Hertfordshire Skills and labour Market Review

Hertfordshire
Local Enterprise Partnership
PERFECTLY PLACED FOR BUSINESS

2018

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THE ECONOMIC CONTEXT

UK economic growth has slowed slightly

Economic growth rates in the UK are now below rates in previous years due to reduced business investment and household expenditure. Slightly weaker growth is forecast for 2019.

Continued strong economic performance of Hertfordshire in terms of GVA per capita

The Hertfordshire Economy's output was worth £35.9 billion in 2016, representing £30,600 per head. This ranks the county as having the 27th highest GVA per head out of 173 Nuts 3 areas.

In the long-term, economic performance has not kept pace with other competing local economies

Out of the top 30 NUTS 3 areas ranked by GVA per head in 2016, 26 NUTS 3 areas have higher average growth rates than Hertfordshire over the 10 years from 2007 to 2016. NUTS 3 areas are local areas which are often county or unitary areas, in isolation or joined up where GVA data can be robustly provided.

Hertfordshire slipped out of the top 20 Nuts 3 areas for GVA per head in 2006, and has remained so, falling to 33rd in 2012, but climbing back up to 27th in 2015 and 2016.

Delving a little deeper into the evidence base reveals some marked differences in the patterns of GVA growth by industry. GVA growth in Information & communication, and Financial & Insurance industries has been weak in Hertfordshire compared to strong national growth.

There are marked local variations in rates of economic growth

The average annual nominal rates of economic growth over a 10-year period from 2006 to 2015 are higher than the national average in Watford (3.6 per cent) and Three Rivers (3.3 per cent). By contrast, average rates of economic growth are well below the national average (UK = 2.5 per cent) in Stevenage (1.4 per cent), Broxbourne (1.7 per cent), East Hertfordshire (1.8 per cent) and Welwyn Hatfield (1.7 per cent).

Although productivity in Hertfordshire is just above the national average, it is below most competitor LEP areas

Hertfordshire's estimated GVA per hour worked was £32.80 in 2016. This is just above the national (UK) average of £32.58, and is the second lowest performance amongst comparator areas, just above Cambridgeshire (£32.23).

Productivity performance relative to the national average has declined in recent years

Hertfordshire's rank for GVA per hour worked has declined from the 23rd highest (out of 168 Nuts 3 areas) in 2004 to the 48th highest in 2016. This is a long-term trend, with major declines in the County's productivity advantage between 2008 and 2012. Since 2012, productivity growth trends have been very similar to national trends.

The rate of jobs growth has been high in Hertfordshire, particularly compared to nearby competing LEP areas

There were 690,000 jobs in Hertfordshire in 2016. Over the decade since 2007, the county has added 113,000 jobs, with the bulk of these – 97,000 - added over the past five years. Between 2012 and 2016 the annual average rate of jobs growth in Hertfordshire was 2.7 per cent – above the UK average of 1.7 per cent. Hertfordshire out-performed all of its peer LEP areas on jobs growth.

Hertfordshire has experienced a high rate of population growth

Hertfordshire had a population of 1,176,000 in 2016. The total population grew by 103,400 over the decade between 2007 and 2016 – representing a growth rate of 9.6 per cent - well above the UK average of 7.1 per cent, and above all other comparator areas.

DEMAND FOR LABOUR AND SKILLS

The Hertfordshire economy supports 690,000 jobs and a much higher rate of job growth than the national average

Since 2007, over 10 years the county has added 113,000 jobs, with the bulk of these – 97,000 - added over the past five years. Between 2012 and 2016 the annual average rate of jobs growth in Hertfordshire was 2.7 per cent – above the UK average of 1.7 per cent.

Rates of jobs growth vary significantly within Hertfordshire

Growth rates show significant variation - from very high rates of jobs growth in Watford, with average annual growth of 5.3 per cent over 10 years – to Broxbourne – with an annual average contraction of 0.5 per cent per year since 2012.

Part-time working is more prevalent in Hertfordshire, particularly in Watford and St Albans

A slightly higher share of employment is part-time (35.2 per cent) in Hertfordshire compared to the national average (GB = 32.2 per cent). Part-time employment as a share of total employment was particularly high in the local authority districts of Watford (47.4 per cent) and St Albans (41.4 per cent).

Workers in Hertfordshire earn eight per cent more per hour than the national average

Average annual (workplace) earnings for full-time workers in Hertfordshire were £31,047 in 2017, eight per cent higher than the UK average (£28,758). Compared to peer areas, Hertfordshire's earnings were similar to Buckinghamshire (£31,859), Cambridgeshire (£30,287) and West Berkshire (£31,660); but lower than other areas of Thames Valley Berkshire, particularly Bracknell Forest (£36,519) and Reading (£36,117).

The wholesale and retail industry is the largest employer in Hertfordshire

Hertfordshire's largest employing industry, in terms of total employees is Wholesale and retail trade; repair of motor vehicles and motorcycles, employing 107,000 or 17.7 per cent of all employees in 2016. This was followed by Administrative and support service activities, employing 87,500 or 14.5 per cent of the total.

Administrative and support service activities are 1.6 times more important for employment than nationally, followed by Professional, scientific and technical activities (1.4), and Construction (1.4).

