

# **Oxfordshire Skills Strategy to 2020:** *Building a responsive skills support system*





Cover photo feat. High Spec Composites in Caversfield near Bicester

# Foreword

There has been no better time for Local Enterprise Partnerships (LEPs) to demonstrate how they will help deliver economic growth; that is what Government has charged them with. The Oxfordshire LEP has responded by developing its Strategic Economic Plan to 2030<sup>1</sup>, the strength of which will influence Oxfordshire's Local Growth Fund allocations from 2015<sup>2</sup>.

Perhaps for the first time Oxfordshire is setting an ambitious growth agenda with our Strategic Economic Plan seeking to:

- Grow Oxfordshire's world-class technology clusters leading to a Gross Value Added uplift of £6.6 billon at constant prices
- Create 85,600 new jobs by 2031
- Attract a minimum of 30 new high value international investments per year.
- Lever in c£2.2 billion of private sector investment
- Deliver 93,560 to 106,560 new homes by 2031
- Invest c£65 million to support Superfast (25mb/s +) and Ultrafast (100mb/s+) broadband speeds across the county that support innovative knowledge rich businesses and communities.
- Deliver c£815 million of highways infrastructure improvements and over £500 million of rail infrastructure improvements
- Invest £125 million in flood alleviation
- Increase by 15% the amount of Skills Funding Agency funding that supports our STEM sectors to match the share of these businesses in the economy.
- Increase the proportion of the working age population qualified to level 2 and above to 90%.
- Increase school attainment
- Provide an additional 1150 apprenticeships for young people in our priority and growth sectors.
- Grow Oxfordshire's green economy and natural capital.

Clearly growth presents significant opportunity, but also significant challenge, to an economy struggling to service existing demand. Oxfordshire needs a skills infrastructure that is aware of and responsive to sectors of labour and skills shortages and planned growth and development well in advance of its arrival.

The diversity of Oxfordshire's job market and labour shortages in some of the county's business sectors offers a golden opportunity for jobs to be available for those furthest from the labour market – but this cannot be achieved without specialist and on-going support to assist residents to overcome barriers to employment.

<sup>&</sup>lt;sup>1</sup> Oxfordshire LEP Strategic Economic Plan, March 2014 - submitted to Government. Response from Government due in April with the Local Growth Fund offer expected in July 2014.

<sup>&</sup>lt;sup>2</sup> The key principle is that Growth Deals will be a partnership between the Government and Local Enterprise Partnerships, where the Government will respond to the offers made by Local Enterprise Partnerships in pursuit of the shared objective of growth. The Government and Local Enterprise Partnerships will negotiate Growth Deals on the basis of the Local Enterprise Partnership's Strategic Economic Plan.

Skills development has always been a core priority for the Oxfordshire LEP; in recognition that skills play a critical role in economic growth. A well-trained workforce is a pre-requisite for a strong and sustainable economy and the life blood of every business and organisation.

This Skills Strategy builds on the work of the Oxfordshire Skills Board which has been working over the past two years to transform the skills landscape. Much has been achieved. For example, record numbers of young people have started an apprenticeship in Oxfordshire over the past year and there is a wider choice of good quality, local apprenticeships than ever before.

Realising our ambition will require a step change in approach, attitudes, focus and aspiration from partners, but with their support and active participation, this Skills Strategy will support:

- A workforce that is aligned to employers needs by a skills system that places employers and well informed individuals at its heart
- A training and education sector that is more flexible and responsive to employer needs and produces employment-ready young people
- Integrated, seamless co-ordination of services to young people designed to align support to ensure young people are successfully transitioned into appropriate training, further education, or employment opportunities appropriate to their abilities, ambitions and future aspirations.

If Oxfordshire is to achieve its growth ambition in a sustainable manner that maximises local employment opportunities we need to encourage greater alignment between the three elements of the skills offer:

- Young people we must better inform and encourage a greater number of young people into skills training provision that supports our growth sectors
- Providers we must encourage more training provision in Oxfordshire's key economic and growth sectors to meet employer demand
- Employers we must encourage employers to become more engaged with the skills agenda.

This strategy sets out the rationale and key interventions required for Oxfordshire to achieve its growth ambitions in a sustainable way that offers opportunity for all who are able to participate in our economy.

# Adrian Lockwood, Chair, Oxfordshire Skills Board and member of the Oxfordshire Local Enterprise Partnership

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### **Background**

Oxfordshire 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<sup>3</sup>' Oxfordshire has outstanding and unique 'big science' and technology-based credentials that drive economic growth, locally, nationally and internationally. The county is one of the best-performing and most innovative areas in England and has unique assets to support growth in the national economy. However, we have some in our community that are unable to fully participate in our economy, hindered by lack of confidence, aspiration and skills.

It is within this context that the Oxfordshire Skills Board has developed its first Skills Strategy. It has one simple aim: to improve skills locally to the benefit of local residents and businesses alike.

This Strategy has been developed from analysis of the significant body of evidence that exists<sup>4</sup> including the seminal report, 'The Oxfordshire Innovation Engine: Realising the Growth Potential'. Paramount in its preparation has been the need to ensure this skills strategy aligns to, and with, the emerging Oxfordshire Strategic Economic Plan (SEP), the objectives of which are supported by the European Structural and Investment Fund Plan (ESIF) and our recently agreed City Deal (see page 12 below). Taken together, these initiatives support Oxfordshire's innovation led growth ambitions, providing access to sources of funding for deliver targeted programmes that improve skills and employment prospects.

The Skills Strategy sets out the key priorities for skills development that address our skills challenges to 2020. This Strategy is not accompanied by an action plan. The purpose of the strategy is to provide a clear direction to skills commissioners, our provider networks and employers on the skills priorities required to drive sustainable growth. It will become a vital tool in setting priorities and allocating resources and funding.

The Oxfordshire Skills Board is committed to working closely with partners and stakeholders to ensure delivery against our ambition.

<sup>&</sup>lt;sup>3</sup> Centred around the leading universities of Oxford, Cambridge and the London universities

<sup>&</sup>lt;sup>4</sup> Research papers and evidence can be viewed at the websites of the Oxfordshire Skills Board and the Oxfordshire Local Enterprise Partnership.

### **Executive summary**

Recent policy initiatives such as our recently agreed City Deal, and emerging ESIF strategy and SEP have focussed partners on identifying our skills priorities required to support and drive Oxfordshire's growth ambition.

### **Strategic Priorities to 2020:**

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 priority sectors - both current and projected - to meet the needs of employers or to train future entrepreneurs, particularly in science, technology, engineering and mathematics (STEM).

*SP2: Creating the 'skills continuum' to support young people through their learning journey:* the ambition is to develop integrated, seamless services that support young people through school and on into training, further education, employment or business, where they understand the full breadth of career options, including local demand, and the training path to succeed in that career.

SP3: Up-skilling and improving the chances of young people and adults marginalised or disadvantaged from work, based on moving them closer to the labour market.

