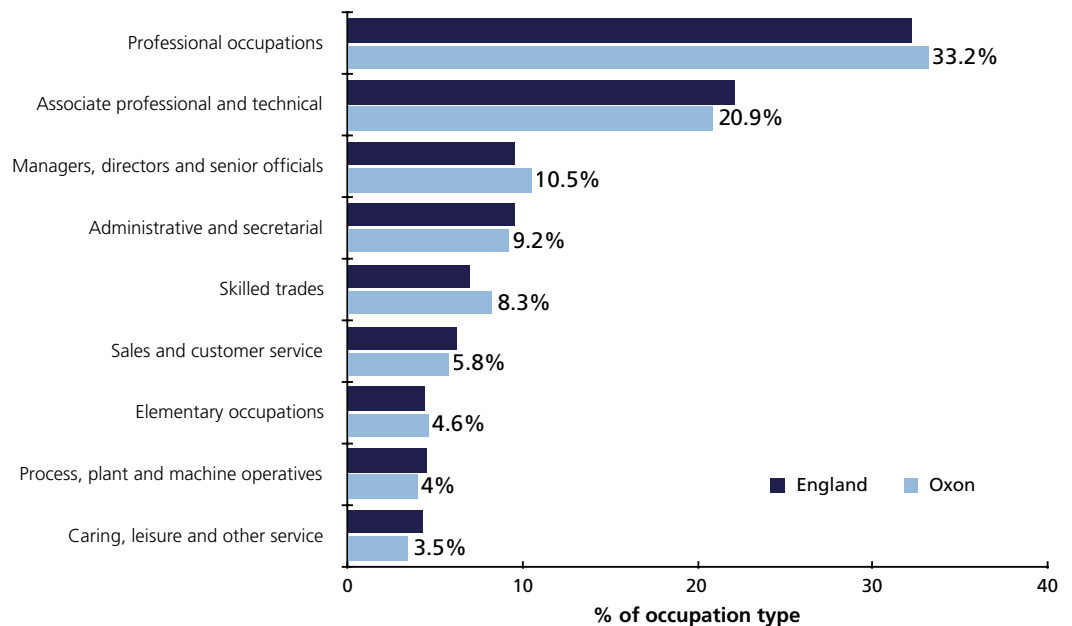
Skills are potentially the county's scarcest resource relative to the opportunity.

Oxfordshire has a highly qualified and highly skilled workforce and yet balancing the labour market remains a challenge. A limited supply of skilled workers, compounded by low unemployment and inactivity rates, make it particularly difficult for Oxfordshire's employers to recruit suitably qualified staff. Skills are potentially the county's scarcest resource relative to the opportunity.

There are currently 417,000 jobs in Oxfordshire³⁰, a rise of 51,000 since 2010, against an ambition to create over 85,000 new jobs by 2031. Around 37 per cent of the workforce are in high-skill jobs as defined by ONS.

In the year to June 2016, there were a reported 128,400 vacancies advertised throughout Oxfordshire³¹ demonstrating significant movement in our labour market. A third of vacancies (42,300) were in the professional occupations such as scientists, engineers, IT specialists, healthcare professionals, teachers, lawyers and accountants and these specialist roles are becoming increasingly hard-to-fill. About 25,000 vacancies were in associate professional and technical roles, such as technicians, officers, artists and designers. These high skill roles together represent over half of all advertised vacancies in that period. However this is not unique to Oxfordshire with a similar spread in the national picture.

Table 2: Percentage of jobs advertised by occupational group³²



Source: Burning Glass Technologies: Labour Insight

³⁰ ONS Jobs density, 2015. Total jobs includes employees, self-employed, government-supported trainees and HM Forces

³¹ Burning Glass Technologies: Labour Insight, June 2015-June 2016.

³² The data source for job openings is from Labour Insight Burning Glass. This is a tool that collates all online openings on a 'real time' basis.

Some sectors face unique challenges. The social care sector, especially care workers, will see significant replacement demand since nearly a quarter of its workforce are currently 55 years old or over. This sector is already facing challenges with large staff turnover and staff shortages which impact the quality of service.

Anecdotal evidence suggests that recent changes to applications for highly skilled migrant visas may be restricting the number eligible to work in the UK; with implications for our education and science based community which Oxfordshire firms have traditionally drawn on³³. The terms of Brexit could also impact on labour supply as the agreement is crystallised.

It is yet to be established how the vote to leave the European Union will affect the labour market in the UK. What is clear is that job creation has kept pace with net migration to the county thus far and so any limitations to the flow of migrants to the workforce could have a huge impact on our largest sectors, such as education, health, construction and other services, where there is a reliance on migrant workers. Although the full effect of Brexit is unknown, some businesses are already feeling the fallout of a weakening pound and uncertainty in the economy.

Population

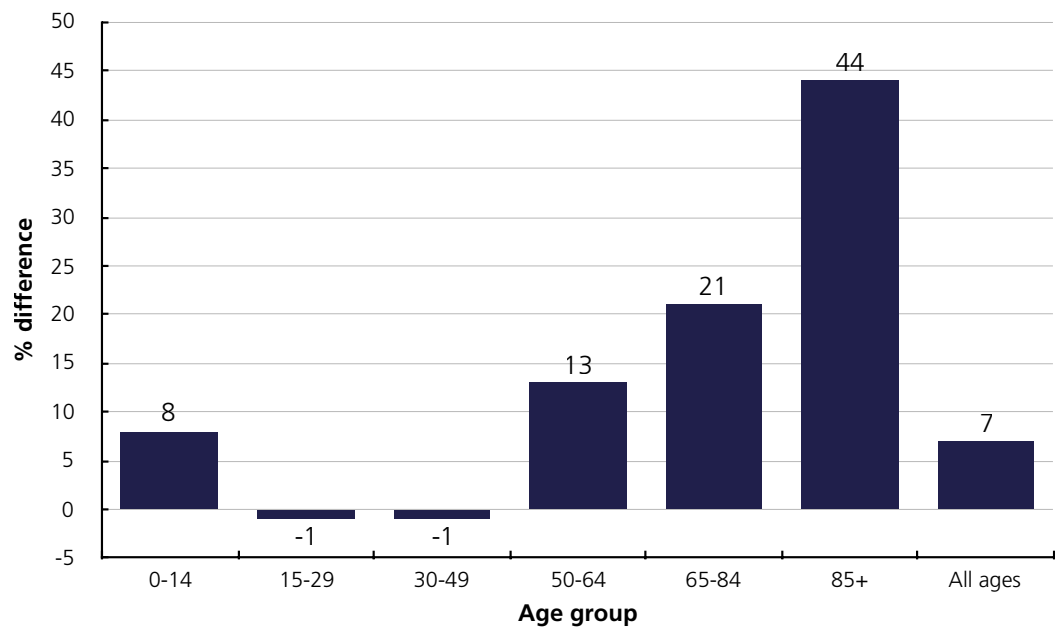
The population profile in Oxfordshire is changing and 'ageing'³⁴ with long term projections showing decline to the working age population to 2037 and very limited growth to rise just 2 per cent in the mid-term to 2024, compared to a significant increase forecast in the older population. The county's economic success and growth means there are more jobs than people which presents significant challenges.



© Experience Oxfordshire

33 The Oxfordshire Innovation Engine: Realising the growth potential', October 2016, SQW

34 ONS sub-national population projections, 2016

Figure 8: Mid term Population growth 2014 to 2024, Oxfordshire

Source: ONS sub-national population projections, 2016

The replacement demand caused by those leaving the labour market due to retirement, mortality or illness will not currently be met by the supply of young workers.

The number of younger and middle-aged workers in particular in the mid term remains stagnant, even dropping slightly. This contrasts with a 13 per cent increase of older workers aged 50-64 and a 24 per cent increase in the number of elderly citizens (over 65), up from 115,000 to 143,000. While more elderly citizens are likely to continue to work past retirement age, the replacement demand caused by those leaving the labour market due to retirement, mortality or illness will not currently be met by the supply of young workers.

School performance

The challenge for Oxfordshire is to ensure a higher proportion of its residents, in particular its' young people, hold the appropriate level skills required for tomorrow's economy. There is particular demand for higher skills and people with polymath skills (blending knowledge in STEM subjects, for example, with other skills).

This begins with children's and young people's attainment at school. The recent trend in GCSE pass rates for 16 year old school pupils completing Year 11 across the local, regional and national areas are illustrated below³⁵. The overall performance of schools at Year 11 (Key Stage 4) within Oxfordshire has generally been below the regional and national average but has narrowed the gap in the last three years.

The latest figures show 58.7 per cent of Oxfordshire pupils at state funded schools gained 5 A*-C grades at GCSE including English and maths, above a total national average of 57 per cent but below the regional average of 59.8 per cent³⁶.

³⁵ Source: DfE School Performance Tables 2015

³⁶ Dept of Education, Provisional GCSE and equivalent results in England: 2015 to 2016

Table 3: Percentage of pupils at the end of key stage 4 achieving at GCSE and equivalents

Geographic area	5+ A*-C grades including English and mathematics GCSEs						
	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16*
Total (state-funded sector)	55.3	58.4	59.1	59.1	56.8	57.3	57
South East	57.5	59.6	60.2	60.2	59	59.9	59.8
Oxfordshire	57.3	57.4	57.9	57.9	59.4	59.7	58.7

Source: DfE School Performance Tables 2016

*2015/16 figures are provisional only

Post-16

The 'raising of the participation age'³⁷ means that after completing formal education at sixteen, young people have a duty to participate in education or training until they turn 18. In effect this means they have to consider their options including continuing further studies at school or college or undertaking training at college or in work, as an apprentice, for example. While the majority of young people participate in education or training beyond sixteen it is those not in education, employment or training (NEET) for whom this provides the opportunity to gain skills that will boost their work opportunities.