A large proportion of jobs in Hertfordshire are highly skilled

In 2017, 57.3 per cent of employees working in Hertfordshire were in highly skilled jobs, compared to the national average of 55.9 per cent

Comprising 310,200 Hertfordshire employees working in skilled jobs increased by 8.3 per cent over the decade from 2008 to 2017, or by +23,700 employees.

In 2017, Hertfordshire's vacancy rate exceeded the national average but was below all but one of the comparator areas

According to the UK Employer Skills Survey, conducted in 2017, 51 per cent of establishments (both public and private sector organisations) in Hertfordshire had recruited in the past 12 months. This was the same rate as nationally (England).

At the time of the survey in 2017 (summer), there were 22,300 vacancies in Hertfordshire – representing 4.0 per cent of total employment. There were more vacancies in Hertfordshire than in Buckinghamshire Thames Valley (9,700), Cheshire and Warrington (22,100), and Thames Valley Berkshire (18,600), but less than in Greater Cambridge Greater Peterborough (41,000).

SUPPLY OF LABOUR AND SKILLS

Hertfordshire's workforce has grown at a much higher rate than nationally

Hertfordshire had a working-age population (or workforce) of 740,000 in 2016. On average, the working age population increased by 0.6 per cent annually over the ten years from 2007 to 2016 – above the rate of change nationally (UK), of 0.4 per cent per year.

The working-age population is projected to continue to increase at a rate greater than the national average between from 2016 onwards.

Hertfordshire's has high rates of economic participation

The economic activity rate – the share of working-age residents in work or actively seeking work – in Hertfordshire was 82.0 per cent, above the UK average of 78.2 per cent.

79.5 per cent of working age residents in Hertfordshire were in employment (the employment rate) in December 2017 – above the UK average of 74.7 per cent. Hertfordshire's employment rate was above all other LEP comparator areas apart from Buckinghamshire Thames Valley (81.8 per cent).

There are fewer foreign nationals registering to work in Hertfordshire

National Insurance Number registrations for EU citizens have decreased markedly in Hertfordshire (by 28.5 per cent) and Nationally (by 24.4 per cent) when comparing the years to March 2016 and March 2018. There has also been a decrease for workers from other countries outside of the EU.

The share of the workforce with degree-level qualifications or higher is above the national average but below most comparator LEP areas

In 2017 it was estimated that 46.6 per cent of working-age residents were qualified to VQ level 4 (degree-level) or above in Hertfordshire. This was above the UK average of 42.8 per cent, and above GCGP (40.9 per cent). However, all other comparator LEP areas had higher shares of the workforce qualified to VQ level 4+.

Other LEP areas have made higher gains in terms of workforce qualifications at degree-level or above.

Hertfordshire has very low rates of unemployment

18,600 working-age residents in Hertfordshire were categorised as officially unemployed in December 2017 – and Hertfordshire's unemployment rate (unemployed as a share of the total working age population) was 3.1 per cent, well below the UK rate of 4.5 per cent.

Skills gaps – skills deficiencies in existing employees - are slightly more prevalent in Hertfordshire than across England

2017, 5 per cent of staff in Hertfordshire were not fully proficient – only slightly higher than the England average of 4 per cent. Skills gaps affected 18 per cent of employers in Hertfordshire, compared to 13 per cent in England.

Most skills gaps are transitionary

The main reasons for skills gaps were transitionary: that the employee's training was only partially completed (62 per cent of employers reporting skills gaps), or that they were new to the role (61 per cent).

Employers in Hertfordshire were less likely to report that skills gaps had a negative impact on their business: 60 per cent of all establishments with skills gaps reported that skills gaps had a negative impact, lower than England average (65 per cent).

The main implications of Skills gaps in Hertfordshire are that they increase the workload for other staff – reported by 52 per cent of establishments reporting a skills gap.

EDUCATION AND TRAINING

Hertfordshire performs significantly better than the national average on school qualifications attainment

Hertfordshire's attainment at Key Stage 4 (Attainment 8 measures) exceeds the national average significantly but is slightly behind Slough, Buckinghamshire and Wokingham. Hertfordshire significantly out-performs Cambridgeshire and Peterborough.

Hertfordshire's level 3 qualifications attainment is significantly higher than the national average

68.0 per cent of 19-year olds attained level 3 qualifications in 2017 – well above the England average of 57.5 per cent. Hertfordshire is slightly outperformed by Slough, Buckinghamshire and Wokingham education authorities but performs much better than Cambridgeshire and Peterborough.

Commitment to staff training is similar in Hertfordshire to the national average, but below nearby LEP areas

In 2017, 66 per cent of establishments in Hertfordshire had a training plan or discrete training budget – the same as the England average (66 per cent). Buckinghamshire Thames Valley (72 per cent) and Thames Valley Berkshire (74 per cent) LEP areas had much higher rates than Hertfordshire and the national average.

In the same year, 70 per cent of establishments in Hertfordshire had funded or arranged training for staff over the past 12 months. This was higher than the England average (66 per cent), but lower than three out of the four comparator LEP areas.