**SP4: To increase the number of apprenticeship opportunities**, particularly those offered by small to medium sized businesses.

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

### 1 Introduction

1.1 The Strategic Economic Plan for Oxfordshire<sup>5</sup> has the following vision:

'By 2030 Oxfordshire will be recognised as a vibrant, sustainable, inclusive, world leading economy, driven by innovation, enterprise and research excellence.'

1.2 Nowhere is better positioned to deliver smart, sustainable and inclusive growth than Oxfordshire. Our economy is truly knowledge based. We possess world class energy research clusters and a thriving environmental innovation sector. Our labour market is hungry for skills at all levels. Our economy is growing. Our district councils and Oxford City Council have, or are developing, Local Plans that will lead to significant new residential and employment-generating development in Oxfordshire up to 2031. We contribute hugely to the country's output at the same time as being custodians of outstanding natural assets.

1.3 Yet we could deliver much more. Our growth potential is inhibited by inadequate infrastructure and poor connectivity. Business success is held back by lack of skilled workers; whilst at the same time we have stubborn pockets of long term unemployment, concentrated in particular localities, often where school performance is also struggling. Our businesses lack access to adequate sources of finance, our transport system often slows us down. Affordable housing is at a premium, some rural areas are poorly served with essential services, whilst broadband connectivity is fragmented... These challenges are being addressed through a variety of policy led interventions brought together under Oxfordshire's Strategic Economic Plan.

1.4 For Oxfordshire to boost its economic advantage and deliver future prosperity in a globally competitive world, local residents need to be better skilled than ever before and local employers need people with the right skills set. Research from the UK Commission for Employment and Skills forecasts a continued trend of employment growth in higher skilled occupations, such as managers, professionals and associate professionals<sup>6</sup>. 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 practice and quality products. For the county, it represents sustained future prosperity.

1.5 Historic perceptions of Oxfordshire point to a county coasting, often fragmented, and a county unclear in its growth ambitions. Oxfordshire stakeholders have now come together to create a vision for the future to release our potential. Our Local Enterprise Partnership has the active involvement of stakeholders from all sectors, and is well advanced in designing the routes to a successful future, for example by having successfully negotiated a City Deal<sup>7</sup> with Government which will deliver a package of measures that will support businesses to seed and grow and jobs to be created.

<sup>&</sup>lt;sup>5</sup> The Oxfordshire Strategic Economic Plan 2030 Executive Summary March 2014

<sup>&</sup>lt;sup>6</sup> Working Futures 2010-2020, UKCES, December 2011

<sup>&</sup>lt;sup>7</sup> Oxford and Oxfordshire City Deal was announced by the Coalition Government on 30<sup>th</sup> January 2014.

1.6 Oxfordshire's economy has a number of highly advantageous features. Oxford was recently identified amongst the top five Technology Innovation Ecosystems in the world<sup>8</sup>. It has one of the most substantial, distinctive and important clusters of research based, high value business activities in Europe, including scientific research and development, higher education, health, car manufacture and motorsports, and publishing. 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. Our world-class universities and research-intensive science clusters are driving that innovation with cutting-edge research and business collaboration.

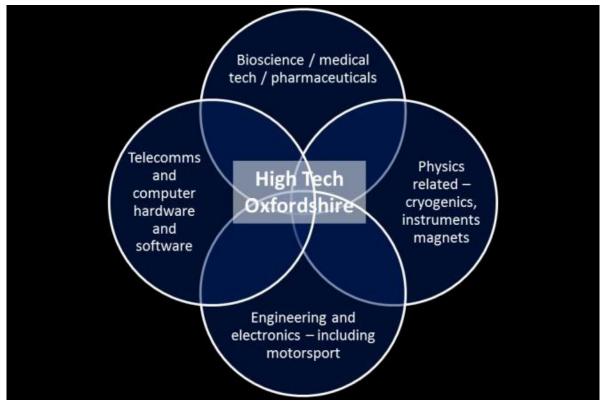


**Diamond Light Source** 

1.7 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 and publishing and, environmental technologies. Indeed, of the 'eight great technologies<sup>9</sup>' 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.

<sup>&</sup>lt;sup>8</sup> MIT Skoltech Initiative, Technology Innovation Ecosystem Benchmarking Study: Key findings from Phase 1, Ruth Graham, 2013

<sup>&</sup>lt;sup>9</sup> 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.



### Figure 1: High Tech Oxfordshire – core overlapping technologies

Source: The Oxford High Technology Cluster: Realising the growth potential, SQW, October 2013

1.8 Central to the continued transformation of Oxfordshire's knowledge based economy<sup>10</sup> to a world leader in technology and business innovation, is the need for higher skills attainment. Of course, the demands of the wider local economy cannot be ignored in particular the needs of the service sector such as care, where significant growth is expected over the coming years<sup>11</sup>. The county also has a rich and thriving arts, culture and tourism sector with scope to drive economic growth.

1.9 The county's environment and heritage are assets in the success of the county's economy. Oxford is a global brand known for its academic excellence and historic significance. The Ashmolean Museum is the world's oldest public museum. Blenheim Palace is a world heritage site. The market towns and the three Areas of Outstanding Natural Beauty (the Cotswold, North Wessex Downs and the Chilterns) are key natural assets but also important economic assets. It is estimated that Oxfordshire's visitor and cultural sectors contribute approximately £3.1billion to the local economy<sup>12</sup>.

<sup>&</sup>lt;sup>10</sup> 51% of Oxfordshire's economy is based in knowledge intensive industries and services, British Registration and Employers Survey, 2011, using the Eurostat NACE Rev.2 Classification High tech and medium-technology sector.

<sup>&</sup>lt;sup>11</sup> Working Futures 2010-2020, UKCES, December 2011

<sup>&</sup>lt;sup>12</sup> Economic Impact of Tourism in Oxfordshire 2012, Experience Oxford

1.10 The Oxfordshire Skills Board and LEP recognise that the inherent potential in the local economy requires focused effort on a number of fronts including, above all, maximising the potential of our people.

### 2 The national and local policy context

2.1 In the last few years the Coalition Government has introduced a substantial programme of reform to the education, skills and training sectors. The Government's skills strategy, 'Rigor and Responsive in Skills', places vocational training at the heart of the skills system.<sup>13</sup> Building on the role and scope of apprenticeships as a route to a skilled career and, placing a new emphasis on pre-employment training through the introduction of traineeships, it's strategy aims to make the skills system more 'rigorous and responsive' to the demands of employers and learners by 'putting them more directly in the driving seat, and to create incentives for all training providers to deliver excellent programmes'. Other priorities include support for those who lack basic skills; encouraging employers to develop the skills of their workforce and, getting individuals to be more informed of their choices by accessing independent careers advice and guidance.

2.2 In addition, the 'raising of the participation age<sup>14</sup>' means that after completing formal education at sixteen, young people have a duty to participate in education or training until they turn 17. From September 2015, this will rise to 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.

