

Oxfordshire Economic Assessment

Draft 8

25th February 2010

Slide presentation

Summary of Findings

Economic Assessment

Working Papers

Technical Annexes

Evidence Base

CONTENTS

1	Key Economic Indicators for Oxfordshire	4
2	Introduction to the Economic Assessment.....	6
3	Undertaking an Economic Assessment.....	6
3.1	Why This Report Has Been Produced.....	6
3.2	How Do Local Economies Develop?	7
3.3	The Context of Oxfordshire 2030.....	8
3.3.1	A World Class Economy and Improving the Quality of Life.....	8
3.3.2	What do we mean by a ‘World Class Economy?’.....	9
3.4	The Challenges facing Oxfordshire	10
3.5	What is the Best Way to Measure Economic Growth and Productivity?.....	10
3.6	What Geographical Area Should We Be Assessing?	11
3.7	Benchmark Comparisons	16
4	The Economic Assessment.....	21
4.1	Gross Value Added and Productivity	21
4.2	Income.....	29
4.3	Worklessness & Deprivation.....	30
4.4	Business Size.....	43
4.5	Business Sectors.....	47
4.6	Business Activity – Drivers of Productivity.....	56
4.7	Oxfordshire’s workforce.....	62
4.8	Workforce skills	66
4.9	Skills of Residents	68
4.10	Housing.....	71
4.11	Employment Land and Premises	74
4.12	Transport Infrastructure.....	76
4.13	The Infrastructure of Support for Economic Development.....	78
4.14	Sketches of Oxfordshire’s Districts.....	80
5	Conclusions.....	83
6	Issues to be addressed in the economic development of Oxfordshire.....	83
	ANNEX 1: Technical papers and references	86
	ANNEX 2: Calculating GVA	87

ANNEX 3: The Key Questions to be Asked by the Economic Assessment88

Summary prepared by: Dave Waller, Oxfordshire County Council

With technical papers by: Lyndsay Mountford, Oxfordshire County Council

Fiona Mullins, Peter Frobisher, Oxfordshire Data Observatory

Margaret Melling, MM Consulting Ltd,

Rob McKay, Tunguska Ltd

DRAFT

1 Key Economic Indicators for Oxfordshire

	Indicator	Ref	Oxfordshire	South East	England	Cherwell	Oxford	South	Vale	West
<i>GVA</i>	Total Gross Value Added (£m), 2006	ONS	14,920	166,003	985,477	N/A	N/A	N/A	N/A	N/A
	Gross value added per head (£), 2006	ONS	23,608	20,152	19,413	N/A	N/A	N/A	N/A	N/A
	% change in GVA per head, 1996-2006	ONS	+77%	+67%	+62%	N/A	N/A	N/A	N/A	N/A
<i>Businesses</i>	Number of VAT registered businesses, 2007	ONS	26,350	319,865	1,735,690	5,795	3,550	7,000	4,950	5,055
	VAT registrations per 10,000 adults, 2005	ONS	42	44	39	34.7	20.6	45.6	33.7	39.3
	% growth in no. of VAT-registrations, 1997-2007	ONS	27.5%	24.0	22.4	30.5	27.5	23.5	28.2	29.4
	3 year business survival rate, businesses registered for VAT, 2003 (% still trading)	ONS	68.8%	66.3%	63.5%	66.7%	64.9%	68.9%	70.3%	73.0%
<i>Employment</i>	Number of employees, 2005	ABI	308,521	3,752,318	22,908,721	66,294	98,261	54,702	54,028	37,065
	Jobs density (jobs per working age resident), 2005	Nomis	0.92	0.88	0.84	0.90	1.01	0.86	0.91	0.84
	% growth in number of employed, 1998-2005	ABI	3.2	9.6	8.3	4.5	3.7	6.3	-4.7	5.6

	Indicator	Ref	Oxfordshire	South East	England	Cherwell	Oxford	South	Vale	West
	% growth in total jobs 2000-2005	Nomis	0.0	2.9	5.0	-1.3	5.9	-1.5	-3.0	-1.9
	Employment rate (% of working age residents), July 2005-June 2006	APS	80.9	78.6	74.3	84.7	70.9	81.5	85.1	87.2
<i>Income</i>	Gross Domestic Income per Household (indexed) 2006 (UK=100)	ONS	112.8	111.5	102	-	-	-	-	-
	Mean gross weekly earnings, full-time workers, workplace-based (£), 2006	ASHE	543.5	566.7	544.3	533.9	540.1	692.5	619.0	604.7
<i>Worklessness</i>	Inactivity rate (% of working age residents), July 2005-June 2006	APS	16.4	17.8	21.5	12.5	24.9	17.1	13.5	10.1
	Claimant rate (% working age residents), April 2007	DWP	1.0	1.5	2.4	1.2	1.5	0.8	0.7	0.7
	% of working age residents claiming at least one key DWP benefit, Oct-Dec 2006	DWP	7.4	9.8	13.9	7.8	8.9	6.4	6.6	6.2
<i>Skills</i>	% of working age residents with NVQ level 4+ qualifications, 2005	APS	31.8	29.4	26.3	21.3	35.5	38.7	36.6	25.8
	% of working age residents with no qualifications, 2005	APS	9.5	10.1	14.0	10.3	10.8	5.1	10.5	10.7

2 Introduction to the Economic Assessment

The Economic Assessment is a detailed study of the economy of the County, and its context; how the economy functions and interacts with other aspects of life in Oxfordshire, such as its society and environment.

The purpose of the Economic Assessment is to provide a commonly agreed picture of the economy, to inform other strategy, policy and programme development.

This document pulls together data dealing with all the themes that an economic assessment is required to cover. A separate, briefer, report provides a *Summary of Findings* while more detailed *working papers* have been developed for each of the key thematic topics.

The outputs of the report will be provided in a range of different formats for different audiences.

3 Undertaking an Economic Assessment

3.1 3.1. Why This Report Has Been Produced

The preparation of a Local Economic Assessment is a new statutory duty arising from the Local Democracy Economic Development and Construction Act 2009 planned to come into force in April 2010.

The intention of the Economic Assessment is to provide a common understanding of the state and nature of the local economy for all those with a stake or an input to it, particularly deliverers of public services and those with a responsibility for encouraging the economic development of Oxfordshire, in whole or in part. Detailed understanding of the county's economy will help both the public and private sector tackle a period of great economic uncertainty.

The aims of the economic assessment are to:

- ◆ Provide a sound understanding of local economic conditions and how they affect residents and businesses;
- ◆ Identify the local economic geography, including linkages between the area and the wider economy;
- ◆ Identify local constraints to economic success (including growth of GVA and employment) and the risks to delivering sustainable economic growth.
- ◆ Identify comparative strengths, weaknesses, economic challenges and opportunities

On 10th September 2009, the leaders of the 5 District Councils and of Oxfordshire County Council, meeting as the Oxfordshire Leaders Group, agreed to the production of the

Oxfordshire Economic Assessment by early 2010, before the statutory duty comes into effect, in order to provide evidence to inform a number of policies that are currently being developed.

The related policies and strategies include:

- ◆ Review of the Economic Development Strategy for Oxfordshire to be developed by the Oxfordshire Economic Partnership.
- ◆ Development of the Local Investment Plan (arising from the 'single conversation' with the Homes and Communities Agency about infrastructure investment necessary to ensure the building of new homes);
- ◆ Evidence collecting phase of the development of the Integrated Regional Strategy;
- ◆ Oxfordshire's Local Transport Plan 3;
- ◆ District level Local Development Frameworks (LDFs) and county level LDF for Minerals and Waste
- ◆ County Council Localities Strategy
- ◆ County level 'Transforming Social Care' strategy
- ◆ The review of the Oxfordshire Children and Young People's Plan 2010 - 2013

The Oxfordshire Economic Assessment is being developed in association with members of the Oxfordshire Partnership and in the context of their goals as set out in their plan *Oxfordshire 2030* as well as the frameworks provided by the Regional Economic Strategy and the South East Plan. Of particular relevance are the South East Plan aim to increase total regional GVA by 3%, the Regional Economic Strategy target to increase GVA per head by 3%, and the Oxfordshire 2030 , LAA2 target to move Oxfordshire into the top 10 of 131 NUTS3 statistical areas (roughly equivalent to counties) in the UK in terms of GVA per head. It is currently 13th out of the 131 areas.

3.2 3.2. How Do Local Economies Develop?

The economic assessment considers factors that increase the positive agglomeration or spill-over effects between businesses and individuals to increase productivity, efficiency and living standards, while minimising the costs associated with excessive agglomeration – congestion, housing shortages, skills shortages on the one hand and the risks of inequality and unsustainable resource use on the other.

Economists have been arguing about how economies work ever since Adam Smith. The various models they have developed bring out the need to look at a range of variables that

affect how the economy works – factors that either help drive economic growth or act as barriers to it.

The Manchester Independent Economic Review¹ summarises the theory behind local economic development as follows:

“Economic activity is unevenly spread in every country. The explanation for this lies in the benefits of concentrating business and jobs in certain places for reasons which might often have a particular geographical or historical explanation (such as a natural port or easy access to resources in the past) but which gradually become self-fulfilling.

There are favourable knock on effects or spill-overs between businesses and individuals, which over time reinforce the advantages of these centres of economic activity. Economists call these ‘agglomeration economies’. These benefits to the geographic concentration of economic activity are often self-reinforcing, creating a virtuous cycle over time

There are also increasing costs to this concentration, such as congestion and higher house prices, as cities grow. The balance of these costs and benefits determines which regions are rich and poor, which grow rapidly or more slowly, and so shapes the uneven geographical pattern we see in the economy.”

The economic assessment therefore considers the factors that increase or reduce economic growth and productivity or, as the economists would put it, the positive agglomeration / spillover effects between businesses and individuals to increase growth and productivity, efficiency and living standards, while minimising the costs of excessive agglomeration – congestion, housing shortages, resource use, skills shortages, environmental damage etc.

3.3 3.3. The Context of Oxfordshire 2030

A World Class Economy and Improving the Quality of Life

The Oxfordshire 2030 Sustainable Community Strategy² sets out four general goals in order to improve the quality of life of its residents;

- ◆ Create a world class economy for Oxfordshire building particularly on the high tech sector.

¹ Reviewers Report, Manchester Independent Economic Review, 2009. This review was conducted by a particularly strong collection of business and university researchers and, despite the different context, provides a useful framework for economic assessment work.

² Oxfordshire Partnership, 2008

<http://portal.oxfordshire.gov.uk/content/public/oxfordshirepartnership/oxfordshire2030/2030summaryFINAL.pdf>

- ◆ Have healthy and thriving communities. We want to sustain what is good about our city, towns and villages but also respond to the needs of the 21st century including the impact of demographic and lifestyle changes.
- ◆ Look after our environment and respond to the threat of climate change and the potential for more extreme weather conditions. The threat of flooding is a particular concern.
- ◆ Break the cycle of deprivation by addressing the regeneration needs of disadvantaged communities; reducing the gap between the best and worst off and supporting people to maximise their talents and raise their aspirations.

The aim of this economic assessment is to focus on economic issues while also exploring the relationship of the economy to the issues of thriving communities, resource efficiency, breaking the cycle of deprivation and resilience to possible future changes such as increased global competition, resource shortages, climate change and the like.

What do we mean by a 'World Class Economy?'

One of the main objectives of the strategic plan prepared by the Oxfordshire Partnership, Oxfordshire 2030³, is achieving a "world class economy". Oxfordshire 2030 does not define precisely what it means by 'a world class economy' but implicit in its text are the following key elements:

- ◆ An economy that is competitive on a global basis, generating good levels of income for both residents and workforce of the county
- ◆ Inclusive so that all residents can benefit and
- ◆ Environmentally sustainable in terms of low natural resource use, low carbon emissions, high bio-diversity and low pollution levels.

Some of the indicators that Oxfordshire already has a world class economy are:

- ◆ the ranking of Oxford University near the top of the world's top ten universities
- ◆ the concentration of Research and Development in Oxfordshire (employing 8% of the county's workforces compared with less than 3% for the South East region as a whole)
- ◆ The high level of investment in cutting edge 'big science' particularly in the £350 million Diamond Light Source at Harwell.
- ◆ The outstanding quality of its natural and built environments
- ◆ The ability of a number of sectors of the economy (particularly performance engineering and bio-technology/medicine) to compete successfully in global markets

To maintain its global success the Oxfordshire economy needs to take account not only of what happens in Oxfordshire but also amongst competitor economies elsewhere.

³ See objectives of Oxfordshire 2030 the local strategic plan produced by the Oxfordshire Partnership <http://portal.oxfordshire.gov.uk/content/public/oxfordshirepartnership/oxfordshire2030/2030reportFINAL.pdf>

Understanding what can and cannot be affected by public policy and intervention will be vital in deciding future economic development strategy.

3.4 3.4. What is the Best Way to Measure Economic Growth and Productivity?

GVA is a measure of economic performance and is used as the central theme of this assessment. GVA does not reflect other aspects of society directly (the environment or the distribution of wealth for example) but it is widely used as the basis for comparison by government.

Gross Value Added, GVA, is a 'top-down' measure of economic performance at "basic" prices. "Basic" prices exclude taxes and include subsidies. At county level it includes wages and profits. GVA is NOT a measure of the value of goods produced/sold or of standard of living or quality of life. It provides a measure of the value added to materials and other inputs in the production of goods and services by resident organisations. The measure includes wages and company profits but the final calculation is complicated and is only available 2 years in arrears. Like all measures of production GVA contains economic "bads" as well as "goods" e.g. the activity involved in clearing up pollution incidents or attending to accidents. There are issues therefore with GVA as an indicator. Nevertheless it provides a widely recognised benchmark used by both central and regional government.

To try and address the weakness of GVA as a measure of an economy and to reflect the fact that an economy does not occur in isolation from the environment and society, SEEDA has worked with the New Economics Foundation to develop an Index of Sustainable Economic Wellbeing⁴. Although this index is being trialled by most RDAs its methodology is as complex as that of GVA and its influence is likely to be marginal unless there are choices made to emphasise other aspects of the economy (resilience, employment, equality, resource use) rather than the current focus on growth and productivity.

GVA continues to be widely used by government and increasing GVA is a key Public Service Agreement target of the Regional Development Agencies. It is useful as a benchmark for comparison with other similar and/or neighbouring economies and a key yardstick against which the impact of other factors affecting the economy, (skills, housing, transport, deprivation etc) can be assessed.

3.5 3.5. The External Changes affecting Oxfordshire

Oxfordshire faces challenges that are both immediate and long term. Some are specific to Oxfordshire and others arise at national and international levels.

The South East Plan⁵ defined the challenges as:

⁴ An Index of Sustainable Economic Wellbeing, Jackson et al, New Economics Foundation, July 2006 (draft)

⁵ Sections 2.3 – 2.9 The South East Plan, Regional Spatial Strategy for South East England, GOSE, May 2009

- unprecedented population growth
- an ageing population
- globalisation (that is both uneven and uncertain in its impact and implications)
- technological change
- declining household size
- climate change

Since that was written the economic recession has added a new perspective to those challenges. The CBI⁶ has suggested that additional issues are:

- a fundamental change in the business environment throughout the next decade compared with that which might have been expected even two years ago
- a shortage of investment capital
- higher levels of volatility and risk
- severe constraints on the ability of government to make funding contributions to provide necessary infrastructure

The global restructuring has accelerated with the economies of China and India continuing to grow rapidly while those of much of the developed world, and of the UK in particular, continuing to contract.

3.6 3.6. What Geographical Area Should We Be Assessing?

Different geographies are useful for different problems. Assessing the economy of Oxfordshire as a whole will require consideration of what is happening to particular areas within it as well as of neighbouring functional economic areas.

The Oxfordshire economy is composed of all of the economic activity that occurs in the county. This includes profits from Oxfordshire-based businesses and salaries paid to workers living in Oxfordshire plus the 17% of the Oxfordshire workforce that commutes in from outside the county⁷. About 15% of the resident working age population commutes out of Oxfordshire so that a proportion of the wealth of people in Oxfordshire is not generated by the Oxfordshire economy.

This economic assessment is primarily focused on the Oxfordshire economy – measured by Gross Value Added - but it recognises that the concern of residents is their wealth or income and not necessarily whether it comes from the Oxfordshire economy or from elsewhere. Commuting and other economic flows, for example goods and services along

⁶ The Shape of Business – the next 10 years, CBI 2009

⁷ Source: census 2001 travel to work analysis

supply chains coming into and out of the County, have a substantial impact on the overall economy of Oxfordshire.

Oxfordshire has links with significant external economic 'poles' - centres of activity such as Swindon, Reading, Milton Keynes, Aylesbury, Birmingham and London to which a substantial proportion of economic flow in and out of the County is attracted.

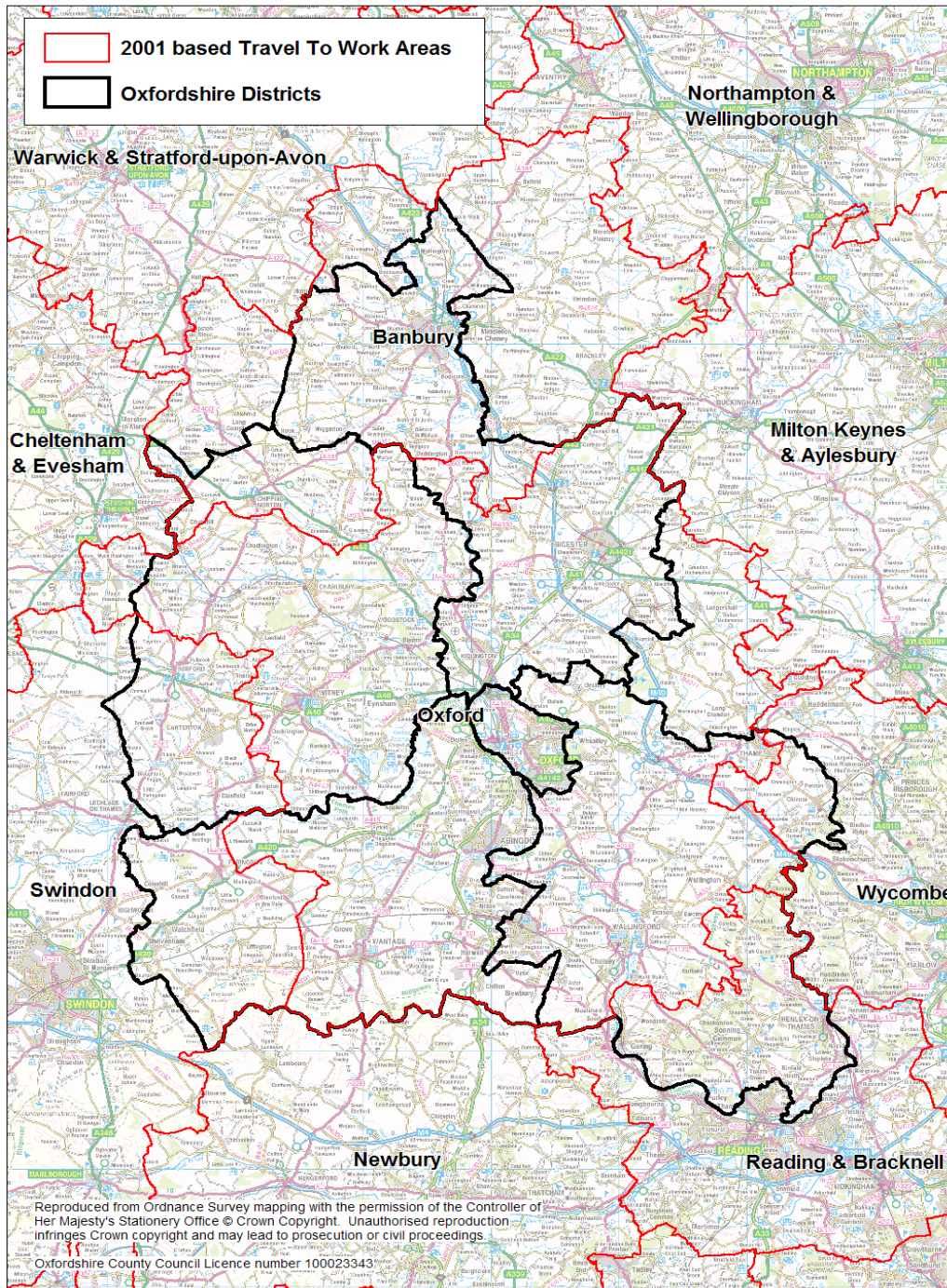
Aggregating a range of criteria including housing, transport, labour markets and economic development across England led the LGA⁸ to suggest that the spatial area of Oxfordshire approximated to that of a functional economic area.

Nevertheless it also showed that for any one criterion the area varies:

- ◆ the 'all worker' labour market is geographically smaller than that for senior managers and professionals, i.e. people in more senior and higher-paying jobs commuted further.
- ◆ the housing/migration area of South Midlands and Milton Keynes extends into north Oxfordshire and
- ◆ Oxfordshire is part of the much larger London global city region as well as having strong links across its boundaries to neighbouring centres (Swindon, Reading, Aylesbury, and Milton Keynes in particular).

⁸ Prosperous Communities II Vive la Devolution! LGA 2007

Figure 1 Travel to Work Areas of Oxford and Banbury, 2001



Source: Census 2001

Within the county there are approximately 20 towns that each have their own retail and service hinterlands that affect their local economic performance.

As a result different geographies will be of relevance for different types of problem and the choice of geography can be both pragmatic and to a degree experimental:

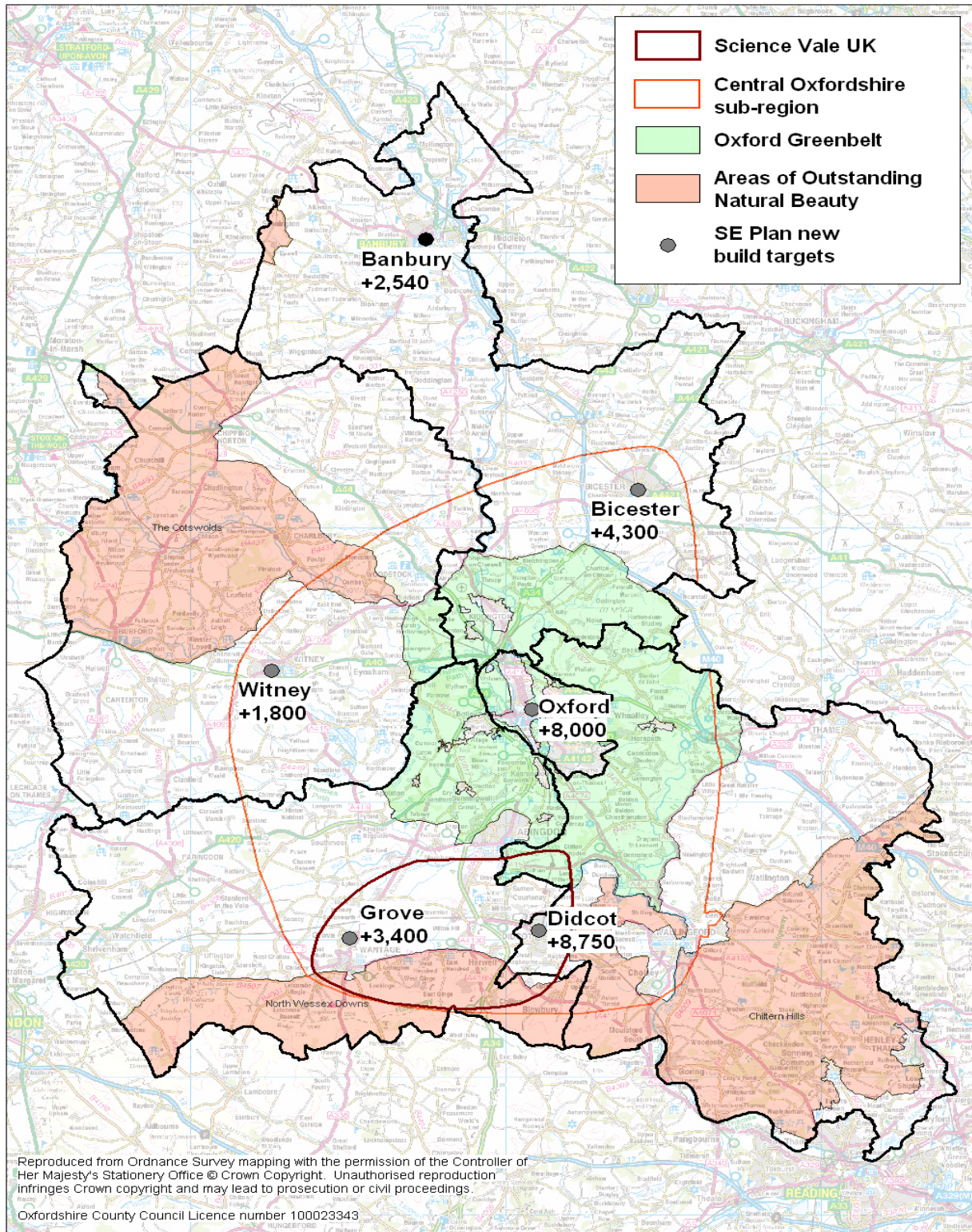
- ◆ the Science Vale UK area that brings together the high tech centres of employment and associated housing across South Oxfordshire and Vale of White Horse districts

is in the process of proving its utility for promoting that area and may increasingly be complemented by sub regions for Oxford and northern Oxfordshire.