Higher-skill occupations receive the highest incidence of training

In Hertfordshire in 2017, 62 per cent of Managers receiving training, followed by 32 per cent of Administrative/clerical staff and 22 per cent of Sales and customer service.

The main type of training funded or arranged were job specific training (82 per cent of establishments offering training), and basic induction training for new starts (62 per cent).

Online training, e-learning and self-learning are all prevalent forms of training

Online training, e-learning and self-learning are popular methods of training. 52 per cent of establishments providing training offered online training or e-learning, with 42 per cent offering other self-learning.

Under-employment affects about nine per cent of all staff employed in Hertfordshire

In 2017, 9.2 per cent of staff in all establishments in Hertfordshire were under-utilised, higher than the national average of 8.5 per cent, and other comparator LEP areas.

34 per cent of establishments in Hertfordshire stated that they had one or more staff that were under-utilised in terms of having more advanced qualifications and skills than required for their current job role.

About this report

A REVIEW AND ANALYSIS OF HERTFORDSHIRE'S LABOUR MARKET

This report reviews and analyses available evidence about the Hertfordshire labour market. It covers a range of topics from the size and nature of the labour market, including details about commuting patterns – to an analysis of demand and jobs in Hertfordshire; and a review of the nature of participation in the labour market of Hertfordshire residents.

SELECTION AND USE OF COMPARATOR LOCAL AREAS

In the 2013 Economic outlook, the following comparator areas were agreed for performing comparative analysis, and this has continued to be applied in all subsequent economic reports:

- Buckinghamshire Thames Valley LEP
- Cheshire and Warrington LEP
- Greater Cambridge and Greater Peterborough LEP
- Thames Valley Berkshire LEP

They are all successful LEP areas, with some neighbouring or nearby, sharing similar characteristics, including mostly:

- Successful economies, high rates of GVA per capita, low rates of unemployment
- Proximity to London with similar commuting patterns/ relationships and influence on business location
- Based around county geographies with small cities, large towns and rural areas
- Are not dominated by a large city region within their boundaries.

It must be noted the GVA data is reported by NUTS geographies, rather than LEP areas. The smallest NUTS geographies are NUTS 3 areas – which represent one, or a combination of county and unitary authority areas.

The following NUTS3 areas comprise the comparator LEP areas:

- Hertfordshire: Hertfordshire County
- Buckinghamshire Thames Valley LEP: Buckinghamshire County
- Cheshire and Warrington LEP: Cheshire East and Cheshire West and Chester
- Greater Cambridge and Greater Peterborough LEP: Cambridgeshire and Peterborough
- Thames Valley Berkshire LEP: Berkshire

COMPARISON BETWEEN YEARS

As far as possible, at the time of writing, the most up-to-date data has been used. For employee jobs, the Business Register and Employment Survey from the Office of National Statistics is the main data source used. Due to changes in methodology, BRES data from 2016 is comparable to 2015, but not to earlier years. In order to provide a better time series – the previous edition of BRES is used for data between 2011 and 2015.

LABOUR AND SKILLS HAVE A NUMBER OF UNIQUE PROPERTIES

Labour demand is a derived demand

That is, hiring labour is not desired for its own sake but rather because it aids in producing output, which contributes to an employer's revenue and hence profits, or to the efficiency and effectiveness of their outputs and services.

Why this matters for local economies:

- The demand for skills is dictated by the actual or anticipated demand for goods and services.
- When demand for goods and services increases or decreases rapidly, the supply of labour cannot always adjust as rapidly – thus leading to excess demand (unfilled vacancies); or excess supply (unemployment)
- Many policies and initiatives emphasise an increase in the supply of skills, or increasing levels of qualifications amongst the workforce as a route to economic growth.
- It's not always clear what the demand is or where it will be in the future. Businesses and employers operate in a market environment and react to it – it is not always possible or reasonable to plan five years ahead. This is illustrated by evidence that suggests 50 per cent of employers do not have a training plan or budget[1].

[1] UK Employer Skills Survey (2013), UK Commission for Employment and Skills.

- In summary, there are many reasons why mismatches occur between demand and supply in the labour market.

There is a limited effective supply of labour

People have a limited amount of time to work during the day, and are only willing to travel certain distances or times to work.

Why this matters for local economies:

- There are constraints to the effective supply of labour. In local economies such as Hertfordshire, with high levels of economic participation, it is difficult to increase supply from of the existing resident workforce. Other options may be to 'import' labour through commuting or in-migration.
- Adjustments in labour supply are not smooth or frictionless. It is often difficult to increase labour supply rapidly.
- The ability of supply to respond will rely on existing levels of excess capacity (often signalled by high unemployment); the rate of growth in the working-age population; the ability of migrants to enter the labour market; and the mobility of workers in the local, or adjacent, areas.
- Individuals volunteer to be available for work. Some individuals do not make themselves available and remain 'economically inactive.'

Labour mobility and portability

Skills belong to the individual and are portable, can be withdrawn and then reinstated in the market. Individuals effectively 'rent' their labour and skills to employers. Unlike other forms of productive assets or capacities which reside with the firm, skills reside in the individual – who can withdraw their labour temporarily or permanently (by leaving the workforce or moving to another job).