The County Council has a duty to 'track' all young people in Years 12-14 on behalf of the Department for Education to monitor who is participating in learning and identify vulnerable groups that may need additional support to access opportunities. This means obtaining data from all learning providers about who is on which provision and what they progress in to at the end of those courses. Oxfordshire County Council must also ensure there are enough learning places available and encourage all young people to participate in learning, especially those from vulnerable groups.

2.3 Additionally 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 guidance and to ensure that their Year 11 leavers have a suitable offer of learning.

2.4 Oxfordshire Skills Board was set up in 2011 and brings together public and private sector employers, secondary, further and higher education skills providers and stakeholder groups. Working closely with the Oxfordshire Local Enterprise Partnership, it is driven to achieve improvements in the skills available to Oxfordshire's employers and the learning opportunities available to students, residents and workforce.

2.5 The Skills Board is committed to brokering

• better understanding of skills needs and priorities across Oxfordshire

<sup>&</sup>lt;sup>13</sup> ' Rigour and Responsiveness in Skills, published<sup>13</sup> jointly by the Department for Business Innovation and Skills and the Department for Education, April 2013

<sup>&</sup>lt;sup>14</sup> 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 will extend until their 18th birthday.

- strengthened links between business and providers of learning
- improved skills and business support provision to employers
- stronger links with county and regional employment and skills bodies
- raised aspirations and economic wellbeing.

### City Deal

2.6 Locally, the 'City Deal' has provided renewed focus on the skills agenda and its vital role in supporting innovation led growth. Agreed in January 2014, the Oxfordshire City Deal will deliver a 'transformative' package of measures<sup>15</sup> to support economic growth and jobs for the county. This process has led to stronger collaborative working arrangements between the public, private and education sectors corralled behind a vision to drive Oxfordshire's innovation led growth potential. The skills element of City Deal includes a commitment to deliver:

- 525 new apprenticeships for young people
- 300 Apprenticeship Grants for Employers
- A new body that will support young people as they transition into the world of work through a number of mechanisms<sup>16</sup>

### European Structural and Investment Fund (ESIF) Strategy

2.7 In parallel, Oxfordshire has submitted its first European Structural and Investment Fund (ESIF) Strategy which sets out proposals for the use of the c£20m European funds notionally allocated to Oxfordshire for the period 2014-2020. European Social Funds (ESF) account for 50% of that total to support social inclusion and skills initiatives<sup>17</sup>, with a similar amount of European Regional Development Fund (ERDF) supporting innovation, enterprise and higher level skills. 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

<sup>&</sup>lt;sup>15</sup> Key features are: a network of 4 Innovation Hubs at Harwell (innovation), Culham (advanced manufacturing), the proposed BioEscalator in Oxford (life sciences) and the Begbroke Innovation Accelerator (advanced engineering); transport infrastructure including Science Transit public transport scheme and accelerate the delivery of 7500 new homes.

<sup>&</sup>lt;sup>16</sup> Through work experience placements, better informed careers information and advice that shows where job opportunities are; improved business-schools links.

<sup>&</sup>lt;sup>17</sup> 50% is the European Regional Development Fund – primarily to support innovation.

- 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

2.8 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.

2.9 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 Economic Plan

2.10 Oxfordshire is finalising its Strategic Economic Plan 2030 (SEP). This sets out the long term vision and ambitions for economic growth in the county. The scale, ambition and deliverability of the SEP will form the basis of Growth Deal negotiations with Government and determine Oxfordshire's allocation from the Local Growth Fund (LGF). £900m of the £2bn national LGF pot will be allocated to LEPs on a formula basis, with the remaining £1.1bn allocated following a process of "competitive tension" where LEPs will bid for funding).

2.11 The SEP's approach to growth builds upon our successful City Deal, and is further supported through the ESIF delivery plan and is founded upon our four thematic objectives:

- I Innovative Enterprise innovation led growth is at the heart of our strategy, underpinned by the strength of our University research and development capacity, business collaboration and supply chain potential
- I Innovative People delivering and attracting specialist and flexible skills at all levels, across all sectors, as required by our businesses, with full, inclusive employment and fulfilling jobs
- I Innovative Place providing both the quality environment and choice of homes needed to support smart growth whilst capitalising upon the exceptional quality of life, vibrant economy and the dynamic urban and rural communities of our county
- I Innovative Connectivity allowing people to move freely, connect easily and providing the services, environment and facilities needed by a dynamic, growing and dispersed economy

All three documents can be viewed at the Oxfordshire LEP website: http://www.oxfordshirelep.org.uk

### 3 Our Labour Market

3.1 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.

### **Research base and universities**

3.2 Underpinning Oxfordshire's strong economy and labour market is the area's very particular strengths in higher education and research. The two universities in the area, the University of Oxford and Oxford Brookes University, are well established. Together they educated over 44,000 students in 2011/12. A significant proportion of students who study at the universities take STEM and medical related subjects which are in high demand. 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.

3.3 The University of Oxford is particularly well renowned. It is rated as the best University in Europe and in the 2013 QS World University Rankings ranked in the top five globally in 18 of the 28 subjects covered, and in seven out of 13 STEM subjects<sup>18</sup>. In 2010/11 the University secured over £325m in grants for STEM and medical research, almost 9% of the UK total. ISIS innovation, the technology transfer company which is a subsidiary of Oxford University, is one of the UK's most prolific and best regarded technology transfer companies.

3.4 The proximity of major research facilities (see below) to the University is unique in Europe and possibly worldwide<sup>19</sup>. 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.

<sup>&</sup>lt;sup>18</sup> Quacquarelli Symonds (QS) University World Rankings.

<sup>&</sup>lt;sup>19</sup> The Oxfordshire Innovation Engine: Realising the Potential, October 2013, SQW

### Oxfordshire Skills Strategy 2020



### **Economic overview**

3.5 Oxfordshire is a significant regional economy, contributing £16.5 billion in 2012 to national output<sup>20</sup>. The LEP area has Gross Value added (GVA) per capita above the national average (£24,900 compared to £21,900). GVA has increased significantly in the last decade or so, and in 2012, the Oxfordshire LEP area had the 4th highest GVA per capita among the 39 LEPs<sup>21</sup>. At the same time, the area has not fully realised its potential, held back by infrastructure limitations, skills shortages and inadequate connectivity<sup>22</sup>. According to the UK Competitiveness Index 2013 the Oxfordshire Local Enterprise Partnership area ranked 6<sup>th</sup> out of 39 LEPs.