- ◆ The Oxford and Central Oxfordshire Diamond for Infrastructure and Growth provides a basis for comparison with 7 other urban 'Diamonds' across the South East
- ◆ Villages and market towns have developed their own specific analysis and plans for their part of the local economy.
- ◆ West Oxfordshire, South Oxfordshire and Vale of White Horse Districts are all part of Areas of Outstanding Natural Beauty that extend across into neighbouring counties and to a greater or lesser extent have associated tourism markets that are not particularly related to Oxfordshire.
- ◆ Rural areas make up more of Oxfordshire than any other South East county. The characteristics of the residents of rural areas are quite distinct in terms of their demographics and their engagement with the Oxfordshire economy.

DRAFT

Figure 2 Economic Geography of Oxfordshire – key features



Source: Oxfordshire County Council

The issue with economic geography is not so much about which one is right but more which geography is appropriate for which set of problems and how those different geographies can relate to each other most effectively. As the LGA report puts it:

“the sub-regional map [of functional economic areas] is not a given, but will vary as the targets for policy intervention vary.”

This economic assessment looks at the county of Oxfordshire as having a reasonable correlation to a defined sub-regional functional economic area but will in addition consider the more local areas within the county as well as links to surrounding cities and regions including London, the rest of the South East, the Midlands and to the global economy.

There are strong links or economic similarities with areas to the north (in the South Midlands), south-west (through Swindon to Bristol) and north-east (through to Milton Keynes, Bedford and Luton).

The choice of economic geography can and does however reveal different perspectives and different choices: what appears right or wrong will depend on the perspective arising from different geographies.

3.7 3.7. Benchmark Comparisons

Why is Benchmarking important?

One of the ways of evaluating the various measures describing Oxfordshire's economy is to judge them relative to other comparable sub-regional economies. Differences in local geography, scale, policy context, local cultures and legal frameworks all mean that care has to be exercised in such comparisons but as they are often used as a short hand way of describing what Oxfordshire's future should be like ('we should become the Silicon Valley of the UK', 'we should be more like Grenoble' for example) it is important to assess these benchmark comparators.

The Evidence

Throughout these annexes, there will be comparisons of key statistical information with other areas. There are in the UK a number of counties where there are strong parallels with Oxfordshire, and which will be used often as comparators. The first is Berkshire; while the old County is now represented by six Unitary authorities, it is possible to assemble a composite statistical area to represent Berkshire; as a prosperous area immediately adjacent to Oxfordshire with a strong hi-tech economy and considerable overlap in terms of travel-to-work and supply chains, it represents a good comparator for Oxfordshire. The second is Cambridgeshire, which shares key aspects of having a knowledge economy built over time from a strong and long-established University core, and a substantially rural nature. It is also a similar distance from London.

Not all comparison is on objective statistical data. The 2007 report into the Quadrant⁹ (now called the Science Vale UK) provided a useful comparison of Southern Oxfordshire with ELAt (Eindhoven, Leuven, Aachen triangle), San Diego, Grenoble and South Cambridgeshire on the basis of size, existing institutions and infrastructure, governance, public support and talent pool. The SQW study identified a range of critical success factors from an analysis of these comparator areas, including:

- ◆ The presence of leading edge, commercially aware research institutes
- ◆ A commitment to a long-term (20 years+) strategy
- ◆ Infrastructure investment (especially around transport) that was seen as a national priority
- ◆ Effective partnership between public and private sectors
- ◆ A good supply of appropriately skilled people
- ◆ Marketing around global brands, especially Cities and Institutions.

There is an element of subjective appraisal with such an approach, and the SQW report was focussed on the 'Science Vale' area within Oxfordshire. However, such information provides a useful and enlightening context to more statistical information. This is especially true when considering strategy, policy or programme development informed by this report.

A further comparative study was undertaken by the South East Diamonds for Investment and Growth partnership, comparing the intensity of employment in knowledge intensive business. While again looking at sub-County geographies, the research showed that the Reading and Oxford/Central Oxfordshire diamonds were a close match.

⁹ Evaluation of the economic and employment growth potential of the southern central Oxfordshire Quadrant, SQW Consulting, November 2007

Table 1 Oxford/Central Oxfordshire comparison with other SE Diamonds for Growth

	KBI Employees (2007)	Location Quotient (GB=100)	KBI as a % of total employment (2007)	% change 2000-2007
Brighton and Hove	76,589	118.7	64.0%	15.6%
Oxford / Central Oxfordshire	129,807	111.0	59.8%	9.7%
Reading Diamond	128,360	110.0	59.3%	6.5%
Portsmouth and Urban S Hampshire	248,605	106.1	57.2%	7.4%
North Hampshire	90,700	103.9	56.0%	5.9%
Milton Keynes and Aylesbury Vale	92,568	100.5	54.2%	21.5%
Thames Gateway / Kent	95,525	91.2	49.2%	14.1%
Gatwick Diamond	77,532	85.7	46.2%	4.1%
<i>Diamonds</i>	<i>939,686</i>	<i>103.6</i>	<i>55.8%</i>	<i>9.7%</i>
<i>South East</i>	<i>2,039,534</i>	<i>102.1</i>	<i>55.1%</i>	<i>8.2%</i>

Source: Building a Knowledge Economy, Workshop by CLES and Oxford City Council, SEDFIG

This would indicate that a comparison between Oxfordshire and Berkshire, while based more on Berkshire acting as a model for potential growth, is not entirely without an objective basis.

After the 2001 Census, the Office of National Statistics undertook a clustering analysis of Local Authority Districts using over 40 different variables to demonstrate which Local Authority areas were most similar. One of the outputs from this study was a 'Corresponding Authority' table which showed the three most similar authorities for any given District.

Table 2 ONS Cluster Analysis 'Corresponding Authorities

LAD	Most Similar	Distance
Cherwell	Huntingdonshire	1.19
Oxford	Cambridge	1.90
South Oxfordshire	Vale Of White Horse	0.48
Vale Of White Horse	South Oxfordshire	0.48
West Oxfordshire	Vale Of White Horse	0.63
LAD	2nd	Distance
Cherwell	Mid Bedfordshire	1.41
Oxford	Southampton	12.23

South Oxfordshire	West Oxfordshire	0.76
Vale Of White Horse	West Oxfordshire	0.63
West Oxfordshire	North Wiltshire	0.74
LAD	3rd	Distance
Cherwell	Basingstoke and Deane	1.46
Oxford	Bristol	12.86
South Oxfordshire	West Berkshire	0.8
Vale Of White Horse	East Hampshire	0.82
West Oxfordshire	South Oxfordshire	0.76
LAD	4th	Distance
Cherwell	Aylesbury Vale	1.48
Oxford	Cardiff	13.63
South Oxfordshire	East Hampshire	0.83
Vale Of White Horse	South Cambridgeshire	0.89
West Oxfordshire	Test Valley	0.88

The methodology used by ONS was rigorous, and based on demographic structure; household composition; housing; socio-economic character, employment and industry sector. The 'Distance' figure represents the statistical distance (SED) from the original to the comparator Authority; the ONS defines these distances as follows:

LADs are considered *extremely similar* if the SED is less than 2.66646 (within 1% of total range)

LADs are considered *very similar* if the SED is less than 5.94795 (within 2.5% of total range)

LADs are considered *similar* if the SED is less than 11.4171 (within 5% of total range)

LADs are considered *somewhat similar* if the SED is less than 22.3554 (within 10% of total range)

LADs are considered *less similar* if the SED is greater than 22.3554 (over 10% of total range)

From this we can see that:

- ◆ Oxford is extremely similar to Cambridge, but other comparator areas soon become much more statistically distant and therefore qualitatively different.
- ◆ Cherwell is also most similar to part of Cambridgeshire, but has good parallels with parts of Hampshire. The similarities for Cherwell are much less than those in the rest of Oxfordshire outside of Oxford.
- ◆ Vale, and South & West Oxfordshire, are all most similar to each other, but are closely comparable to rural parts of Berkshire and Hampshire.

3.8 Summary of issues

The SQW work indicates very strongly that Cambridgeshire is a close comparator for Oxfordshire; this is reinforced by the ONS cluster work which approaches the issue from a different angle, but again indicates that Cambridgeshire has strong parallels.

Berkshire is also indicated as a comparative area. The presence of West Berkshire and rural elements of Hampshire indicate that the strongly urban nature of most of the Unitary authorities of the former Berkshire county distance them from Oxfordshire in the cluster analysis. However, it is a prosperous area, with strong economic ties and proximity to Oxfordshire make it a good benchmark for economic potential. The Diamonds for Growth study indicates strong parallels between Reading and central Oxfordshire, suggesting that using Berkshire as a comparator is realistic and useful.

DRAFT

4 The Economic Assessment

4.1 4.1. Gross Value Added and Productivity

Why GVA is important to the economic assessment

GVA is an internationally accepted measure of economic activity for a given, sub-national economy. It is therefore a fundamental measure of economic performance and forms a key element of the Economic Assessment process. However, GVA is not without drawbacks.

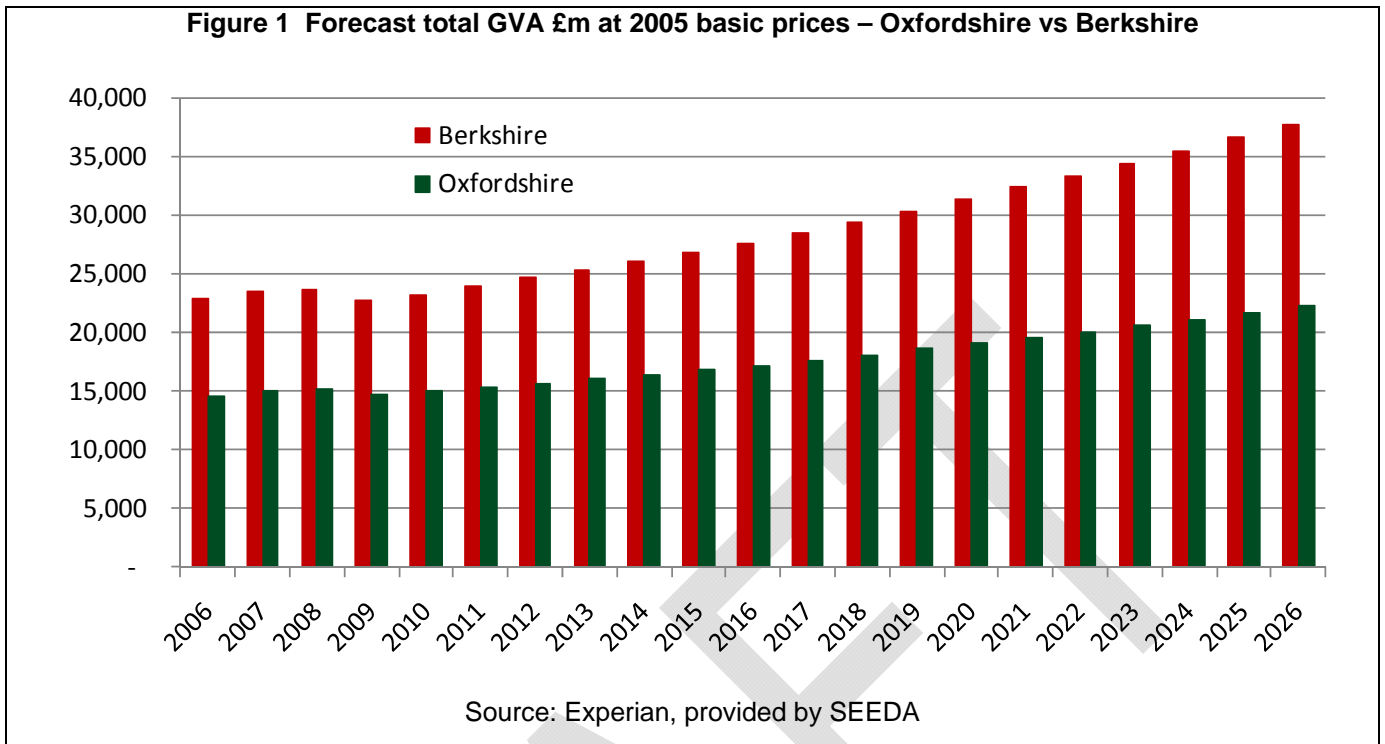
Productivity measures are frequently shown as GVA per head of resident population. However, for an area like Oxfordshire, which is largely self-contained, has an aging population, and is substantially rural, this can under-represent the levels of productivity in the economy. Alternative approaches include measuring GVA per head of the working population, or by hour worked. This latter measure has the benefit of addressing the potential impact of part-time work.

There is a significant time lag in the publication of the regional and sub-regional GVA data by ONS - as of December 2009 the latest data for Oxfordshire's GVA is for the year 2007. This means that ONS's GVA data is not useful for monitoring the current economic downturn which started to make an impact in 2008. Experian have prepared a forecast of GVA based on 2005 data that includes assumptions on the current global economic recession.

The evidence

Oxfordshire contributes a greater share of the UK's total GVA (1.27%) than it has a share of the UK's working age population (1.07%). GVA per head of resident population is a standard measure of productivity for a County-level (NUTS3) area. Under this measurement, Oxfordshire ranks 13th out of 131 NUTS3 level areas. Berkshire ranks 4th. However it is notable that the top 10 ranking areas are almost all concentrated urban areas, with Berkshire being the only one with a significant rural hinterland. All the areas have substantial in-commuting.

Both Oxfordshire and Berkshire are expected to see a one year decline in GVA in 2009 followed by consistent annual growth up to 2026.



The GVA gap between Berkshire and Oxfordshire is predicted to continue to widen with Oxfordshire’s forecast annual growth around 0.5 percentage point below Berkshire’s.

Table 3 Predicted annual change in total GVA, 2007 to 2024

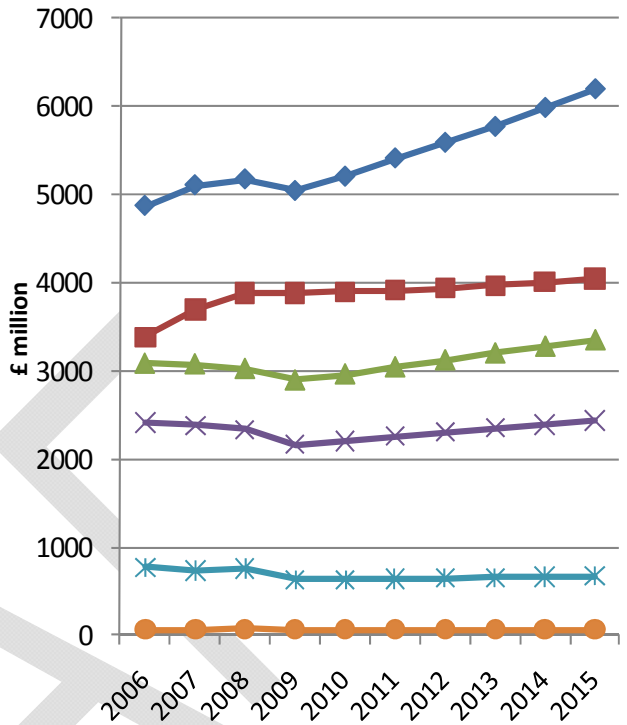
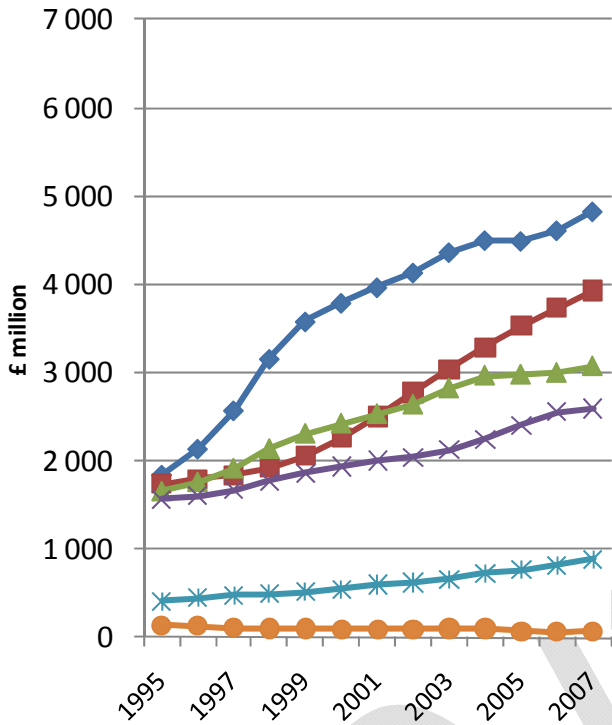
	2007	2008	2009	2010	2011	2012	2013	2014	2015
Berkshire	2.4%	1.0%	-4.0%	2.3%	3.1%	2.7%	2.7%	2.9%	2.9%
Oxfordshire	3.2%	1.2%	-3.7%	1.9%	2.4%	2.2%	2.2%	2.4%	2.3%
	2016	2017	2018	2019	2020	2021	2022	2023	2024
Berkshire	3.1%	3.2%	3.2%	3.3%	3.3%	3.2%	3.1%	3.1%	3.1%
Oxfordshire	2.5%	2.6%	2.7%	2.7%	2.7%	2.6%	2.6%	2.6%	2.6%

Source: derived from Experian forecasts, provided by SEEDA

Comparing Oxfordshire’s historical and forecast GVA for each sector shows a significant reduction in the growth of GVA from public sector from 2008 to 2015.

Figure 2 Oxfordshire GVA by sector HISTORICAL (at 2007 basic prices)

Figure 3 Oxfordshire GVA by sector FORECAST (at 2005 basic prices)



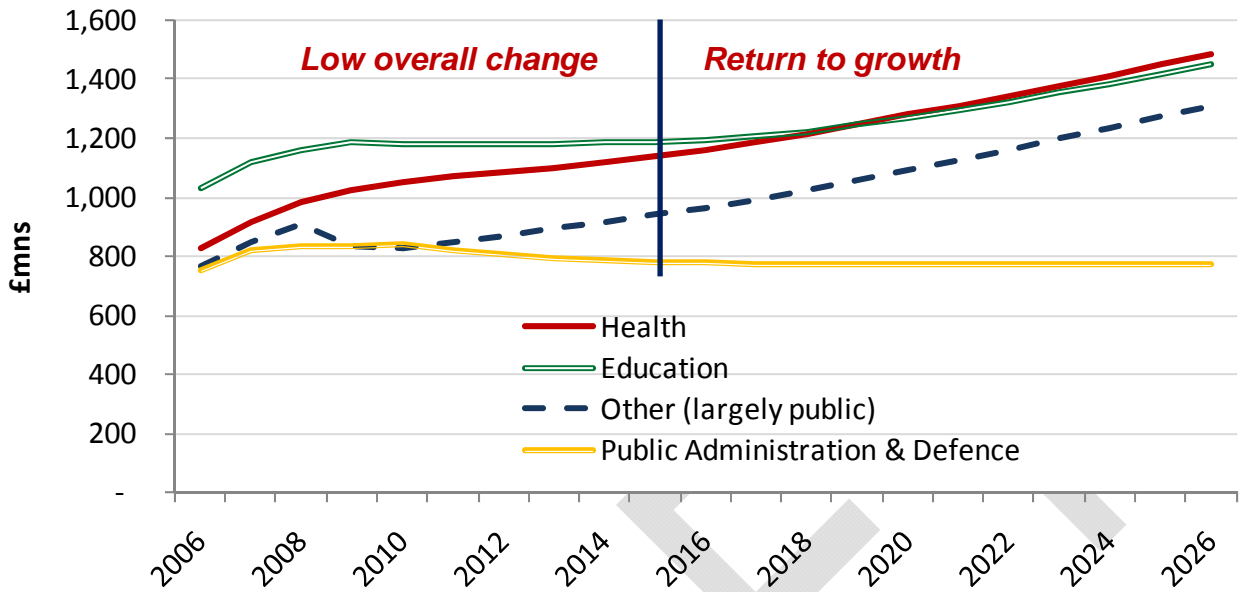
- ◆ Business services and finance
- Public administration, education, health and other
- ▲ Distribution, transport and communication
- × Production
- * Construction
- Agriculture, forestry and fishing

Source: National Statistics Online GVA released Dec09
Table 3:4 Headline1 Gross Value Added by NUTS3 area and 6 industries at 2007 basic prices by region

Source: Experian forecasts provided by SEEDA

The more detailed forecast over a longer time period for the *Public Admin, Defence, Health & Education* sector shows GVA from *Health and Education* continuing to grow and little change in GVA from *Public administration and Defence*.

Figure 4 Oxfordshire GVA for Public Administration, Education and Health sector FORECAST (at 2005 basic prices)



Source: Experian forecasts provided by SEEDA

Table 4 Forecast change in Oxfordshire GVA for Public Administration, Education and Health sector (at 2005 basic prices)

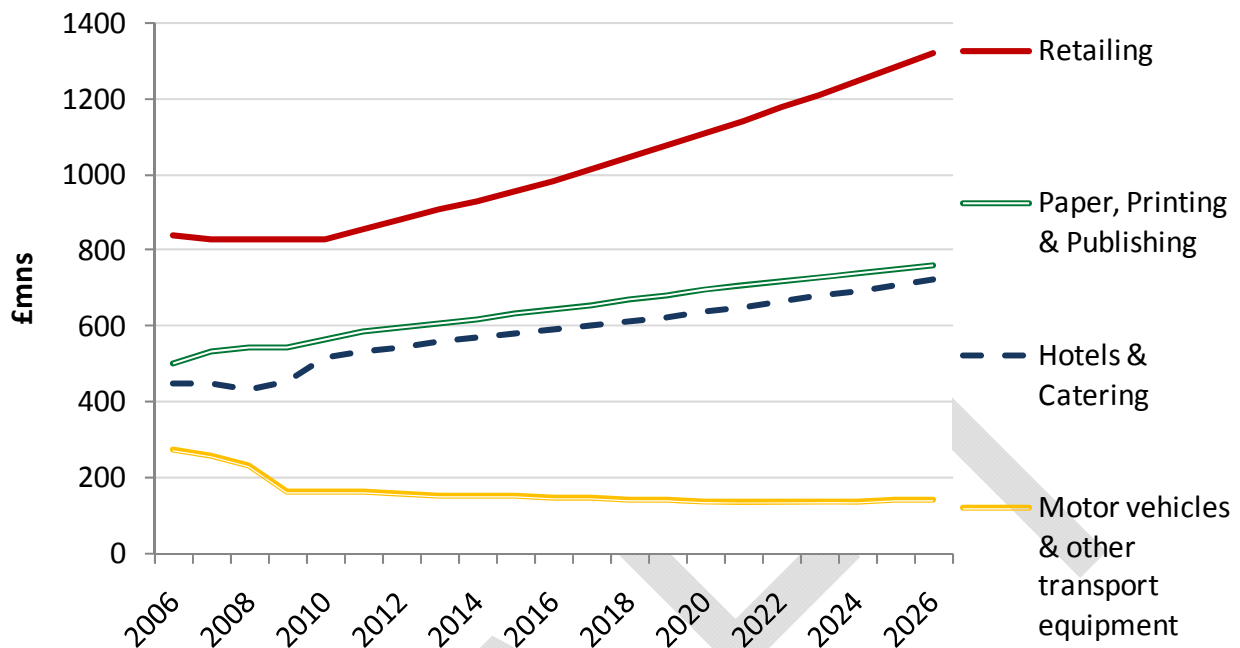
	2006 to 2016	2016 to 2026
Health	+40%	+28%
Education	+16%	+21%
Other (largely public)	+25%	+36%
Public Administration & Defence	+3%	-1%
TOTAL Public Administration, Education and Health	+21%	+22%

Source: Experian forecasts provided by SEEDA

Continued growth is forecast for Oxfordshire's *Printing & Publishing* sector, in contrast to GVA from motor manufacturing which shows a long term decline.

GVA from the *Retailing* and *Hotels & Catering* sectors – an indication of the strength of the local economy - are expected to increase from 2010 onwards.

Figure 5 Oxfordshire GVA for selected private sector industries FORECAST (at 2005 basic prices)



Source: Experian forecasts provided by SEEDA

Table 5 Forecast change in Oxfordshire GVA for selected private sector industries (at 2005 basic prices)

	2006 to 2016	2016 to 2026
Retailing	17%	34%
Paper, Printing & Publishing	28%	18%
Hotels & Catering	32%	22%

Source: Experian forecasts provided by SEEDA

Analysis

The GVA per resident worker of Oxfordshire is behind some key comparator areas, and outside the goal of a Top 10 slot. However, considering the self-contained nature of the County, its' high proportion of Public employment, its largely rural nature, and the fact that many of the other Top 10 areas are purely urban rather than having Oxfordshire's rural-urban mix its position of 13th out of 131 is positive.

The choice of GVA *per head* as measure of productivity makes Oxfordshire appear less productive than it is. If the measure were GVA *per hour worked* instead then the differential with Berkshire would be halved. The differential can be attributed to a higher proportion of

part-time work in Oxfordshire, and also the fact that Berkshire has substantial in-commuting which contributes significantly to its higher GVA/head.

The overall level of GVA growth is an area for concern. Projections indicate it will fall increasingly behind Berkshire. Given the expected proximity of other growth areas (for example, Milton Keynes & the South Midlands, Swindon and Aylesbury) there is potential for a very localised lack of competitiveness from the Oxfordshire economy. An increase in demand for skilled employment from neighbouring economies (and consequential wage pressures) could lead to a substantial increase in out-commuting and/or the loss of established companies.

Key Issues

What will be the impact of the decline in growth in the public services? Possible scenarios include employment shifting to higher value-added activity in the private sector, or adding to economic inactivity. Given the wide range of activities under the Public Sector umbrella, the exact outcome is unclear.

Is it possible to address the relative decline in manufacturing in Oxfordshire, especially hi-tech manufacturing which is a sector that many expect to see resurgent?