Why this matters for local economies:

- Labour is mobile, people can commute, and there are conditions where people can enter or withdraw from the labour market.
- Firms may also be unwilling to spend money on training on general/transferable skills as workers may then move on to other jobs and take these skills with them.

Information asymmetries

There are many information asymmetries where there is imperfect information in the labour market. For example, employers do not know how productive an employee will be before they employ them, no matter their qualifications. Employees do not always know about the working conditions, investment plans or the efficiency of the business they work for (which will affect their wages in the long-term). It is also often unclear what specific skills/qualifications are needed in a local economy and hence what courses training providers should offer and what training people should undertake to enhance their opportunities in the local labour market.

Why this matters for local economies:

- Given that information is imperfect for the supplying and hiring of labour, there will be structural deficiencies, such as a lack of supply of training and workers for certain jobs.
- Workers have to interpret the pay, conditions and nature of jobs themselves, and make choices based on available information, and perceptions.

1. The Economic Context

SUMMARY: THE ECONOMIC CONTEXT

UK economic growth has slowed slightly

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The Hertfordshire Economy's output was worth £35.9 billion in 2016, representing £30,600 per head. This ranks the county as having the 27th highest GVA per head out of 173 Nuts 3 areas.

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The average annual nominal rates of economic growth over a 10-year period from 2006 to 2015 are higher than the national average in Watford (3.6 per cent) and Three Rivers (3.3 per cent). By contrast, average rates of economic growth are well below the national average (UK = 2.5 per cent) in Stevenage (1.4 per cent), Broxbourne (1.7 per cent), East Hertfordshire (1.8 per cent) and Welwyn Hatfield (1.7 per cent).

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Hertfordshire has experienced a high rate of population growth

Hertfordshire had a population of 1,176,000 in 2016. The total population grew by 103,400 over the decade between 2007 and 2016 – representing a growth rate of 9.6 per cent - well above the UK average of 7.1 per cent, and above all other comparator areas.

NATIONAL ECONOMIC PERFORMANCE

The UK economy has weakened over the past year

The latest estimate of Gross Domestic Product (GDP) indicated that output grew by 0.2 per cent during Q1 2018, as indicated in **Figure 1.1**.

Over the year from Q1 2017 to Q1 2018 GDP increased by 2.7 per cent – the slowest annual year-on-year rate of expansion for almost three years (since Q3 2014 to Q3 2015).

Growth in Q1 2018 was driven by business services and finance within the services sector. Business investment growth was flat between Quarter 3 (July to Sept) and Quarter 4 (Oct to Dec) 2017, but when compared with the same quarter a year ago business investment grew by 2.1 per cent.

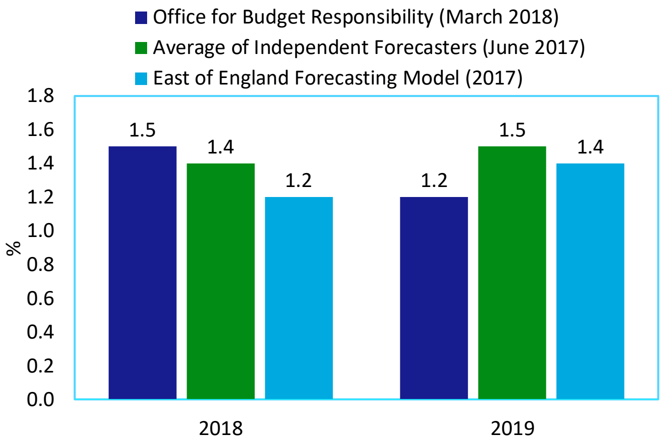
Over the latest full calendar year, GDP was estimated to have increased by 1.7 per cent between 2016 and 2017, a downward revision of 0.1 percentage points from the preliminary estimate and slightly lower than the 1.9 per cent growth seen between 2015 and 2016.

Household spending grew by 1.8 per cent between 2016 and 2017, its slowest rate of annual growth since 2012, in part reflecting the increased prices faced by consumers.

