### **Cambridge Profile**

Patterns of economic activity and nature of economy	Overall employment rate (aged 16-74)	Average (61.5%) and improving green					
	Average employee earnings (workplace)	High (£586) and increasing green					
	Jobs density	High (1.08) and stable green					
Entrepreneurial culture	Level of self employment	Low (13%) but increasing amber					
	New business registrations per 10,000 adults	Average (50) but increasing green					
Skills levels and aspirations	16-19 year olds who are not in education, employment or training	High (6.4%) but stable red					
	Population aged 19-59/64 qualified to at least level 2 or higher	High (82%) and increasing green					
Patterns of unemployment and deprivation	People aged 16-64 on out of work benefits	Low (7%) but increasing amber					
Housing affordability	Ratio of median house price to median earnings	High (8.7) and increasing red					

### **Key Issues**

- A long term decline in office floorspace may lead to problems for the hi-tech industry over a 5-10 year timescale
- High levels of public sector employment with expectations of redundancies in this sector over the next few years
- Very low housing affordability and pockets of income deprivation in the north of the city
- A low availability of affordable family housing may impact negatively on inward investment
- Income and employment disparities between wards in the north and south of the city

	Cambridge City			East Cambridgeshire			Fenland			Huntingdonshire			South Cambridgeshire		
ECONOMIC ASSESSMENT OVERVIEW	Performance against	Performance		Performance against	Performance		Performance against	Performance		Performance against	Performance		Performance against	Performance	
	Cambridgeshire average	against national average	Direction of travel	Cambridgeshire average	against national average	Direction of travel	Cambridgeshire average	against national average	Direction of travel	Cambridgeshire average	against national average	Direction of travel	Cambridgeshire average	against national average	Direction of travel
PEOPLE											_			-	
Overall employment rate (aged 16-74)			1			Ŷ			<b>↑</b>			↓ ↓			<u> </u> ↑
People aged 16-64 on out of work benefits			↓ ↓			→			<b>1</b>			↓ ↓			→
Proportion of population aged 19-59/64 qualifed to at least level 2 or higher			<b>↑</b>			Ŷ			↓			↓			↑
Proportion of population aged 19-59/64 qualifed to at least level 4 or higher			<b>↑</b>			ų.			↑ Î			<b>1</b>			. ↓
5+ A*-C grades at GCSE inc English and Maths			↓			ų.			<b>↑</b>			. ↓			<u> </u>
BUSINESS															
New business registration rate (2011)			<b>↑</b>			<b>↑</b>			<b>↑</b>			1			1
Percentage of small businesses in an area showing employment growth (discontinued) (2008)			→			→			→			→			→
Labour productivity (2010)			↓ ↓			<b>↑</b>			1			1			1 1
Jobs density (2011)			1			<b>↑</b>			↓			↓			↓
Median earnings of employees in the area (2012)			1			↓			1			↓			1 1
PLACE															
CO2 emissions per head (2009)			1			<b>↑</b>			<b>1</b> 1			<b>↑</b>			<mark>i</mark> ↑ j
Housing affordability			↓ ↓			1			1			↓			<b>1</b> ↑
GVA per capita (2010)			↓ ↓			Ϋ́			<b>↑</b>			1 1			1 1
Place Survey results			-			-			-			-			-

	Forest Heath			St E	dmundsbury		North	Hertfordshire	Uttlesford			
	Performance against Cambridgeshire average	Performance against national average	Direction of travel	Performance against Cambridgeshire average	Performance against national average	Direction of travel	Performance against Cambridgeshire average	Performance against national average	Direction of travel	Performance against Cambridgeshire average	Performance against national average	Directi of trav
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		Better than average										
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		Worse than averag	ge									
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### **Cambridge SWOT**

#### **Strengths**

A national centre for higher education and R&D, with employment in these sectors over 10 and 8 times higher than the national shares of employment respectively.

A globally significant hi-tech economy that provides around 19% of employment in the city.

A substantial tourism industry that generated £351m of expenditure in 2007.

Relatively high levels of resident satisfaction in Cambridge as a place to live.

Over half of residents are employed to NVQ level 4+; generally recognised as the skill level required to drive innovation and leadership within an economy and to enable businesses to compete globally.