3.6 The Oxfordshire LEP area has a strong and well-functioning labour market, demonstrated by high levels of employment, high resident wages, and low levels of economic inactivity. The LEP area has the highest employment rate among LEPs in England. For the period April 2012 - March 2013, 346,600 Oxfordshire residents were in employment - 77.9% of those aged 16-64<sup>23</sup>. Employment is relatively high across the LEP, although there is variation between districts (from 71.5% of working age people in Oxford, to 84.1% in Cherwell). 83% of our residents are economically active - compared to 77% nationally<sup>24</sup>. The county has a well-qualified and highly skilled labour force. 55% of the population is employed in managerial, professional or associate professional roles.<sup>25</sup>

<sup>&</sup>lt;sup>20</sup> ONS Regional Gross Value Added (Income Approach), 2012

<sup>&</sup>lt;sup>21</sup> GVA by Local Enterprise Partnership, 2011-12 - Buckinghamshire Business First

<sup>&</sup>lt;sup>22</sup> The Oxfordshire Innovation Engine: Realising the Growth Potential', October 2013, SQW

<sup>&</sup>lt;sup>23</sup> Annual Population Survey 2012

<sup>&</sup>lt;sup>24</sup> Annual Population Survey, 2012

<sup>&</sup>lt;sup>25</sup> Annual Population Survey, 2012

Industry	Oxfor	Oxfordshire vs	
		% of total	South East
Education	48,600	15.2	above average
Human health and social work activities	39,900	12.5	similar
Professional, scientific and technical activities	36,200	11.3	above average
Retail	32,100	10.0	below average
Manufacturing	24,600	7.7	above average
Accommodation and food service activities	20,900	6.5	similar
Administrative and support service activities	20,200	6.3	below average
Information and communication	17,700	5.5	below average
Construction	12,400	3.9	below average
Wholesale	12,100	3.8	below average
Public administration and defence	11,200	3.5	below average
Transportation and storage	10,400	3.3	below average
Arts, entertainment and recreation	7,600	2.4	below average
Other service activities	6,700	2.1	below average
Motor trades	6,100	1.9	below average
Financial and insurance	5,200	1.6	below average
Real estate activities	4,700	1.5	below average
Water supply, sewage and energy	3,400	1.0	similar
Mining and quarrying	200	0.1	below average
Agriculture, forestry and fishing	100	0.0	below average
Column Total	320,000	100	

### Oxfordshire Skills Strategy 2020

Numbers rounded to nearest 100. Exc farm agriculture.

3.7 There were 320,000 employees<sup>26</sup> in Oxfordshire in 2012

3.8 A key feature of Oxfordshire's economy is that a high proportion of jobs (51%) form part our 'knowledge economy; <sup>27</sup>'associated with high levels of labour productivity and competitiveness in the global economy.

Table 2: Employees in the 'knowledge economy', 2012

	Number of jobs	% of total
High and medium technology manufacturing	13,100	4
High-tech knowledge intensive services	16,000	5
Financial, market and professional	49,400	15

<sup>&</sup>lt;sup>26</sup> This figures includes both full-time and part-time jobs and excludes the self-employed, people on government supported schemes and HM forces.

<sup>&</sup>lt;sup>27</sup> British Register & Employment Survey 2012, using Eurostat definition

Education, health and		
other public	83,600	26
Total	162,100	51
Total jobs in Oxfordshire	320,000	

3.9 This employment structure is reflected in the above average number of people employed in education; professional, scientific and technical activities, and manufacturing when compared to the regional average. The median annual pay<sup>28</sup> for full time employees living in Oxfordshire in 2013 is relatively high at £29,400 (£27,000 in Oxford - £31,300 in the Vale of the White Horse). This is above the national average (£27,400) although slightly below the regional average rate of £29,700.

3.10 Oxfordshire is home to c29,000 businesses: 90% of which are micro businesses employing less than nine staff<sup>29</sup>. Less than 3% of our businesses employ more than 250 staff - we are a small and medium enterprise led economy. Nearly 6,000 of these businesses (c18%) operate in the professional, scientific and technical sector.

3.11 Less than 5,000 of our working age population claim Job Seekers Allowance c.1.1% (Dec 13)<sup>30</sup> - a drop of over 4000 from the peak in April 2009. A challenge of virtual full employment is the ability of employers to find and recruit suitably qualified staff, especially in professional and technical and associate professional level business sectors (level 3 and above) where over 4,000 vacancies exist with just over 400 people seeking those roles<sup>31</sup>. In August 2013 (latest available figure), about 14, 600 people were claiming employment support allowance and other incapacity benefits. Indeed this figure has remained fairly static over the past decade.

3.12 In 2012, 197,900 people were gualified at NVQ4 and above - 47% of residents aged 16-64, the second highest rate among 39 LEPs (only the London LEP area showed a stronger performance). The proportion of the local population gualified at NVQ4 and above has grown strongly in recent years: in 2005 only 31.6% of working age residents was qualified at this level.

3.13 At the same time, the share of the population without any qualifications while comparatively low, at 6.6% of work age residents, still totals nearly 28,000 people<sup>32</sup>. This is significantly below the national average (9.5% for England), although only the 13th best performance among LEPs. There are however some stark spatial variations- in Blackbird Levs in Oxford, 46% of residents lack any qualifications, with a number of other areas characterised by a combination of low skills levels, high unemployment and worklessness. This is reflected in the Index of Multiple Deprivation<sup>33</sup> (2010) which shows certain urban areas of Oxford (Littlemore, Barton, Blackbird Leys, Rose Hill), Cherwell (parts of Banbury) and Vale of White Horse (Abingdon) in the 20% most deprived areas in the country. At the

<sup>&</sup>lt;sup>28</sup> 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. The average income in 2013 was £35,933

**ONS UK Business Activity 2012** <sup>30</sup> Office for National Statistics

<sup>&</sup>lt;sup>31</sup> Office for National Statistics

<sup>&</sup>lt;sup>32</sup> ONS Annual Population Survey

<sup>&</sup>lt;sup>33</sup> 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.

same time, some parts of rural Oxfordshire have been identified as showing relatively high levels of deprivation (Bersinsfield, Brightwell, Cholsey, Faringdon and Hundreds)<sup>34</sup>

## Labour supply

3.14 *Demographic changes*: With low unemployment and inactivity rates, the local labour market is 'tight', making it difficult for employers to recruit suitably qualified staff. 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 science based community which Oxfordshire firms have traditionally drawn on<sup>35</sup>. The profile of the population is changing and 'ageing'<sup>36</sup> with moderate growth in the working age population forecast compared to a significant increase forecast in the older population.

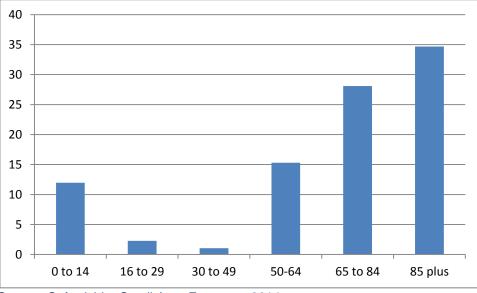


Figure 1: Population Change (net) 2011 to 2020

Source: Oxfordshire Small Area Forecasts 2014

3.15 The number of younger workers (aged 16 to 29) is forecast to increase by 5.6% between 2011 to 2020; with those aged between 30 to 49 years increasing by 1%. The biggest increase in the working age population will be those aged between 50 to 64 years. This contrasts to an increase of 29% in those aged 65 plus; with the numbers of very elderly (over 85%) forecast to increase by 35%.