Similar national growth rates are expected in 2016

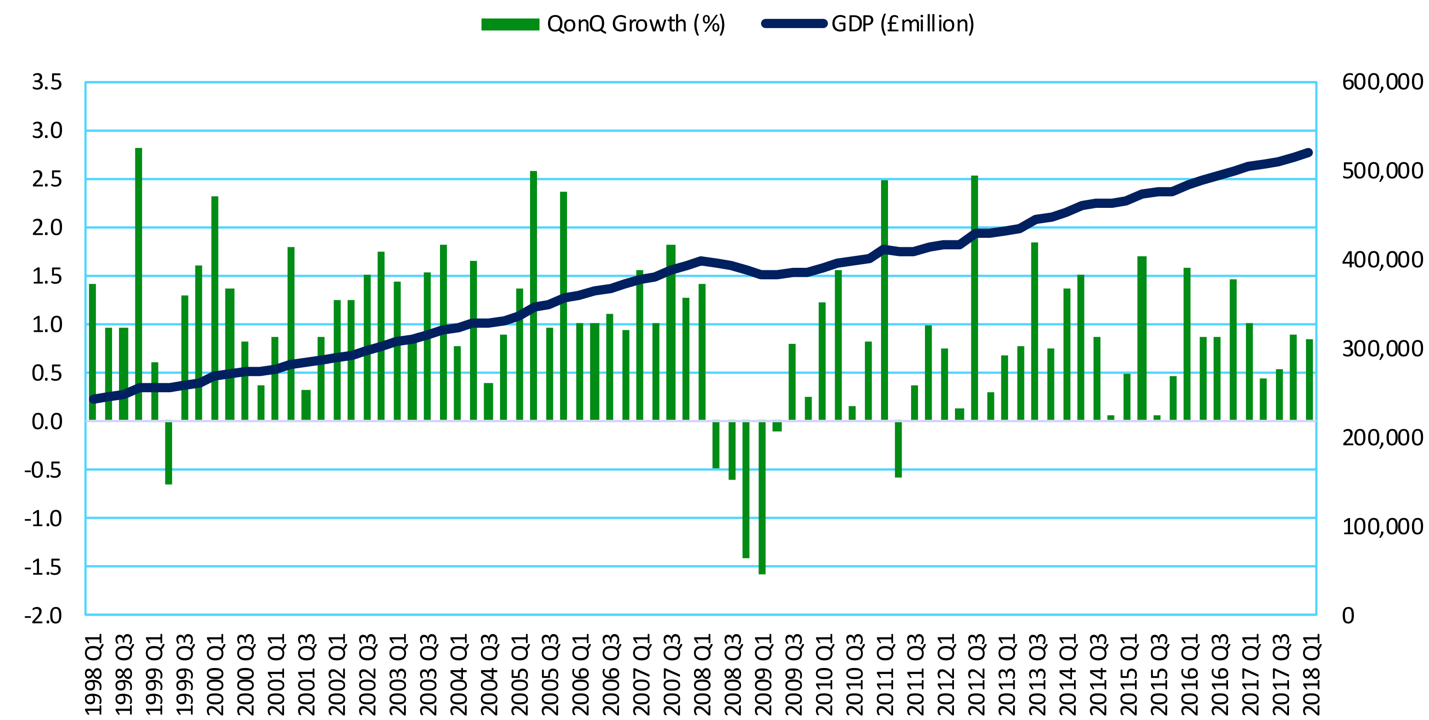
The average of independent forecasters (June 2018) suggests that the rate of UK growth will be 1.4 per cent in 2018 and 1.5 per cent in 2019 (**Figure 1.2**), with the Office for Budget Responsibility's latest forecast (November 2015) projecting slightly lower growth at 1.2 per cent for 2018 and 1.2 per cent for 2019.

FIGURE 1.2: PROJECTED UK ECONOMIC GROWTH RATES IN 2018 AND 2019



Source: Office for Budget Responsibility March 2018 Economic and Fiscal Outlook; HM Treasury, Forecasts for the UK economy: a comparison of independent forecasts, June 2018; East of England Forecasting Model, 2017.

FIGURE 1.1: UK QUARTERLY ECONOMIC GROWTH 1998-2018



Source: Office for National Statistics.

ECONOMIC OUTPUT (GVA)

Hertfordshire continues to perform strongly in terms of economic output per capita, but has gradually lost ground to other competing local economies

According to the latest estimates, Hertfordshire continues to perform strongly on economic output. The Hertfordshire Economy's output was worth £35.9 billion in 2016, representing £30,600 per head. This ranks the county as having the 27th highest GVA per head out of 173 Nuts 3 areas (**Figure 1.3**). Over a 10-year period between 2007 and 2016, the average annual growth rate of the Hertfordshire economy was 2.8 per cent – higher than the national average of 2.5 per cent, and higher than Cheshire West and Chester (1.1 per cent) and Berkshire (2.0 per cent).

It must be noted the GVA data is reported by NUTS geographies, rather than LEP areas. The smallest NUTS geographies are NUTS 3 areas – which represent one, or a combination of county and unitary authority areas.

Figure 1.4 shows the top 30 Nuts 3 areas ranked by GVA per head in 2016. It shows that only 8 have an average annual growth rate (2006-2010) below Hertfordshire, whereas 21 NUTS3 areas have higher growth rates. Further analysis of GVA performance, described over the following pages, shows that Hertfordshire's GVA performance has gradually worsened relative to other high-performing NUTS3 areas since 2007.

FIGURE 1.3: ECONOMIC OUTPUT PERFORMANCE (GVA)

NUTS 3 Area	Total GVA £ billion	Annual rate of GVA growth over 10 years, 2007-2016, per cent	GVA per head £	Rank GVA per head out of 173 Nuts 3 areas
Hertfordshire*	35,966	2.8	30,600	27
Buckinghamshire*	15,828	2.8	29,600	30
Cheshire East	12,536	2.7	33,300	17
Cheshire West and Chester	9,365	1.1	27,900	38
Cambridgeshire	18,896	2.8	29,000	34
Berkshire*	35,942	2.0	40,000	8
England	1,495,559	2.4	27,100	
United Kingdom	1,747,647	2.5	26,600	

Source: Regional Accounts, December 2017 Release, Office for National Statistics. Note: Current values, unadjusted for inflation. * Denotes where the NUTS 3 area boundaries are consistent with LEP area boundaries - Buckinghamshire Thames Valley, and Thames Valley Berkshire.