High educational attainment levels, however performance may be boosted by pupils living outside Cambridge.

Average business size is larger than that seen nationally and employment growth among smaller businesses is strong, helping to create a high jobs density.

The city has seen a significant recent increase in retail floorspace, supporting a growing retail sector.

#### Weaknesses

A high level of in-commuting causes significant levels of congestion within the city.

Relatively high proportion of population with no qualifications, and a low proportion of pupils gaining five or more GCSEs grade A\*-C.

High proportion of young people not in education, employment or training (NEET).

Housing within the city is very unaffordable and housing completions have steadily declined since 2004.

#### **Opportunities**

The hi-tech sector is generating national strengths in creative industries and clean technologies; important growth sectors in their own rights.

The area is perceived as very entrepreneurial and the birth rate of new enterprises is high compared with local figures, although this remains below the national average. This may be due to various reasons such as the high cost of living, increasing the perceived risk of starting up a business and the high value nature of the economy meaning there are fewer but higher value start-ups.

Proposals as part of the Greater Cambridge City Deal designed to retain highly skilled graduates in the region.

Future supply of housing sites on the edges of the city.

The city has fairly high but recently decreasing levels of crime.

#### **Threats**

High levels of traffic congestion may start to influence the attractiveness of the area as a place to invest.

Access to high skilled migrant workers- important to the hi-tech and health sectors- could be negatively affected by tight visa restrictions.

Generally high levels of prosperity but pockets of income deprivation in the north of the city.

Low levels of unemployment and benefit claimants, however the recession has increased employment disparities within the district.

High levels of public sector employment with expectations of a continued number of redundancies in this sector over the next few years.

Relatively low business density, exacerbated by a long term decline in office floorspace, leading to a recent shortage against demand that may be partially met by CB1. However, the likely remaining shortage may lead to problems over a 5-10 year timescale.

Innovation strengths are concentrated within the University of Cambridge and a small number of global companies – a situation that may not be resilient in the longer term.

A low availability of affordable family housing in Cambridge may impact negatively on inward investment and the ability of firms to move existing staff into the area.

### Labour market, prosperity and crime

# Large working age population, but high student numbers reduce levels of economic activity

Cambridge has an estimated population of around 123,900, of which nearly 74% are of working agethe highest proportion in Greater Cambridge- due to the large student population. However, University of Cambridge students are forbidden to do paid work during term time, meaning that this proportion is not wholly representative of the actual available workforce.

#### High level of in-commuting shows Cambridge is a regional hub of employment

- 2001 Travel to Work Area (TTWA) data showed Cambridge as the third largest travel to work area in the East of England. Cambridge is one of two TTWAs in the region (the other being Norwich) which are net importers of workers (i.e. more jobs than resident workers).
- Commuting patterns into Cambridge stretch across the Cambridgeshire local authority boundary into the surrounding districts of St Edmundsbury, Forest Heath and Uttlesford.
- Large proportion of the resident population employed in 'high value' occupations.

#### Importance of high skilled migrant workers in the hi-tech and health sectors

- Between 2002/03 and 2011/12, 74,140 overseas people registered for a National Insurance Number (NINo) in Cambridgeshire. Of these, 47% registered in Cambridge City.
- There is a risk that the hi-tech sector might face increased labour and skills shortages in the future.
   Overseas students have traditionally filled a proportion of vacancies in the hi-tech sector but tighter new work visa and student visa regimes may restrict their opportunities to work in the UK.
   Furthermore, there are significant numbers of migrants in Cambridge who initially worked in the area, but now commute out due to higher salaries (IPPR 2009).
- As this has been better understood, so policies have been put in place to retain highly qualified
  migrant workers; the Greater Cambridge City Deal supports an initiative designed to allow business
  graduates remain in the UK.

#### Generally high levels of prosperity but pockets of income deprivation in the north

- The East of England Forecasting Model estimates that Gross Value Added (GVA) per capita (a
  measure of general prosperity) is the highest in Cambridge City of all Greater Cambridge districts,
  significantly higher than the average UK figure, possibly reflecting the high jobs density in the district.
- Median weekly resident pay increased fairly consistently between 2002 and 2012.
- However, wards in the north of the city have a significant proportion of households with an income of less than £20,000 (Market, Abbey, King's Hedges, Arbury and East Chesterton).
   [Map 3]

#### A high number of single-person households

While gross weekly pay is the highest in the county, annual household income is the second lowest
in the county. This may be because there are more single-person households in the city so there are
fewer households with a joint income.