<sup>&</sup>lt;sup>34</sup> Oxfordshire Rural Community Council

<sup>&</sup>lt;sup>35</sup> The Oxfordshire Innovation Engine: Realising the growth potential', October 2013, SQW

<sup>&</sup>lt;sup>36</sup> Oxfordshire Small Area Forecasts 2014

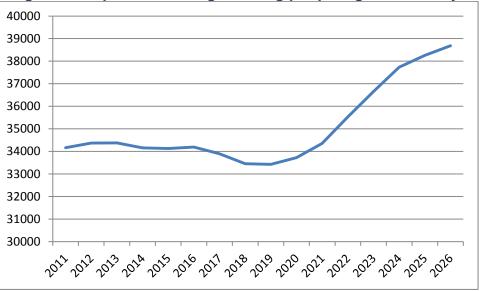
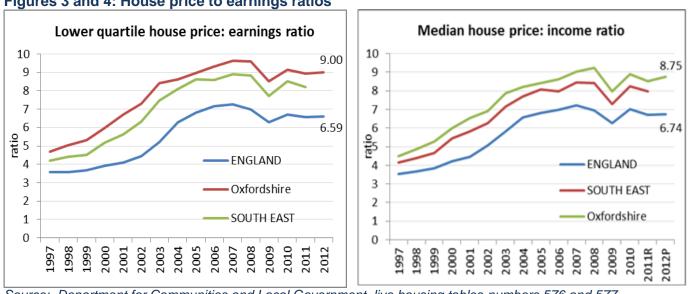


Figure 2: Population change: Young people aged 16 to 19 years

3.16 The number of young people entering the workforce over the period to 2020 will remain fairly static, picking up thereafter.

3.17 House prices: Oxfordshire is an expensive area to live making it difficult for employers to recruit people, especially from lower housing cost areas.

3.18 Although earnings in Oxfordshire are above the national average, the cost of living in the county is also high. House prices are almost nine times higher than annual earnings, with the City of Oxford the least affordable place nationally.



Figures 3 and 4: House price to earnings ratios

Source: Department for Communities and Local Government, live housing tables numbers 576 and 577

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

3.20 *Educational attainment*: In 2012/13, 60.6% of Oxfordshire pupils gained 5 A\*-C grades at GCSE including English and Maths, compared to an England average of 59.2% but below the regional average of 62.4%<sup>37</sup>.

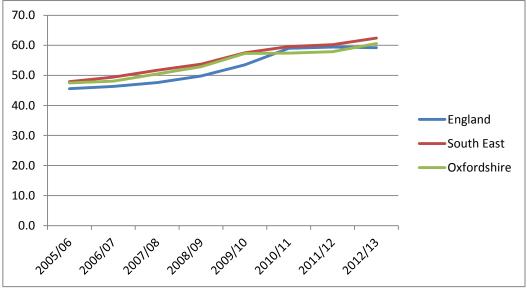


Figure 5: % Pupils achieving 5 A\*- C GCSEs inc English and Maths 2012/13

3.21 Significant improvements in GCSE results have been made in recent years nationally, regionally and locally; with Oxfordshire's results continuing to improve. In 2010/11 38% of Oxfordshire pupils went onto university after their A levels compared to 43% regionally and, 48% nationally.<sup>38</sup> The wealth of employment opportunities available may explain the difference with young people being attracted by jobs rather than continued education.

3.22 Young people not in education, training or employment (NEET): 4.6% (790) of young people in school years 12-14 were considered to be 'NEET'<sup>39</sup> in February 2014, a fall from 5.9% the same time 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/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 level<sup>40</sup>. While the NEET rate in Oxfordshire is lower than many other areas it is concentrated in particular areas of the county.

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

<sup>&</sup>lt;sup>37</sup> Dept of Education

<sup>&</sup>lt;sup>38</sup> Dept of Education, Destinations of key stage 5 pupils: academic year 2010 to 2011; % of students who entered A level or other level 3 qualifications remaining in education or employment.

<sup>&</sup>lt;sup>39</sup>Youth Engagement and Opportunities team, Oxfordshire County Council, 2013.

<sup>&</sup>lt;sup>40</sup> Dept for Education ,Supporting Post 16 transition, 2013

Table 2: NVQ Levels and	Table 2: NVQ Levels and equivalent						
NVQ Levels	Equivalent						
No qualifications/other	GCSEs	≥ <u>s</u>					
Level 1		Low skills					
Level 2	Five or more GCSEs, O- Levels or equivalent at grades A*-C	S					
Level 3	Two or more A-Levels or equivalent	Intermediate skills					
Level 4 + 5	First or other degree or higher	Higher level skills					

### Table 3: % of the working age population by NVQ levels

December	Oxfordshire	Oxfordshire	South East	<b>Great Britain</b>
2012	(numbers)	(%)	(%)	(%)
NVQ4 and above	197,900	47	36.8	34.4
NVQ3 and above	270,300	64.2	58.2	55.1
NVQ2 and above	332,100	78.9	75.4	71.8
NVQ1 and above	375,800	89.3	87.7	84
Other qualifications	17,400	4.1	5.4	6.3
No qualifications	27,600	6.6	6.9	9.7

Source: ONS annual population survey

3.24 While nearly half the population of the county is clearly highly skilled with 47% being qualified to NVQ level 4 and above; nevertheless, a fifth of the population (21%) are low skilled - that is, they are qualified below NVQ Level 2. Improving the county's NVQ levels would go some way toward providing employers with the skilled workforce they need. 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<sup>41</sup>.

3.25 Graduate retention: With two top universities located in Oxford the county benefits each year from the flow of graduates directly into the local economy. A guarter of all graduates from both universities stay on to work in the county after they complete their

<sup>&</sup>lt;sup>41</sup> Leitch Review of Skills, Prosperity for all in the global economy – world class skills, Final Report, 2006

studies indicating the strong attraction of the county in terms of job prospects and lifestyle. Just over another quarter go to London. Boosting the retention rate of graduates even further could be one way of securing the higher skilled people the county needs.

3.26 *Military:* Oxfordshire has a long and proud association with the military and has a large military presence, with more than 10,000 military personnel (October 2012) and almost 5,000 family members living and working in the county.

3.27 RAF Brize Norton is the largest Royal Air Force base in the UK, with 7,500 staff. The Defence Academy of the United Kingdom provides post-graduate education and training and is based at Shrivenham; MOD Bicester is one of two main national logistics centre; in addition there are further barracks in Benson, Abingdon and Didcot. With the possibility of developing the logistics capacity at Bicester and the LEP's and County Council's continued support working to resettle those leaving the military, there is an opportunity to look at initiatives that match the skills sets of leavers against sectors of current and projected labour shortages.