FIGURE 1.4: TOP 30 NUTS3 AREAS FOR GVA PER HEAD IN 2016

Rank GVA per head 2016	Region name	Value of total GVA in 2016, £bn	Average annual growth rate 2006-2016	GVA per head 2016, £
1	Camden and City of London	£79,084	4.5%	£309,400
2	Westminster	£56,324	4.4%	£227,500
3	Tower Hamlets	£27,555	3.1%	£90,400
4	Kensington & Chelsea and Hammersmith & Fulham	£22,299	2.5%	£66,300
5	Haringey and Islington	£23,671	2.7%	£46,300
6	Milton Keynes	£12,144	5.0%	£45,900
7	Hounslow and Richmond upon Thames	£19,188	4.9%	£41,100
8	Berkshire*	£35,942	2.0%	£40,100
9	Edinburgh, City of	£19,473	1.9%	£38,400
10	Belfast	£10,633	2.2%	£37,200
11	West Surrey	£27,973	3.0%	£35,900
12	Aberdeen City and Aberdeenshire	£17,608	2.7%	£35,800
13	Wandsworth	£10,775	2.4%	£34,100
14	Solihull	£7,153	2.9%	£33,800
15	Glasgow City	£20,741	2.3%	£33,700
16	Harrow and Hillingdon	£18,481	2.6%	£33,500
17	Cheshire East	£12,536	2.7%	£33,300
18	Oxfordshire*	£22,610	3.4%	£33,100
19	Manchester*	£17,896	3.0%	£33,100
20	Lambeth	£10,725	3.6%	£32,700
21	Lewisham and Southwark	£20,110	2.8%	£32,700
22	Swindon	£6,970	1.6%	£32,000
23	Warrington	£6,564	1.4%	£31,400
24	West Sussex (North East)	£12,358	3.4%	£31,200
25	Bristol, City of	£14,087	2.6%	£31,000
26	Warwickshire	£17,042	4.0%	£30,600
27	**Hertfordshire***	**£35,966**	**2.8%**	**£30,600**
28	East Surrey	£12,112	1.6%	£30,400
29	North Hampshire	£10,992	1.8%	£30,100
30	Buckinghamshire CC	£15,828	2.8%	£29,600

Source: Regional Accounts, December 2017 Release, Office for National Statistics. Note: Current values, unadjusted for inflation. * Denotes where the NUTS 3 area boundaries are consistent with LEP area boundaries - Buckinghamshire Thames Valley, and Thames Valley Berkshire.

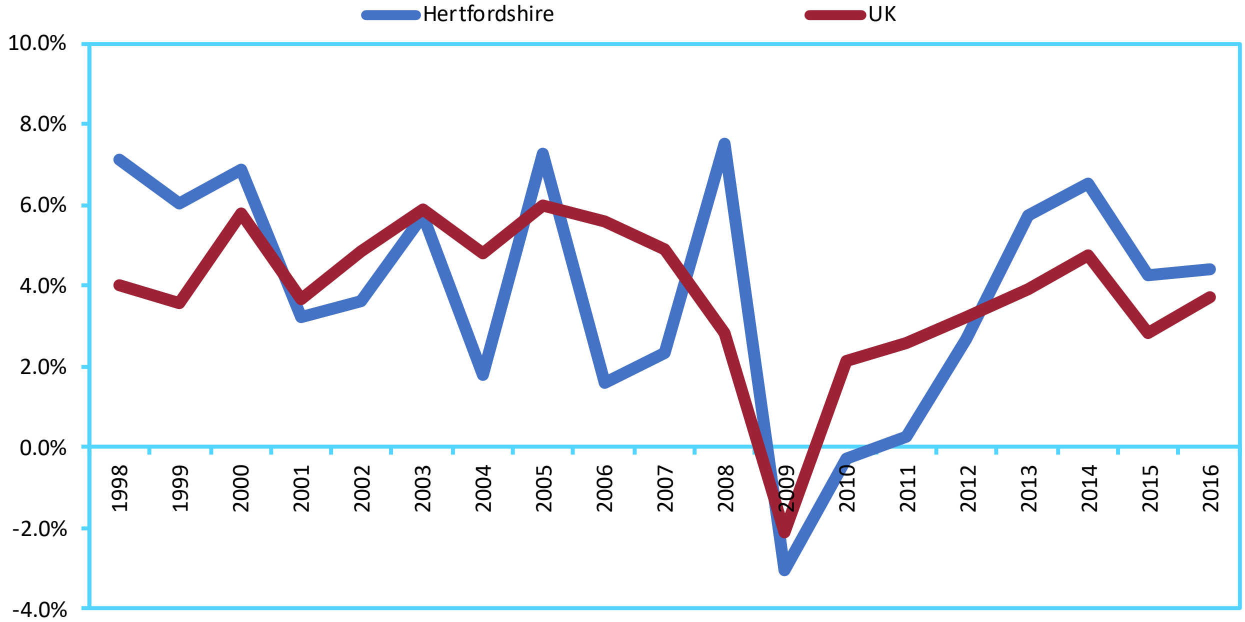
Over the past three years, the rate of gva growth has been strong in Hertfordshire

Hertfordshire's annual rate of nominal[2] economic growth over the past three years has been above the national average rate, as detailed in **Figure 1.5** This comes after a three-year period where annual GVA growth rates were below the national average, from 2009 to 2012. Between 2000 and 2008, the annual rate of growth has swung above and below the national rate, with no consistent pattern.