#### Relatively high levels of resident satisfaction

- The 2008 Place Survey recorded that 87% of Cambridge City residents were satisfied with their local area as a place to live, third highest in the county and above the national average of 80%.
- Cambridge was also one of the few Cambridgeshire districts with above average levels of satisfaction with the way the council runs things.

### Relatively high levels of crime but decreasing

- Cambridgeshire Police collate data for the county's Crime and Disorder Reduction Partnerships.
- Of the Cambridgeshire districts, the highest number and rate of crimes are recorded in Cambridge City.
- The rate of crime in Cambridge has decreased in the 2012/13 period to 87.3 crimes per 1,000 people. Cambridge's rate has dropped proportionally greater than any other Cambridgeshire district.

#### Skills levels, education and skills demand

# Disparity in resident population skills: very high proportion of population highly skilled; relatively high proportion with low attainment

- A very high proportion (56%) of Cambridge City residents are qualified to NVQ level 4+ (degree level and above). This is over 20 percentage points higher than the national average.
- However, in 2013, 6% of Cambridge City residents aged 19-59/64 have no qualifications and only 52% of pupils at the end of Key Stage 4 gained five or more GCSEs at A\*-C, which was the third lowest figure in Greater Cambridge.

## Possible intermediate level skills shortages, particularly in technical and skilled trade occupations

- Cambridge City has a lower than average proportion of their population holding level 3 (recognised as 'intermediate level') as their highest qualification. This is the lowest proportion in Cambridgeshire and over five percentage points lower than the national average.
- The National Skills Audit 2010 found that the highest 'densities' of skills shortages (i.e. relative to the numbers in the occupation) are found in associate professional/technical, skilled trades and personal service occupations, all of which require predominantly intermediate level skills.
- Associate technical/professional and skilled trade occupations are essential in many advanced manufacturing sectors; skills shortages in these areas could be restricting their growth in the subregion.

## Some evidence of recruitment difficulties in the ICT sector, particularly around commercial expertise [business discussion via Connected Cambridge linked in group]

- High number of vacancies in the ICT sector 200 jobs advertised on Connected Cambridge every week with a churn of only 13%, i.e. vacancies not being filled.
- Recruitment often takes place from outside of Cambridge or the UK for vacancies within CB1/CB2.
- Many Cambridge organisations have high expectations of academic qualifications in addition to technical expertise, but maintain lower salaries than London.
- Development staff are very academic and technically competent but often don't have the commercial experience or business knowledge to drive a successful business.

## Relatively high proportions of young people not in education, employment or training (NEET)

• Of the Cambridgeshire districts, proportions of 16-19 year olds NEET are highest in Fenland and Cambridge City. The proportion of young people NEET in Cambridge City is 6.4%.

## High educational attainment levels, but performance may be boosted by pupils living outside Cambridge

- Of those pupils studying in the district a high proportion have good attainment levels with 60% reaching level 3 by age 19, compared with 48% nationally.
- Pupils attending schools in Cambridge perform better than pupils living in Cambridge. This implies that school performance in the city may be boosted by pupils living outside Cambridge.

### Patterns of unemployment and deprivation

# Low levels of unemployment and benefit claimants, however the recession has highlighted employment disparities within the district

- The unemployment rate among the economically active across Cambridge City is low at 3.5% of 16-74 year old residents (compared with a national level of 5.2%).
- However, there are disparities within the district, with areas around the north of the city having a
  much higher prevalence of Jobseeker's Allowance claimants. This is particularly true for King's
  Hedges ward and, to a lesser extent, Abbey and Arbury wards.

#### Relatively low levels of incapacity benefit claimants

- Just under 4% of Cambridge City residents claim Incapacity Benefit/Employment and Support Allowance (IB/ESA) – a moderate proportion for Greater Cambridge and lower than the national average.
- As a proportion of the working age population, IB/ESA claimants have been decreasing since 2006, similar to the pattern seen nationally.