### **Employability skills**

3.28 There are numerous national employer surveys citing dissatisfaction with the education and skills system. The Confederation of British Industry's (CBI) 'Learning to Grow: What employers need from education and skills' survey was conducted in early 2012. Key findings were:

- For the 14-19 age group 71% of employers believe that schools and colleges should prioritise development of employability skills. Alongside this 50% want to see more done to strengthen literacy, 45% numeracy and 30% technology skills.
- Among the firms that need employees with STEM skills and knowledge 42% currently have difficulties recruiting staff, rising to 45% expecting difficulties in the next three years.
- The two biggest barriers amongst employers who have had difficulties recruiting STEM-skilled staff are the lack of general workplace experience amongst applicants (42%) and weaknesses in their employability skills (39%).
- 68% of employers believe that the government can help tackle future shortages by promoting science and maths in schools.



3.29 These national findings resonate locally with Oxfordshire employers experiencing similar challenges recruiting to roles, for a number of reasons, including an undersupply of suitably qualified individuals entering appropriate courses and a general lack of awareness and understanding in young people about the career options and future job opportunities available locally. While most employers found education leavers they recruited to be well prepared for work, with the satisfaction increasing with the recruit's age and/or educational attainment;<sup>42</sup> 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. Employability skills go beyond basic numeracy and literacy. For employers, it 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.

<sup>&</sup>lt;sup>42</sup> UKCES Employer Needs Survey 2011/12 Oxfordshire

### 3.30 The table below shows the 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

3.31 Schools and colleges are now responsible for the provision of independent and impartial careers information, advice and guidance (IAG) to students in years 8 to 13; as well as organising work experience and other work related activities. This range of 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 it<sup>43</sup>. 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; including developing good education-business links.

3.32 Employers have a key role in training their workforce. According to the UKCES' recent Employer Skills Survey 2013, 66% of employers invest in training for their staff; up from 65% in 2011. However, this means 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 6.7 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.

<sup>&</sup>lt;sup>43</sup> OFSTED Careers Guidance Survey 2013;



3.33 Oxfordshire has seen a near three- fold increase in the number of apprenticeship starts, increasing from 1,610 in 2005/06 to 4,530 in 2012/13. Over the same period, more apprenticeships were at advanced level; with 'Higher' apprenticeships coming on stream too. This appears to show that apprenticeships are becoming an option for young people who are attracted to a vocational route to learning while at work. In 2012/13, 66% of all starts were in small to medium sized businesses, with the remainder undertaken in large or very large firms.

### Table 4 – Apprenticeships started by level

	Intermediate (L2)	Advanced (L3)	Higher (L4)	All
2005/06	68%	32%	0%	1,610
2012/13	57%	42%	1%	4,530

### Labour Demand – industry demand and skills shortages

### Table 5: Distribution of jobs advertised by occupational group<sup>44</sup>

Occupation group	Number of
	Job
	vacancies
	4 <sup>th</sup> quarter
	2013
Professional occupations	7,900
Associate professional and technical	4,500
Administrative and secretarial	2,000

<sup>&</sup>lt;sup>44</sup> The data source for job openings is from Labour Insight Burning Glass. This is an online tool that collates all openings on a 'real time' basis.

### Oxfordshire Skills Strategy 2020

Managers, directors and senior officials	1,900
Sales and customer service	1,700
Skilled trades	1,500
Caring, leisure and other service	1,300
Elementary	1,300
Process, plant and machine operatives	1,100
TOTAL job openings	23,100

Source: Labour Insight

3.34 In the 4<sup>th</sup> quarter of 2013, there were a reported 23,100 vacancies advertised throughout Oxfordshire. Nearly a third of vacancies were in the professional occupations with an additional 20% in associate professional and technical roles; together, representing over 50% of all advertised vacancies in that period.

3.35 *STEM*<sup>45</sup> needs now: Oxfordshire's burgeoning science and technology sectors need people trained or with proficiency in science, technology, engineering and mathematics subjects, in particular there are insufficient people with the right intermediate level skills flowing through. Currently, less than 5% of Skills Funding Agency funding invested into the county supports training in these sectors. The area is home to the Science Vale Oxford Enterprise Zone (EZ) which has a concentration of specialised science and technology that is without parallel in the UK. The Science Vale area accounts for 13% of research and development employment in the South East and 4% of R&D employment in England. Its major centres include:

- Harwell Science and Innovation Campus, which is being developed as a world-class centre for science, innovation and enterprise. Harwell has more than 4,500 people working in over 140 organisations.
- Milton Park, which is one of Europe's largest multi-use business parks, hosting more than 160 companies which employ around 6,500 people in one of the UK's foremost science communities.
- Culham Science Centre, which is home to the UK's fusion research programme, known as the Culham Centre for Fusion Energy (CCFE) and the world's largest fusion experimental facility, JET (Joint European Torus).

3.36 There are also a number of science parks in the Oxfordshire area – in Oxford and at Begbroke - that house a wide range of high-tech businesses.

<sup>&</sup>lt;sup>45</sup> 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. STEM education, training and skills refers to those disciplines where core learning encompasses science, technology, engineering and mathematics; provides the foundation for further progression in those subjects; and are crucial for innovation-led growth. However, it is also recognised that the local economy requires the labour force in general to be increasingly STEM literate.

3.37 Given the county's innovation led growth ambition, the demand for STEM skills is expected to rise considerably.



3.38 *Tomorrow's jobs*: Nationally, forecasts indicate a net growth of about 2 million jobs by 2020, with a corresponding increase in demand for higher level skills – at intermediate levels and above - whilst the proportion of jobs requiring no or low qualifications is forecast to decline<sup>46</sup>. Oxfordshire's emerging Strategic Economic Plan has the ambition to create over 80,000 new jobs by 2031 (a 1% increase per annum) compared to 0.8% per annum achieved between 2001 and 2011.

<sup>&</sup>lt;sup>46</sup> Ambition 2020; World Class Skills and Jobs for the UK, July 2009, UK CES; Working Futures, UK CES 2011

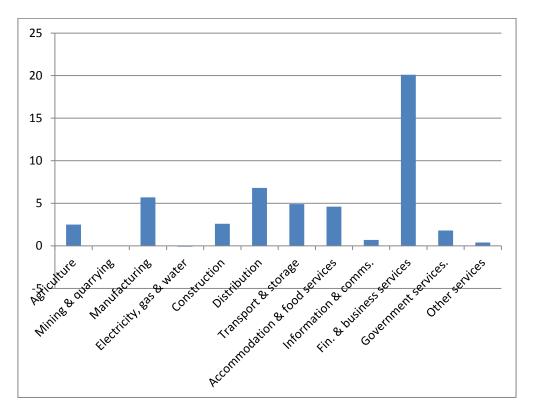


Figure 6: Employment projections by broad industry sector, 2011 to 2021

3.39 Across the broad sectors there is forecast growth<sup>47</sup> in construction jobs, manufacturing, distribution, transport and storage and accommodation and food services but with very strong growth in the financial and business sectors. These forecasts confirm the demand forecast in higher skilled jobs.