In 2015, nearly a third of 16-18 year olds (combined Years 11-13) participated in Further Education, and a further third in school sixth form. Eight per cent went onto Higher Education and the same amount into Apprenticeships.



© Melanie Ringer, OxLEP, 2016

³⁷ From June 2013, all 16 year olds were required by law to stay in education, training or work with training, for a full academic year after their compulsory school leaving age. For young people due to leave school in or after June 2014 this requirement was extended until their 18th birthday.

The wealth of employment opportunities available may explain why fewer young people continue their education, as they are attracted by jobs.

Just over four per cent (528) of young people in school years 11 to 13 were considered to be 'NEET'³⁸, a fall from 5.6 per cent from the previous year. Young people who are 'NEET' may be either unemployed or inactive (not seeking work and/or not available to start work due to illness, disability, caring or studies). While the majority of 16 year olds continue their learning when they complete their statutory education, there are others, often the most vulnerable, who do not. It is acknowledged that young people who do not obtain 5 GCSEs at A*-C are seven times more likely to be NEET at 17 than those who achieve this level³⁹. While the NEET rate in Oxfordshire is lower than many other areas, it is concentrated in particular areas of the county - such as Oxford City and Vale of White Horse (5.7 per cent and 4.2 per cent of young people respectively).

49 per cent of Oxfordshire pupils went onto university after their A levels compared to 55 per cent regionally and, 58 per cent nationally.⁴⁰ The wealth of employment opportunities available may explain why fewer young people continue their education, as they are attracted by jobs.

Qualifications

National Vocational Qualifications provide a way of understanding work based competencies held by the resident population.

Table 4: NVQ Levels and equivalent

NVQ Levels	Equivalent	Skill level
No qualifications/other	GCSEs	Low skills
Level 1		
Level 2	Five or more GCSEs, O-Levels or equivalent at grades A*-C	Intermediate skills
Level 3	Two or more A-Levels or equivalent	
Level 4 + 5	First or other degree or higher	Higher level skills

52 per cent of Oxfordshire residents aged 16-64 are qualified to at least NVQ level 4; the highest rate among 38 LEPs (The next best performing is London with 50 per cent). Oxford City has the highest population of highly qualified residents and Cherwell the lowest. The proportion of the local population qualified at NVQ4 and above has grown strongly in recent years: in 2005 only 31.6 per cent of working age residents was qualified at this level.

38 Youth Engagement and Opportunities team, Oxfordshire County Council, 2013.

39 Dept for Education ,Supporting Post 16 transition, 2013

40 Dept of Education, Destinations of key stage 5 pupils: academic year 2014 to 2015 (provisional) based on the % of students who entered A level or other level 3 qualification, going to a HEI in 2013/14.

Table 5: Percentage of highest and lowest qualification, 2015

District	% with NVQ level 4 or above	% with NVQ level 2 or above	% with no quals
Cherwell	36	72.6	6.5
Oxford	63.4	86.1	4.6
South Oxfordshire	57.4	85.0	3.3
Vale of White Horse	47.7	80.1	4.7
West Oxfordshire	50.1	78.2	9.6

Source: ONS annual population survey

NVQ Level 2 is also the minimum 'platform of skills' our economy should seek to achieve to ensure employment and business competitiveness, both nationally and globally.

Nevertheless, nearly a fifth of the population (19.2 per cent or 70,900) are low skilled - that is, they are qualified below NVQ Level 2. Five per cent (20,100) have no qualifications. However, this is significantly below the national average (8.6 per cent for England), and the lowest percentage of the population unqualified among LEPs. There are however some stark spatial variations - a tenth of West Oxfordshire residents have no qualifications and in Blackbird Leys in Oxford 28 per cent of residents lack any qualifications, with a number of other areas characterised by a combination of low skills levels, high unemployment and worklessness. Improving the county's NVQ levels would go some way toward providing employers with the skilled workforce they need. NVQ Level 2 is also the minimum 'platform of skills' our economy should seek to achieve to ensure employment and business competitiveness, both nationally and globally⁴¹.

Table 6: Percentage of working age population by NVQ levels

December 2015	Oxfordshire	Oxfordshire	South East	Great Britain
	(numbers)	(%)	(%)	(%)
NVQ4 and above	219,000	51.7	39.8	37.1
NVQ3 and above	284,800	67.3	60.5	57.4
NVQ2 and above	341,900	80.8	76.8	73.6
NVQ1 and above	379,600	89.7	88.5	84.9
Other qualifications	20,300	4.8	5.2	6.5
No qualifications	23,400	5.5	6.3	8.6

Source: ONS annual population survey

There is a need to maximise the potential of students from schools, colleges and our universities as well as making Oxfordshire an attractive place to work from those outside otherwise we risk limiting business growth. This is especially true for developing and retaining skills in science, technology, engineering and mathematics.

Aligning education and employer needs

The Confederation of British Industry's (CBI) 'Inspiring Growth: What employers need from education and skills' survey was conducted in spring 2015. Key findings were:

- For the 14-19 age group the study revealed too many young people are leaving school without the basic literacy and numeracy skills needed to be successful in the workplace. In Oxfordshire, 25.5 per cent of pupils are not making expected progress in English between key stage 2 and key stage 4 and 28.5 per cent fell short in Maths⁴². Half of employers want to see more done to strengthen literacy and numeracy and just under half want to see improvements in technology skills.
- Among the firms that need employees with STEM skills and knowledge⁴³, there is widespread difficulty in recruiting at every level, from new entrants to train as apprentices (20 per cent), to those with 5+ years' experience of STEM-related work (32 per cent). This is expected to rise in the next three years to 36 per cent for new entrants and 52 per cent for experienced workers.
- The two biggest barriers amongst employers who have had difficulties recruiting STEM-skilled staff are the lack of general workplace experience amongst applicants (46 per cent) and a lack of appropriate attitude and aptitude for working life (44 per cent).
- Furthermore, a degree in a STEM subject gives graduates from Higher Education a clear advantage with two out of five employers reporting they prefer to recruit STEM-qualified graduates.



© David Fleming, Careers Fest 2015

42 DfE 2014/15, percentage of pupils in state-funded schools between key stage 2 and key stage 4.

43 STEM is the acronym encompassing the disciplines of science, technology, engineering and mathematics, and subjects that draw on these areas. Many industries require people with varying levels, and integration, of STEM education or training. However, it is also recognised that the local economy requires the labour force in general to be increasingly STEM literate.

- Three priorities for STEM-related active are identified:
 1. Create more STEM-related apprenticeships (54 per cent surveyed said this);
 2. Tackle low business relevance of some STEM qualifications in H.E and recruit specialist maths and science teachers in schools and colleges (47 per cent);
 3. Fire up interest in STEM careers through providing high quality work placements (35 per cent) and schemes to engage young people (33 per cent).

Concern has been expressed that provider networks have not always delivered the courses, training and information the economy needs⁴⁴. A report from the Royal Academy of Engineering⁴⁵ found that STEM subjects nationally accounted for quarter of course provision compared to non-STEM subjects. The previous iteration of the Oxfordshire Skills Strategy spoke of a greater STEM focus in provider delivery and recent STEM initiatives have resulted in higher than average participation rates in Oxfordshire with STEM participation now accounting for a third of student population at school, further education and higher education. Oxfordshire's burgeoning science and technology sectors need people trained or with proficiency in STEM subjects and given the county's inward investment led growth ambition, the demand for STEM skills is expected to rise considerably, requiring continued focus on engaging young people in STEM participation.

While about two thirds of employers in Oxfordshire found education leavers they recruited to be well prepared for work, with the satisfaction increasing with the recruit's age and/or educational attainment;⁴⁶ nevertheless, a common concern emerging from the LEP's regular 'Barrier to Business' Survey is that too many young people do not have the 'employability' skills businesses require. Whilst tangible hard skills are no doubt deemed important to employers, employability skills go beyond basic numeracy and literacy. For employers, it also covers on the one hand, maturity, attitude and general competences but also the softer skills such self-management, customer awareness, communication, team-working and problem solving.

Careers education and employability skills

Oxfordshire employers experience challenges recruiting to roles for a number of reasons, including an undersupply of suitably qualified individuals entering appropriate courses but also due to a general lack of awareness and understanding in young people about the career options and future job opportunities available locally.

In order to meet the high-skill requirements of our priority sectors, it is imperative that young people understand their career and training options in order to make well-informed choices that lead them into appropriate training at appropriate times throughout their learner journey.

Under the 2011 Education and Skills Act schools and colleges now have a statutory duty to provide independent and impartial careers education, information, advice and

44 No Stone Unturned: In Pursuit of Growth, The Rt Hon the Lord Heseltine of Thenford CH; Hidden Talents Skills mismatch analysis, June 2012, Laura Gardiner & Tony Wilson, Centre for Social Inclusion

45 FE STEM Data Project 2011, The Royal Academy of Engineering

46 UKCES Employer Skills Survey 2013, Oxfordshire

Eight out of ten employers do not think careers advice in schools is good enough.

guidance (CEIAG) to students in years 8 to 13 while work experience and other work related activities for young people remain optional.