The impact of the current economic downturn in Oxfordshire looks to be confined to the private sector in 2009. From 2009 onwards, public sector GVA in Oxfordshire is predicted to remain roughly constant. Is there a way of estimating the impact of planned changes in Oxfordshire's public sector on GVA?

Within the commercial sectors the production sector appears flat: are there ways in which its growth can be supported?

What new sectors will emerge as dominant generators of GVA and how can we best address them in Oxfordshire?

It is predicted that Berkshire will continue to grow its GVA at a rate above that of Oxfordshire –how does this impact Oxfordshire's ambition of a world class economy?

The decline in GVA is limited to 2009 – is this optimistic?

The issue of the disparity productivity – as measured by GVA per head or preferably GVA per hour worked – needs to be addressed. Long term Oxfordshire's economic prosperity will depend on it being competitive both within the UK and nationally and productivity is key to that competitiveness. Lower levels of productivity has implications for out-commuting and the retention of companies and employment.

Maintaining the diversity of employment in Oxfordshire should be a high priority. Diverse employment allows for greater resilience to macro-economic factors, and there is anecdotal evidence that the existing diversity has ameliorated the impact of the current recession.

Greater clarity about the balance to be achieved between growth and productivity while maintaining key aspects of the Oxfordshire 'experience' (particularly lifestyle and environmental quality) and the resilience of its economy, will be important in establishing future strategic priorities.

Note on GVA forecast data

Each publication of sub-regional GVA includes a complete reissue of the previous years of data - updating to “current basic prices” - this means that the full 2007 dataset is GVA at 2007 basic prices.

Experian has produced forecasts of GVA for the South East of England Regional Development Agency (SEEDA) for NUTS3 areas from 2006 to 2026 based on 2005 GVA – i.e. at 2005 basic prices.

Experian also provides a breakdown of GVA by industry group at a more detailed level than the ONS. In order to compare historical GVA by industry with the Experian forecasts it has been necessary to map the Experian sectors to the ONS GVA sectors. The following table shows the mapping used in this report.

Note that the sum of GVA by sector from Experian equals a lower total than the “total GVA” provided in the same spreadsheet. It appears most likely that the difference should be allocated to the Business Services and Finance (ONS) sector. This assumption will be checked.

Table 6 Mapping of GVA sectors - Experian to ONS

Experian GVA sector	ONS GVA broad sector
Agriculture, Forestry & Fishing	Agriculture, forestry and fishing
Mining (excluding Oil & Gas)	Production
Food, Drink & Tobacco	Production
Textiles, Footwear & Clothing	Production
Wood and Wood Products	Production
Paper, Printing & Publishing	Production
Fuel Processing	Production
Chemicals & Manmade Fibres	Production
Rubber & Plastics	Production
Mineral Products	Production
Metals	Production
Mechanical Engineering	Production
Electrical Engineering	Production
Motor vehicles & other transport equipment	Production
Other Manufacturing	Production
Electricity, Gas & Water	Production
Construction	Construction
Wholesaling	Distribution, transport and communication
Retailing	Distribution, transport and communication
Hotels & Catering	Distribution, transport and communication
Transport	Distribution, transport and communication
Communications	Distribution, transport and communication
Banking & Insurance	Business services and finance

Business Services	Business services and finance
Other F&B (real estate, R&D etc.)	Business services and finance
Public Administration & Defence	Public administration, education, health and other services
Education	Public administration, education, health and other services
Health	Public administration, education, health and other services
Other (largely public)	Public administration, education, health and other services
Remainder (GVA total minus sum of GVA by sector)	Business services and finance

DRAFT

4.2 Income

Why is it important

Income of workers makes a direct contribution to GVA so that if we aim to increase GVA then increasing incomes will contribute to that. Data is easier to obtain and can therefore serve as a more accessible proxy indicator for GVA – although it only provides part of the picture.

The evidence

In the same year as the GVA data (2006), Berkshire's average earnings were over £100 per week above Oxfordshire.

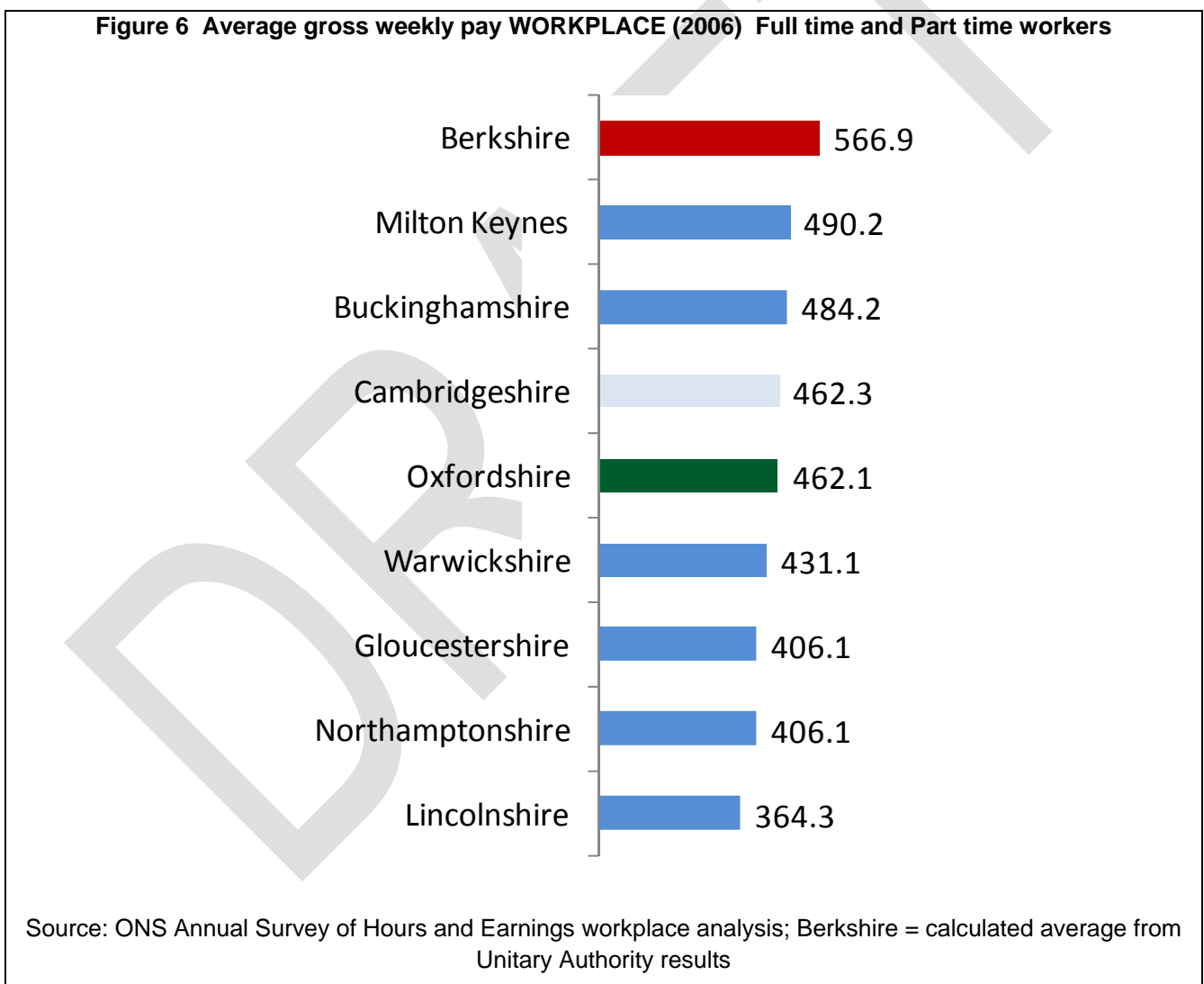


Table 7 2009 Earnings – Gross Weekly Pay, Full-Time Workers

	By Residence (£)	By Workplace (£)	Difference (£)
Oxford City	495.9	526.9	-31.0

Cherwell	549.5	490.1	59.4
South Oxfordshire	570.2	461.4	108.8
Vale of White Horse	576.9	573.1	3.8
West Oxfordshire	538.9	495.1	43.8

Source: ONS annual survey of hours and earnings - resident analysis

Note: Median earnings in pounds for employees living in the area.

Analysis

The higher proportion of graduates in Berkshire's predominantly private sector workforce is likely to contribute to Berkshire's higher average income. The difference between workplace and residence wage rates varies widely across the county. A substantial element of it must be attributable to commuting patterns; in Oxford by commuting in, South Oxfordshire by out-commuting (presumably mostly to London and Reading as well as in to Oxford). This could also hold true for Cherwell and West Oxfordshire, where there are good commuting routes by train or road to the external economic poles. However, Vale is extremely closely balanced between these two measures despite close proximity to Swindon. Traffic across the District boundaries from West and South Oxfordshire in to the Vale, particularly at Milton Park and Harwell Science and Innovation Campus, are also a contributory factor.

Key Issues

How can we improve wage rates without an excessive negative impact on related factors such as house prices, business costs and productivity?

Are there aspects of housing availability and affordability that impact on commuting patterns suggested by the difference between wages measured by workplace and by residence. Is the greater issue commuting patterns internally in the County, or externally to other economic centres?

The alternative to increasing the income levels of existing jobs is to bring about structural change in the economy so that, like Berkshire, we have a higher proportion of roles that employ graduates in the workforce who are therefore paid higher salaries.

4.3 Worklessness & Deprivation

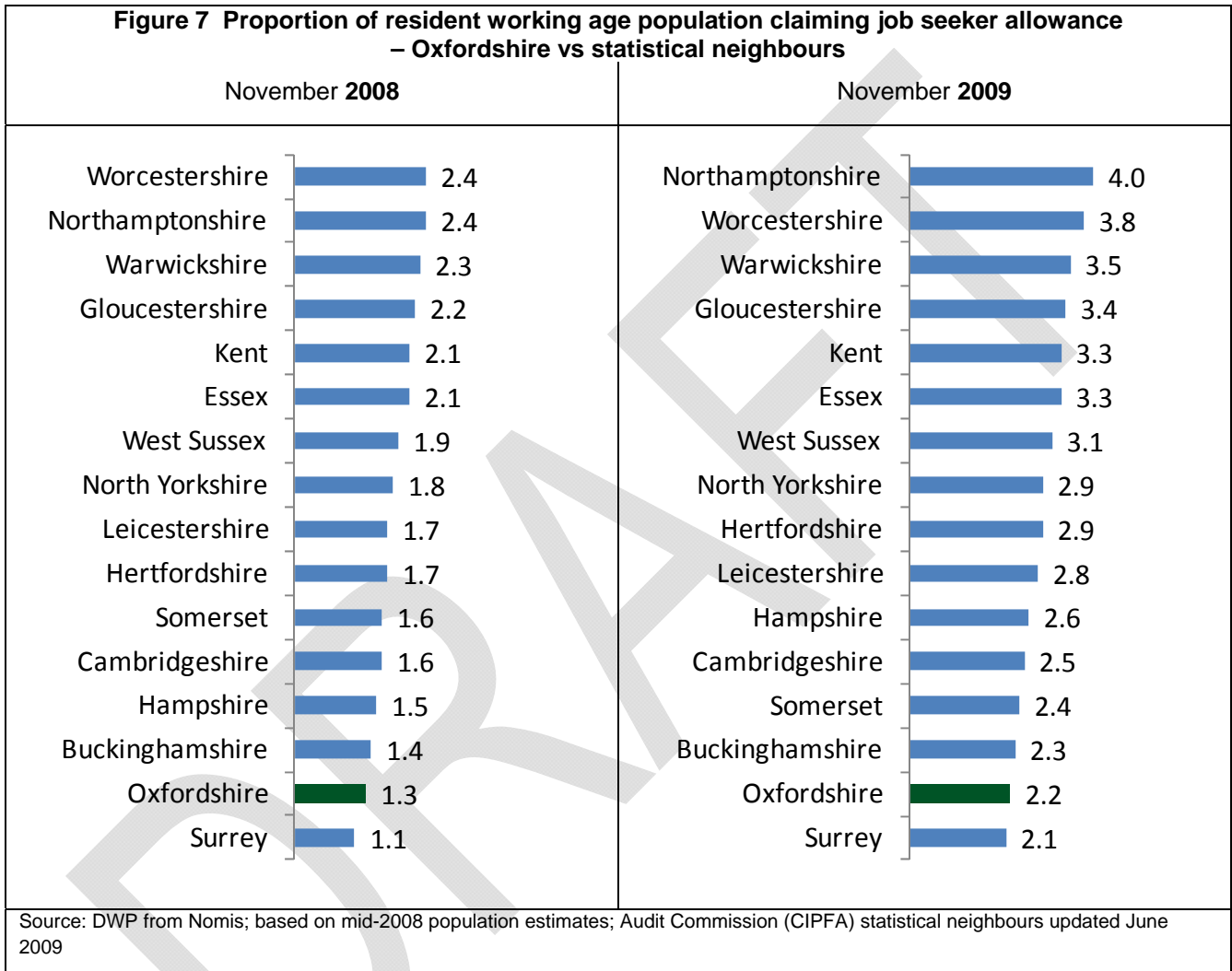
Why is this important

GVA/head is reduced by higher levels of worklessness.

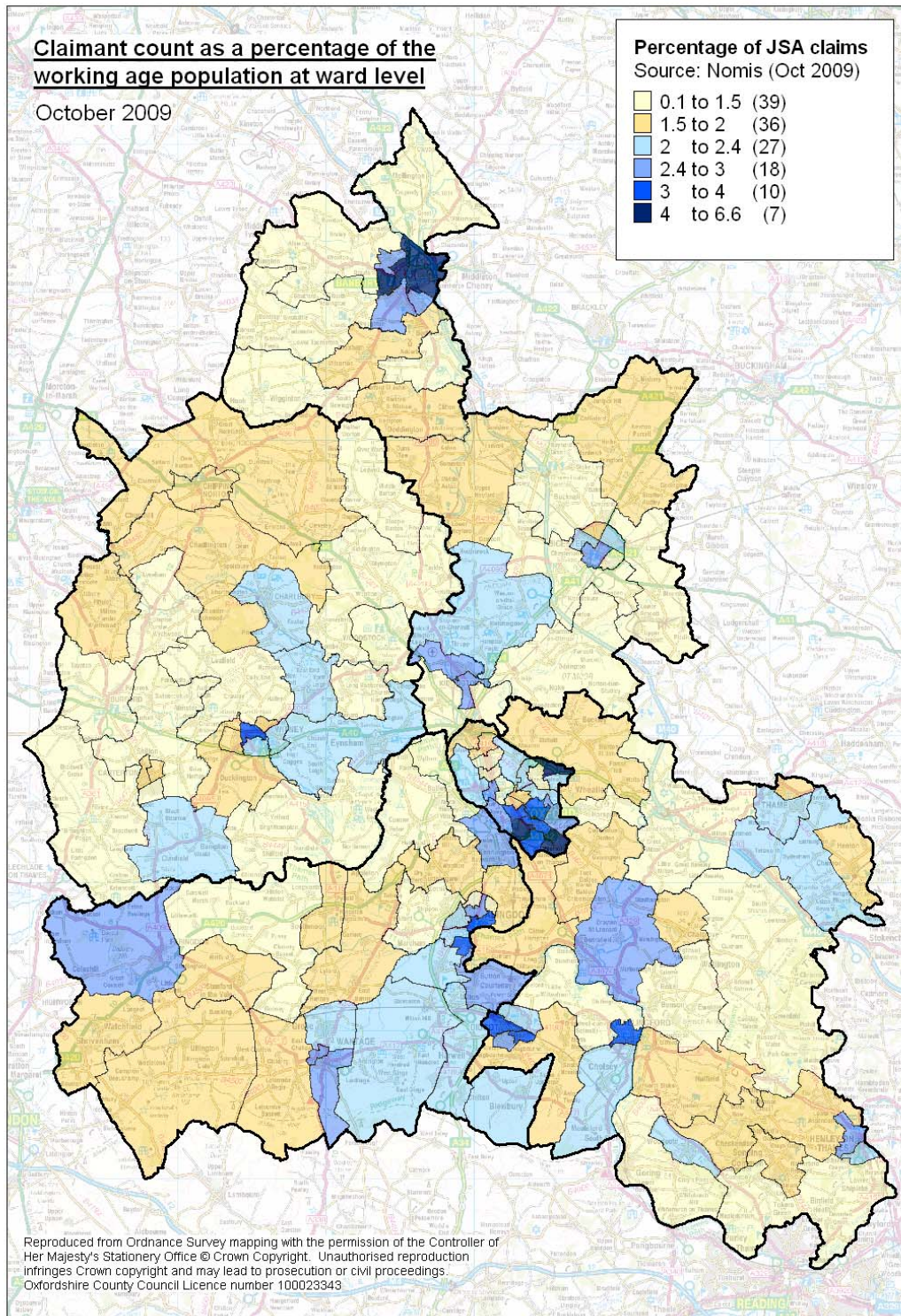
There are a number of different forms of worklessness: those seeking work and claiming Job Seekers Allowance (JSA) and those claiming benefits due to being unable to work because of incapacity (IB) or severe disability (SDA). There is a further group of people not claiming benefits but who have given up seeking work.

The Evidence

Oxfordshire is a generally prosperous County. However, this general prosperity has the capacity to throw pockets of economic deprivation into sharp relief. Joblessness, which still lies at the heart of deprivation, has stayed substantially lower than the national average, even through the recent economic crisis.



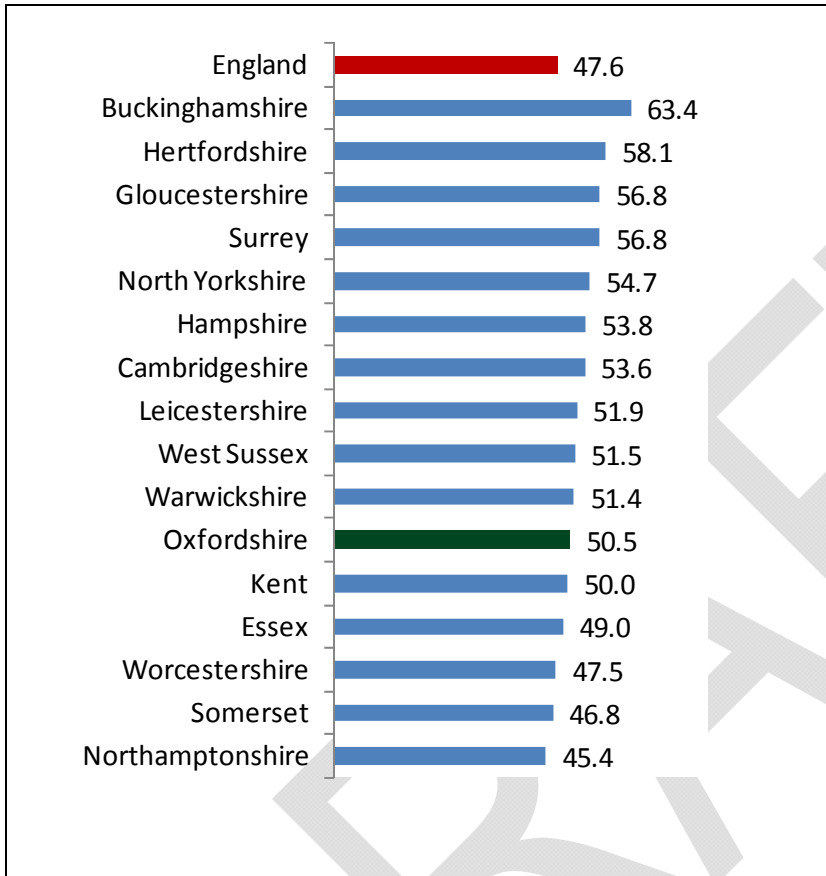
However during the period July 08 – July 09, which largely represents the most severe part of the recession, rates of Job Seekers Allowance (JSA) benefit claimants in the wards with the greatest levels of deprivation (according to the national Indices of Multiple Deprivation) showed much higher increase rates than anywhere else in the County. These areas also demonstrate the longest periods of unemployment, with the proportion of JSA claimants claiming for 12 months or more ranging from 1.5 – 2.5 times the Oxfordshire average.



As outlined in the section above on Skills, worklessness in these areas is frequently associated with low skills, and while these are not the only factors coming into play – health in the form of long term illness is also significant – skills could be seen to be a tool for overcoming other barriers to securing and retaining employment.

2008 pupil attainment results show Oxfordshire ranked 11th out of 16 statistical neighbours on the percentage of pupils achieving 5+ A*-C GCSEs (including English and Maths) – above the England average, but below Cambridgeshire and a number of other counties.

Figure 8 Percent of pupils achieving 5+ A*-C GCSEs including English and Maths (2008)



Source: Dept for Children Schools and Families achievement and attainment tables 2008 KS4 results

A low ranking on the “Education and Skills” domain of the Index of Multiple Deprivation (2007) is an important influence on the overall scores of Oxfordshire’s most deprived areas. A total of 13 of Oxfordshire’s 404 super output areas are ranked in the most deprived 5% in England.

In comparison Berkshire’s most deprived areas include low scores on a broader range of domains.

Table 8 Oxfordshire’s 10 most deprived areas (IMD2007)

LA NAME	SOA name	IMD 2007	Income	Employment	Health	Education and skills	Housing and services	Crime	Environment
Oxford	Northfield Brook 68	11%	10%	26%	12%	2%	32%	8%	47%
Oxford	Barton & Sandhills 13	12%	10%	22%	13%	6%	13%	21%	42%
Oxford	Barton & Sandhills 14	13%	14%	24%	24%	2%	11%	38%	30%
Oxford	Blackbird Leys 20	14%	15%	25%	23%	4%	25%	6%	37%
Oxford	Northfield Brook 69	14%	12%	26%	25%	5%	5%	22%	77%
Cherwell	Banbury Ruscote 50	17%	15%	20%	34%	6%	66%	16%	16%
Cherwell	Banbury Ruscote 54	17%	15%	21%	23%	5%	74%	19%	26%
Oxford	Blackbird Leys 18	17%	20%	23%	29%	3%	25%	21%	39%
Oxford	Rose Hill and Iffley 76	17%	10%	35%	36%	6%	14%	19%	44%
Oxford	Rose Hill and Iffley 77	18%	20%	27%	22%	4%	26%	12%	58%

Source: CLG IMD2007, Data is national ranking (100%= least deprived) shaded cells are in the most deprived 10% in England

Table 9 Berkshire’s 10 most deprived areas (IMD2007)

LA NAME	LSOA code	IMD2007	Income	Employment	Health	Education and skills	Housing and services	Crime	Environment
Slough	E01016490	9%	12%	14%	18%	25%	2%	2%	28%
Reading	E01016443	11%	8%	24%	30%	1%	39%	5%	43%
Reading	E01016368	12%	10%	21%	28%	2%	40%	6%	35%
Reading	E01016372	12%	10%	20%	33%	3%	21%	6%	48%
Reading	E01016420	13%	11%	9%	18%	10%	52%	15%	35%
Reading	E01016441	15%	12%	18%	23%	6%	24%	10%	80%
Slough	E01016464	16%	7%	18%	37%	42%	47%	5%	25%
Reading	E01016389	16%	9%	20%	27%	13%	26%	22%	40%
Reading	E01016415	16%	17%	18%	29%	11%	30%	10%	25%
Reading	E01016438	17%	15%	37%	37%	6%	39%	3%	30%

Source: CLG IMD2007, Data is national ranking (100%= least deprived) shaded cells are in the most deprived 10% in England

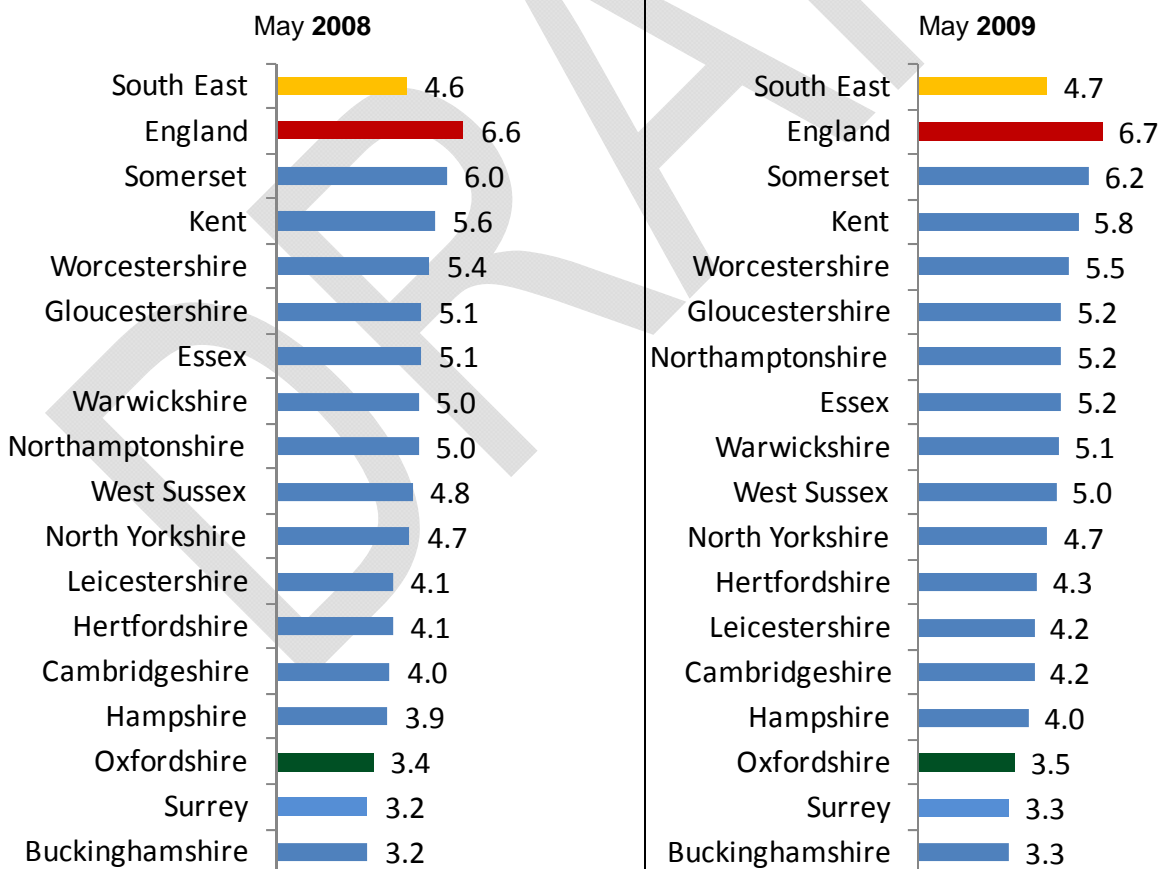
The disproportionate impact of job losses through the recession felt in these areas could be a reflection of the reduction of low-skilled low-value-added jobs to reduce costs.