As can be seen in **Figures 1.6 and 1.7**, Hertfordshire slipped out of the top 20 Nuts 3 areas for GVA per head in 2006, and has remained so, falling to 33rd in 2012, but climbing back up to 27th in 2015 and 2016.

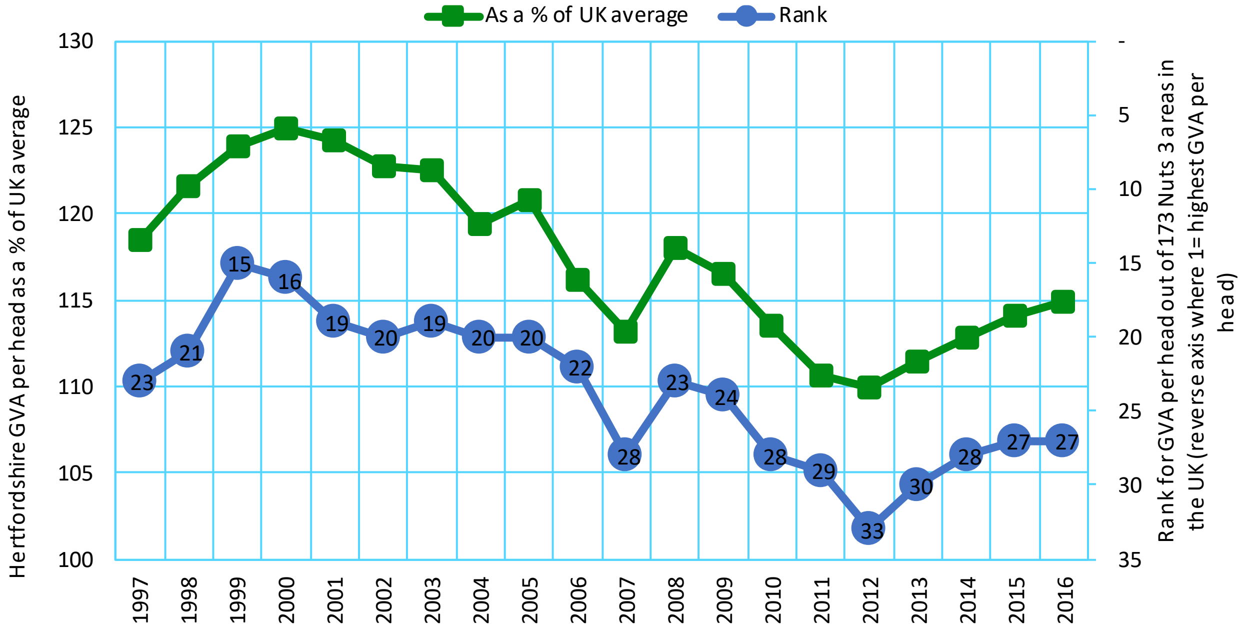
In the next few pages, further evidence will be examined in relation to GVA performance to try to better understand and explain the dynamics of change.

FIGURE 1.5: ANNUAL RATE OF ECONOMIC GROWTH (NOMINAL: DOES NOT TAKE INTO ACCOUNT INFLATION)



Source: Regional Accounts, December 2017 Release, Office for National Statistics. Note: Current values, unadjusted for inflation.

FIGURE 1.6: GVA PER HEAD – COMPARED TO UK AVERAGE, AND RANKING OUT OF 173 NUTS 3 AREAS



Source: Regional Accounts, December 2017 Release, Office for National Statistics. Note: Current values, unadjusted for inflation.

[2] This does not take into account the rate of inflation – it is the nominal rate of growth, rather than the real rate of growth.