Work experience activities can help with young people's transition from education to work. Some schools provide this in-house while others commission services from private providers. The result has been mixed with variation in what young people have access to and their experience of it⁴⁷. Eight out of ten employers do not think careers advice in schools is good enough⁴⁸. Issues include:

- Careers advice not tailored for the individual seeking it;
- Careers advice given by non-specialist staff;
- Schools push towards academic routes and may not be knowledgeable on other routes to careers;
- There is a lack of support and encouragement for those students with special educational needs.

There is a need and an opportunity to strengthen young people and parent's awareness of local career opportunities and the various routes to these. Improving CEIAG has been the focus of many reports with suggestions to:

- incentivise schools;
- make it part of the criteria of an OFSTED judgement;
- collect destination data in order to measure CEIAG success;
- co-ordinate careers initiatives at the national level;
- implement quality standard for a congest careers guidance market;
- offer statutory guidance to careers guidance professionals.

These top-level initiatives currently serve as ideas for implementation to address the patchiness of CEIAG delivery in schools across England. A new Careers Strategy for CEIAG in secondary schools was due in 2016 but as yet has not been published. In the meantime, the Careers and Enterprise Company (CEC) who are funded by DfE, are leading on this agenda nationally with various careers education projects. With careers policy currently under review by DfE, Oxfordshire will need to be mindful of any future changes in careers policy or publication of a Careers Strategy in the near future.

At local level, schools have expressed their desire to have access to good local



© David Fleming, Careers Fest 2015

47 Careers education, information, advice and guidance, First Joint Report of the Business Innovation and Skills and Education Committees of Session 2016-17, House of Commons.

48 CBI: Business Issues, 2015

labour market information to help inform their careers education, information and guidance. Education links to business, which take the form of work experience; business talks and lectures, careers events, and other activities such as mentoring or mock interviews, are also considered a vital part of CEIAG and improving young people's employability skills.

CBI's definitions of employability skills:

CBI definition of employability skills

A positive attitude (readiness to take part, openness to new ideas and activities, desire to achieve) underpinnings:

Self management- readiness to accept responsibility, flexibility, time management, readiness to improve own performance

Teamworking- respecting others, co-operating, negotiating/ persuading, contributing to discussions

Business and customer awareness- basic understanding of the key drivers for business success and the need to provide customer satisfaction

Problem solving- analysing facts and circumstances and applying creative thinking to develop appropriate solutions

Communication and literacy- application of literacy, ability to produce clear, structured written work and oral literacy, including listening and questioning

Application of numeracy- manipulation of numbers, general mathematical awareness and its application in practical contexts

Application of information technology. basic IT skills, including familiarity with word processing, spreadsheets, file management and use of internet search engines

The delivery of good CEIAG is vital to ensure young people are offered a full range of training and career pathway options and employability skills of young people are improved.

Communication, customer service and planning skills are the employability skills required above all else in job vacancy postings in Oxfordshire⁴⁹. Far more employers expect to need more people with leadership and management skills (70 per cent of employers in the CBI survey said they will need more; 28 per cent no change; 2 per cent fewer). Every employer rates a 'positive attitude' as an important asset to have⁵⁰.

80 per cent of Oxfordshire businesses surveyed accept they have a responsibility for the development of young people's employability skills before they leave school but often wait for schools to make the first move⁵¹.

The delivery of good CEIAG is vital to ensure young people are offered a full range of training and career pathway options and employability skills of young people are improved. Raising awareness will help address our ongoing skills challenges. Working collaboratively to improve the CEIAG infrastructure, aligned to the needs of our economy becomes one of our strategic priorities moving forward.

49 Burning Glass Technologies: Labour Insights, June 2015-June 2016

50 What Employers want, p.4 <http://whatemployerswant.org/wp-content/uploads/2014/10/What-Employers-Want-FINAL.pdf>, 2014

51 Developing the continuum in Oxfordshire: Improving employability skills through Education Business links, Collaborative Insights. Commissioned by OCC. October 2014.

Apprenticeships

Oxfordshire apprenticeship starts have more than doubled, increasing from 1,610 in 2005/06 to 4,250 in 2015/16 with a peak in 2012/13. Over the same period, more apprenticeships were at advanced level; with 'Higher' apprenticeships (including degree level) coming on stream with four per cent of apprenticeships now at this level.

Table 7 – Apprenticeships started by level

	Intermediate (L2)	Advanced (L3)	Higher (L4)	All
2005/06	68%	32%	0%	1,610
2015/16	58%	38%	4%	4,250

Source: Skills Funding Agency

Retail, business, engineering and health apprenticeships make up 85 per cent of all apprenticeships in Oxfordshire and vacancy data shows there is high demand for apprenticeships in retail, digital technologies, property and engineering and science job families. Three quarters of all Oxfordshire apprenticeship starts are in small to medium sized businesses of up to 100 employees, with the remainder undertaken in large or very large firms. Eight per cent (1,680) of Oxfordshire workplaces recruit apprentice in the 2014/15, much lower than the national average of 17 per cent⁵². This demonstrates much more needs to be done to encourage employers to take on Apprenticeships.

The Government are introducing the apprenticeship levy on 6 April 2017. The levy requires all employers operating in the UK with a pay roll in excess of £3 million to pay at levy at 0.5 per cent of their payroll, offset by a £15,000 levy allowance that can be used to fund apprenticeship delivery.



There are approximately 400 Oxfordshire based businesses that will be eligible to pay into the levy to varying degrees. As a result, employers will be looking into how they will use their levy. For some this will mean introducing Apprentices to their workforce for the first time, for others they may expand Apprenticeship into new areas, or some may decide not to use the levy at all.

With more Apprenticeship opportunities coming on line from employers, it is anticipated it will trigger a rise in candidates to fill these roles.

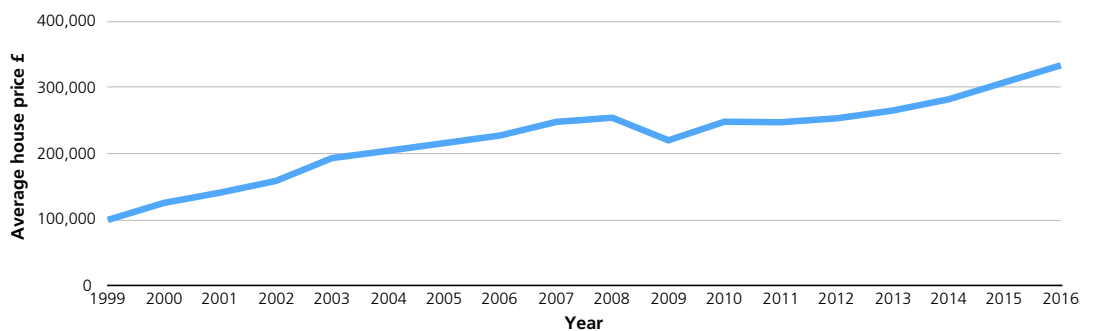
While Apprenticeships are becoming an option for those who are attracted to a vocational route to learning while at work, staying on at school and college is still considered 'de rigueur' for the majority and, as important as it is to have Apprenticeship opportunities, there are currently not enough candidates in Oxfordshire to fill these roles. On average Oxfordshire have around 200 unique Apprenticeship vacancies each week, with over 10,000 in an average year but only an average of 4,400 actual starts. With more Apprenticeship opportunities coming on line from employers, it is anticipated it will trigger a rise in candidates to fill these roles.

Increasing the number of apprenticeship opportunities will continue to remain as one of our strategic priorities, whilst also seeking to increase interest in apprenticeships amongst those considering their career pathways.

Housing affordability

Oxfordshire is an expensive area to live making it difficult for employers to recruit people, especially from lower housing cost areas. The average property in Oxfordshire is £333,310 which is 48 per cent above the national average of £224,731⁵³.

Figure 9: Average house price, Oxfordshire



Source: House price index, Land Registry, 1999-2016

Although earnings in Oxfordshire are above the national average, the cost of living in the county is also high. The median⁵⁴ annual pay for full time employees living in Oxfordshire in 2015 is relatively high at £30,900 (£29,200 in Cherwell - £32,100 in Vale of White Horse). This is above the national average of £27,900, and the regional average rate of £30,100⁵⁵. The median average weekly wage is £578.40. House prices

53 HM Land Registry, April 2016. There is a time-lag between the sale of a property and the subsequent registration of this information with Land Registry. As new information becomes available, the published price indices are revised to reflect any new data.