3.40 Oxfordshire has strengths in a diverse range of business sectors including education. health, creative and media, construction and the science and technology sectors - all of which are forecast to grow as the economy improves. However, Oxfordshire's innovation led growth vision suggests a greater focus in the future on the following sectors:

- life sciences and medical instruments •
- high performance technologies
- satellite and data communication •
- energy and environmental technologies
- digital, publishing and media. •

3.41 The UK space sector is predicted to grow by 100,000 jobs nationally to 2030<sup>48</sup> with c.12,000 jobs predicted locally centred around the internationally renowned space cluster at Harwell Oxford.

3.42 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

<sup>&</sup>lt;sup>47</sup> Economic Forecasting to Inform the Oxfordshire Strategic Economic Plan and Strategic Housing Market Assessment, Final report for Vale of White Horse District Council and partners, January 2013, SQW and Cambridge Econometrics <sup>48</sup>A UK Space Innovation and Growth Strategy 2010 to 2030, Space IGS

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 assets<sup>49</sup> Employment in our agricultural sector is predicted to grow by 8.5% to 2020. In order to support growth our skills eco-system must understand the projected skills requirements of these sectors and ensure the necessary provision is in place.

3.43 Labour and Skill shortages: According to the UKCES Employer Skills Survey in Oxfordshire 2011-2012, 7% of employers (c 2000 businesses) were reporting hard to fill vacancies where impacting on their business (compared to 5% nationally). The dominant reason for recruitment difficulties was a lack of applicants with the required skills, qualifications or experience; this issue was more common in Oxfordshire than nationally and in neighbouring areas with similar economies such as Berkshire and Surrey. 1 in 5 of those reporting difficulties was trying to recruit to higher skilled occupations, particularly professionals or technical/ skilled support occupations. Recruitment difficulties were more of an issue in the manufacturing sector and among employers engaged in science & technology activities. Skills shortages are a major barrier to business growth - evidenced by Culham Centre for Fusion Energy who, in reporting over 70 current skilled vacancies at technical level, 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'

3.44 *Service sector*. 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.

3.45 The service sector is 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.

<sup>&</sup>lt;sup>49</sup> Skills for a Green Economy, HM Government October 2011

### Oxfordshire Skills Strategy 2020

3.46 *Replacement demands*: The need for skilled people however will not come solely from the creation of new jobs. In many sectors, the 'replacement' demand (through retirement for example) will far outstrip the number of newly created posts, with an estimated 13 million 'replacement roles' required nationally, by 2020<sup>50</sup>. Up-skilling the existing workforce is also an issue for many sectors. For example, SEMTA – the Sector Skills Council for the Advanced Manufacturing and Engineering sectors, suggests the industry requires an additional 170,000 people nationally over next five years. It also cites a further 274,000 people currently employed in the sector need to be up-skilled to technician level, as the proportion of medium to low skill job roles decreases.



### **Our Provider network**

3.47 There are nearly 500 providers delivering government funded education and training in Oxfordshire.

3.48 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 32 school sixth forms, the county council, private training providers delivering apprenticeships, alternative niche providers who target those not in education, employment or training, and 7 special schools with post 16 provision.

3.49 For adult provision there were 26 providers delivering at least 200 enrolments to Oxfordshire residents in 2012/13. The largest numbers were delivered by Oxfordshire's two

<sup>&</sup>lt;sup>50</sup> Ambition 2020; World Class Skills and Jobs for the UK, July 2009, UK CES; Working Futures, UK CES 2011

further education colleges, the sixth form college and the County Council. The rest is delivered by private training providers (both local and national). The two universities (Oxford and Oxford Brookes) are also significant providers within the county.

3.50 Concern has been expressed that the sector as a whole has not always delivered the courses and training the economy needs<sup>51</sup>. On STEM provision, a report from the Royal Academy of Engineering<sup>52</sup> looked at the FE and Skills sector and found that STEM subjects accounted for 25% of course provision compared to non-STEM subjects; qualifications at level 3 and below dominate provision; also, while achievements in science and engineering had held over the four year period of the study (2008 to 2011), achievements in technology subjects had fallen. At the same time, the FE sector has sought to understand the barriers it faces in trying to facilitate the delivery of high quality STEM learning (at level 3 and above) pointing to the relative higher costs of providing STEM subjects compared to non-STEM subjects and funding challenges, with the result that, at the time of the survey, most respondents expected to see a small change or no change in their post16 STEM provision<sup>53</sup>.



 <sup>&</sup>lt;sup>51</sup> 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
 <sup>52</sup> FE STEM Data Project 2011, The Royal Academy of Engineering;

<sup>&</sup>lt;sup>53</sup> The challenges of Stem provision for further education colleges, 2012, 157 Group

### 4 The Challenges

4.1 If Oxfordshire is to achieve its growth ambition in a sustainable manner that maximises local employment opportunities we need to encourage greater alignment between the three elements of the skills offer:

- Young people we must encourage greater number of young people into entering skills training provision that support our growth sectors
- Providers we must encourage more provision is made available in Oxfordshire's growth sectors
- Employers we must encourage business involvement in schools and colleges, and more employers to offer a greater number of traineeships and apprenticeships.

4.2 There will be an ever increasing demand for higher-level skills. Skills shortages and gaps are present now. We are faced with an ageing workforce alongside a shrinking supply of young people. Too many young people are not achieving their potential or finding employment or training opportunities.

4.3 Economic growth through business and technological innovation will require Oxfordshire to ensure all its' people are educated and trained to their maximum potential.

4.4 The Skills Funding Agency currently fund 492 providers to deliver skills outcomes for Oxfordshire residents, an investment totalling around £24.5m per year. Maximising skills funding and ensuring it helps support our key economic sectors will be a priority, as is driving out duplication in the skills system to maximise outputs. Similarly, we must ensure that we drive the skills elements of Oxfordshire's European Structural and Investment Fund allocation to areas of greatest need that enhances economic inclusion, support employment and drive productivity.

4.5 The table below looks in more detail at the relationship between Oxfordshire's priority sectors and all age provision. It shows the deficit of provision in our priority sectors, all of which suffer current labour shortages, or are subject to significant growth in the short term

Priority sectors	Number of busines ses	Busines ses %	No. of employees	Number of employees %	Number of learning aims	% all aims, inc. communi ty learning	Number of providers delivering in subject area	Number of vacancies in Oxfordshi re between 1/8/12 and 31/7/13
STEM (excluding ICT)	6000	20	60,000	20	9556	11.0	245	6212
STEM – SFA funded*	n/a	n/a	n/a	n/a	1480	4.8	n/a	n/a
Retail	2750	9.5	30,000	10	910	1.0	49	2029
Health &								
Social Care	3500	12.5	40,000	12	3853	4.4	148	2945

### Oxfordshire Skills Strategy 2020

Hospitality & Catering	2250	8	25,000	8	1585	1.8	79	4840
Employability Skills/Basic Skills	n/a	n/a	n/a	n/a	13764	34.6	207	3494

4.6 There are insufficient people with the right intermediate level skills flowing through into STEM occupations .Of particular concern is that whilst STEM businesses account for 18.6% (c60,000 employees) of our business base, the SFA fund less than 1500 individual learning aims per annum – less than 2.5% of the total STEM workforce. In order for Oxfordshire to deliver our growth potential we need to increase this flow. There are multiple reasons why the current flow is lower than required– historical, poor responsiveness, low demand and other options available to young people, alongside low engagement and demand by employers.