### Nature of the economy

## A high value economy dominated by knowledge intensive, high value industries and occupations

- Knowledge intensive occupations are concentrated in Cambridge City where they represent 26% of employment (reflecting high employment in teaching, research and health professions).
- The professional, scientific and technical sector accounts for the largest number of businesses in the city, followed by retail, information and communication, and accommodation and food services.
- The dominant sectors of employment are education (accounting for approximately 25% of all employment compared with a national average of 10%), health, professional, scientific and technical, and retail. 64% of employment is in 'high value' occupations.
- The East of England Forecasting Model estimates that labour productivity in Cambridge City is the third highest of all Greater Cambridge districts.
- Cambridge City saw the highest percentage increase in employee wages (among Cambridgeshire districts) over the last five years.

#### High levels of public sector employment

 45% of Cambridge workers work in the public sector (15 percentage points higher than the national average).

#### A national centre for higher education and research & development (R&D)

• Cambridge is a key centre for both higher education and R&D (over 10 and 8 times higher than the national shares of employment respectively), together with a range of high value manufacturing activity. Another major specialism is within software consultancy, 2.5 times the national quotient, and employing around 3,000 people in the city.

## Globally significant hi-tech and bio-tech economy, leading to strengths in creative industries and clean-tech

- Responses to the County Council's survey of hi-tech businesses and employers indicate that the
  wider hi-tech 'community' provided 51,400 jobs at the start of 2010. Almost three quarters of the
  total are employed in Cambridge City and South Cambridgeshire, 39,000 in all, with 18,355 in
  Cambridge City representing over 19% of total employment. [Maps 1 and 2]
- 10% of the UK's computer games developers are within five miles of Cambridge city centre.
- National strengths in software, computer games and electronic publishing.
- National strengths in advanced materials and bio-tech in clean-tech.

#### Average business size larger than seen nationally

- In 2011 there were 5,850 local units in VAT and/or PAYE based enterprises in Cambridge, and there were 98,000 jobs in 2011, 30% of the county's total jobs.
- The size of businesses in the district is generally larger than across the wider sub-region or across England as a whole with 17% employing between 10 and 49 people compared with a comparative figure of 13% across Greater Cambridge and 14% across England as a whole.
- The proportion of enterprises in Cambridge with employment less than 50 showing employment growth in 2008 was the highest among Greater Cambridge districts at 14.5% and above the national proportion.

#### **Tourism**

• The tourism industry generated expenditure of £351m million for Cambridge in 2007. The University of Cambridge is a major attraction for tourists.

#### Relatively low business density but high jobs density

- A high density of businesses is crucial in creating the levels of agglomeration required to enable
  effective knowledge flow between people and firms, important for the growth of any successful
  economy.
- Business density is relatively low in Cambridge City compared with other districts across Greater Cambridge. Business density increased by a smaller proportion than the region as a whole between 2004 and 2012. This was likely due to a combination of high population growth over this period and a general decrease in office space in the city centre.
- Across Greater Cambridge, only in Cambridge City is the labour demand higher than the available workforce, with a jobs density figure of 1.08 in 2011. This figure decreased between 2003 and 2011, reflecting an increase in population over this period.

#### Relatively high 'birth rate' of new enterprises but below national figures

- The 'birth rate' of new enterprises (measured as births per 100 active enterprises) in 2011 was the highest in Cambridge City compared with the other Greater Cambridge districts, yet this was still marginally below the national figure. This may be because the high cost of living increases the perceived risk of starting up a business and the high value nature of the economy means there are fewer but higher value start-ups.
- New business registrations per 10,000 residents are also below the figures seen for the East of England and England as a whole.
- Around 13% of Cambridge residents are self-employed; this is the lowest proportion within Greater Cambridge. This proportion is also lower than the national average, suggesting there may not be a significantly large number of businesses sitting below the VAT/PAYE threshold.