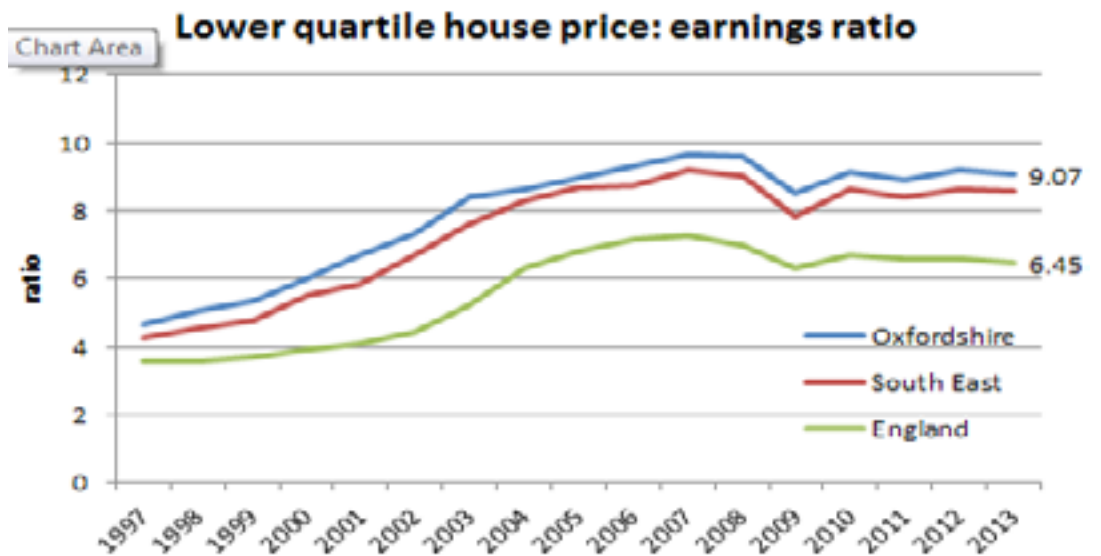
54 Median income (the middle pay point of the range of pay rates being sampled), is used to avoid the picture being skewed by individual incomes of very high earners.

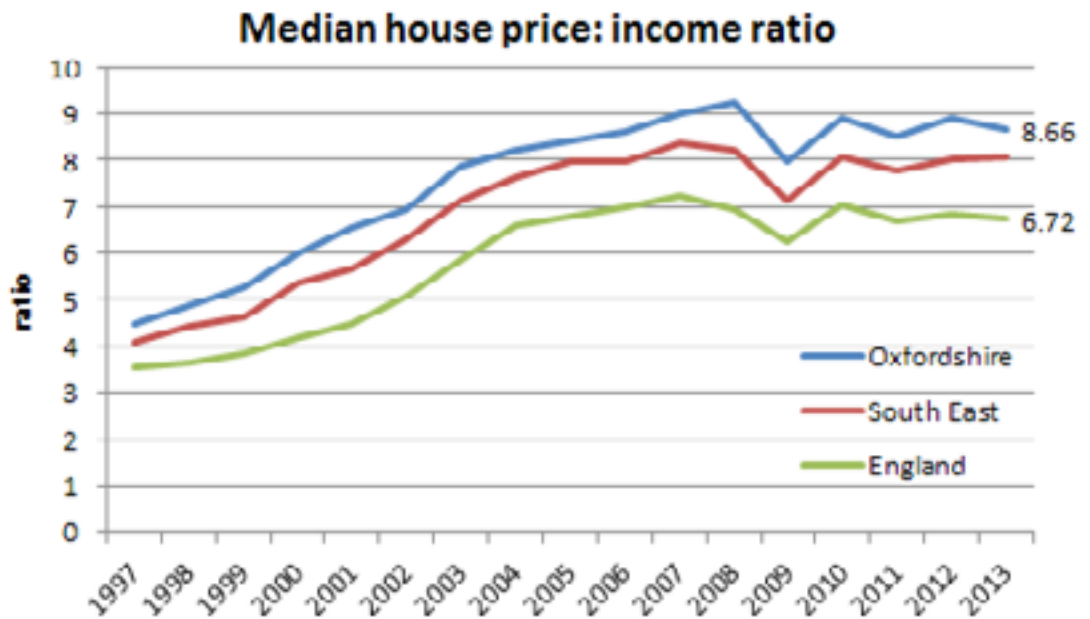
55 ONS Annual Survey of Hours and Earnings, 2015 provisional, Place of residence by Local Authority.



are almost ten times higher than annual earnings, with the City of Oxford the least affordable place nationally.

The ratio of lower priced houses to the lower 25 per cent of incomes gives an indication of affordability: the price of the most affordable housing in Oxfordshire remains nine times higher than the lowest 25 per cent of earnings.





Source: House price to earnings ratios .Department for Communities and Local Government, live housing tables numbers 576 and 577

Affordability of housing affects the whole population but is particularly detrimental to attracting key workers groups, such as nurses, teachers, police officers, fire fighters and paramedics, and other skilled workers moving to Oxfordshire. Many Oxfordshire head teachers see teaching shortages as the biggest risk factor to the running of their schools and, although minimum staffing levels have been maintained in wards across the NHS in Oxfordshire, this is due in part to bringing in workers from other departments rather than having full quotas of staff. Oxford City's local plan completes in 2019 and aims to address key workers and affordable housing but in the meantime, those starting their careers, or wishing to relocate, are being priced out of the area and are looking to work elsewhere or they choose to commute from outside of the county: In 2011, 57,000 workers commuted into Oxfordshire, that is 10,000 more than 2001.

Deprivation

Many studies over the years have shown there is a strong link between economic deprivation and educational underachievement. This matters, not least because the nature of the labour market in Oxfordshire has changed with a requirement for many more high-skilled workers and the consequences for young people of low educational achievement are now more dramatic than they may have been in the past.

While many of areas of Oxfordshire enjoy prosperity, there are pockets within communities that are struggling, falling in the bottom 10-20 per cent of the most deprived areas in the country⁵⁶. These pockets are in Oxford (parts of Rose Hill and Iffley, Northfield Brook, Barton, Sandhills and Blackbird Leys), Cherwell (in Banbury parts of Grimsbury and Castle, and Ruscote) and Vale of White Horse (parts of Abingdon

⁵⁶ Department for Communities and Local Government, English Indices of Deprivation, 2015. The OMD brings together data on a range of measures including income, employment, health, skills, education, housing and crime to understand where poverty is concentrated.

Over 14,500 people claim Employment Support Allowance (ESA) making ESA our largest cohort and one that should be at the forefront of our thinking.

Caldecott). At the same time, some parts of rural Oxfordshire have been identified as showing relatively high levels of deprivation (Bersinsfield, Brightwell, Cholsey, Faringdon and Hundreds)⁵⁷. There are 22,300 ‘worklessness’ households across the county, 10.2% compared to 15.3% nationally. Of the c19,930 out of work benefit claimants over 14,500 people claim Employment Support Allowance (ESA) making ESA our largest cohort and one that should be at the forefront of our thinking.

Supporting those furthest away from the labour market will improve prospects for social mobility and potentially lift those affected from the poverty trap.

Labour and skill shortages/mismatches

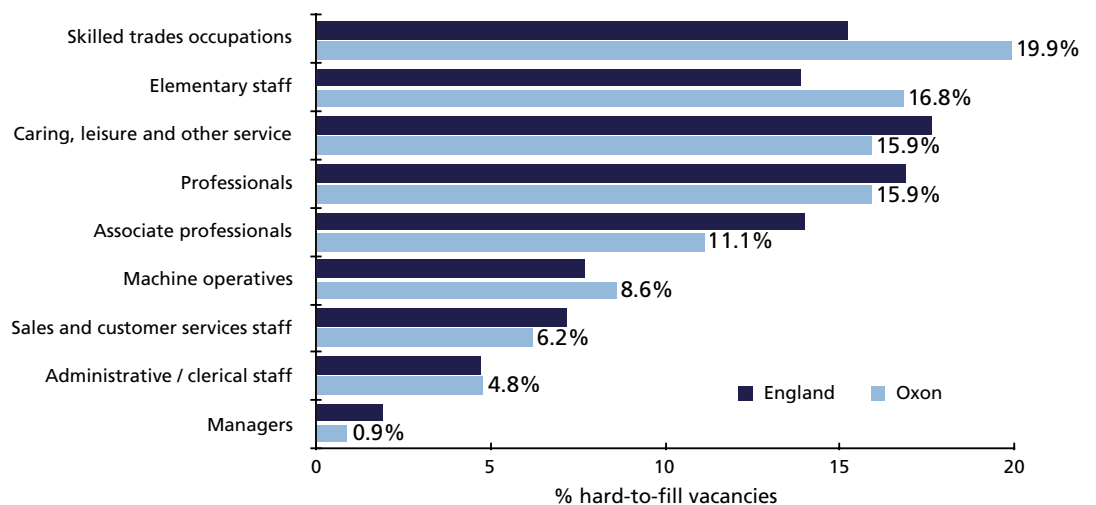
According to the UKCES Employer Skills Survey in Oxfordshire 2015, 10 per cent of employers (c. 2,220 businesses) were reporting job vacancies that are hard-to-fill (compared to eight per cent nationally) and 70 per cent of these vacancies were hard to fill due to a shortage of skills. The dominant reason for recruitment difficulties was a lack of applicants with the required skills, qualifications or experience.

The construction sector, in particular electricians, bricklayers, plasterers and plumbers are taking the brunt of skills shortages.

Figure 10 shows, of all hard-to-fill vacancies, a fifth are recruiting to skilled trade occupations. This is much more prevalent in Oxfordshire than nationally and is borne out in anecdotal evidence from local construction employers that suggest the construction sector, in particular electricians, bricklayers, plasterers and plumbers are taking the brunt of skills shortages.