4.7 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 intermediate 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 and their understanding of their career and training options. Increasing the interest of young people to enter appropriate training and to make well informed choices at appropriate times throughout their learner journey is vital. In order to begin to sustainably rebalance training provision to our priority sectors we must ensure a steady supply of well-informed young people entering training and ultimately

the workplace. The further education and higher education sector have a vital role in this through the provision of training and courses, their engagement with business and links to key sectors; and their potential to generate entrepreneurs and spin out companies.

4.8 For young people and adults with no or low qualifications there is the need to re-skill or re-train to and move people closer to the labour market. The diversity and labour shortages of Oxfordshire's businesses offers an opportunity for jobs to be available for those furthest from the labour market but will require support to overcome barriers. New large scale developments in Oxfordshire will provide opportunities for young people and those furthest from the labour market to access training and employment, such as the proposed redevelopment of the Westgate Centre in central Oxfordshire which will provide around 6,000 new jobs once constructed, as well as new jobs created at the construction phase.

4.9 Schools have expressed their desire to have access to good local labour market information to help inform their careers education and, information, advice and guidance services. Schools-business links are vital and a lot of good work is already taking place but more can be done to improve business involvement with schools.

4.10 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

Increase STEM provision and train more <b>'technicians'</b>	Young people reach their potential and are fully	Move those disadvantaged in the labour market closer to potential sources of jobs
Close the <b>mismatch</b> between the skills of the local work force and those in demand by employers	aware of the careers in demand locally; career paths into those jobs; and their training options	Increase <b>funding</b> into STEM subjects
Improve employability skills of young people	Meeting the demand for higher level skills	Schools need timely and accurate careers information about the local economy to provide an effective
	Providers	
Employers have a key role in engaging with education - to offer work experience, school visits, and contribute more to training opportunities	need to offer more depth and breadth of provision – it is not more of the same	Promote traineeships and <b>apprenticeships</b> among employers and learners

### 5 The Way Forward – the strategic priorities

5.1 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**<sup>54</sup> that addresses the skills required by our growing economy.

### **Strategic Priorities to 2020:**

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 priority sectors - both current and projected - to meet the needs of employers or to train future entrepreneurs, particularly in science, technology, engineering and mathematics (STEM).

SP2: Creating the 'skills continuum' to support young people through their learning journey: the ambition is to develop integrated, seamless services that support young people through school and on into training, further education, employment or business, where they understand the full breadth of career options, including local demand, and the training path to succeed in that career.

SP3: Up-skilling and improving the chances of young people and adults marginalised or disadvantaged from work, based on moving them closer to the labour market.

**SP4: To increase the number of apprenticeship opportunities**, particularly those offered by small to medium sized businesses.

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

5.2 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.

<sup>&</sup>lt;sup>54</sup> Skills -system – define here or within paper - within paper!

5.3 This strategy sets out the direction of travel required to improve skills levels locally and drive innovation led growth. Given the broad range of partners involved in the delivery of our objectives we have developed the small set of metrics against which we can measure performance:

Target	Where we are now	Where we want to be by 2020
Increase the provision and take up of STEM courses at schools and further education colleges.	In 2011/12: 5% of Skills Funding Agency investment supported STEM qualifications for those aged 19+ 25% of all Education Funding Agency supported learning aims were taken in STEM subjects by 16-18 year olds	<ul> <li>15% increase of Skills Funding Agency investment will be directed to the provision of STEM education and training aims.</li> <li>30% of all EFA supported learning will be in STEM subjects.</li> </ul>
Work place experiences and accredited employability skills training will be widely available to young people	Currently 12% of businesses are engaged in work experience <sup>55</sup>	35% of businesses in Oxfordshire will be working with schools and colleges to support young people in their transition into work.
Increase the proportion of Oxfordshire pupils achieving 5+ A*-C grades at GCSE including English and Maths to 65%; with an aspiration to see this further improved to 70% by 2020 <sup>56</sup> .	Pupils gaining 5+ A*-C grades at GCSE (including English and Maths) in 2012/13: Oxfordshire – 60.6% South-East – 62.4% England – 59.2% Oxfordshire has seen continuous improvement since 2005/06 - when 47.5% of pupils achieved 5+ A*-C grades - but it	Exceeding the regional average and being among the best of our statistical neighbours.

 <sup>&</sup>lt;sup>55</sup> Estimated work experience placements organised through Oxfordshire County Council.
 <sup>56</sup> 65% by 2015 is in line with the Oxfordshire County Council Strategy Improving Educational Outcomes in Oxfordshire

	has yet to meet the regional average.	
Increase the proportion of the work age population qualified to NVQ Level 2	In 2012, 79% of Oxfordshire's population were qualified to NVQ Level 2.	90% of Oxfordshire's will be qualified to at least NVQ Level 2.
To decrease the percentage of working age residents with no qualifications to 5%	In 2011, 6.9% of working age residents had no qualifications (ranked 6 <sup>th</sup> out of 11 with statistical neighbours).	An area with one of the lowest proportion of residents with no qualifications.
To reduce the number of young people in national curriculum years 12 - 14 <sup>57</sup> not in education, employment or training. To reduce the number of young people under 18 who are in employment without learning	In January 2014, 4.5% of young people in the county were 'not in education, employment or training'. At the same time 31.4% of employed young people in national curriculum year 12 were in employment with no learning	<ul><li>2% of young people not in education, employment or training.</li><li>100% of young people under 18 participating in learning</li></ul>
To increase the number of apprenticeship starts: i) for 16-24 year olds to 3,750 ii) within small to medium sized businesses iii) in STEM	<ul> <li>In 2012/13:</li> <li>4,530 apprenticeships were started across the county;</li> <li>2,600 16-24 year olds started an apprenticeship in Oxfordshire.</li> <li>An apprenticeship was provided by 66% of small to medium sized businesses;</li> <li>15% of apprenticeship starts were in STEM subjects</li> </ul>	We will have created an additional 1,150 apprenticeship places for 16-24 year olds; 70% of small to medium sized businesses will offer an apprenticeship; 20% of all apprenticeship starts will be in a STEM subject.

<sup>&</sup>lt;sup>57</sup> Covering ages 16 to 19 years