The measures of deprivation reflect its relative nature in contrasting neighbouring communities with very different characteristics. This has two implications. The first is around seeking to narrow the disparity between the poorest and both the richest and the average, which has the consequence of creating moving targets. The second is around the effect of low-cost housing in concentrating relative poverty, with consequential self-reinforcing effects around poor quality accommodation, crime and anti-social behaviour, poor health and diet, and exclusion from learning and work opportunities.

The proportion of resident working age people claiming Job Seeker Allowance increased in Oxfordshire from 1.3 to 2.2 between November 2008 and November 2009. Oxfordshire remained ranked 15 in its group of 16 statistical neighbours.

The most recent data on the proportion of people claiming Incapacity Benefit or Severe Disablement Allowance shows a decline (compared with the previous year) in each of the counties in Oxfordshire's statistical neighbours group. Oxfordshire remains ranked 14th out of 16 comparable neighbours with a rate below the regional and national averages.

Figure 9 Proportion of resident working age population claiming Incapacity Benefit or Employment Support Allowance (and related) – Oxfordshire vs statistical neighbours

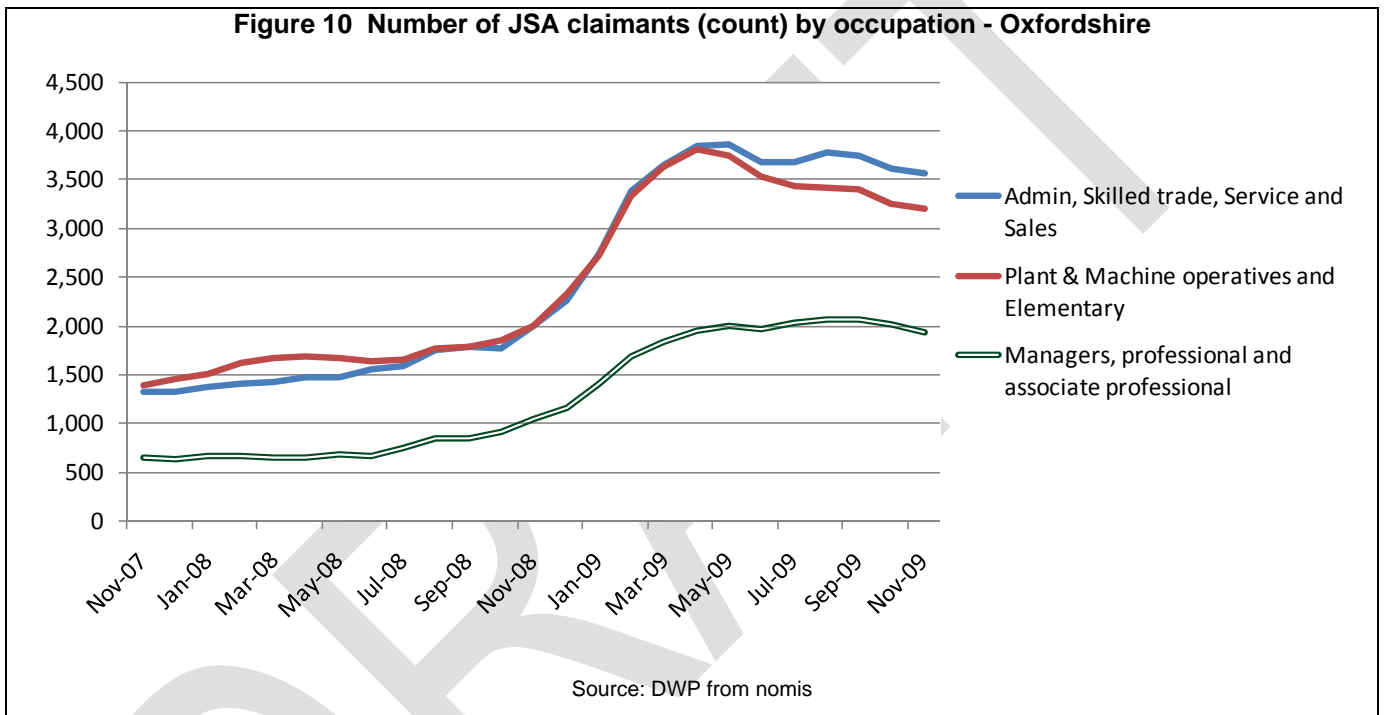


Source: DWP from Nomis; based on mid-2008 population estimates; Audit Commission (CIPFA) statistical neighbours updated 2009; Employment Support Allowance replaced Incapacity Benefit for new clients from October 2008

Table 10 JSA Claimants in Oxfordshire – May 2008 & May 2009, number and rate

	May 2008		May 2009	
	Number	Rate (%)	Number	Rate (%)
Oxfordshire	13,710	3.4	14,370	3.5

There has been a recent decline in the number of JSA claimants in Oxfordshire – particularly for those seeking work in the more elementary occupations (-16% from April 2009 to Nov 2009).



Some wards in Oxfordshire have much higher rates of JSA claimants than the county average including (but not exclusively) areas of greater overall deprivation.

- ◆ Blackbird Leys, Northfield Brook and Barton wards in Oxford and Banbury Ruscombe and Neithrop in Cherwell have higher rates of JSA claimants and include areas ranked as more deprived on the Index of Multiple Deprivation.
- ◆ Banbury Grimsbury & Castle however has higher JSA claimant rates without being ranked as more deprived.

Table 11 Wards in Oxfordshire with highest and lowest rates of JSA claimants November 2009

	HIGHEST RATES	JSA claimants	
		Number	rate
Oxford	Blackbird Leys	250	6.4
Cherwell	Banbury Ruscote	252	5.2
Oxford	Northfield Brook	242	4.9
Cherwell	Banbury Grimsbury and Castle	306	4.7
Cherwell	Banbury Neithrop	157	4.5
Oxford	Barton and Sandhills	214	4.5
Oxford	Rose Hill and Iffley	168	4.2
South Oxfordshire	Didcot Northbourne	146	4.0

	LOWEST RATES	JSA claimants	
		Number	rate
Vale of White Horse	Marcham and Shippon	17	0.7
Cherwell	Hook Norton	9	0.6
West Oxfordshire	Brize Norton and Shilton	12	0.5
West Oxfordshire	Ascott and Shipton	4	0.3
Oxford	Holywell	9	0.2

Ranking Oxfordshire's wards on those showing the greatest **increase in JSA claimant rate** between November 2008 and November 2009 highlights:

- ◆ Wards where JSA rates were already relatively high and
- ◆ Wards in southern Oxfordshire (Abingdon, Didcot, Aston Rowant) where rates have seen an above average change.

Table 12 Wards in Oxfordshire with the greatest change in the proportion of claimants of Job Seeker Allowance (Nov 2008 to Nov 2009)

		JSA rate Nov-07	JSA rate Nov-08	JSA rate Nov-09	2008 to 2009 difference in rate
Oxford	Blackbird Leys	2.6	4.3	6.4	2.1
Oxford	Northfield Brook	2.1	2.9	4.9	2.0
Cherwell	Banbury Grimsbury and Castle	2.1	2.8	4.7	1.9
Vale of White Horse	Abingdon Caldecott	0.7	1.6	3.5	1.9
Vale of White Horse	Abingdon Abbey and Barton	1.0	1.3	3.1	1.8
South Oxfordshire	Didcot Northbourne	1.4	2.2	4.0	1.8
Oxford	Barton and Sandhills	2.4	2.8	4.5	1.7
Oxford	Littlemore	1.5	1.8	3.5	1.7

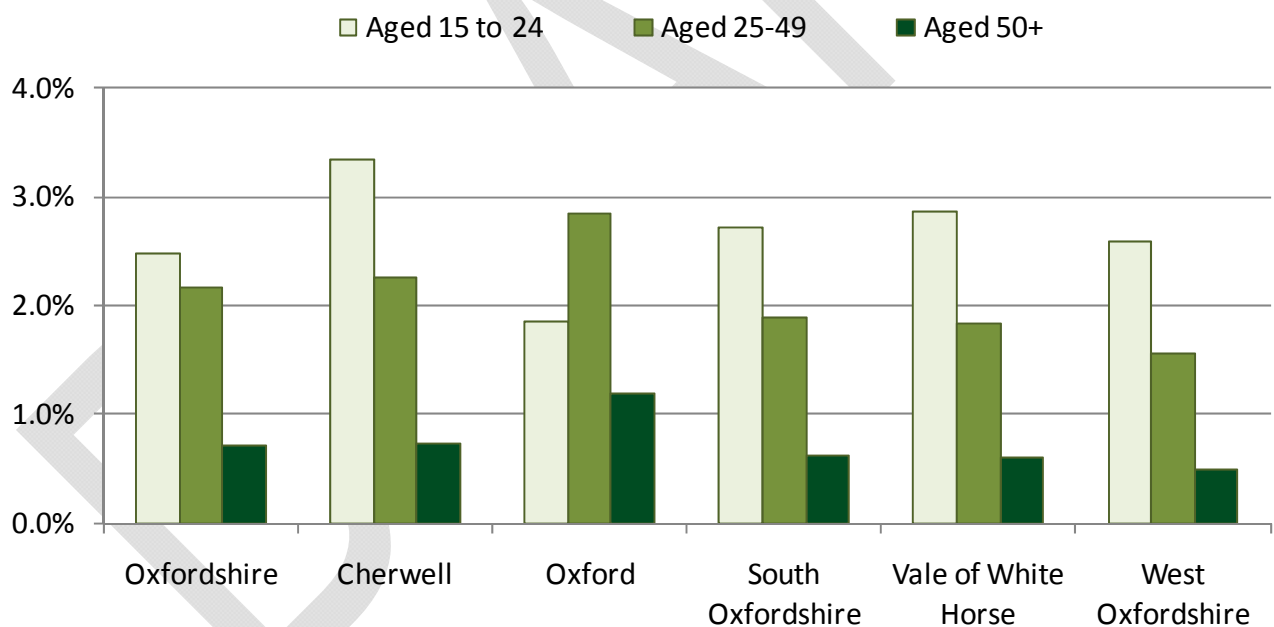
Oxford	Cowley Marsh	1.5	1.6	3.3	1.7
Cherwell	Banbury Ruscote	2.9	3.6	5.2	1.6
South Oxfordshire	Aston Rowant	0.5	0.5	2.1	1.6
Vale of White Horse	Kennington & South Hinksey	0.5	1.0	2.6	1.6
Vale of White Horse	Sutton Courtenay & Appleford	0.4	0.9	2.5	1.6

Source: DWP from nomis; based on mid-2008 population estimates

Young people are disproportionately affected by job losses – there was a higher proportion of claimants from the younger age group (aged up to 24) in November 2009 than other age groups in all districts in Oxfordshire with the exception of Oxford city.

- The rate in Oxford city is likely to be affected by the fact that the lower age group in the resident population (denominator) includes the student population.
- Cherwell had the highest rate of younger JSA claimants of the districts in Oxfordshire.

Figure 11 Claimants of Job Seeker Allowance November 2009 as proportion of resident population (mid-2008)



Source: DWP and ONS from nomis

Data on the proportion of young people who were not in education, employment or training (NEET) also highlights Cherwell district. In June 2009, Banbury and Bicester/Kidlington had the highest rates of 16-18 year olds NEET.

Table 13 Proportion of young people who were Not in Education, Employment or Training, Oxfordshire's localities

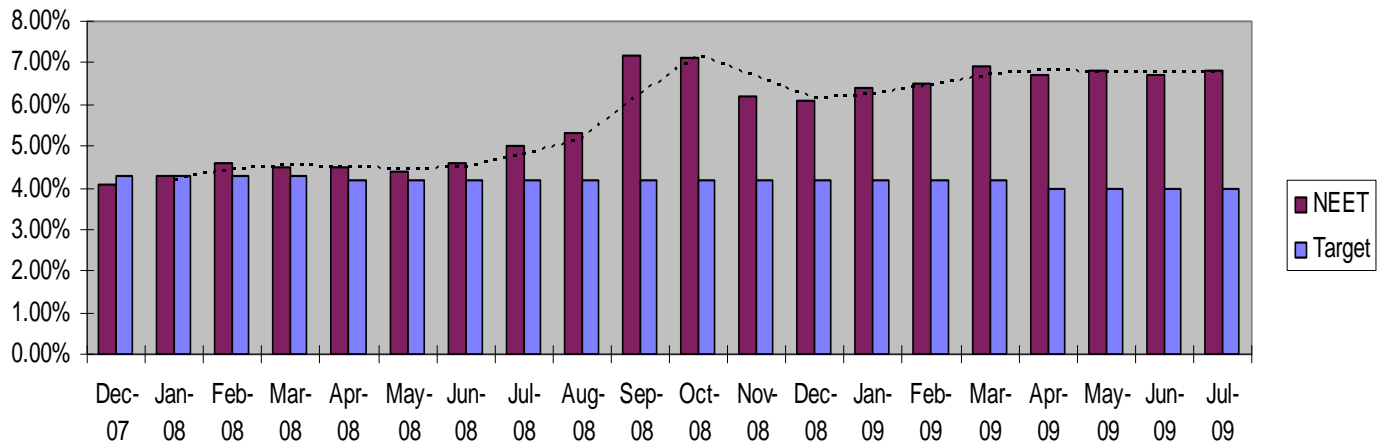
Locality	Cohort of 16-18 year olds	Number of those NEET	Proportion of cohort which are NEET %
Banbury	1498	150	10.01%
Bicester/Kidlington	1736	111	6.39%
Witney/Eynsham/Woodstock	1604	89	5.55%
Carterton/Burford/Chipping Norton	1342	71	5.29%
Didcot	949	69	7.27%
Thame/Watlington	837	18	2.15%
Abingdon/Berinsfield	1482	67	4.52%
Henley/Sonning Common/Woodcote/Wallingford	1110	35	3.15%
Wantage/Faringdon/Grove	1140	58	5.09%
Headington/Wheatley	892	44	4.93%
Cowley/Iffley (ISIS)	856	86	10.05%
North Oxford/Cumnor/Botley	1174	72	6.13%
Oxford South East	811	101	12.45%
TOTALS:	15431	971	6.2%*
Oxfordshire Average			6.7%

Source: Oxfordshire County Council Children Young People and Families, draft Children's Plan Needs Analysis Dec 2009

* This overall percentage differs slightly from the overall Oxfordshire figure as the locality information does not include the young people who were educated in Oxfordshire but live out of county.

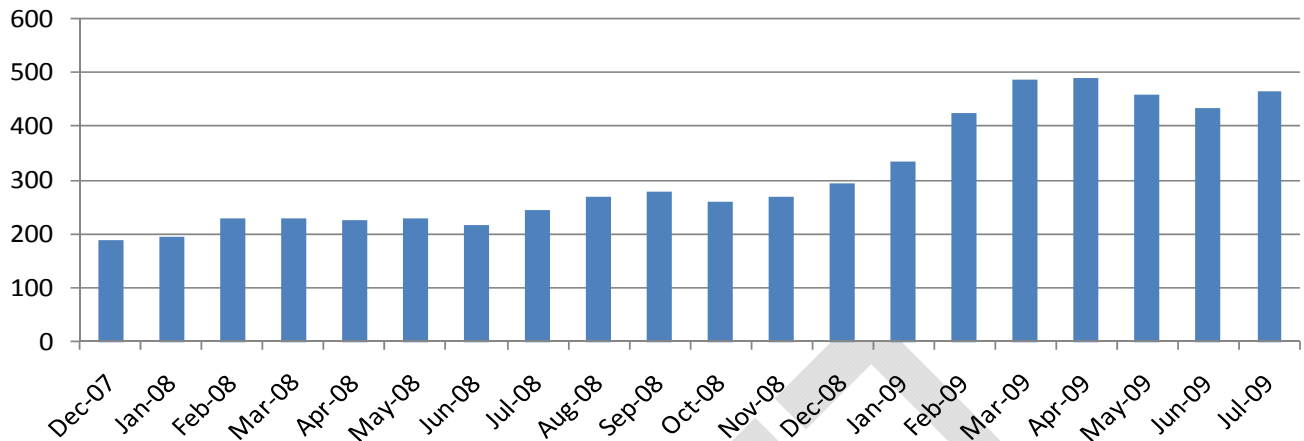
Comparing the NEET trend and the number of people aged 18 and under claiming job seeker allowance in Oxfordshire shows a six month time lag with increases in NEET showing in the data in September 2008 and a significant increase in younger JSA claimants from Feb/March 2009.

Figure 12 Proportion of 16-18 year olds NEET Oxfordshire



Source: Oxfordshire County Council Children Young People and Families, draft Children's Plan Needs Analysis Dec 2009

DRAFT

Figure 13 Number of people aged 18 and under claiming Job Seeker Allowance - Oxfordshire

Source: DWP from nomis

ILO unemployment rate

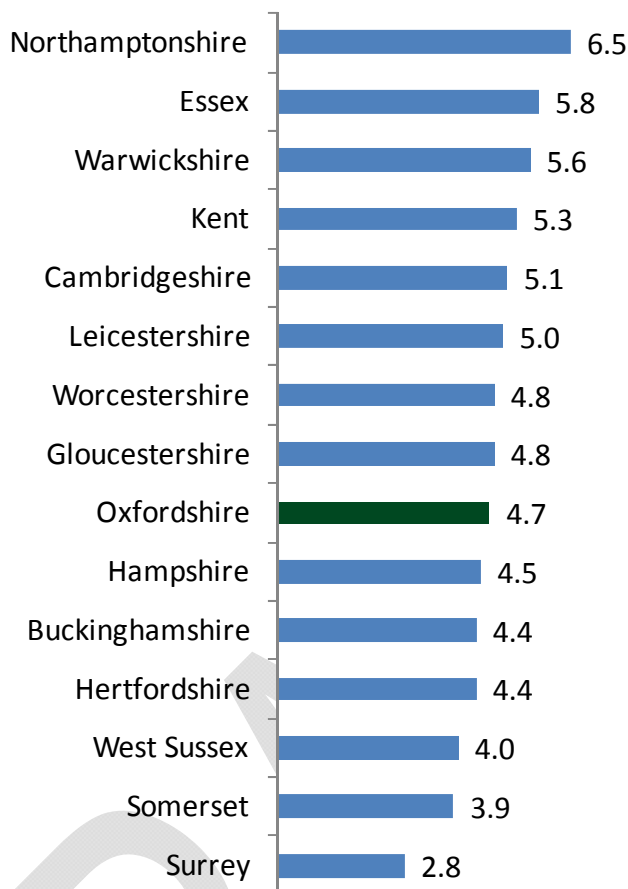
International Labour Organisation (ILO) unemployment rate is based on the Annual Population survey data and is a fuller measure of unemployment than the count of people claiming benefits. In Oxfordshire in 2008/09 the ILO rate was 4.7 compared with the March 2009 JSA rate of 2.3.

Table 14 Comparison of ILO unemployment and JSA claimants - Oxfordshire

Measure	Date	Number	Rate
Working age unemployment rate (ILO unemployment)	Annual Population Survey Apr 2008-Mar 2009	15,900	4.7
Job Seeker Allowance Claimants	Mar 2009	9,174	2.3
	Nov 2009	8,741	2.2

Source: ONS and DWP from nomis

Figure 14 ILO unemployment – Oxfordshire vs statistical neighbours (Apr08-Mar09)



Source: ONS Annual Population Survey from nomis

Analysis

Unemployment has not been a significant issue in Oxfordshire for a considerable time. The current recession has been generally characterised by businesses seeking alternatives to releasing staff, and while there have been job losses in Oxfordshire the impact has been limited so far. Where it has been felt most keenly is amongst young people. In this, Oxfordshire is not significantly different from the general UK picture.

Despite this overall positive picture, there are still particular pockets where worklessness is endemic. Unemployment can be multi-generational, leading to young people growing up in a culture devoid of employment. Where the recession has hit hardest is in these areas, where individuals seem most vulnerable to lower levels of work availability. This is at least partly related to low skills and educational attainment, meaning work patterns such as they are tend towards casual unskilled work which is the most unstable.

Key Issues

Compared with statistical neighbours Oxfordshire has relatively low rates of people claiming Job Seekers Allowance (JSA) and Incapacity Benefit (IB)

There has been a recent decline in the number of people in Oxfordshire claiming JSA - the greatest decrease is in those seeking work in more elementary occupations.

Some wards in Oxfordshire have been more affected by increases in rates JSA claimants than others including those ranked as deprived and wards in southern Oxfordshire.

Young people disproportionately affected by job losses – particularly in Cherwell district.

There may be a link between NEET and young people claiming Job Seeker Allowance – recent evidence shows increases in % NEET followed six months later by increases in younger JSA claimants.

4.4 Business Size

Why is Business Size important for the Oxfordshire economy?

A sustainable economy has a range of businesses, both in terms of size and sector. This diversity ensures that structural economic change has a limited effect on employment.

Businesses of different sizes also have different capacities, with larger firms more able to devote 'risk resources' for diversification, development and innovation.

The evidence

Oxfordshire generally lies between UK and South East regional averages for each size-group. However, there is a distinct dip in the proportions of businesses employing between 50 and 99 and 100 to 249 people, compared to both national and regional figures.

Table 15 Percentage of VAT and PAYE Registered Business Stock, 2009

	0-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000+	TOTAL
UK	68.02	14.90	8.27	5.47	1.88	1.01	0.30	0.11	0.05	100.00
South East	70.32	14.02	7.67	4.97	1.71	0.93	0.25	0.09	0.04	100.00
Oxfordshire	69.41	14.53	8.10	5.10	1.58	0.87	0.26	0.11	0.05	100.00
<i>Cherwell</i>	<i>68.69</i>	<i>14.60</i>	<i>8.32</i>	<i>5.46</i>	<i>1.71</i>	<i>0.89</i>	<i>0.27</i>	<i>0.07</i>	<i>0.00</i>	<i>100.00</i>
<i>Oxford</i>	<i>59.40</i>	<i>18.04</i>	<i>10.65</i>	7.05	2.52	1.59	0.34	0.25	0.17	100.00
<i>South Oxfordshire</i>	75.09	12.45	6.91	3.67	1.06	0.50	0.19	0.06	0.06	100.00
<i>Vale of White Horse</i>	69.79	13.81	7.70	5.61	1.76	0.84	0.42	0.08	0.00	100.00
<i>West Oxfordshire</i>	72.26	14.45	7.31	4.15	1.00	0.66	0.08	0.08	0.00	100.00

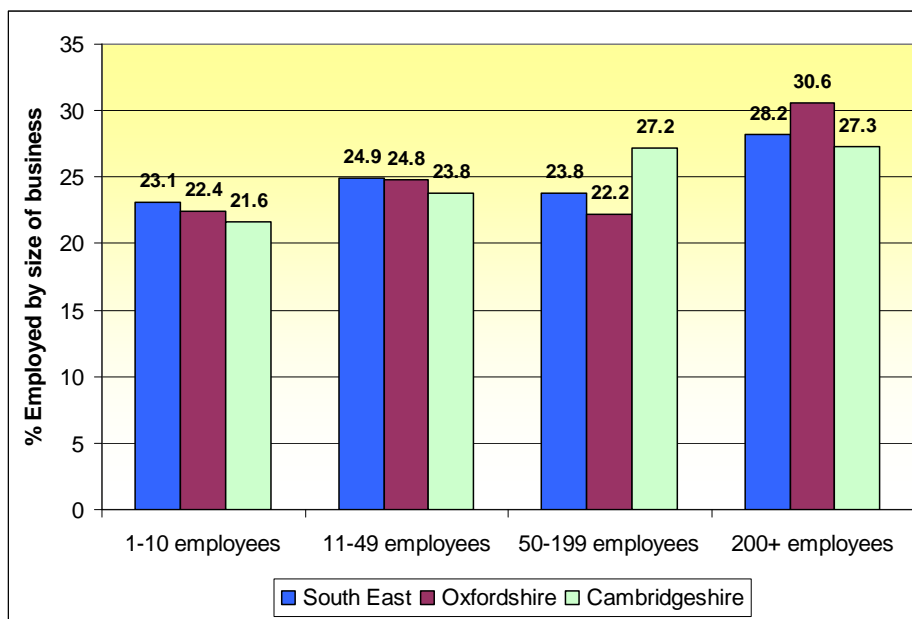
Source: UK Business: Size, Activity and Location 2009, Office for National Statistics

As can be seen from the table, Oxford has a much reduced proportion of micro-businesses (fewer than 5 employees) while showing a greater representation at the higher size bands. Cherwell and Vale of White Horse show their business populations most strongly in the 5-100 staff range, while West and South Oxfordshire have the highest proportions of micro-business. This suggests a correlation between the presence of larger businesses and the proportion of urban area, possibly as a result of both the availability of suitable commercial property and also the presence of appropriate skilled labour. The overall rural nature of Oxfordshire as a county would therefore go some way to explaining the lower proportions of medium-sized firms.