Elementary and machine operatives are also deemed hard-to-fill posts but in this case a shortage of skills was not the main factor in filling posts and more likely due to there being not enough people interested in doing this type of job.

Figure 10: Profile of hard-to-fill vacancies by occupation (hard-to-fill vacancy base)



Source: UKCES Employer Skills Survey, Oxfordshire, 2015

Skills shortages are a major barrier to business growth - evidenced by Culham Centre for Fusion Energy who struggle to fill skilled vacancies at technical level⁵⁸, commented:

'going forward we envisage needing many more engineers and technicians to support our future Fusion technology roadmap which includes developing centres of excellence in remote handling, materials testing and other specialist areas....at present the single greatest risk to CCFE is the lack of skilled technicians'

Nearly all businesses that report an impact of skills shortages with the majority of these creating an increased workload for other staff. Customers also suffer with just over half of business saying they cannot meet customer service objectives.

When roles are filled, 16 per cent, or 3,312 establishments say they have staff that are not proficient in their roles. This equates to five per cent of jobs, which is significant. Most skills gaps occur in high and middle skill roles and while many are due to employees being new to the role, which employers are addressing by either offering broader development activities (84 per cent) or providing further supervision (74 per cent)⁵⁹, there are pockets of industry where the impact is long-term and a threat to growth and productivity especially in the following sectors:

- **Creative and Digital**

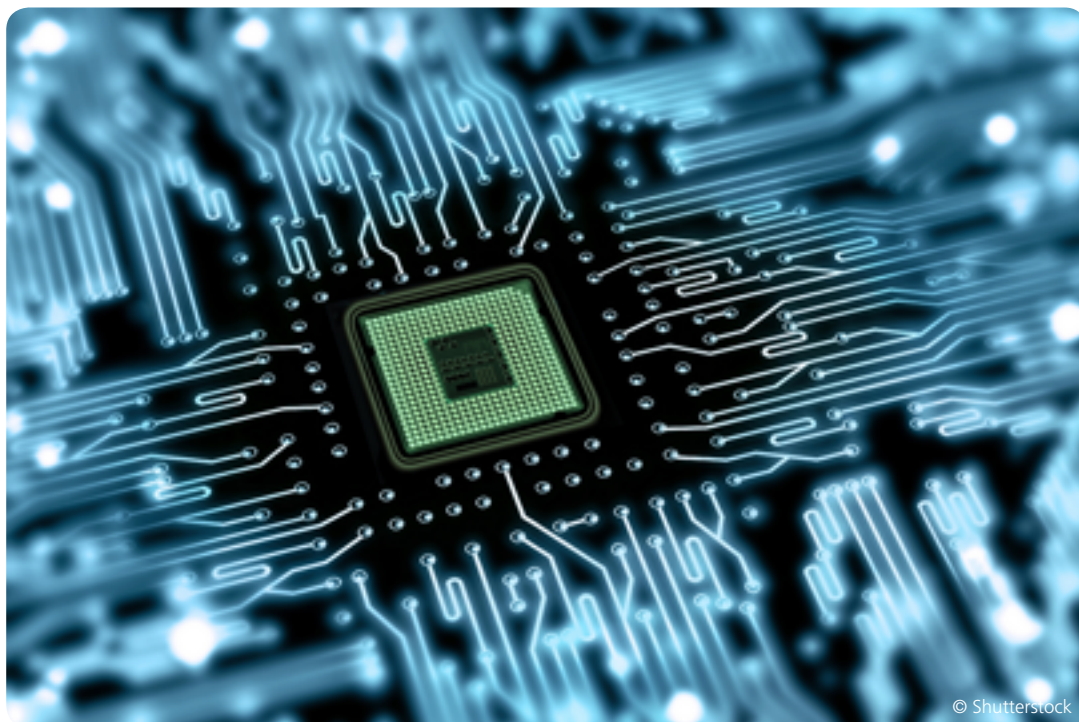
The House of Commons Science and Technology Committee have published a report entitled 'Digital skills crisis'. The report states:

- 12.6 million of the adult UK population lack basic digital skills.
- An estimated 5.8 million people have never used the internet at all.
- The digital skills gap is costing the UK economy an estimated £63 billion a year in lost additional GDP.
- An audit of IT equipment in schools found that 22 per cent of it is ineffective.
- Only 35 per cent of ICT teachers hold a relevant qualification.
- The Government has been able to recruit only 70 per cent of the required number of computer science teachers into the profession.

The UK will need 745,000 additional workers with digital skills to meet rising demand from employers between 2013 and 2017, and almost 90 per cent of new jobs require digital skills to some degree, with 72 per cent of employers stating that they are unwilling to interview candidates who do not have basic IT skills. Oxfordshire

58 Business Barometer Oxfordshire, Skills Focus, Issue 10, 2014, <http://www.withyking.co.uk/images/uploads/library/Barmoeter/Oxfordshire-business-barometer-issue-10.pdf>

59 UKCES Employer Skills Survey 2015



is already seeing a shortage of skills in this job family area with jobs in digital technologies more likely to have a vacancy than other roles⁶⁰.

- **Manufacturing**

73 per cent of manufacturers have faced difficulties recruiting skilled workers in the last three years, contending with a lack of technical skills (67 per cent), an insufficient number of applicants (64 per cent) and a lack of relevant experience (61 per cent). The number of 'hard-to-fill' vacancies overall in the UK remains static and stubbornly high at 35 per cent.

Manufacturers are fighting back by offering competitive salaries (84 per cent) and half will offer further training and development opportunities. 79 per cent plan to recruit manufacturing and engineering apprentices in the next 12 months⁶¹.

- **Service industries**

Service roles also play an important role in supporting local economies and providing the services required by businesses, investors, and residents - with significant numbers of roles available at entry and lower skilled entry points.

The service sector is also currently suffering labour shortages, particularly in, health and social care, retail and hospitality, and the logistics sectors. An analysis of the planning pipeline – at advanced pre application and formal submission stages indicates significant employment growth in these sectors in the short to mid-term, with four developments (retail and logistics led) potentially creating 6,500 jobs alone over the next few years.

⁶⁰ 19% of all job vacancies were in digital technologies from Jun 2015-2016. Business and finance was second with 16% of all vacancies. Burning Glass technologies: Labour Insight data on job postings, year to June 2016

⁶¹ EEF Skills report 2016



It is evident that Oxfordshire employers are proving resilient to skills gaps with only 18 per cent saying the skill disparity creates a major impact to their business. Just under half of Oxfordshire employers surveyed say their staff are overqualified for their current role and nearly a third say staff are under-utilised (where both qualifications and skills are more advanced than their current role). Employers give the top two reasons for this issue in Oxfordshire as 'the working hours of their current role suit them better' or 'they are not interested in taking on more responsibility', so while workers have more qualifications and skills than those needed for their role they are happy not to fully utilise them. What is more, 88 per cent of employers see under-utilisation as an advantage and so are happy to retain the status quo.

Employers have a key role in training their workforce. According to the UKCES' recent Employer Skills Survey 2015, 69 per cent of employers invest in training for their staff; up from 65 per cent in 2011. However, this means just under a third of employers do not invest in any training. The number of days training days provided to employees has fallen from 7.8 to 7.1 days. While small to medium sized firms make up the bulk of businesses and are a key driver of growth research suggest they invest less in training than larger firms.

What is clear is all education and skills providers - including schools, colleges, public and private agencies and trainers, the county's universities, voluntary sector and, employers have a role to play in meeting our skills challenges and maximising Oxfordshire's potential.

Summary of the issues and challenges

The infographic consists of 12 challenge cards arranged in a grid. Each card features a white icon on a colored background, followed by a title and a brief description of the challenge.

- Green card:** Icon of a person with two smaller people below. Text: Increase **STEM** provision and train more **'technicians'**
- Teal card:** Icon of a person with a question mark. Text: **Young people reach their potential** and are fully aware of the careers in demand locally; career paths into those jobs; and their training options
- Blue card:** Icon of two hands shaking. Text: Move those **disadvantaged** in the labour market closer to potential sources of jobs
- Light blue card:** Icon of three people in a circle with arrows. Text: Close the **mismatch** between the skills of the local work force and those in demand by employers
- Orange card:** Icon of a hand holding a coin. Text: Ensure Government **funding for skills is aligned** to employer need
- Dark blue card:** Icon of a bar chart with an upward arrow. Text: Meeting the demand for **higher level skills**
- Light blue card:** Icon of a person with a lightbulb. Text: Schools need **timely and accurate careers information** about the local economy to provide an effective careers guidance service
- Orange card:** Icon of a thumbs up. Text: Improve **employability skills** of young people
- Dark blue card:** Icon of two people talking. Text: **Employers** have a key role in engaging with education - to offer work experience, school visits, and contribute more to training opportunities
- Teal card:** Icon of two people with speech bubbles. Text: Work more closely with our **provider network** to influence provision
- Green card:** Icon of a megaphone. Text: Promote **traineeships and apprenticeships** among employers and learners

In the short term OxLEP and the Skills Board will develop its collective response to the challenges highlighted above and will focus our resources towards achieving positive outcomes across areas where we can add significant value; in parallel we will work with the many and varying stakeholders that contribute to one or more of the above challenges to help influence their delivery towards addressing these challenges as appropriate.