## Many innovation strengths, driven by the University of Cambridge and a small number of global companies

- The East of England Innovation Baseline (2009) found that private sector investment in R&D in Cambridge makes up a large proportion of the total amount in the East of England.
- However there is a concern that business R&D investment is heavily dependent on the investment decisions of a small number of global companies, a pattern which may not be resilient in the longer term.
- The report found that strong regional performance on business university research and consultancy is driven by the University of Cambridge's strong interactions with business communities. The University of Cambridge accounts for about 60% of the total value of collaborative research and research/consultancy contracts in the region of which the total amount is the highest level in the UK.
- By 2005, 51 companies had spun-out directly from the University of Cambridge alone and 250 companies had been created based on knowledge transfer from the University of Cambridge. In 2005 those companies employed 3,990 people and generated revenues of £574m.

### **Business development, infrastructure and housing**

### Low availability of affordable family housing in Cambridge may impact negatively on inward investment

- There is a low proportion of detached and semi-detached housing in Cambridge City. This may impact on the attractiveness of the city for inward investment.
- Property agents are increasingly reporting a high demand for family houses in the centre of Cambridge.

## Housing is very unaffordable and there is an increasing gap between the rest of Cambridgeshire

- Cambridge City is the most expensive area in the sub-region; the average house price in Aug 2012 to Jan 2013 was £349,064. This is more than double the average house price in Fenland which has the cheapest house prices in Cambridgeshire. Furthermore, house prices in Cambridge are rising at a greater rate than the rest of Cambridgeshire, house prices have increased by 7.6% from the same period in 2011/12.
- Nine of the ten least affordable wards in the sub-region are in Cambridge City, including the least affordable Newnham where the lower quartile house price is 23 times the lower quartile income. For Cambridge as a whole this ratio is 13.95.

#### Fall in housing completions

• Like most other districts, Cambridge saw a significant fall in the number of dwellings completed over 2008-2010. Preceding this there was already a downward trend in housing completions since 2004. From 2010/11 to 2011/12, there was again a slight drop in housing completions to record the second lowest level in the county.

## Long term decline in office floorspace; a shortage may lead to problems over a 5-10 year timescale

- Excluding completions in research and development, since 1999 there has been a decline in all
  classes of business floorspace in Cambridge City, much of this was converted into land used for
  dwellings.
- In 2011/12 Cambridge saw the highest change in net business floorspace, in large part a result of significant gains in research and development floorspace.
- Property agents report a demand for city centre office space, predominantly from the
  professional business market requiring good quality space close to the centre. Moreover, recent
  reports suggest that the lack of office space for small and medium sized businesses in
  Cambridge could hamper economic growth in 2013.

#### Significant increase in retail floorspace

- Cambridge accounted for just over a third of the total increase in Cambridgeshire's new retail floorspace between 1999 and 2012. Most of the additional floorspace was within the town centre area.
- From 2012 most of the increases in retail floorspace are projected to be in Cambridge City and South Cambridgeshire.

#### Increasing traffic congestion as the Cambridge travel to work area expands

- 2011 figures show the busiest urban road within Cambridgeshire is Milton Road in Cambridge.
- The A14, A428 and M11 were identified as three of the six 'priority' corridors for intervention in the
  East of England, based on the direct costs of transport congestion and the foregone wider economic
  benefits.
- Furthermore several property agents believe that congestion within Cambridge City will soon start to exert a negative influence on business decisions as to where they wish to locate.

#### CO2 emissions per head are lower than the UK average

• Fuel consumption within Cambridge is lower per capita than the UK average and the lowest of all the Greater Cambridge districts, and has been decreasing since 2007.

#### Relatively low levels of fuel poverty

• Fuel poverty is influenced by three factors: low incomes, high fuel costs and thermal efficiency of the housing stock. As an urban area, Cambridge in general has a lower level of fuel poverty compared to the sub-region.

### **Future prospects**

#### Increase in employment

The East of England Forecasting Model forecasts that of the Cambridgeshire districts, Cambridge
City will see one of the higher levels of employment growth in percentage terms between 2011 and
2031.

#### Increase in population

- Cambridgeshire's population is forecast to grow considerably in coming years; the County Council Research Group's 2013 Population, Housing & Employment Forecasts Technical Report, which considers all relevant demographic and economic-led forecasts, suggests that the county's population will grow by 23% between 2011 and 2031.
- The Technical Report suggests that Cambridge's population will grow by around 19% between 2011 and 2031.