Employment data, from the Annual Business Inquiry, generally reflects the picture shown by the business stock data. With 97.15% of workplaces¹⁰ having 0-49 employees, Oxfordshire is only marginally above the South East figure of 96.98%.

¹⁰ In order to deal with branches of larger national employers NOMIS collects data for 'data units' defined at the level of workplaces

Figure 15 Proportion of employees by employee size band, 2007



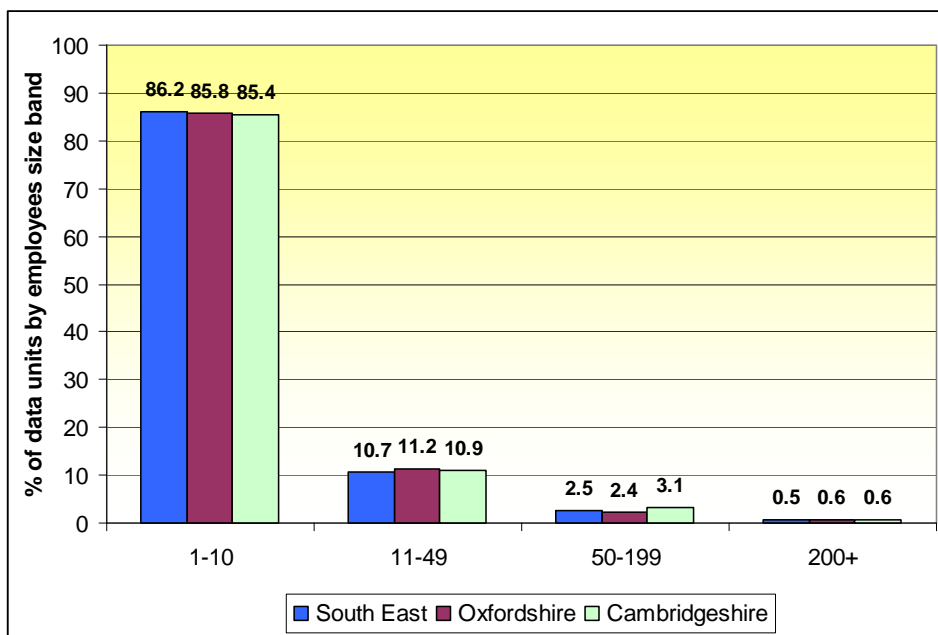
Source: Annual Business Inquiry 2007, ONS

Since 1998 there has been a slight decline (of 6%) in the number of people employed in large businesses in Oxfordshire (at 96,600 in 2007). Across the South East however there has been a 6% growth of employment in large businesses. The majority of the growth in Oxfordshire occurred in small and medium enterprises (1-49 employees), where employment increased by 13%, compared to 11% across the South East.

Oxfordshire has a higher proportion of workers (31%) in large businesses. This is slightly above the average for the South East (at 28%).

A significant and not very visible aspect of employment structure is the phenomena of 'home working'. While some such businesses are inevitably caught up in the Business Stock data for businesses with 0-4 employees, the much lower turnover thresholds for this type of business mean an indeterminate number would not appear as registered either for VAT or PAYE. This is bound up with the difficulty in even defining the term 'home business' which in some contexts refers only to craft, commission or other partial employment (for instance someone undertaking a retail catalogue agency), and in others would include fully active businesses which the owner/manager is able to operate effectively from a domestic dwelling (say a builder with three employees whose work is conducted at a contracted site, but whose business administration is located at home).

Figure 16 Proportion of data units by employee size band, 2007



Source: Annual Business Inquiry 2007, ONS

Analysis

Anecdotal evidence, primarily from the area of entrepreneurship and business development support, indicates that at least part of the lower proportion of medium-sized businesses in Oxfordshire may be related to the flow of spin-outs and other knowledge-driven start-ups in the County. Such businesses are more likely to require risk capital injections to commercialise their core innovation, leading to the need to have an exit strategy for the funding providers. Selling out or licencing the technology is an appealing option compared to the personal and organisational demands of growing these businesses autonomously at this stage.

However, not all businesses in Oxfordshire are 'high tech' or knowledge driven, and there does appear to be a correlation between urbanisation and the skew of size distribution. The Oxfordshire geography of a busy City surrounded by a wide rural hinterland (albeit with strong market and County towns) may therefore itself be a key explanatory factor for the size distribution of businesses in the County.

Key Issues

The business stock of Oxfordshire shows a significant 'dip' in the proportions employing between 50 and 250 people. This may be linked to the rural nature of Oxfordshire, but there are implications for both the potential for indigenous business growth, and the productivity of the existing business stock.

There is anecdotal evidence that the strong enterprise culture in Oxfordshire is undermined by a failure to grow new businesses beyond a certain size; it is suggested that innovative

high-growth companies are frequently sold on at this point. This would fit with the evidence of size distribution.

The role played by mid-sized firms in growing GVA is unclear. Received wisdom is that these firms have greater capacity for growth, in terms of developing new overseas markets, innovation and diversification. Mid-sized firms are sufficiently large to have the capacity to absorb diversification or other risk-ventures, but are potentially more nimble and responsive, and have a greater capacity for growth, than very large firms.

Further research is needed to investigate the reason for the distribution of business size and any implications it has for growth potential and policy making.

4.5 Business Sectors

Why is this important?

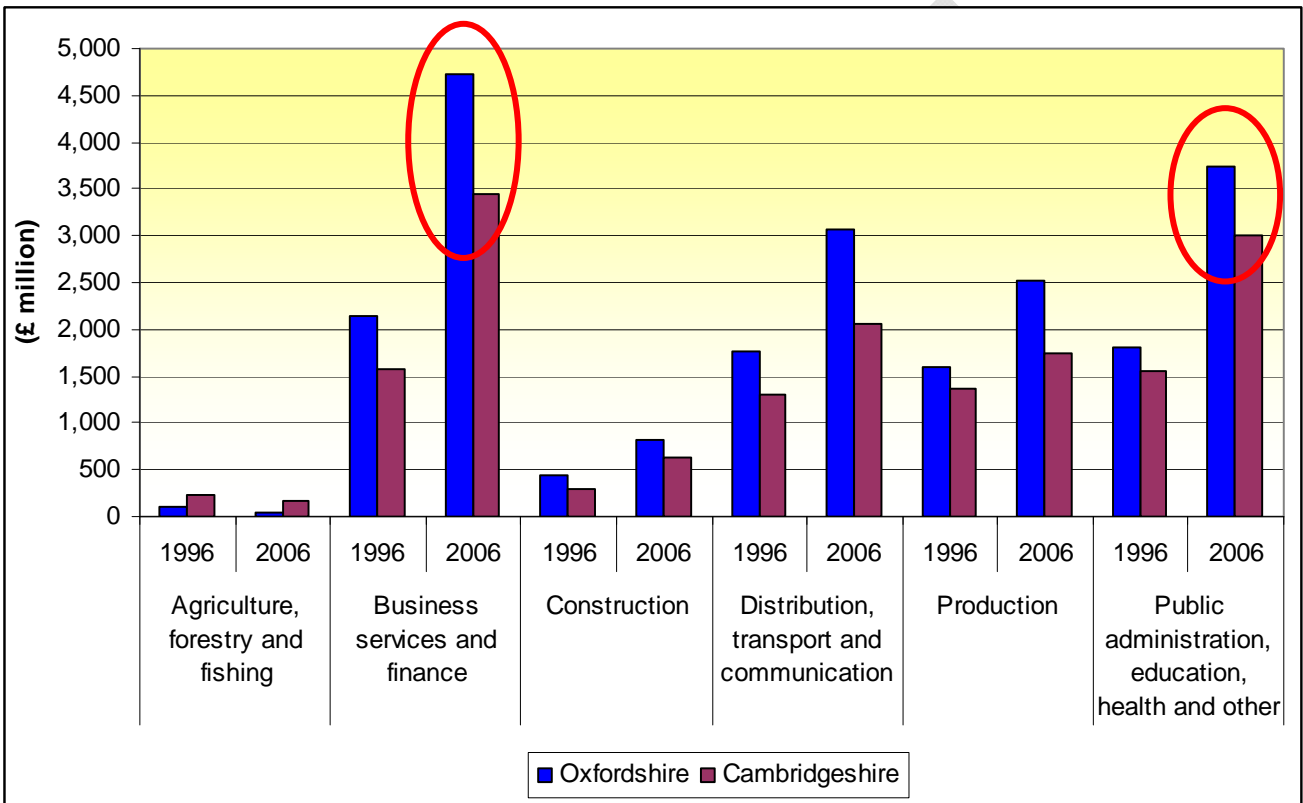
Different industries generate different levels of GVA. Areas with higher GVA per head tend to have a higher percentage of their workforce in business services. Having an economy with strong representation from a range of industries helps to provide a diversified and more resilient business community.

Sector level analysis helps us to understand the sources of Oxfordshire's GVA and the skills required for the county's employers. This is particularly true where substantial amounts of employment are dependent on a group of businesses inter-related by industry, supply chains, resources or some combination thereof; classically these would be referred to as clusters. Defining these groups in a meaningful way can be exceptionally difficult.

The evidence

Using the broad category of Standard Industrial Classification, SIC, code shows that the predominant contributors to Oxfordshire GVA output are the business services and finance sector, and public administration, education, health and other. This is similar to Cambridgeshire where both counties have seen significant increases since 1996.

Figure 17 Total GVA by sector (£ million)

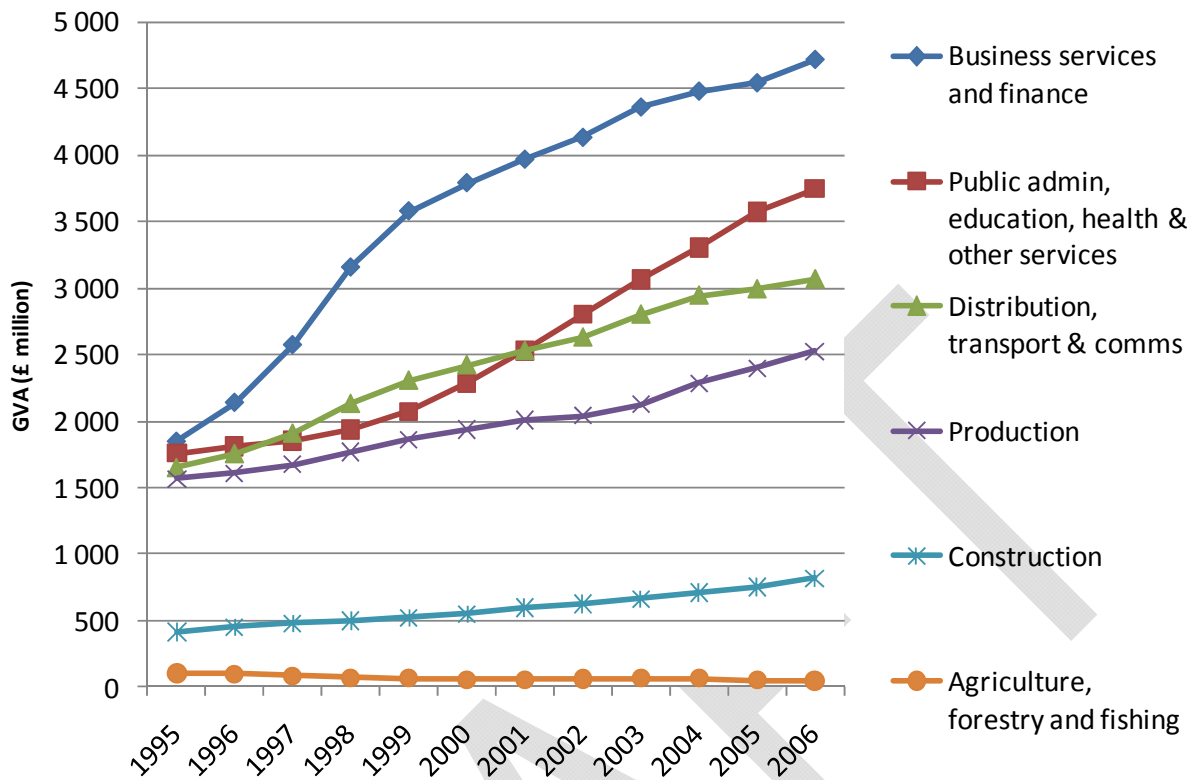


Source: GVA by NUTS3 area at current basic prices, ONS

The structure of Oxfordshire's economy has changed over the past decade with business services and public administration growing faster than distribution, production, construction and agriculture so that these two sectors alone now generate 56% of the county's GVA compared with 48% in 1995.

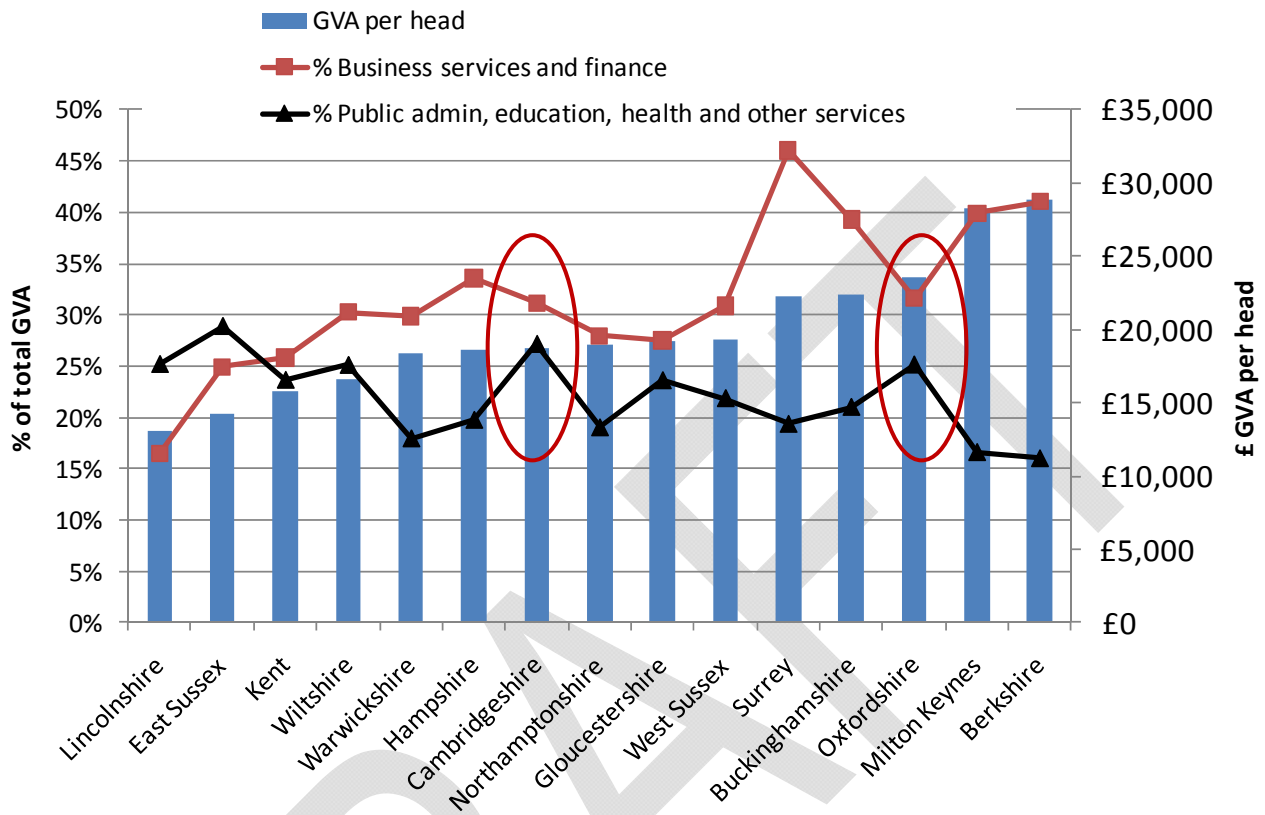
Areas with higher GVA per head tend to have a higher percentage of their workforce in business services. The structure of Oxfordshire's economy therefore affects its aggregate GVA. Oxfordshire has a higher level of GVA per head than would be predicted by the structure of its economy in particular its smaller business services sector and larger public admin sector.

Figure 18 Total GVA by industry – Oxfordshire



Source: National Statistics Online GVA released Dec08; Table 3:4 Headline1 Gross Value Added (GVA)^{2,3} by NUTS3 area and 6 industries at current basic prices by region.

Figure 19 % of GVA from Business services and % of GVA from Public Admin - sorted by GVA per head (2006)



Source: National Statistics Online GVA released Dec08; Table 3:2 Headline1 gross value added per head by NUTS3 area at current basic prices; Table 3:4 Headline1 Gross Value Added (GVA)2,3 by NUTS3 area and 6 industries at current basic prices by region

While the broad categories of Standard Industrial Classification (SIC) codes allow comparisons between areas they are not always easy to use for all policy discussions. By using parts of the detailed codes we are able to look at sectors of particular importance to Oxfordshire and consider the issues that they face in the future¹¹.

There is debate about the importance of clusters as a basis for policy making. On the one hand they are a useful way of describing what Oxfordshire has to offer to outside investors. But on the other hand Oxfordshire has argued in the past that they do not provide a sound basis for planning decisions or other forms of preferential treatment. The agglomeration effects with clusters are unproven as a source of increased productivity. Certainly the traditional definition of a cluster as being a group of businesses in the same industry is no longer sophisticated enough to describe the complex web of relationships between a group of businesses that collectively make a disproportionate contribution to the local economy.

¹¹ The choice of codes to composite together has been done using OECD, regional and national criteria and has been proposed to SEEDA as a common framework that will allow cross regional comparison and benchmarking.

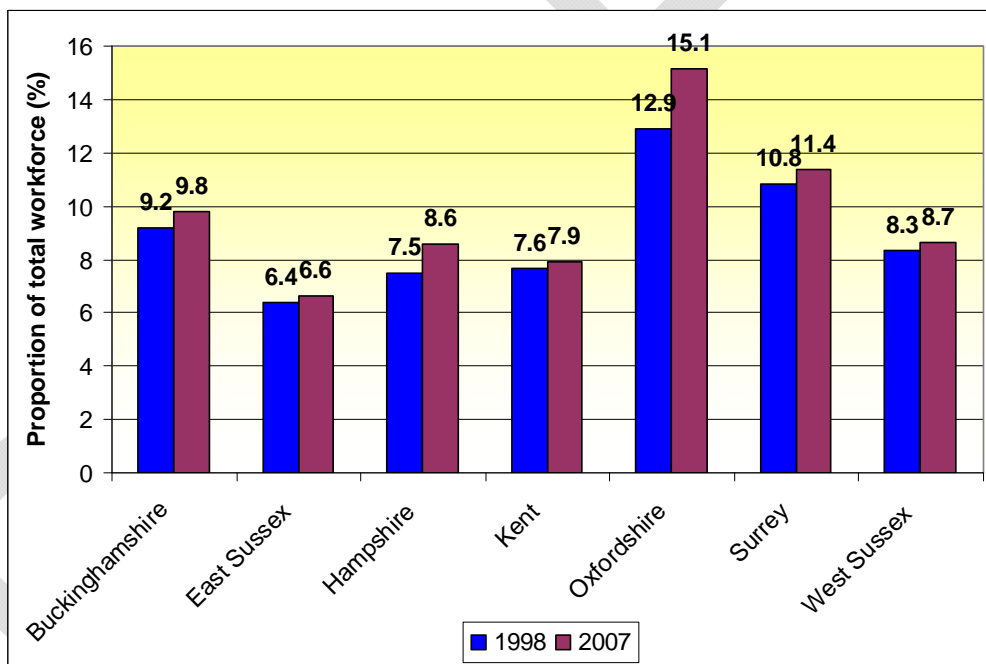
Table 16 Employment in Key Sectors within the Oxfordshire Economy

Industry sector	Oxfordshire's employees (2007)	Comment
<p>Knowledge Intensive Businesses, KIBs This definition covers financial, legal and other business services, research and development and knowledge intensive parts of the media.</p>	48,000 of which approx 6,400 in R&D	<p>Significantly higher employment in this high growth sector than SE average. In Oxfordshire, 48,000 people are employed in KIBs, representing 15.1% of the total workforce. This is significantly higher than the South East, where 10.2% of employees work in KIBs. Oxfordshire has the highest proportion of its workforce employed in KIBs of all the County Council areas in England. Since 1998 employment in KIBs in Oxfordshire has grown by 24% - above the South East average of 17%. By comparison KIBs employment in Cambridgeshire increased by 17% between 1998 and 2007, and now constitutes 14.2% of the workforce.</p>
<p>Hi-tech Manufacturing (excluding ICT)- precision engineering, bio science, medical technology, research, instrumentation and motor sports sectors</p>	43,000	<p>Declining employment in this sector but strength in diversity. In 1998 Oxfordshire was a clear leader in the South East with almost 18% of the workforce engaged in high tech manufacturing. By 2007 this had declined from 53,000 to 43,000 people, less than 14% of the workforce, a percentage now surpassed by Hampshire.</p>
<p>Education</p>	41,200	<p>Most of the increase has been in higher education whose workforce has more than doubled to almost 21,000. Between 1998 and 2007, employment in primary, secondary, further and higher education grew by 52% to 41,200 or 13% of Oxfordshire's workforce.</p>
<p>Retail This sector provides a majority of relatively unskilled occupations</p>	37,700	<p>Below the South East average and affected by structural changes. 11.9% (37,700 people) of Oxfordshire's workforce are employed in the retail sector - the lowest proportion in the South East. All counties in the region have seen a decrease in the proportion of the workforce employed in the retail sector. Moves to the internet and to larger retail centres are threatening the viability of secondary retail centres in market towns and urban suburbs. Strong growth forecast</p>
<p>Health (does not include the related sectors of medical</p>	34,000	<p>The health sector employed almost 11% of the Oxfordshire workforce in 2007 an increase from 8.7% in 1998. This compares with a regional average of 11.5%. The importance</p>

research, medical instruments and technologies and the bio science sectors that are counted in the high tech manufacturing figures)		of Oxfordshire's health sector is not fully captured in this figure
Creative industries	30,100	Growing slowly but employment remains above the regional average. Employing 30,100, Oxfordshire (at 9.5%) has a marginally higher proportion of workers in creative industries than the South East average of 9.3%. However, employment in creative industries in Oxfordshire has grown at the lowest rate of all the counties in the South East.
Tourism and Visitor economy This sector covers general leisure services including restaurants and bars as well as services more specifically targeting visitors to the county	24,000	Slightly above the average for the South East (7.3%). Around 7.6% (24,000 people) of Oxfordshire's workforce are employed in the Tourism sector [rate of change TBA]
Military	15,000?	The military and those that provide services to this sector are particularly important to Oxfordshire. The military themselves report employing directly or indirectly 15,000 people but official data from the Annual Business Inquiry produces a somewhat lower number.
Information and Communications Technology, ICT – covers both the manufacturing and service side of ICT	11,400	Oxfordshire is below the regional average of 5.3% employment in this sector even though employment has doubled from 1.8% to 3.7% between 1998 and 2007. This increase has been exceeded by Buckinghamshire, Hampshire and Surrey. Employment in ICT is mostly in small businesses. Within this sector is a significant cluster of computer games software writers in Banbury.
Agriculture and Rural	5,000+3,900	Less than 3% of the county's employment and generate an equally small proportion of GVA. Agriculture employs over 5,000 people directly in Oxfordshire with a further 3,900 employed in agri-food processing sector. On the other hand agriculture is responsible for the maintenance of much of the natural environment which, along with the creative and cultural industries, generates much of the 'product' that attracts visitors to the county and is part of the attraction for inward

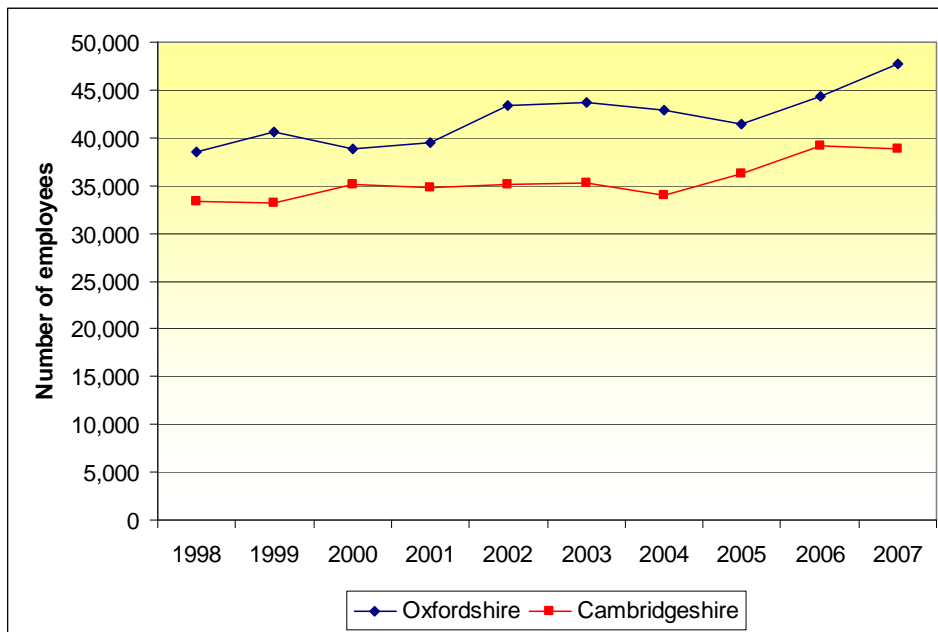
		investment and for mobile 'knowledge workers' to locate in Oxfordshire. The significance of this sector therefore belies the small scale of its immediate impacts.
'Clean tech'. Covered by manufacturing and KIBS sectors above	???	The future? HSBC reported this sector growing globally by 80% even during the recession of 2008/09. It is an area that Oxfordshire needs to pay attention to. A diverse sector ranging from alternative fuels to energy efficiency, to consultancy to water management and land remediation
Voluntary and Community Sector		To be assessed
Other	26,000	
Total employment	316,000	

Figure 20 Proportion of the workforce employed in KIBs



Source: Annual Business Inquiry 2008

Figure 21 Trend of employment in KIBs (1998-2007)



Source: Annual Business Inquiry 2008

Table 17 Employment by Occupation – Percentage of Working Population (Apr 08 – Mar 09)

SOC 2000 Group	GB	SE	Oxon	Oxford	Cherwell	South	Vale	West
1 Managers and senior officials	15.6	17.3	16.2	9.0	13.6	19.7	23.6	18.2
2 Professional occupations	13.1	14.3	17.3	29.5	8.9	19.1	15.3	10.2
3 Associate professional & technical	14.6	15.5	15.3	17.9	13.1	15.8	15.7	13.4
4 Administrative & secretarial	11.4	11.6	11.5	11.5	11.4	9.5	17.0	7.6
5 Skilled trades occupations	10.7	9.8	9.5	#	10.3	10.9	8.1	17.1
6 Personal service occupations	8.3	6.7	6.7	7.6	9.9	4.4	#	6.8
7 Sales and customer service occupations	7.5	6.8	6.8	#	6.1	8.4	6.1	11.1
8 Process plant & machine operatives	7.0	6.8	6.8	5.0	10.0	6.6	#	7.9
9 Elementary occupations	11.3	9.7	9.7	11.0	16.2	5.7	5.8	7.6

Source: ONS Annual Population Survey

Notes: % of those over 16 in employment. # means sample is too small for reliability

Analysis

The high level of Public Sector employment is linked closely to a period of expected restraint, limiting further employment growth in this sector and possibly even contraction.