5.0 Initiatives, programmes and funding to underpin skills objectives

Oxfordshire has several initiatives, programmes and funding streams that will underpin our skills objectives and are working to address some of the challenges:

Strategic Economic Plan (SEP)

Our SEP sets out the long term vision and ambitions for economic growth in the county and builds upon our successful City Deal and Local Growth Fund submissions and is further supported through the ESIF delivery plan. SEP outcomes will be achieved through four wide-ranging programmes, each with priorities to 2020, and a number of key action areas. The programmes are:



People – delivering and attracting specialist and flexible skills at all levels, across all sectors, as required by our businesses, filling skills gaps, and seeking to ensure full, inclusive, employment and fulfilling jobs



Place – ensuring a strong link between jobs and housing growth, and providing a quality environment that supports and sustains growth; and offering the choice of business premises and homes (including more homes that are genuinely affordable) needed to support sustainable growth whilst capitalising on and valuing our exceptional quality of life, vibrant economy and urban and rural communities



Enterprise – emphasising innovation-led growth, underpinned by the strength of Oxfordshire's research, business collaboration and supply chain potential; recognising and reinforcing the significant contribution made by all sectors, all parts of Oxfordshire and all types of business



Connectivity – enabling people, goods and services to move more freely, connect more easily; improving broadband and mobile coverage and capacity; and providing the services, environment and facilities needed by a dynamic, growing and dispersed economy.

Its 'People' priorities to 2020 include:

- understanding – and responding to – the aspirations and frustrations of young people as they seek to build their lives and their careers in Oxfordshire;
- improving schools' performance, particularly at A level where the performance of Oxfordshire's state schools is below the national average;

- developing Science, Technology, Engineering and Maths (STEM) skills among Oxfordshire's young people;
- ensuring the skills provision is aligned more effectively with the needs of employers;
- persuading people of the genuine potential benefits (in people terms) linked to "good economic growth"; and
- emphasising the importance of people as well as firms in terms of inward investment – Oxford has plenty of firms already that will grow fast if they can recruit and retain the right people, including through international recruitment.

European Structural Investment Fund (ESIF)

Oxfordshire has submitted its first European Structural and Investment Fund (ESIF) Strategy which sets out proposals for the use of the circa £16 million European funds notionally allocated to Oxfordshire for the period 2014-2020. Government has recently confirmed its commitment to the ongoing delivery of the ESIF programme beyond Brexit.

European Social Funds (ESF) account for 50 per cent of that total to support social inclusion and skills initiatives, with a similar amount of European Regional Development Fund (ERDF) supporting innovation, enterprise and higher level skills. A further circa £3 million has been designated to the European Agricultural Fund for Rural Development. It is designed to boost our ability to innovate, support business growth and job creation, and provide opportunities for residents throughout the County to participate in our high quality labour market. Oxfordshire's ESIF is based on clear principles:

- A rationale based on analysis of prevailing socio economic conditions and opportunities for medium and long term growth and development, blended with the activities possible using EU funds;
- Close integration with existing initiatives, programmes and strategies, with the intention of complementing and adding value to those with the strongest growth and employment potential;
- Concentration and targeting of funds to those areas and sectors with the greatest potential;
- The goal of increasing internal integration of the Oxfordshire economy, strengthening relationships and interactions between local businesses, start-ups and knowledge centres;
- The goal of contributing to the overcoming of barriers to growth and employment development, in particular by improving communication flows and networking, and by improving the availability and nurturing of the skills base needed;

- The goal of tackling social exclusion through interventions integrated so far as possible with the broader growth and innovation strategy, not in isolation;
- Contributing to the preservation of the natural and environmental assets of the county, with a focus on identifying and supporting innovation based responses to environmental challenges and opportunities to support transition to a low carbon economy;
- Embedding sustainability and equality of opportunity throughout the programme.

The overall goal of the ESIF strategy is to support innovation driven growth for Oxfordshire and fully embraces the need for our programme to be focused on a limited set of priority outcomes where interventions can add greatest value.

ESIF will be supporting fewer, larger projects that make a strategic difference avoiding spreading limited ESIF resources too thinly - ESIF skills related funding will be prioritising:

- increasing the supply of the specific skills needed by priority sectors through support for traineeships, apprenticeships and qualifications particularly at higher levels;
- using our skills and employment funds primarily to bring together labour market supply and demand, addressing sectors with the greatest skills shortages and targeting those with the potential to fill them;
- specific provision for young people at risk of becoming 'NEET' (not in employment, education or training), focused transitions between different stages in education, training and employment;
- a community grants scheme to channel funds through our innovative social enterprise sector, seeking to experiment with new, locally driven solutions to worklessness.

Strategic Environmental and Economic Investment Plan for Oxfordshire (SEEIP)

The SEEIP's main objective is to place the environment or natural capital at the heart of its economy with environment investment with strategic priorities in:

- Growing the green economy in Oxfordshire;
- Enhancing the quality and resilience of urban areas;
- Improving management of land to reduce flood risk, enhance water resources, and promote biodiversity;
- Promoting and enabling access to the countryside;
- Engaging people in the environment and enabling more sustainable lifestyles.

The SEEIP highlights the importance of the Low Carbon energy industry, currently employing 8,800 (7% of Oxfordshire's economy) and with the potential to generate



an additional investment of £250 million a year, a further 8,700 jobs and add economic value to the tune of around £1 billion GVA to 2030.

Its skills objectives support a productive and mobile workforce, achieved by improving health and well-being of the population through improvements to accessible green space and a range of sustainable transport options for efficient commuting.

Culture, Creativity, Heritage, Tourism Investment Plan (CCHTIP)

The investment in culture, the creative sector, heritage and tourism will provide for talent development and business growth for competitive and innovative CCHTIP businesses. One initiative, Oxfordshire Creates, is to provide the most connected creative and knowledge hub and network in the UK to lead to knowledge and technology transfer, research and development for culture, heritage and education, broker links between employment and talent, and ensure the sector is open to talent from different backgrounds.



Tourism is big business in Oxfordshire welcoming 27 million visitors a year and providing around 32,000 jobs. It is in the top 10 for inbound visitors although only a tenth of these translate their visit into an overnight stay.

There is a call to connect productivity and innovation in CCHTIP to destination management and the visitor experience offer, using digital technology and creativity to improve the visitor experience – exploring new ways to unlock capacity, expertise and ideas in a Collaborative Innovation programme.

CCHTIP puts forward a number of projects that focus on raising and developing skills and creating hubs and networks to make Oxfordshire a more attractive setting for business and development.

Innovation Strategy

This document sets out a strategy to better understand, increase, and make use of innovation in Oxfordshire. The strategy is structured around ten key themes, each of which underpins innovation across all sectors:

1. Understanding the Ecosystem
2. Strengthening our Networks
3. Building Innovation Spaces
4. Reinforcing the Science and Research Base for Innovation
5. Innovation for All
6. Innovation for Social Good
7. Nurturing Talent and Developing Skills
8. Attracting Significant Business
9. Attracting Capital
10. Embedding Innovation in the Ecosystem

The objectives of these themes underpin our strategic skills priorities with particular focus on the seventh theme which aims to foster a range of skill sets including entrepreneurial and management skills.

Area Review outcomes

In 2016, the second wave of area reviews for post-16 education and training provision got underway with Oxfordshire included in the Thames Valley area review alongside Berkshire and Buckinghamshire.

The scope of the review encompassed FE colleges including Activate Learning and Abingdon and Witney College in Oxfordshire, The Henley College, a sixth form colleges as well as local authorities and LEPs:

Nine recommendations were agreed by the steering group at their meeting in May 2016 with four pertinent to Oxfordshire FE delivery. These were:

- Abingdon & Witney College to remain as independent college and focus on development of the offer. The college will, in the longer term, consider entering into a partnership with Ruskin College, Oxford and/or Berkshire College of Agriculture.
- Activate Learning to remain as an independent college, re-organise delivery internally to develop efficiencies and improve both the offer and learner outcomes and continue with plans for growth through planned acquisitions, collaborative partnerships and wider deployment of shared Group Services.

- Berkshire College of Agriculture and The Henley College to pursue plans for a merger. If this does not go ahead, Berkshire College of Agriculture should explore collaboration with Abingdon & Witney College, which has the potential to develop an improved and sustainable land-based offer.
- The LEPs in the Thames Valley area to develop their proposal for an Institute of Technology that will deliver high level professional and technical learning in Digital and STEM areas to support a wide range of employment sectors.

OSB and OxLEP will continue to support our FE providers as they explore these recommendations.

Community Employment Plans (CEPs)

Community Employment Plans (CEPs) support people to access job opportunities arising from new development. They include employer-led initiatives relating to both the construction phase for all large developments, and the end user phase of large commercial development, and include measures such as apprenticeships and training schemes, local procurement and links with schools and colleges. A number of CEPs are already in place across Oxfordshire (see below for an example), and more are in the pipeline. The LEP will support local authorities to include such proposals as part of their local plan policies and supporting text.