#### Increase in GVA

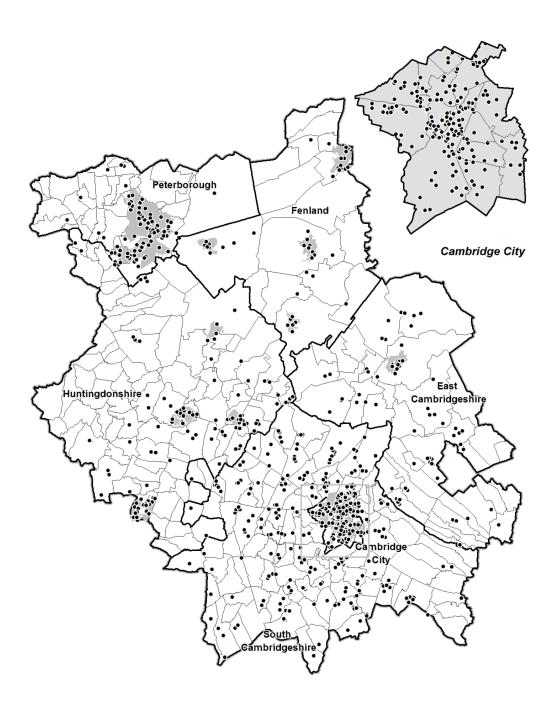
Growth forecasts from the East of England Forecasting Model suggest that GVA per capita will
increase by 45% in Cambridge, between 2011 and 2031; this is the highest growth rate of all of the
Cambridgeshire districts.

#### Employment demand in associate technical and professional occupations

- Occupational forecasts for Cambridgeshire based on the East of England Forecasting Model estimate that over the next five years expansion demand is likely to be strongest in:
  - Caring personal service occupations
  - Managers and senior officials
  - Associate technical and professional occupations
  - Professional occupations
  - Sales and customer service occupations
- All other occupations are projected to experience very little, or negative expansion demand.

### **Appendices**

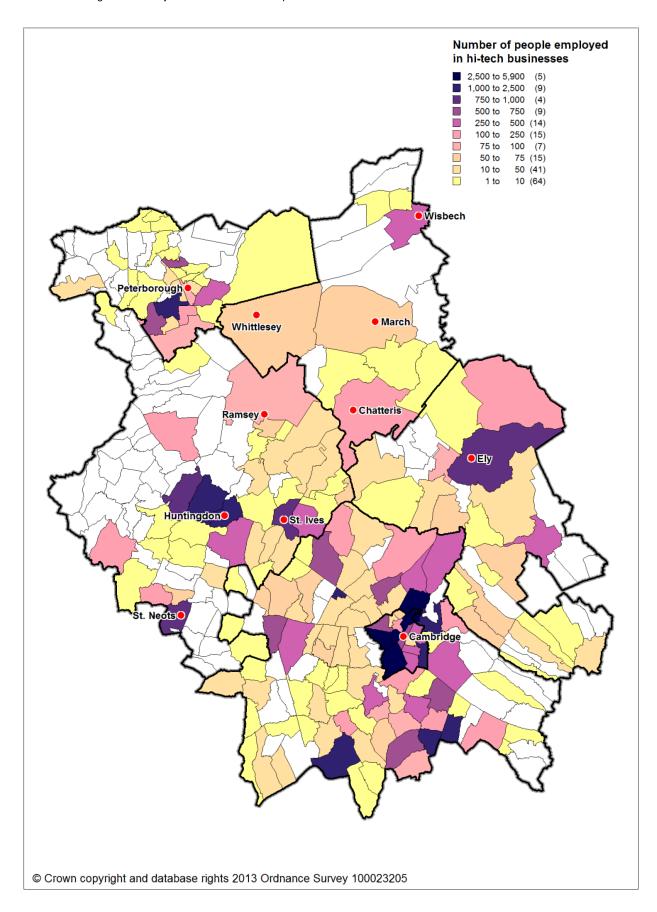
Map 1: All Hi-tech 'Community' Businesses in Cambridgeshire and Peterborough 2010 Source: Cambridgeshire County Council Research Group



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Map 2: Employment in the Hi-tech 'Community', 2010

Source: Cambridgeshire County Council Research Group



Map 3: % households with annual income of less than £20,000, by electoral ward

Source: CACI PayCheck 2010