Public sector employment in Oxfordshire includes not just mainstream public services such as Local Government and the Emergency Services, but substantial contributions from Education, Defence and a range of public sector research institutions, as well as smaller but important contributions such as the Probation Service in Bicester and WRAP (Waste & Resources Action Programme) in Banbury. This diversity allows for more resilience than if Public Sector employment was dominated by a particular government agency or department, as occurs in some parts of the country.

Oxfordshire has been moving to a more knowledge-driven economy, principally through an increase in employment in services (both public and private). However, while the public services have the potential for some GVA growth, especially as a source of spin-outs, they remain a principally consuming part of the economy. Low GVA growth overall could be partly attributed to the substantial proportion of employment in the public sector in Oxfordshire.

The low growth projected in productive industries contributes to low overall projections for GVA. While manufacturing has been in general decline in the UK, this seems to have been accelerated in Oxfordshire. There may be a link to the issues discussed above around business size distribution; that is to say that much high-tech manufacturing in Oxfordshire is early-stage and exploring new innovation, and does not make the transition through to a larger, growing business.

With increasing discussion of the importance of manufacturing for future economic growth in the UK (as opposed to an earlier reliance of financial services) there are issues that need to be addressed in Oxfordshire about what it would have to do to succeed in this area.

The low proportion of retail employment in Oxfordshire suggests that anecdotal evidence about the relatively poor retail offering in the County has a factual basis. Retail employment is frequently perceived as low-value, employment in the sector is more accessible, especially to parts of the population with time or skill constraints. Further, if there is a direct relationship between lower proportions of retail employment and the overall quality of the retail offer, there are implications for town centre vitality, competition from neighbouring areas, lifestyle and tourism.

Key Issues

What will be the impact of the decline in growth in the public services? Scenarios include employment shifting to higher value-added activity in the private sector, or adding to economic inactivity. Given the wide range of activities under the Public Sector umbrella, the exact outcome is unclear.

Is it possible to address the relative decline in manufacturing in Oxfordshire, especially hi-tech manufacturing which is a sector that many expect to see resurgent?

Will the people that come out of the public sector move into the parts of the private sector that generate high GVA/head or will they increase inactivity rates and therefore reduce aggregate GVA per head?

What the new sectors that will come to dominate in the next 20 years and how can Oxfordshire work to make sure it can succeed in them?

What are the declining sectors that will affect Oxfordshire over the next 20 years (eg what is the future of hydro-carbon based car production?) and how will Oxfordshire adjust to any structural declines that occur.

4.6 Business Activity – Drivers of Productivity

Why is Business Activity important to the Economic Assessment?

Productivity is tied not simply to the size and type of businesses present, but to the levels of innovation, marketing, investment and development that occur within those businesses. The GVA of a locality reflects the quality of business activity as well as its quantity. Increased productivity allows wages and profits to grow and services to improve from better use of existing resources.

Although there is no simple measure for business activity, we are able to draw some conclusions from a number of proxy measurements:

- ◆ Enterprise – the birth rate of new businesses
- ◆ Investment – attracting money into businesses and infrastructure
- ◆ Innovation – patents, take-up of innovation support programmes and funding
- ◆ Competition and trade – values of exports

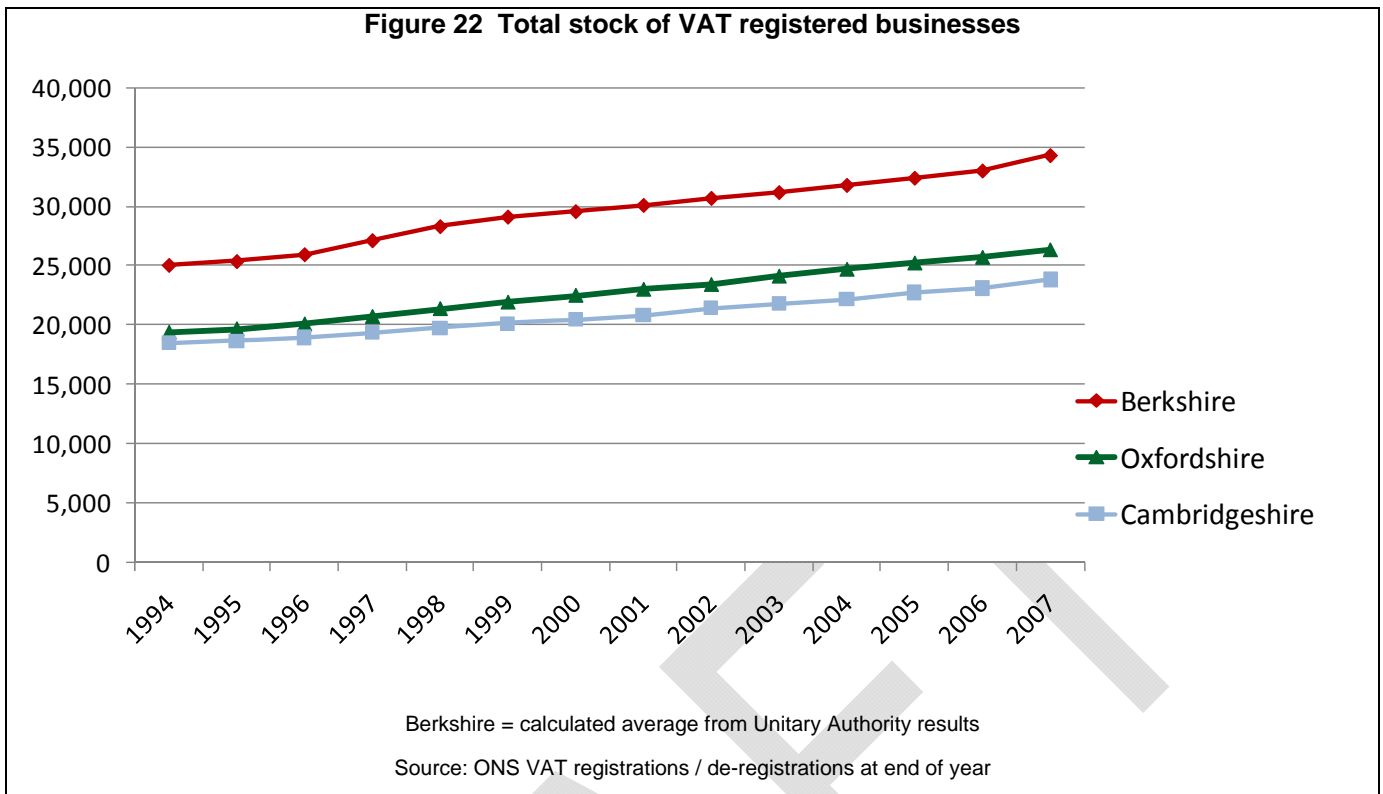
High productivity is a reflection and output of these business factors, and represents high levels of efficiency and competitiveness. Demands from businesses to achieve these goals also drives demand for high skills from the workforce, and is reflected in improved wages and incomes.

The Evidence

Enterprise

Development of new technologies and new businesses and growing existing businesses through innovation, improved supply chains and increased competition are all increased by an enterprising and entrepreneurial approach. VAT registration is used as a proxy of this nationally, as it demonstrates the birth and death rates, and the overall stock, of businesses with sufficient turnover to exceed the VAT threshold (in 2009, £68,000).

Figure 22 Total stock of VAT registered businesses



Oxfordshire's stock of VAT registered businesses has grown more slowly than in Berkshire, Northamptonshire and Warwickshire but faster than in Gloucestershire and Buckinghamshire. A further useful proxy for Enterprise is the survival rate of new enterprises. This suggests that although Oxfordshire's rate of business formation is below that of Berkshire its rate of business survival has been consistently above survival levels for businesses throughout the UK as well as in Berkshire and Cambridgeshire.

Table 18 Survival rates for new businesses 2003-2006

Year	County	1 Year per cent	2 Year per cent	3 Year per cent	4 Year per cent	5 Year per cent
2003	UK	92.6	78.0	63.6	54.6	46.6
2003	Berkshire	92.9	79.6	65.5	54.9	47.7
2003	Cambridgeshire	92.0	78.3	65.8	57.0	49.7
2003	Oxfordshire	93.2	80.7	68.8	59.7	52.1
2004	UK	94.2	78.7	65.3	54.7	-
2004	Berkshire	95.0	80.5	66.0	55.8	-
2004	Cambridgeshire	95.3	81.7	70.4	59.1	-
2004	Oxfordshire	95.3	81.4	68.3	58.0	-
2005	UK	94.3	79.8	64.7	-	-

2005	Berkshire	95.0	80.9	67.6	-	-
2005	Cambridgeshire	95.7	83.4	69.6	-	-
2005	Oxfordshire	95.3	83.9	72.3	-	-
2006	UK	96.5	80.7	-	-	-
2006	Berkshire	96.8	83.4	-	-	-
2006	Cambridgeshire	97.1	83.2	-	-	-
2006	Oxfordshire	97.0	83.0	-	-	-

Source: *Business Demography 2008* (ONS)

Investment

Investment is important in providing physical infrastructure and capital that raises productivity and for providing the basis for investing in new businesses. The former includes capital generated by the planning process as it captures development gain from new housing and commercial developments, from the investment of businesses in their own infrastructure and from government grants. The latter is mostly provided through various sources of commercial investment.

Infrastructure Investment

Almost all infrastructure investment comes from Public funds, or is managed through Public activity (for example, Section 106 funds raised on major planning permissions to secure needed infrastructure associated with major developments). The exception in Oxfordshire is Chiltern Railway's planned investment in the 'Ever Green 3' project to provide new rail infrastructure between Oxford and Marylebone.

Commercial Investment

Data about private sector investment is much more difficult to pin down. Inevitably, individual investments attract varying, but usually high, levels of confidentiality. Similarly, while there are some networks providing venture capital investment for early stage and small, high-growth businesses, larger firms operate on a more national or international basis in securing investments, making aggregated figures difficult to identify.

With a number of strong investment networks of business angels and sources of early stage venture capital, Oxfordshire has been successful in investment in start up businesses spinning out of its university and R&D facilities. It is suggested however that there is a possible relative (but not absolute) lack of follow on investment available so that a number of promising businesses have been sold off rather than continuing to grow in Oxfordshire. This is reflected in the profile of business sizes that has fewer medium sized businesses than elsewhere in the country.

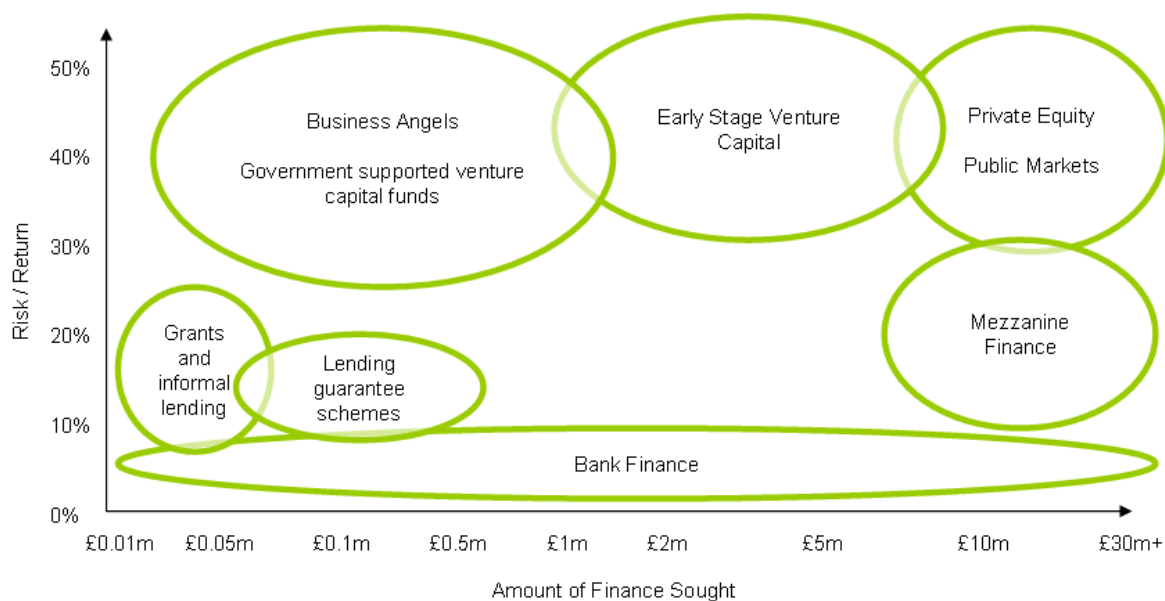
Oxford Investment Opportunities Network (OION) has since 2000, helped close nearly 100 deals, raising over £21.5m for companies¹². Oxford Early Investments (OEI) is a branch of OION which deals with smaller, earlier investments in the £20,000 - £150,000 range, as opposed to OIONs usual £200k - £2m investment packages. However, the absence of clear benchmarking can make it difficult to know whether performance is good or bad. Anecdotal evidence, in the form of awards won by OION suggest performance is good, but without objective data this is supposition.

Science Oxford undertook a snapshot review of early stage finance through OION in the summer of 2009¹³. It found that:

- ◆ Companies within the Advanced Materials sector tend to be the most successful at raising funds.
- ◆ Companies within the ICT sector tend to be least successful in raising funds.
- ◆ Spinout companies which are over 2 years old from the Advanced Materials sector may have the greatest opportunity for success.

It also found that no pre-incorporated businesses or businesses under one year old were successful in securing Angel funding.

Figure 23 SME Finance types: Illustrative mapping of expected return profile against amount sought



Source: Provision of Growth Capital to SMEs. Chris Rowlands et al, Nov 2009

However, in terms of *continued* investment in business, the picture appears to be less positive. Data from the most recent Regional Development Agency Survey showed that

¹² Accessed from <http://www.oion.co.uk/> December 2009

¹³ Science Oxford Networks, *Insight* On-line research paper Summer 2009.

investment in Oxfordshire businesses generally compared poorly against Berkshire and the UK.

Table 19 Businesses reporting trends beyond seasonal variation

Investment in	Level	12 Months to Nov 09			12 Month projection from Nov 09		
		UK	Berks	Oxon	UK	Berks	Oxon
Buildings	Higher	8	4	4	9	13	1
	Same	26	30	24	26	24	27
	Lower	20	9	19	18	10	23
Plant & machinery	Higher	11	8	14	10	10	2
	Same	30	30	23	34	42	24
	Lower	29	22	37	24	15	45
Products and processes	Higher	12	19	14	14	15	7
	Same	29	22	20	31	32	37
	Lower	20	23	27	15	16	22
Sales and marketing	Higher	21	18	28	28	29	29
	Same	41	62	36	42	51	39
	Lower	12	7	13	18	12	15
Training & Re-training	Higher	13	15	20	18	15	22
	Same	46	50	47	48	52	49
	Lower	24	18	16	18	17	13
Overall	Higher	19	22	16	25	32	18
	Same	36	42	28	40	37	41
	Lower	38	28	44	7	6	11

Source: Business Survey (Regional Development Agencies) November 2009

This data suffers from having a small sample size for Oxfordshire in the November survey (the RDA survey is undertaken every three months). However, barring a substantially anomalous result, the survey indicates that business investment levels in Oxfordshire during the core period of the recession have dropped significantly, with the exception of the areas of Sales & Marketing and Training.

Innovation

Innovation is about the successful exploitation of new ideas through the implementation of new or significantly improved products, processes, marketing and organisational changes¹⁴.

There are no simple metrics of innovation but the particular information comparing spinouts (63 active companies in 2008 from Oxford, 45 from Cambridge that rank them 2nd and 3rd nationally behind Imperial College) and science parks, that include innovation and incubator units, (6 and 7 respectively) suggest that Oxfordshire is well placed in terms of innovation capacity. (Source:)

Data from the Regional Development Agency business survey shows that fewer new products and processes are being developed in Oxfordshire but the results are consistent with the fact of the Berkshire economy being two thirds larger than Oxfordshire's.

¹⁴ MIER Overview p9

Table 20 November 2009 RDA Business Survey – businesses reporting innovation activity (%)

Business introducing a new innovation in the last 12 months			
	<i>UK</i>	<i>Berks</i>	<i>Oxon</i>
New product	29	51	25
New process	9	12	8
Neither	58	37	67
Business expecting to introduce a new innovation in the next 12 months			
	<i>UK</i>	<i>Berks</i>	<i>Oxon</i>
New product	28	39	27
New process	11	16	13
Neither	50	40	55

Source: *Business Survey (Regional Development Agencies) November 2009*

However, again there is the caveat that this survey had a relatively small Oxfordshire sample and excessive reliance cannot be placed on this result.

There has been substantial change in recent years in Public sector support mechanisms for innovation. Statistics on the take-up of programmes such as the Grant for Research and Development, Knowledge Transfer Partnerships and the like should give a clearer picture of the shape of innovation activity in Oxfordshire.

Also, data about Patent registrations is potentially a proxy for innovation, and may help provide a clearer picture of the situation in our County.

Competition and Trade

“Competition and trade and in particular strong international trading links have both direct and indirect productivity benefits as both exporters and foreign investors tend to have higher productivity levels¹⁵.” Of Oxfordshire’s key sectors high tech manufacturing activities (including precision engineering, bio science, medical technology, research, instrumentation and motor sports) are likely to be more outward facing and therefore stronger in terms of competition and trade. The other sectors are likely to be more inward facing. HMRC track goods exporting data, and monthly data to October 2009¹⁶ showed that the top 20 exported goods by value were headed by pharmaceuticals manufacture, and also included aerospace products (rank 2), motor vehicles (3), motor vehicle parts (13) and medical devices (17).

Analysis

Evidence around business survival rates, spin-pout generation and access to funding (especially in relation to knowledge-driven business) connects with earlier discussions around business size. While start-up rates are not notable, the survival of new business in Oxfordshire is substantially more likely than most other parts of the UK. This suggests that

¹⁵ MIER

¹⁶ HM Revenue and Customs, Overseas Trade Statistics, Top 20 by SIC October 2009

the support available to new business is highly effective, and also that the preparation made by business principals is more rigorous.

Oxfordshire has evidence to support the widely held belief that it is a major generator of innovation. However, given that innovation is expected to deliver substantial GVA benefits, the failure of GVA statistics to reflect this suggests that again, as with business size, there is a failure to maximise the potential wealth-generation benefits from such innovation. Whether this is because of a predominance of short-term over long-term strategies for realising value awaits further, qualitative exploration. Findings from the RDA Business Survey suggest that outside of the high-tech/spin-out sector, levels of process and product innovation are poor.

Oxfordshire has the potential for deriving substantial GVA from exporting and international trade. However, following from the evidence around business sector, the absence of substantial manufacturing, especially high-tech manufacturing, limits this capacity. The export value for services is much more difficult to capture.

Key Issues

There are proxy measures which could give insight into the competitiveness of the Oxfordshire business community. However, data availability currently is insufficient to draw firm conclusions.

Research needs to be undertaken into whether a tradition of strong commitment to spin-out and other innovation-led new business activity has led to twin problems of poor levels of innovation outside of this field, and the field itself being dependent on risk funding which seeks an exit strategy that is itself preventing many companies from growing on into becoming medium or large size employers (i.e by selling out to existing larger firms).

Indications are that in terms of innovation and investment in new ventures, Oxfordshire performs well for new business and high-tech, but so far these are largely anecdotal.

Continuing business investment across the board has suffered in Oxfordshire, with investment only in Sales/Marketing and Training seeing any growth.

Business survival rates are particularly high in Oxfordshire.

4.7 Oxfordshire's workforce

Why this is important

This section looks at the county's resident workforce, those that commute in to work in Oxfordshire and those that migrate in to fill labour shortages. As GVA per head is reduced by higher inactivity rates (ie people of working age who are not in work) the section also considers worklessness.

Economic development is ultimately about people, their wealth and well-being. Information about the economic activity of people is fundamental to ensuring good economic

development policy and strategy.

Evidence

Between 1998 and 2007, total employment in Oxfordshire was relatively stable, increasing by just 5.7% and reaching approximately 316,000 in 2007. At 5.7%, Oxfordshire has one of the lowest employment growth rates of the South East counties (Buckinghamshire decreased by 2.6%). The increase for the South East region as a whole was 9% between 1998 and 2007.

A third of Oxfordshire's employment is based in Oxford, the remaining two thirds in the surrounding districts.

Table 21 Change in number of employees

	1998	2007	% of Oxon total	% Change, '98-'07
Oxford City	94,760	101,890	32%	7.5
Cherwell	63,415	67,950	22%	7.2
West Oxfordshire	35,110	38,775	12%	10.4
South Oxfordshire	51,450	54,910	17%	6.7
Vale of White Horse	56,705	54,385	17%	-4.1*
Oxfordshire	298,875	315,940	100%	5.7

Source: ONS Annual Business Inquiry

* This figure is a data error

Table 22 Job Density by District/City

	Job Density
Oxford City	1.05
Cherwell	0.90
South Oxfordshire	0.85
Vale of White Horse	0.87
West Oxfordshire	0.93

Source: ONS jobs density

Notes: The density figures represent the ratio of total jobs to working-age population.

Total jobs includes employees, self-employed, government-supported trainees and HM Forces

The occupational structure of the labour market

The largest occupational groups in Oxfordshire are managerial (top ranked classification), administrative occupations (mid level) and elementary (lowest ranked classification), which suggests a large disparity in incomes between major sections of the population.

The occupational structure of Oxfordshire is broadly similar to that of Cambridgeshire but Cambridgeshire has more corporate managers as a proportion of the total than Oxfordshire and more science and technology professionals, and fewer administrative and caring, personal service occupations.

While the size of the workforce has only increased slightly overall, the types of jobs that people do has changed as have the industries that they work in.

The mix of jobs by occupational classification has shifted over the last 5 years:

- ♦ increases in corporate managers, science and technology professionals, health and social welfare “associate professionals”, and teaching and research professionals and also in less skilled occupations such as transport & mobile machine drivers/operatives
- ♦ decreases in skilled metal and electronic trades, health professionals and textiles and printing.
- ♦ The lower occupational classifications (7. Sales & Customer Service, 8. Unskilled Trades and 9. Elementary) have increased slightly.

Many of the additional high level jobs are in the public sector. The increase within the public sector in the top 3 managerial and professional occupational classifications, accounts for 10,000 of the 15,000 increase in the top 3 occupational classifications over the period 2005 -2009.

The occupational structure of Oxfordshire is broadly similar to Cambridgeshire. Some notable differences include more corporate managers more science and technology professionals, and fewer administrative and caring, personal service occupations in Cambridgeshire than in Oxfordshire.

The significance of these changes is that different types of job attract different salaries and therefore different GVA. In addition the changes in occupational structure within the local economy have implications for the institutions providing education and skills development to that market. As the public sector is expected to contract in the coming years it is likely that this will affect the county's occupational structure and related level of GVA.

Sources of Labour: In commuting and migration

In commuting and in migration contribute to Oxfordshire's GVA by growing the salaries and profits earned in the county. They both smooth out labour shortages but have costs associated with their impact on infrastructure required to address congestion and housing shortages

In commuting

In 2001 seventeen percent of Oxfordshire's workforce commuted into the county from surrounding areas. At the same time almost fifteen percent of the working age residents commuted out of the county 70% of them to London (20%) and other parts of the South East (50%).