Westgate Community Employment Plan

In 2013, we successfully agreed with Land Securities the development of a Community Employment Plan for the Westgate shopping centre redevelopment. The key objectives of the Westgate CEP are:

- to procure supply chain locally
- to provide Oxfordshire residents with sustainable jobs
- to equip people with the skills to be successful, with a particular focus on youth and longer term unemployed groups
- to give communities the opportunity to grow for good

Two plans have been agreed for the Westgate development, covering the Construction and End User phase. 750 outcomes have been agreed across the two CEPs, taking account of the length of the build plus a sensible period of time post opening of Westgate Oxford to ensure optimum outcomes for the local community.

There have been a number of successes within the current Construction CEP:

- 50 people attended pre-employment training, 11 people attended site work experience, and 3 people have been employed on the site;



- 2 individuals employed as a result of the CEP and Laing O'Rourke's involvement with City of Oxford College;
- 18% of those employed on the site have Oxfordshire postcodes;
- 39.5% of procurement to date awarded from within the local supply chain;
- Significant attendance at local career events such as Career Fest, etc;
- Land Securities and Laing O'Rourke have become lead partners supporting the future School of Construction and Science Technology Engineering and Maths (STEM) Centre on the City of Oxford Campus at Blackbird Leys;
- Laing O'Rourke is currently supporting University Technical College Oxfordshire with its Project Base Learning programme.

Each CEP is measured and monitored as part of ongoing dialogue through monthly meetings with a variety of key external and internal stakeholders. All progress is shared regularly with Oxford City Council.

6.0 The way forward – revised strategic priorities

Our ambition is to secure the skills base needed by the local economy to support growth and the transfer of new ideas across our economy through an **aligned and responsive local skills infrastructure** that addresses the skills required by our growing economy.



Refreshed Strategic Priorities:

SP1: To meet the needs of local employers through a more integrated and responsive approach to education and training: developed in partnership with our provider network, to encourage more training provision in identified priority sectors - both current and projected.

SP2: To ensure that young people are prepared for the world of work through delivery of high quality CEIAG, by well-informed Careers leaders in schools supported by qualified careers advisers. This will include multiple encounters with employers and use of up to date local labour market information.

SP3: To address Oxfordshire's tight labour market and skills shortage areas by

- i) ensuring those marginalised or disadvantaged from work, are moved closer to the labour market
- ii) supporting and encouraging older workers to consider vacancies in areas of skills shortage

SP4: To support the government's agenda to increase the number of apprenticeships offered, and apprenticeship uptake, particularly within small to medium sized businesses.

SP5: To investigate how Oxfordshire as a place of employment is promoted to graduates in our HE organisations and how more graduates can be retained to meet the demand our businesses have for higher level skills.

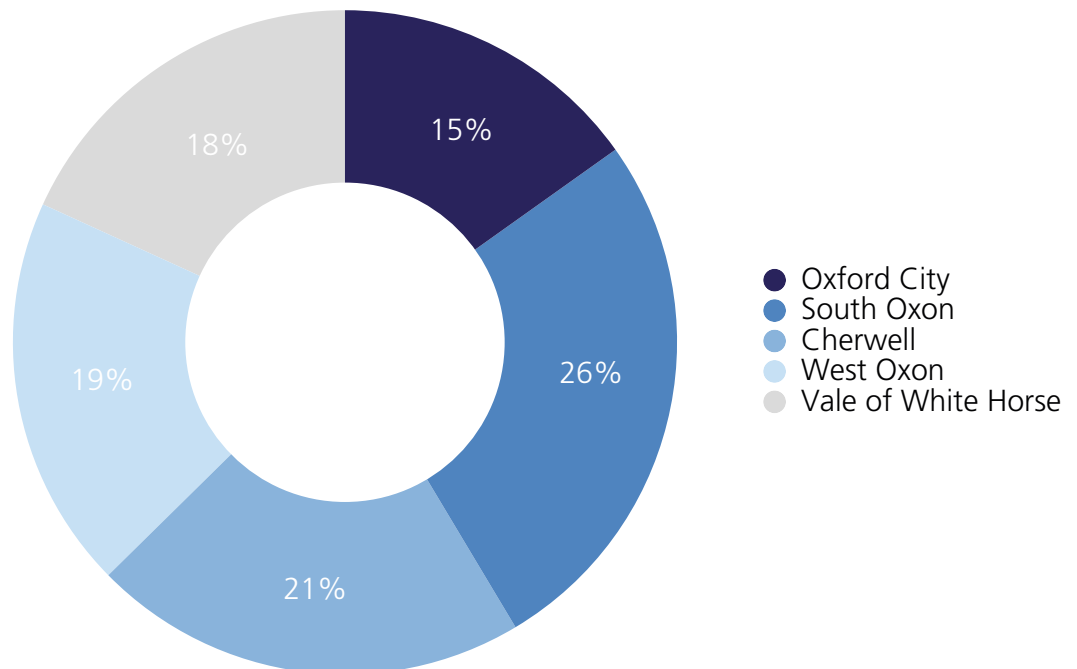
Achieving our ambitions will require concerted effort from a wide range of partners, including businesses, schools, further education colleges, the higher education sector, private training providers, local authorities, the LEP and Skills Board, and others. We invite each organisation involved in skills development locally to develop its' own action plan that aligns to the ambitions of this strategy.

Appendices

Research findings: Enterprise and Employment

89 per cent of businesses in Oxfordshire are micro businesses employing less than nine staff⁶² with a quarter of businesses based in South Oxfordshire shown in Figure 1. Less than 1% of our businesses employ more than 250 staff, with many of the largest organisations based in Oxford City.

Figure 1: Businesses by location, 2014



Nearly 6,400 of businesses in Oxfordshire (circa 21 per cent) operate in the professional, scientific and technical sector, which is significantly above national average.