Migration

The labour force is also augmented by migrants who come from abroad to the county to work (often for short periods) Since May 2004 many of them from the A8¹⁷ accession countries citizens have applied for work in the UK under the Migrant Worker Scheme. The majority (56%) of these have been from Poland but numbers have declined since the start of the recession. These migrant groups have been important in the roles of process (factory) and warehouse operatives and as care and home assistants.

The economy imports skills, as well as growing its own skilled labour force. Providing the transport systems, housing and training necessary to encourage necessary staff to commute, to move or to improve their skills are key issues for improving the county's GVA.

Analysis

Trends in employment generally reflect the trends in business sector examined above, with growth in public and business services, and declines in manufacturing. Overall low growth and the polarisation of the workforce suggest a general trend towards small business with low-skill demands, which is generally agreed by the sector data.

The in- and out-commuting figures for Oxfordshire show a generally self-contained economic area; key commuting routes by rail to London, Reading and Birmingham would be expected to lead to an overall positive travel picture. However, this does not fit with experiences of peak-time traffic around Oxford and the major towns; consequently there must be substantial movement of employees around the County. Given the polarisation of employment, further investigation of the relationship between employment and distance travelled could be informative.

Key Issues

More people, working longer for higher wages generates higher GVA per head.

The mix of jobs by occupational classification has shifted over the last 5 years.

Increased employment will contribute to higher GVA/head. The choice of sectors and occupational types will affect the amount of GVA they generate. The choice of how much more employment is wanted will be affected by related requirements of infrastructure, especially housing, and the impact of more development on the environment?

¹⁷ The A8 comprises: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

What are the underlying causes of the under-representation of employment in middle-ranking, skilled 'blue-collar' trades? Is it related to anecdotal evidence about difficulty in recruiting 'technician' type roles reported by employers?

Can we expect the structural changes in employment type over the last five years to continue?

The proportion of jobs occupied with degree level qualifications appears to be associated with higher levels of GVA but this will come about from creation of the jobs needing such qualifications rather than from training residents to degree level. Evidence shows that potential employees at lower levels of salary and qualification are much less likely to commute to find employment. This could mean that lack of suitably skilled staff for low skilled and low paid jobs may be a barrier that is not as easily filled by in migration or in commuting. It also means that those with low skills are less likely to find employment unless it is close by.

The predominant employment opportunity for graduates in Oxfordshire is in the Public Services. Will expected contraction in this sector cause a drag on overall graduate recruitment?

4.8 Workforce skills

Why is this important?

The Leitch Review asserted that improved skills levels in the working population would lead to improvements in productivity (and therefore GVA) in the economy. Skills are also important to breaking the cycle of deprivation (in that fewer than 50% of those with no qualifications are in work, compared to nearly 90% of those with graduate-level qualifications) and improving other outcomes such as lower crime levels, better health and greater social cohesion.

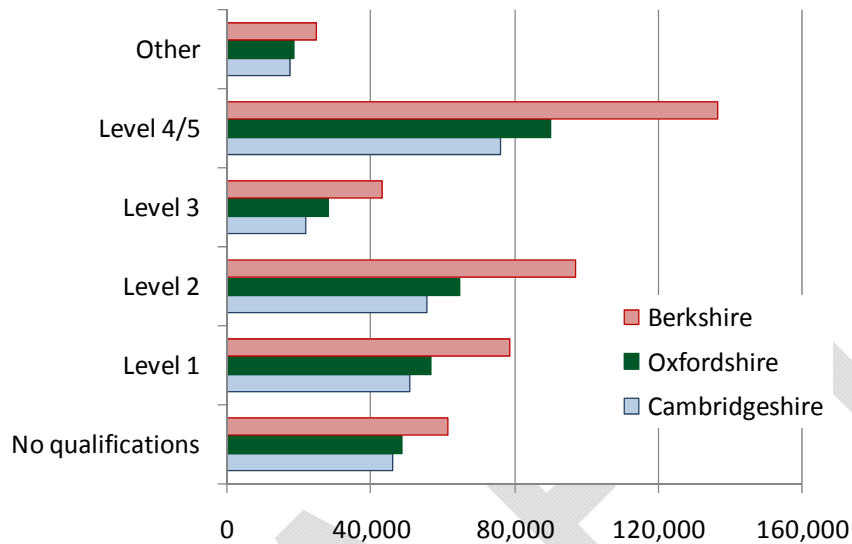
Upgrading the skills of the UK population as a whole is a top priority for central government. The 2006 Leitch Review of skills identified the UK as occupying only 17th position out of 30 OECD countries on low skills (up to Level 2), 20th for intermediate skills (Level 3), and 11th on high skills (Level 4+)¹⁸. The Review stressed particularly the importance of skills for economic prosperity: along with investment, innovation, enterprise and competition, skills are seen as a crucial component of improved economic productivity. For example, 20% of the productivity gap with countries such as France and Germany has been associated with the UK's relatively poor skills record.

¹⁸ Basic skills means everyday numeracy and literacy skills. Level 2 equates to 5 good GCSEs. Level 3 equates to 2 "A" levels. Level 4 equates to a degree or its vocational equivalent.

Evidence

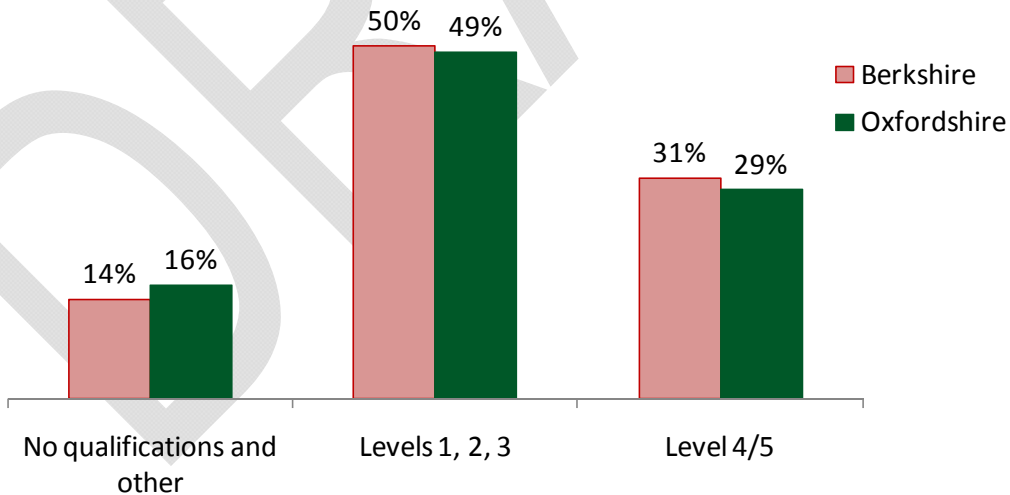
At the time of the Census 2001 survey there were many more graduates (or equivalent) employed in Berkshire than Oxfordshire equating to a higher overall % of graduate employment in the workforce.

Figure 24 Number of people in employment in the area by highest qualification (2001)



Source: Census 2001 table S131

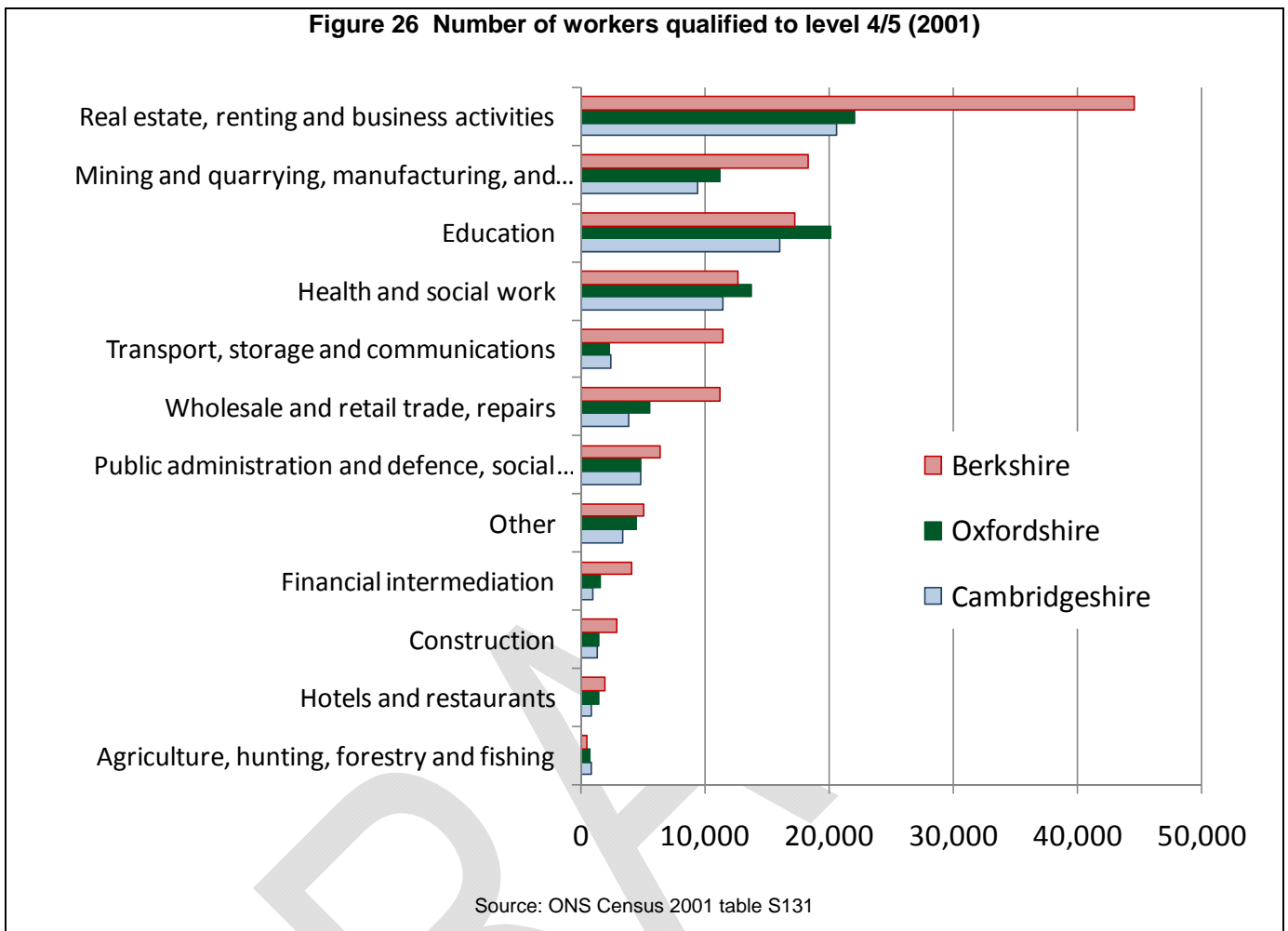
Figure 25 % of employment in the area by highest qualification (2001)



Source: Census 2001 table S131

The biggest difference in graduate numbers is those employed in the general category of “business activities”.

Oxfordshire employs more graduates than Berkshire or Cambridgeshire in the categories of Education and Health & Social work.



4.9 Skills of Residents

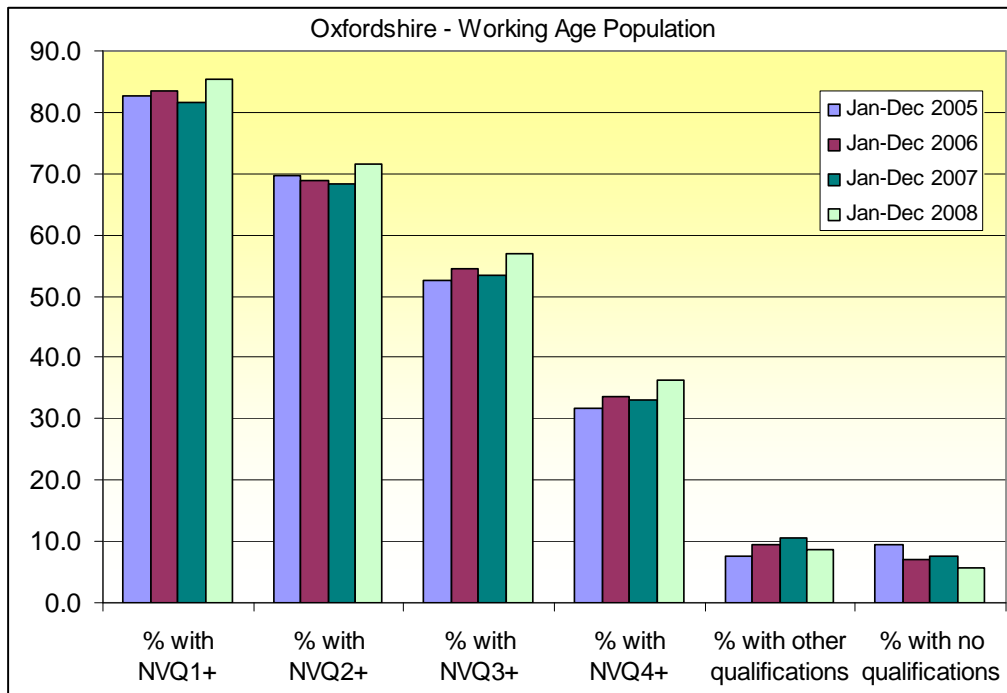
The Oxfordshire Partnership has adopted specific skills targets for the resident working age population as a whole, as set out in LAA1 and LAA2. For Levels 2 and 3 the new LAA2 targets are:

NI 163/PSA 2	% of population aged 19-64 for males and 19-59 for females qualified to at least Level 2 or higher: from 73.8% baseline (2006) to 79% by 2010/2011
NI 164/PSA2	% of population aged 19-64 for males and 19-59 for females qualified to at least Level 3 or higher: from 56.8% (2006) to 61% by 2010/2011

The most recent data shows real progress at all qualification levels and a continuing reduction of the working age population without any qualifications. Oxfordshire performs better at all qualification levels than the England and South East averages and better at all levels except Level 4 (degree level) than Cambridgeshire.

Businesses in Oxfordshire will need access to skilled staff both because the workforce is forecast to grow and because existing staff will retire or move away and will need replacing. Even though there are a number of sectors that were forecast in 2004 to contract in terms of number of employees there will be a net demand for workers in every sector in the period 2004-2014 because of this need to replace departing staff.

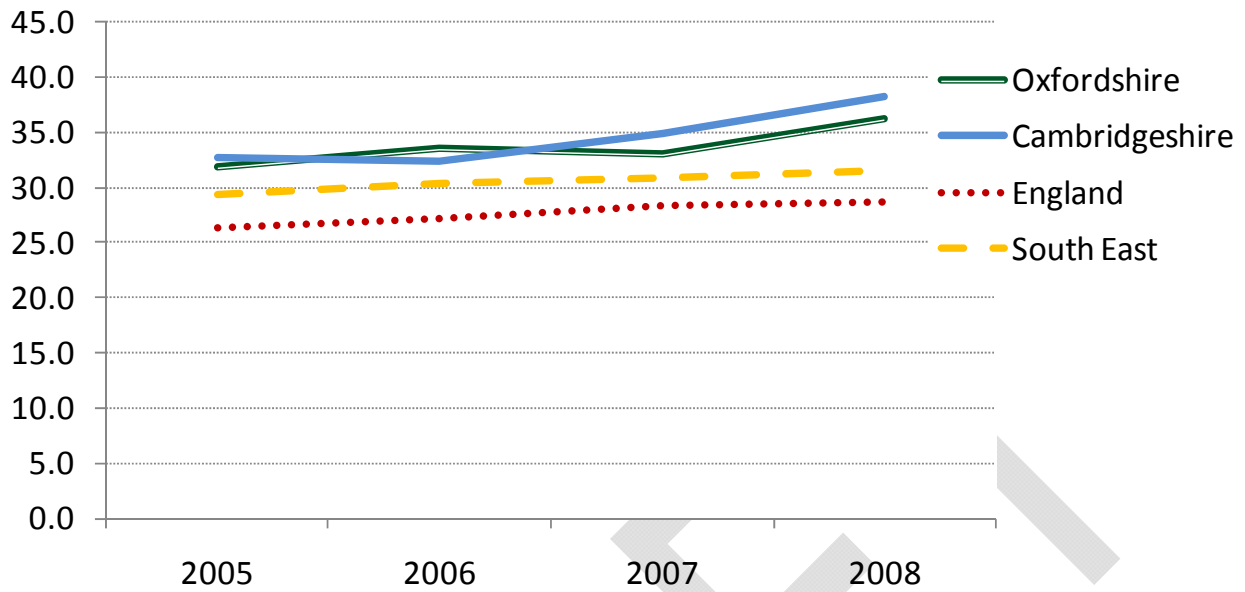
Figure 27 Highest qualification in the Oxfordshire working age population



Source:

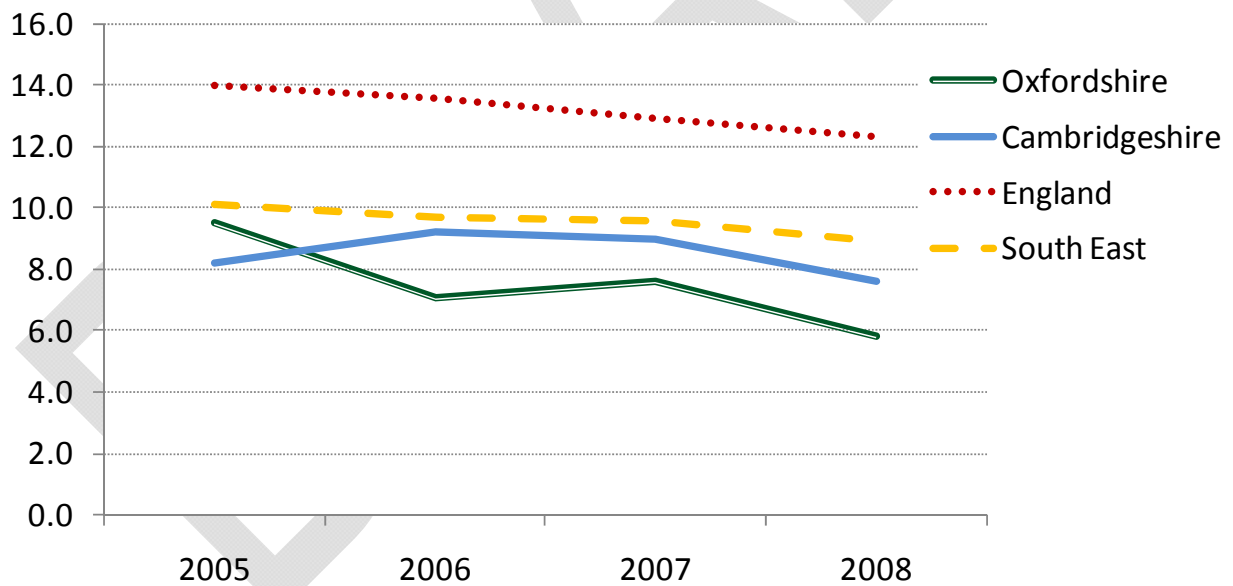
The recent trend shows an increase in the proportion of working age people with degree or equivalent with Cambridgeshire overtaking Oxfordshire in 2007. The percentage of people with no qualifications has declined in Oxfordshire, regionally and nationally.

Figure 28 % of working age population with NVQ4+



Source: ONS Annual Population Survey

Figure 29 % of working age population with no qualifications



Source: ONS Annual Population Survey

Analysis

Skill levels in the County show a positive trend, with skills increasing at all levels. However, managing the supply/demand equation of skills may prove problematic – for example, the lower level of graduate employment in Oxfordshire compared to Berkshire and the high

proportion of that graduate employment in Health and Education indicates that there may be insufficient commercial opportunities for graduates in the Oxfordshire economy.

Key Issues

Encouraging and maintaining employment opportunities for graduates, across a broad range of disciplines.

Maintaining momentum in reducing the proportion of the county population with no qualifications.

Offering an aspirational future to young people to encourage them to make appropriate educational choices.

4.10 Housing

Why is this important?

Housing is seen by economists as both a barrier to, and driver of, economic development. With insufficient housing or housing of the wrong sort in the wrong location businesses can not employ the staff they need or they cannot do so without the staff having to commute long distances. Availability of personnel has a direct impact on market wages, and so to costs, competitiveness and profitability

The Evidence

Oxfordshire is the most rural County in the South East, and is characterised by clearly defined hierarchy of urban settlements dispersed across a substantial area of agricultural land and a variety of natural landscapes. Oxford is clearly the largest urban settlement, begin around four times the size of the next largest, Banbury. Banbury is the largest of the 'Country Towns', followed by Bicester, Witney, Abingdon¹⁹, Wantage and Grove and Didcot. There are a number of major villages/small towns, and then a large number of small villages and hamlets.

Oxfordshire has a number of spatial pressures. It is sufficiently close to London to be influenced by economic activities there, particularly leading to out-commuting. This is also true to an extent for Reading and the Midlands. Oxford has historically been a key mid-point between Birmingham and London, first for the Thames/Canal, then the railway, and finally the M40. It also lies on the key east-west route of the A40 and north-south A34/A43. Oxfordshire has a high-quality rural environment, typified by the Cotswolds Area of Outstanding Natural Beauty and parts of the Oxford Green belt, and its conservation remains a high priority. The County also has a substantial built heritage which is similarly valued. It has a large number of small villages with distinct communities, which further

¹⁹ Abingdon and Wantage and Grove are not technically considered 'country towns' by the planners for whom the term has a specific meaning relating to the development of the county's structure plan.

contributes to an inclination to conserve and resist change. Therefore accommodating new development and regeneration requires careful integration with the existing environment.

Economic Development in general presents a number of challenges for land use planning;

- ◆ The mismatch between local labour and skills, and the needs of businesses. This leads to commuting and pressure on transport systems, especially at peak times.
- ◆ The pressure to grow the economy and supply the housing it needs in order to meet national and regional targets.
- ◆ The demands placed by businesses, not just for additional space as the economy grows, but for different space to that previously available (tracking structural changes in the economy), and access to specific infrastructure.
- ◆ Pressure on natural resources, including valued or protected landscapes.
- ◆ Balancing demand for housing by a growing labour pool with demand for jobs. The relationship between job creation and housing development is unclear and complex.

This is further complicated by a lack of certainty over future demand, the impact of new innovations and changing behaviours. Reflecting both locally-generated aspirations and national and regional targets, the County has been set some challenging targets in terms of its contribution to the regional and national economy; The South East Plan (section 22.3) says that Oxfordshire will need to generate an additional 18,000 new jobs by 2016 and deliver 55,200 net new dwellings by 2026. Of these, 40,680 would be in Central Oxfordshire and the balance of 14,520 in the rest of Oxfordshire.

At the regional level the South East Plan used both employment forecasts and demographic projections to attempt to assess the need for new housing in the county. These factors were then assessed in the light of other factors including how to preserve an attractive environment, how to balance development across all parts of the county, how to reduce commuting, how to provide necessary supporting infrastructure and how to address lack of access to affordable housing.

Table 23 South East Plan Policy H1: Regional Housing Provision 2006-2026 in Oxfordshire²⁰

Location	Total
Cherwell	13,400
Oxford	8,000
South Oxfordshire	18,940
Vale of White Horse	11,560
West Oxfordshire	7,300
Oxfordshire	55,200

²⁰ Note the South Oxfordshire figure includes the number of houses originally allocated to the urban extension south of Oxford but now to be located elsewhere in the District

From the narrow perspective of economic development the potential of housing to actually promote business development is unclear: jobs tend to be created much more slowly than houses can be built and having more housing than jobs in a particular place encourages commuting to the much larger London labour market rather than necessarily promoting local economic development²¹.

The South East Plan housing numbers provide the basis for production of Local Development Frameworks for each District.

As part of this the need for both housing and employment land will be reviewed.

In the context of the current recession the financial viability of many property developments has been affected. In order to ensure that new housing continues to be delivered Oxfordshire is working with the Homes and Communities Agency in a pilot 'single conversation' process that will lead to a Local Investment Plan for infrastructure necessary to support and enable housing delivery.

Analysis

Oxfordshire is expecting to see substantial population growth over the next 10-15 years, which will place consequential demands on employment. The range and type of housing built will have a direct impact on the affordability and the income range of potential occupants. Given existing trends in employment and income, there needs to be careful consideration of the role that housing will play in helping to shape future demographic spread and in particular employment type. Substantial proportions of housing would need to appeal to key groups such as skilled technicians if housing is to help address gaps in recruitment.

The Issues

The delivery of new housing is affected by the commercial imperative to build; therefore provision always lags behind the demand curve. Periods of economic uncertainty, such as we have recently experienced, can halt (temporarily or permanently) expected programmes, with consequential impacts for infrastructure provision and employment delivery.

The relationship between housing and jobs is complex. A clearer understanding of how the two inter-relate would have substantial value for policy and strategy development.

The allocation of growth and related housing and infrastructure across the county remains one of the most difficult issues facing Oxfordshire in the years to come.

²¹ ODPM research – find reference

4.11 Employment Land and Premises

Why Employment Land is important to the Economic Assessment

As we have seen above, there is evidence to suggest that the provision of a range of suitable commercial property has a direct impact on the size range of businesses within a locality. The availability and suitability of property has a strong influence on attracting, retaining and developing businesses.

The evidence

Oxford is a powerful brand with world-wide recognition. It is the lynch-pin upon which Central Oxfordshire has been able to accommodate a diverse range of industries - education, health, bioscience, information technology, publishing, the motor industry and tourism. At the core the city is home to around 3,800 businesses providing 108,000 jobs. Seven of the ten largest employers in Central Oxfordshire are located in Oxford²².

Inevitably, economic activity concentrates around the large urban areas, with a few notable exceptions; Harwell Science and Innovation Campus, MEPC at Milton Park, UKAEAs facility at Culham , and the military (and former military) sites at Brize Norton, Bicester and Upper Heyford.

All Local Planning Authorities (in Oxfordshire, the Districts and City) are required to create a Local Development Framework., which is the planning policy that sets out future growth and development in their areas. As part of this there is a requirement to carry out an Employment Land Review which assesses take-up and use of existing commercial property, and scopes the need for further provision over the course of the Development Framework. The employment land reviews conducted to date have used differing methodologies and illustrate the difficulties of forecasting in this area.

In addition to the need to plan for future employment demands, there is the matter of the existing commercial property stock. Aging brings a number of circumstantial changes to commercial property which can substantially reduce its utility and viability, including maintenance, layout & services, and changes in the immediate locality.

Data held by the Valuation Office Agency for national non-domestic rating purposes (NNDR, more commonly known as business rates) provides a substantial picture of the commercial property provision at District and Unitary Authority level, enabling the construction of County comparisons.

²² <http://www.southeastdiamonds.org.uk/Oxford.htm>

Table 24 Commercial and Industrial Floorspace, April 08

	Floorspace; Offices; (2005 Revaluation)	Floorspace; Factories; (2005 Revaluation)	Floorspace; Warehouses; (2005 Revaluation)	
	Square metres (m2)(thousands)	Square metres (m2)(thousands)	Square metres (m2)(thousands)	Totals
Cambridgeshire	1328	2258	1834	5420
Berkshire	2796	1674	2300	6770
Oxfordshire	1363	1937	1963	5263
Proportions				
Cambridgeshire	24.50%	41.66%	33.84%	100.00%
Berkshire	41.30%	24.73%	33.97%	100.00%
Oxfordshire	25.90%	36.80%	37.30%	100.00%

Source: VOA Commercial and Industrial Floorspace and Rateable Value Statistics, via ONS Neighbourhood Statistics

Analysis

Spatial planning plays an important role in preparing the County for its future economic (and social) demands. However, forecasting future business needs is difficult. The situation is made more complex by the changing nature of business; current Local Development Frameworks are looking ahead typically to 2025 – if we project the same time period backwards we would go back to 1995, when the use of desk-top computers in business was only just gaining wide acceptance, the M40 link from Oxford to Warwick had been completed less than 12 months and there was substantially more manufacturing in the UK.

Ultimately, the designation of areas of land as acceptable within Planning Policy for certain types of uses is only part of the equation. The realisation of such development requires the site to provide an economical opportunity to developers and investors, which in turn requires a viable market for the final development. Incidental factors such as unexpected development obstacles, market shifts and competitive developments can leave sites untouched, despite local aspirations and favourable policy regimes.

Business Rates (Valuation Office Agency) data agrees with business sector data around the low proportion of manufacturing in Oxfordshire. Oxfordshire seems to have a large proportion of commercial floor-space given over to distribution; however this can at least partly be explained by the presence of the M40 corridor.

Issues

Land allocated for employment uses cannot always be developed for various reasons (including local resistance, economic viability, lack of specific demand or pressure for alternate use).

Forecasting the demand for employment land is particularly difficult, for a number of reasons:

- ◆ Changes in business practice require spatial solutions that are unexpected or novel. This can make an existing allocation inappropriate.
- ◆ Employment densities vary enormously between business types, and increasing automation puts further downward pressure on densities.
- ◆ Past performance, in terms of take-up, is a long-term indicator of future demand but can be superseded and tends to smooth shorter-term fluctuations.

Future changes to the planning system could result in different results in terms of land being made available and taken up for business development.

4.12 Transport Infrastructure

Why Transport is important

Transport is a key enabler of economic activity. The free movement of goods and people underpins a modern Western economy to such an extent that it is recognised as a guiding principle of the European Union. However, the volume of travel associated with economic activity can exceed the capacity of infrastructure put in place to deal with it, this is particularly true considering that there are distinct peaks and troughs, leading to 'rush hours' with their attendant traffic congestion, crowded commuter trains etc.

Sustainable transport planning is therefore a significant activity for public bodies engaged in economic development. Currently, Oxfordshire County Council is developing a new Local Transport Plan (LTP3) and in parallel is commissioning work under the 'Developing a Sustainable Transport Strategy' (DaSTS) for the Central Oxfordshire Sub-Region (COSR). While this covers only part of Oxfordshire, it is the area with the most concentrated expected future growth, and which already accounts for a significant proportion of existing travel in the County.

The DaSTS draft interim report²³ sets out a number of key Transport issues:

- ◆ As a result of both housing and employment growth, the number of trips on the network in Science Vale UK is likely to increase in future years; Due to the nature of the topography, access to the area is constrained by river crossings and the Berkshire Downs.
- ◆ 225,000 people work in the COSR. 80% of this workforce also resides in the COSR, with a further 8.6% in other areas of Oxfordshire
- ◆ Those people who work in the COSR predominantly travel to work by car (58%, with a further 5% as passengers), with 8.7% by bus, 1.3% by rail, 8% on bicycle and 8.8% on foot

²³ *Draft Interim Report – DaSTS Central Oxfordshire.* Halcrow Group Ltd for Oxfordshire County Council.

- ◆ Of those people who live in the COSR, almost 85% remain in the COSR for work. Approximately 60% of these trips are made by car drivers/passengers
- ◆ 35,000 people work in Science Vale UK. 55% of these live in the Science Vale UK area. 4% of people who work in the area travel to work by public transport
- ◆ 60% of trips to Milton Park originate in South Oxfordshire or the Vale of White Horse. 80% of trips to Milton Park are made by car, with a further 7.3% as car passengers
- ◆ 78% of trips to Harwell SIC originate in South Oxfordshire or the Vale of White Horse. 80% of trips to Harwell SIC are made by car, with a further 6% travelling to work as a passenger in a car
- ◆ 35% of trips to Culham Science Centre originate from the Science Vale UK area, with a further 19% from Abingdon and 10% from Oxford
- ◆ A number of corridors are already under increasing pressure and frequently experience congestion, namely the A34 and the M40
- ◆ COTM indicates that by 2016 nearly all sections of the A34 are likely to experience an increase in flow of over 25% in both the morning and evening peaks. This increase in flow means that by 2016 and beyond, large sections of the A34 are operating at, or close to capacity in both directions
- ◆ There are a number of junctions in Science Vale UK that do not have sufficient capacity to accommodate current traffic demands, such as Frilford Lights and Steventon Lights Junctions onto the A34 are likely to create the largest constraint points (including Milton Interchange, Marcham Interchange, Hinksey Hill, Botley junction and Peartree Roundabout)
- ◆ Due to increased traffic flows, journey times for car and bus passengers will increase in future years
- ◆ There is limited strategic highway infrastructure in the Science Vale UK area
- ◆ The only significant bus flows in Science Vale UK are from Wantage/Grove to Oxford, Harwell SIC and Milton Park, which corresponds with the core bus routes; Transport policy needs to adapt and respond to demographic trends
- ◆ There is a need to ensure that transport can facilitate an improvement in education, skills and training, for example through better access to education institutions
- ◆ The Science Vale UK area is predominantly rural, with many of the population living in villages. This represents challenges for sustainable accessibility
- ◆ The requirement to provide additional highway infrastructure could cause severance between communities and make existing accessibility issues worse.

Assessing the economic impact of traffic congestion is extremely difficult. The most basic equation for defining impact is:

$$\boxed{\text{number of persons affected by congestion}} \times \boxed{\text{average delay per person}} \times \boxed{\text{value of delay}}$$

The value of the delay is dependent entirely on the activity of the person delayed – what they were delayed or prevented from doing. This in turn is widely varied; using GVA as a proxy is inaccurate due to the different proportions of activity from the broader economy – there is a far higher proportion of individuals engaged in commercial transport for instance. There is also the apportionment of the cost – is an individual delayed while commuting a cost to their employer, or is that loss apportioned to the individuals own personal time?

Further work in this area is clearly needed.

Key Issues

The substantial growth identified for the Central Oxfordshire sub-region will have an inevitable knock-on effect for transport and strategic transport planning.

While there is strong anecdotal evidence for the impact of congestion in Oxfordshire, obtaining hard numerical data is a much more challenging proposition. Rough proxies are achievable, but of limited utility.

How viable is it to extrapolate the Central Oxfordshire DASTS to the whole county?

How will the economy's need for increased transport capacity be accommodated so that congestion is not a barrier to economic growth?

4.13 The Infrastructure of Support for Economic Development

The performance of networks of public and private organisations and individuals involved in business or providing support to businesses is seen as a key part of the county's infrastructure. Ensuring that these networks work well together remains an issue.

Why is this important

Developers involved in attracting businesses to their business parks report that the soft infrastructure of strong and accessible networks is vital to their offer.

The evidence

There is a wide range of institutions and organisations with remits that are fully or partially associated with the economic development of Oxfordshire. For some, their responsibility may be associated with a part of the County, or to a wider area of which Oxfordshire is only a part. There are different responsibilities at different levels. In addition to these largely

public-sector participants, there are groupings of private sector interests with an impact on economic development at a local level, and formal and informal public-private partnerships.

Within the public sector, responsibility is characterised by a drive for wide-ranging, long-term benefits; for example through the provision of infrastructure or the delivery of support programmes to specific sectors that have been deemed of strategic importance. Private sector groups are characterised either by a drive to lobby for investment in certain localities or business networks (for example through Chambers or groups like the FSB or IOD), or for extending contacts for commercial purposes (breakfast clubs, investment networks, etc).

Parishes, towns, districts, the county, regional bodies and central government all have powers or influence over various matters. These remits change frequently – examples include both the duty to produce this economic assessment (which now lies with County and Unitary Councils), the structures responsible for regional spatial and economic planning, and the structures responsible for developing adult skills. Indeed the range of activities that can be described as contributing to ‘economic development’ is broad, covering community services, infrastructure, planning, skills and education, and regulatory powers. This inevitably spreads responsibility across a wide range of organisations for policy making and service provision. Co-ordination can be difficult.

In so far as delays and uncertainty in decision making processes act as barriers to investment it is necessary to improve our understanding of the governance structures necessary to provide a predictable context within which those contributing to the county’s economic development can plan and act.

As importantly, public services are only one part of the process of economic development: businesses also work at different scales and are generally not interested in local administrative boundaries. Science Oxford undertook a study of the take up of support for technology-led businesses in Oxfordshire in 2006²⁴. The study found that one of the key strengths in Oxfordshire was ‘pervasive networks’. Networks were classified into three types:

- ◆ General business networks, such as breakfast and lunch clubs, and local branches of national networks (eg chambers, CBI, IoD, FSB),
- ◆ Sector-specific networks such as Oxfordshire Bioscience Network, and
- ◆ Function-specific networks such as Oxfordshire Investment Opportunity Network.

The value of business networks in economic development is complex. Advancing the spill-over and agglomeration effects of certain sectors is certainly one role, but more generally the report indicates a role whereby networks act as a capacity multiplier for members, enabling them to become quickly aware of legislative changes or commercial opportunities that would not otherwise register with them.

²⁴ Science Oxford, *The Demand for Business Support by Science and Technology Companies in Oxfordshire*. July 2006.

The issues

The interface between public and private economic development interests is important for ensuring that strategic developments meet actual business needs or opportunities. However, there are clear differences in perspective that need to be bridged for effective delivery. Partnership working arrangements designed to align interests and improve governance can themselves be changeable and contested. Partnerships constantly need to balance the need to be inclusive with the ability to be decisive, which can again cause tensions.

Specific examination of the structures within Oxfordshire, and the broader context within which they operate, is important in developing and improving such structures.

4.14 Sketches of Oxfordshire's Districts

Oxfordshire is a heterogeneous County; that is to say its' component parts are quite discrete and have a strong individual character of their own. This informs the social aspects to economic activity around the County and the processes for agreeing priorities between the Districts, the County and other organisations involved in economic development. The aim of this section is to understand those different perspectives as a part of the whole picture of the County.

Oxford

Oxford City is of course our most distinct and continuous urban area. There are proportionally fewer smaller businesses in Oxford than the County as a whole, and consequently more large businesses. In terms of business activity, Oxford has some expected strengths – it has a higher proportion of retail and tourist accommodation businesses, arts and entertainment companies, and public administration, education and health bodies. Similarly, it has no agricultural activity, but also lower proportions of both production and construction businesses.

However, employee data (from the ONS Annual Business Inquiry 2008) indicates that Oxford has a lower proportion of people working in the 'Tourism related' sector (6.9%) than the County average (8.1), which is itself slightly lower than the South East average (8.2). Oxford's job density (ONS 2007) is 1.05, indicating a net commuting-in of around 7000 employees; traffic, especially at key 'rush hour' times remains a high priority. This situation is reflected by the comparison between workplace and residence earnings, where uniquely in Oxfordshire workplace earnings are higher than the residence figures. Data around residence earnings and employee occupations indicates that much of the higher-value employment of Oxford residents is related to the Universities and Hospitals. Commercial occupations, around senior management, seems to make up the bulk of in-commuting.

Cherwell

Cherwell District is centred on the three main urban areas of Banbury, Bicester and Kidlington, but retains a large rural area. Kidlington has been heavily influenced by its proximity to Oxford, whereas both Bicester and Banbury are more self-contained. Banbury in particular has much in common with the economy of the South Midlands, with a high proportion of manufacturing and distribution businesses, and forms its own discrete travel to work area, which with the Oxford TTWA accounts for a very close fit with the County boundary. Bicester has struggled for a long period with high levels of out-commuting, due to the ease of transport to a number of other centres of employment, Oxford, Milton Keynes, Aylesbury and London in particular. The presence of Bicester Village is most likely the driver for Cherwells' high proportion of retail businesses, only slightly behind Oxford and above the County average. Bicester is also a substantial centre for Defence employment.

Cherwell has strong earnings by residence, but significantly lower earnings by workplace which reflects this pattern of out commuting to higher paying employment. There are high proportions of employment in Standard Occupational Classification (SOC) groups 8 and 9, which are typically associated with lower skill levels and lower wages.

West Oxfordshire

West Oxfordshire has a substantial rural economy, along with a strong tourism sector benefitting from the District being part of the Cotswolds AONB. Industrial activity is a greater density along the A40 corridor, especially around the main town of Witney. The District is also home to the substantial military base at Brize Norton.

West Oxfordshire has the highest proportion of Construction businesses in the County. This is reflected to an extent in its high proportion of employment in Skilled Trades. It also has the county's highest proportion of employment in Customer Service and Sales occupations. West Oxfordshire is home to some of the larger employers in the county, notably Siemens Magnet Technology at Eynsham, Owen Mumford medical technology in Woodstock and Chipping Norton, and Abbott Diabetes Care in Witney.

West Oxfordshire has the second highest job density (0.93) in Oxfordshire after Oxford City. Given that wage disparity between residential and workplace rates indicate a level of out-commuting, West Oxfordshire must be presumed to draw in commuters, most probably from the rural area of the Cotswolds district of Gloucestershire.

South Oxfordshire

South Oxfordshire is an exceptionally rural area, bordering Reading to the South, and close to West London. It partly falls inside the Chilterns AONB. It is home to the RAF's leading helicopter base, at Benson.

South Oxfordshire has the highest proportion of businesses in the Professional Scientific and Technical category, probably due to the long-established complex at Culham.

South Oxfordshire has the lowest workplace earnings in the County, and the greatest disparity between workplace and residence earnings; this may be related to the District having the lowest job density in Oxfordshire, with much employment coming from out-commuting, especially to Oxford and Reading. South Oxfordshire shares with Vale of White Horse the highest levels of employment in Senior Management and Professional categories; groups 1-3 inclusive.

Vale of White Horse

Vale of White Horse closely follows South Oxfordshire in terms of employment in the Professional Scientific and Technical category. Again, this is largely due to a single concentration, in this case the Harwell Science and Innovation Campus, although the high proportions of science and technology businesses at Milton Park also has a substantial impact.

Vale of White Horse has the highest proportion of residents with qualifications at NVQ Level 4 and above (45%). This would seem to be linked closely to the high proportions of both senior Management, Professional, and Associate Professional occupations, and the very small gap between workplace and residential earnings, suggesting that the commercialised science of many businesses at Harwell and Milton Park has a substantial local impact.

The Vale has the narrowest gap between workplace and residential wage rates. This in itself would suggest very limited value in out-commuting from the District, despite the close proximity of the substantial economic activity at Swindon.

5 Conclusions

A World Class Economy will succeed financially, socially and environmentally. Options need to be identified for bridging the gap between the economy's current state and the ambition for it to be world class.

History, geography and subsequent self-reinforcing 'agglomeration' effects arising from the concentration of skills, jobs and other businesses have given Oxfordshire a strong economic base on which to build. Politically important from Medieval times, the presence of Oxford University, and its place on strategically important communication routes – road, river/canal, railway and now motorway and telecoms – has given the County both substantial and long-lived foundations on which to build its' economy. Oxfordshire is recognised nationally and by SEEDA as a high performing sub-regional economy with a high rate of employment, high skills levels and high productivity in comparison to the South East and to the rest of the UK.

Despite this Oxfordshire has some issues to address: it has had low levels of jobs growth in recent years, its large public sector is vulnerable to spending restraint in the medium-term future and it is not as strong as neighbouring Berkshire in sectors that generate high levels of GVA per job. Oxfordshire does not have the scale of London or other benchmark 'global high tech regions' such as Silicon Valley in California. Nor does it appear to have as strong a global reputation for its high tech economy as Cambridge and the evidence suggests that it does not have the level, or rate of growth, of productivity as neighbouring Berkshire.

Having set itself the aim of having a world class economy in 2030, the structure of economic assessment needs to be adapted to the needs of Oxfordshire by identifying:

- ◆ A fuller meaning of what a world class economy means to Oxfordshire;
- ◆ The gap between where we are now and maintaining or developing a world class economy;
- ◆ The options available to maintain or develop a world class economy, both alone and as part of a wider geography.

6 Issues to be addressed in the economic development of Oxfordshire

There are a number of issues to be addressed in the local economy. There are legacy weaknesses which we must ameliorate, and there are risks to our future prosperity that must be treated, transferred or tolerated.

The economy of Oxfordshire is the result of a range of factors only some of which are specific to Oxfordshire itself. Understanding these factors provides the starting point for

understanding potential areas of policy intervention. These will need to be understood in the context of Oxfordshire's other key objectives that refer to the environment and climate change, thriving communities and breaking the cycle of deprivation. The key issues arising from the economic assessment to date are:

1. Low recent growth in GVA
2. Size of public sector – large and likely to decline
3. Productivity not improving enough
4. (problems with GVA per head as a metric)
5. Education and Skills: under - performance
6. Population change – effects of growth and decline
7. Un-affordable Housing
8. Communications and Infrastructure congested
9. Un-sustainability of current system
10. Effects of recession on already deprived communities
11. Slow growth forecast for future
12. Lack of shared 'story' about the Oxfordshire economy

To increase Oxfordshire's GVA per head will therefore involve a range of possible policy and operational responses designed to affect the variables that contribute to changes in GVA per head:

- ◆ Level of economically inactive population – retired / students (dependency ratio)
- ◆ Proportion of part time jobs
- ◆ Proportion of better paid jobs
- ◆ Amount of commuting arising from the balance of jobs and homes
- ◆ Level of unemployment
- ◆ The proportion of businesses in more profitable industry sectors
- ◆ The overall size of the economy that is related to the intensity of agglomeration / spill-over effects that increase competitiveness.
- ◆ The strength of international connections that tend to increase productivity and therefore GVA
- ◆ The level of innovation that increases productivity
- ◆ The level of investment that enables more productivity and greater wealth creation from the existing stock of ideas and entrepreneurs
- ◆ The entrepreneurial / enterprise culture that creates more businesses that produce more GVA

- ◆ The level of skills and their affect on productivity – if there are jobs to make use of the skills – and on a wide range of social costs

There is a need for continued improvements to understanding of Oxfordshire economy amongst a wider community of policy makers and stakeholders. Particular issues to address include:

- ◆ On going attention to emergent threats to the Oxfordshire economy. This would essentially build a 'risk register' for the economy, allowing for a risk management approach to be adopted in terms of protecting existing employment and economic activity.
- ◆ The potential value of greater collaboration across Central England as a global economic region. Benchmarking has shown that comparator places with high-tech and knowledge based globally competitive economies frequently encompass much larger areas and populations than Oxfordshire. An evaluation of the potential of working as part of a broader partnership needs to be undertaken to ensure that we are taking the best approach to achieving our aim of being a world class economy.
- ◆ Best practice from other benchmark communities. A clearer understanding of the critical factors for success in building a world class economy will inform and support policy making and the development of appropriate interventions to achieve our goals.
- ◆ How to ensure adequate investment is available during the coming years to enable the development of new and growing businesses. An understanding of the possibilities for innovation in securing public and private sector funding for critical infrastructure will be vital to retain and enhance a competitive edge during the expected period of reduced public sector capital expenditure.
- ◆ Improved understanding of exactly how to help small businesses grow successfully into medium sized businesses and medium sized business to grow into large businesses.
- ◆ Review of economic development strategy based on the economic assessment. The Economic Development Strategy for Oxfordshire (EDSO) is due to be refreshed in the spring of 2010. A solid and commonly agreed evidence base for the trends, expectations and possibilities of the economy will make the most substantial contribution to this process and ensure that there is a robust strategy for the delivery of our economic aspirations.
- ◆ Ensure governance arrangements are effective in enabling timely and appropriate decisions affecting economic development. There has been considerable flux within the structures and processes for supporting economic development. The Economic Assessment provides an opportune point for reflection on the current structures and considerations about alternatives to ensure the effective delivery of the support and interventions required to reach the goals set out in Oxfordshire 2030.

ANNEX 1: Technical papers and references

The following papers have been, or need to be, prepared to support the Economic Assessment. In some cases the papers referenced refer to external reports.

1. Bench marking
2. Business Structure
3. Deprivation
4. Future Challenges
5. GVA technical issues
6. High tech and knowledge intensive references
7. Hi-tech and Bioscience Sector References
8. Homeworking
9. Housing
10. ICT sector definition references
11. Industry sector definitions
12. Innovation
13. Investment
14. Land use: Employment land use and housing
15. Localities: Market towns, Rural, SVUK
16. Migration
17. Military sector employment and contribution to the economy
18. Sectors: bio-tech, clean tech, cultural industries, engineering, retail, tourism, Universities, Voluntary and Community Sector (VCS)
19. SIC codes and SOC codes
20. Skills evidence
21. Transport

ANNEX 2: Calculating GVA

GVA is a top down measure of economic performance at “basic” prices and at county level includes wages and profits.

Sub-regional (NUTS3) GVA Incomes approach...

Income generated through goods and services

Made up from:

Compensation of employees –	WAGES
	+
Mixed incomes –	INCOME FROM SELF EMPLOYMENT
	+
Gross operating surplus –	COMPANY PROFITS

Compensation of employees – manufacturing (ONS ABI survey); non-manufacturing (ASHE and STES surveys); wages on farms (DEFRA survey)

Mixed income - Inland Revenue and DEFRA

Gross operating surplus - Inland Revenue & ONS/BERR inquiries and ONS estimates

GVA is **NOT** a measure of:

- ♦ the value of goods produced/sold
- ♦ standard of living - does not include taxes or benefits such as job seeker allowance
- ♦ quality of life

GVA per head measures the production of an area relative to its resident working age population. While the intention is that it should measure productivity it fails to do this because it is affected by in-commuting, varying levels of economic activity and the structure of the economy and should therefore be replaced by GVA per job or GVA per hour worked (which takes account of varying levels of part time working).

However, some caution needs to be applied to this approach. Because of the use of resident population, rather than resident working population, the analysis is vulnerable to demographic skews. Oxfordshire has seen an increasingly aging population, which has the effect of diluting the GVA produced amongst the working age population. In addition GVA of an area is produced by its workforce whether they are residents or not of that area. A higher level of in-commuting, such as is found in Berkshire, will lead to a higher level of GVA per (resident) head. Further, of the 12 NUTS3 areas in the UK ranked higher than Oxfordshire, only Berkshire (ranked number 4) is a similar Shire County; all other areas are tightly defined urban areas, including Swindon, Nottingham and Peterborough.

ANNEX 3: The Key Questions to be Asked by the Economic Assessment²⁵

- ◆ What do we already know that can be justified with reference to the evidence we hold?
- ◆ Does this enable us to describe both what is going on directly in our area and the global, national, regional and local forces driving it?
- ◆ Can we describe the economic geography of our area in terms of the impact of other places on it and its impact on them?
- ◆ Can we supplement this with forecasting information which will show future trends and developments?
- ◆ In light of the above, how can we best describe our economy and, more broadly, the economic wellbeing of our area in terms of:
 - spatial and economic variation: economic sub-areas, rural, urban. coastal geography
 - the key characteristics of those areas in terms of: demography, skills, employment, enterprise
 - the drivers for change in terms of each of those factors in each area
 - the relative importance in each area of supplementary contexts including: inclusion, environment, housing, planning and connectivity.
- ◆ If this represents a factual description of place, what anecdotal or other impressions exist which challenge or validate it?
- ◆ Do these reveal gaps in data or knowledge, for each of the sub-areas and categories of information relevant set out above, which can and need to be collected and or mapped?
- ◆ Can this data be collected easily, can proxies be developed, and can it be accessed on a commercial basis?
- ◆ What other documents, produced by the council and its partners, can be used to challenge or confirm your analysis?
- ◆ How can we use the evidence in the LEA to support our planning and policy activities?

Source – IdeA Guidance on Preparing Local Economic Assessments

²⁵ How to do a Local Economic Assessment, PAS and IDEA/LGA, consultation draft 31st July 2009 page 10