Figure 2: Businesses by sector, 2014

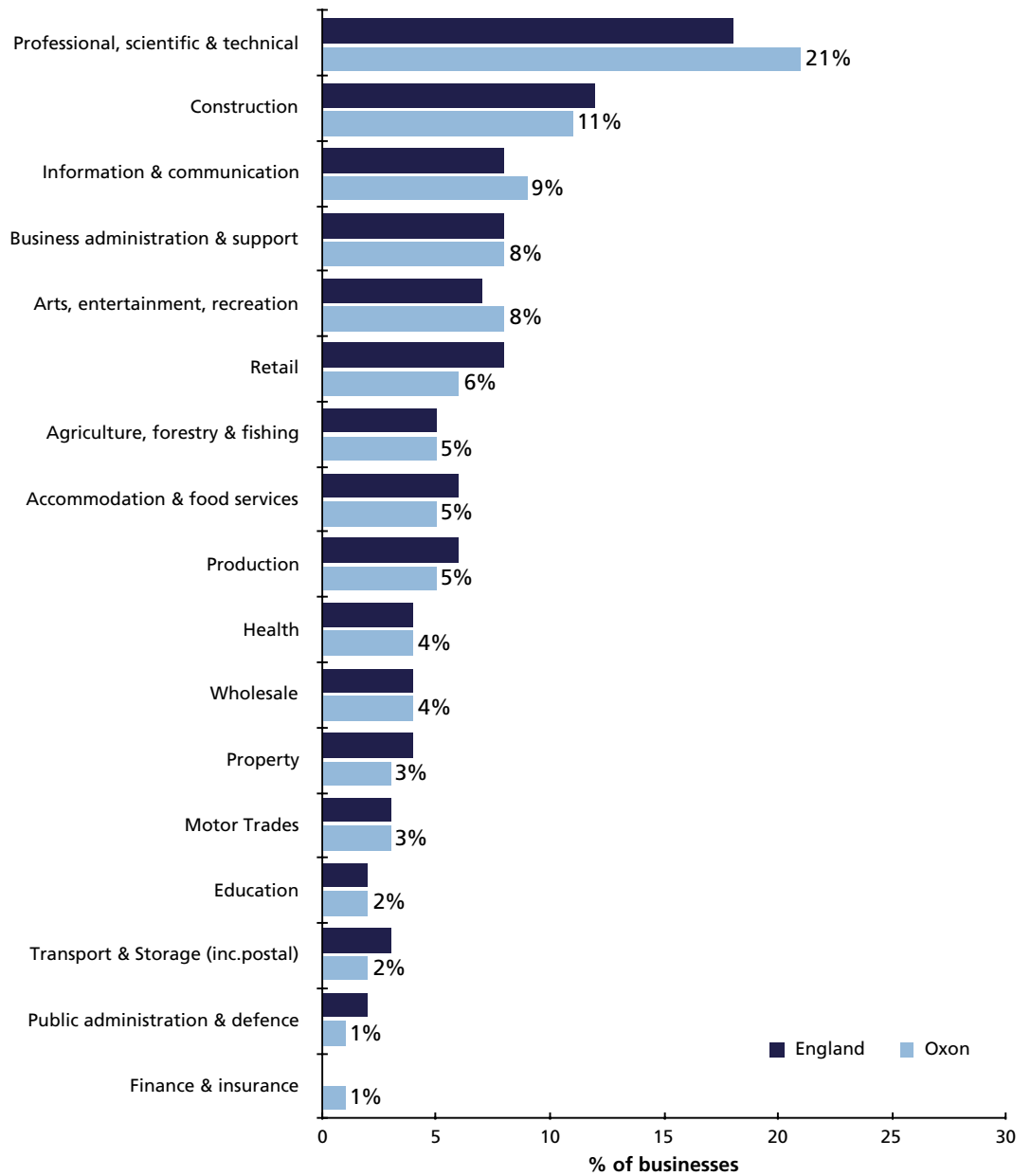
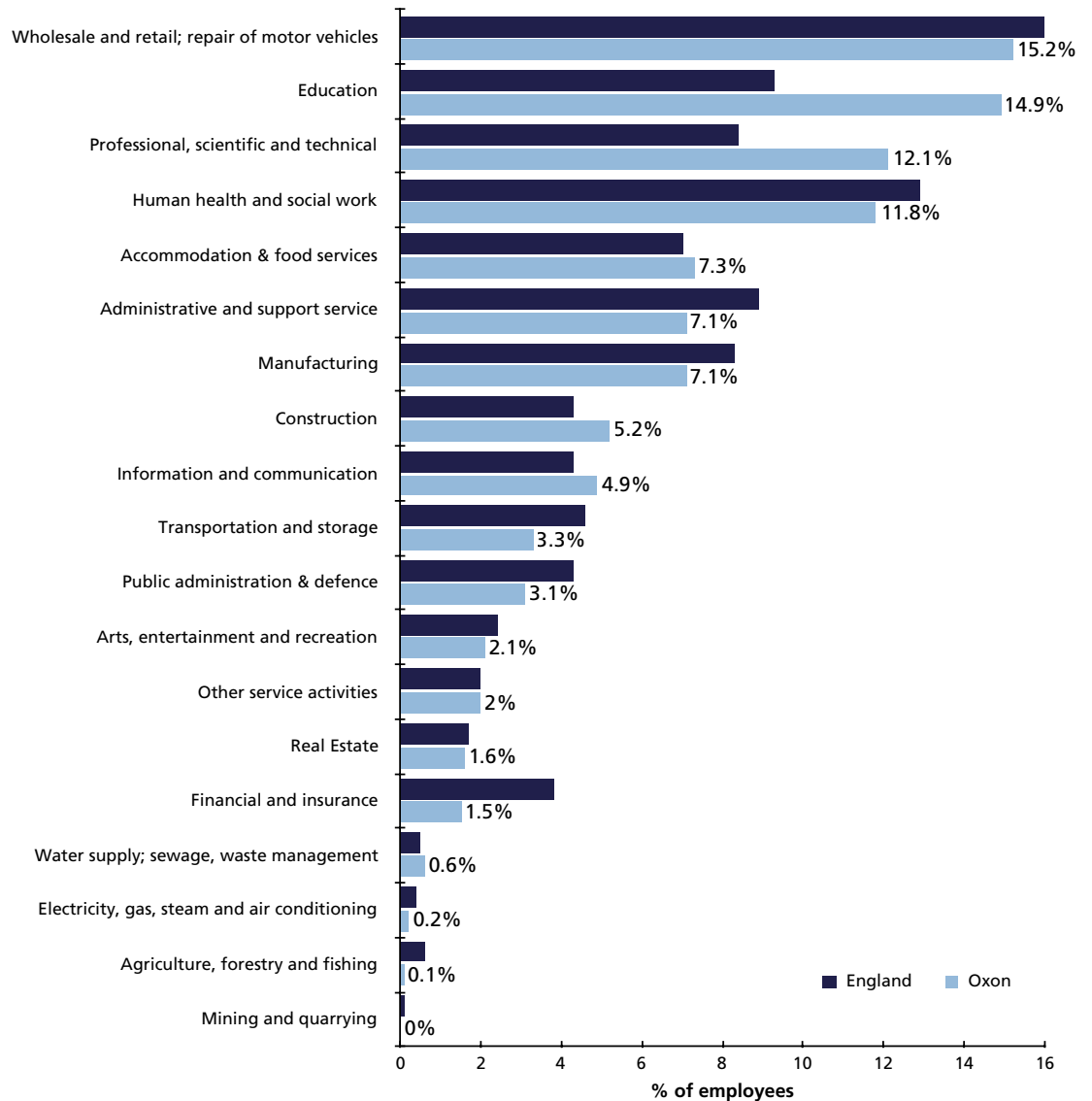


Figure 2 shows the percentage of business enterprises by sector. Over a fifth of enterprises fall within the Professional, scientific & technical sector.

Figure 3: Employment by sector, 2014

The UK Business Register lays out the number of employees in each industry sector⁶³. Oxfordshire has higher proportions of workers in the education; professional, scientific and technical; accommodation and food; construction and ICT sectors than at national level, demonstrated in figure 3 and additionally very robust wholesale and retail and health and care sectors.

The employee breakdown for each district shows where there are pockets of industry in figure 4 overleaf. Employees engaged in education are centred on Oxford whereas professional, scientific and technical roles are mainly found in South and Vale. Figure 4 shows the top ranking industries in each of the City and districts.

Figure 4: Percentage of resident workforce in top five industries per district, 2014

Cherwell	% of employees
Retail	12.3
Manufacturing	11.7
Health	10.0
Business admin & support services	8.8
Professional, scientific & technical	7.9

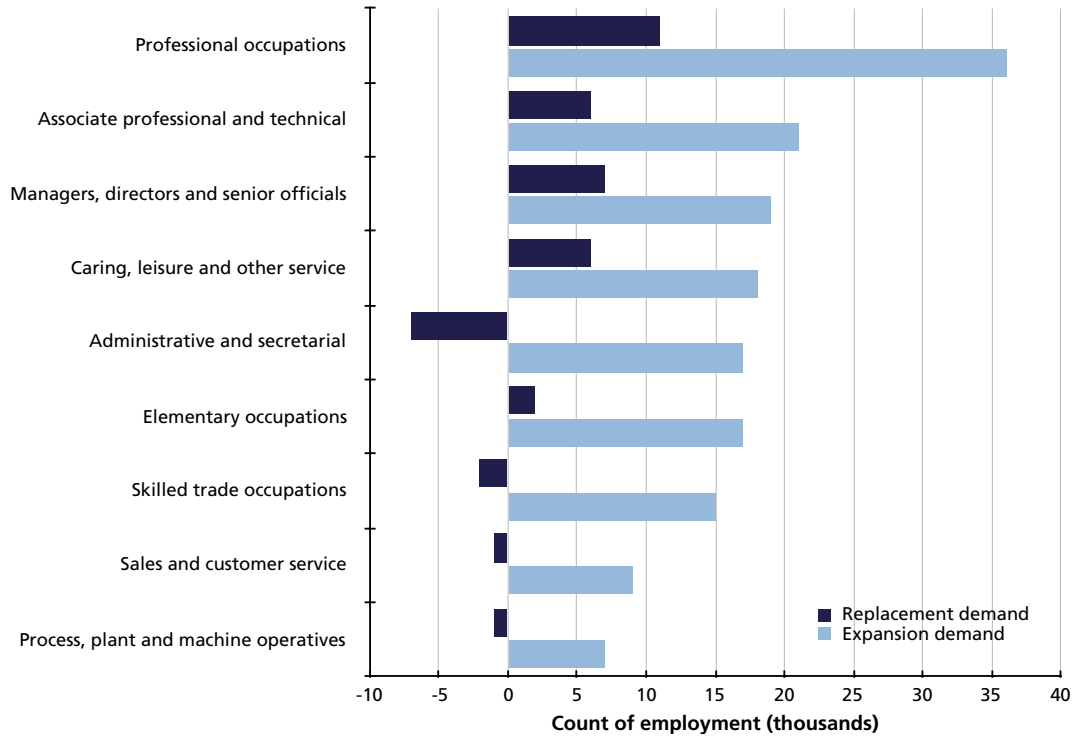
Oxford	% of employees
Education	27.6
Health	17.3
Professional, scientific & technical	8.7
Retail	8.3
Accommodation & food services	6.8

South Oxfordshire	% of employees
Professional, scientific & technical	20.7
Retail	9.6
Accommodation & food services	8.9
Education	8.6
Business admin & support services	7.9

Vale of White Horse	% of employees
Professional, scientific & technical	17.4
Education	10.8
Health	9.4
Business admin & support services	8.7
Retail	7.2

West Oxfordshire	% of employees
Manufacturing	12.7
Retail	10.3
Education	9.5
Health	9.2
Accommodation & food services	8.7

Figure 5: Employment projections of expansion and replacement demand by occupation type, 2014 to 2024



Source: UKCES Working Futures, 2014-2024

The Working Futures Survey projections show which industry sectors will grow or decline to 2024, as per figure 5. Please note Working Futures do not take into account local idiosyncrasies, investment proposals or closures.

Our Priorities



people

Delivering and attracting specialist and flexible skills at all levels, across all sectors, as required by our businesses, filling skills gaps, and seeking to ensure full, inclusive, employment and fulfilling jobs;



place

Ensuring a strong link between jobs and housing growth, and providing a quality environment that supports and sustains growth; and offering the choice of business premises and homes (including more homes that are genuinely affordable) needed to support sustainable growth whilst capitalising on and valuing our exceptional quality of life, vibrant economy and urban and rural communities;



enterprise

Emphasising innovation-led growth, underpinned by the strength of Oxfordshire's research, business collaboration and supply chain potential; recognising and reinforcing the significant contribution made by all sectors, in all parts of Oxfordshire and all types of business;



connectivity

Enabling people, goods and services to move more freely, connect more easily; improving broadband and mobile coverage and capacity; and providing the services, environment and facilities needed by a dynamic, growing and dispersed economy.