FIGURE 1.7: RANK AND VALUE OF GVA PER HEAD, COMPARED TO SELECTED NUTS3 AREAS 2006 TO 2016 (NUTS3 AREAS RANK ORDERED BY 2016 GVA PER HEAD)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Camden and City of London	1: £205900	1: £232700	1: £235200	1: £247400	1: £256000	1: £263200	1: £265000	1: £273900	1: £298000	1: £292800	1: £309400
Westminster	2: £150800	2: £166600	2: £179000	2: £186200	2: £191500	2: £197200	2: £202800	2: £212500	2: £226800	2: £221300	2: £227500
Tower Hamlets	3: £80500	3: £89800	3: £86000	3: £85900	3: £80300	3: £90500	3: £87800	3: £89500	3: £94900	3: £94800	3: £90400
Kensington & Chelsea & Hammersmith & Fulham	4: £46200	4: £51500	4: £54500	4: £52000	4: £54600	4: £56200	4: £60500	4: £62800	4: £64400	4: £64500	4: £66300
Haringey and Islington	5: £39400	5: £42700	5: £44100	5: £41200	5: £42000	5: £42500	5: £43300	5: £43800	5: £45100	5: £45500	5: £46300
Milton Keynes	8: £30400	8: £32400	7: £34800	8: £32800	8: £34300	6: £35900	7: £36000	7: £37200	6: £39900	6: £43000	6: £45900
Hounslow and Richmond upon Thames	18: £27000	16: £28600	15: £29700	17: £27800	16: £28300	16: £28700	13: £31100	11: £33200	10: £35700	8: £38300	7: £41100
Berkshire*	6: £34700	6: £35400	6: £35600	7: £34400	6: £34700	7: £35900	6: £36800	6: £37600	7: £38100	7: £39100	8: £40100
Edinburgh, City of	7: £33900	7: £35400	8: £34600	6: £36700	7: £34300	8: £34600	8: £35000	8: £35900	8: £36800	9: £37900	9: £38400
Belfast	9: £29000	9: £31000	10: £30900	9: £31200	10: £31200	10: £32600	10: £34100	10: £34500	11: £35000	10: £36500	10: £37200
Hertfordshire*	**22: £25200**	**28: £25500**	**23: £27100**	**24: £26100**	**28: £25700**	**29: £25500**	**33: £26000**	**30: £27200**	**28: £28600**	**27: £29500**	**27: £30600**
Buckinghamshire CC*	34: £23700	34: £24200	32: £25400	32: £24900	31: £25100	30: £25500	27: £26700	29: £27300	29: £28100	29: £29200	30: £29600
Cambridgeshire CC	35: £23200	35: £24200	36: £24700	38: £23500	38: £24200	34: £24900	31: £26200	31: £26700	32: £27600	34: £28400	34: £29000
Central Bedfordshire	103: £17200	96: £18100	98: £18200	108: £17300	107: £17300	102: £18000	108: £18300	95: £19500	91: £20300	100: £20000	103: £20400
Cheshire East	23: £25100	25: £26300	26: £26100	25: £26000	26: £26000	25: £26000	22: £28400	18: £30300	17: £31400	20: £31900	17: £33300
Cheshire West and Chester	32: £24100	29: £25500	34: £25300	30: £25600	34: £24600	37: £24300	36: £25200	41: £25300	38: £26800	40: £27000	38: £27900
Essex Haven Gateway	113: £16700	105: £17400	115: £17300	122: £16400	113: £17100	114: £17200	116: £17400	119: £17900	117: £18700	119: £19000	120: £19400
Essex Thames Gateway	111: £16800	103: £17500	104: £17800	114: £16800	111: £17100	111: £17300	111: £17800	114: £18300	119: £18600	110: £19400	124: £19200
Heart of Essex	60: £20400	58: £21400	59: £21600	50: £21500	54: £21500	55: £21700	57: £22000	56: £22700	58: £23300	51: £24500	51: £25200
North Northamptonshire	96: £17700	90: £18500	87: £19000	94: £18000	88: £18800	96: £18300	109: £18000	98: £19300	107: £19300	107: £19600	102: £20400
Oxfordshire*	27: £24500	30: £25400	25: £26200	26: £25900	24: £26700	20: £27500	22: £28400	22: £29400	20: £30800	17: £32300	18: £33100
West Essex	48: £21300	49: £22200	46: £22800	58: £21000	47: £22100	49: £22000	55: £22200	58: £22500	48: £24700	45: £25800	45: £26400
West Northamptonshire	46: £21400	43: £22800	44: £23100	48: £22000	42: £23200	45: £22600	46: £23400	44: £24500	46: £25300	50: £24900	47: £25900
England	£21700	£22700	£23100	£22600	£22900	£23200	£23900	£24700	£25800	£26300	£27100
UK	£21700	£22600	£23000	£22400	£22700	£23100	£23600	£24400	£25400	£25900	£26600

Source: Regional Accounts, December 2017 Release, Office for National Statistics. Note: Current values, unadjusted for inflation. * Denotes where the NUTS 3 area boundaries are consistent with LEP area boundaries - Buckinghamshire Thames Valley, and Thames Valley Berkshire.

Hertfordshire has not shared in the national economic growth from the information and communications industry

Delving a little deeper into the evidence base reveals some marked differences in the patterns of GVA growth by industry, as displayed in **Figure 1.9.** GVA growth in Information & communication, and Financial & insurance industries has been a lot stronger nationally than in Hertfordshire. By contrast, Hertfordshire has experienced stronger growth rates in Agriculture, mining & utilities, and Construction industries.

Differences in GVA performance at the local level are due to differences in industry structure and growth

Figure 1.8 provides GVA estimates for each local authority area in Hertfordshire. As can be seen, the average annual nominal rates of economic growth over a 10-year period from 2006 to 2015 are higher than the national average in Watford (3.6 per cent) and Three Rivers (3.3 per cent). By contrast, average rates of economic growth are well below the national average (UK = 2.5 per cent) in Stevenage (1.4 per cent), Broxbourne (1.7 per cent), East Hertfordshire (1.8 per cent) and Welwyn Hatfield (1.7 per cent).

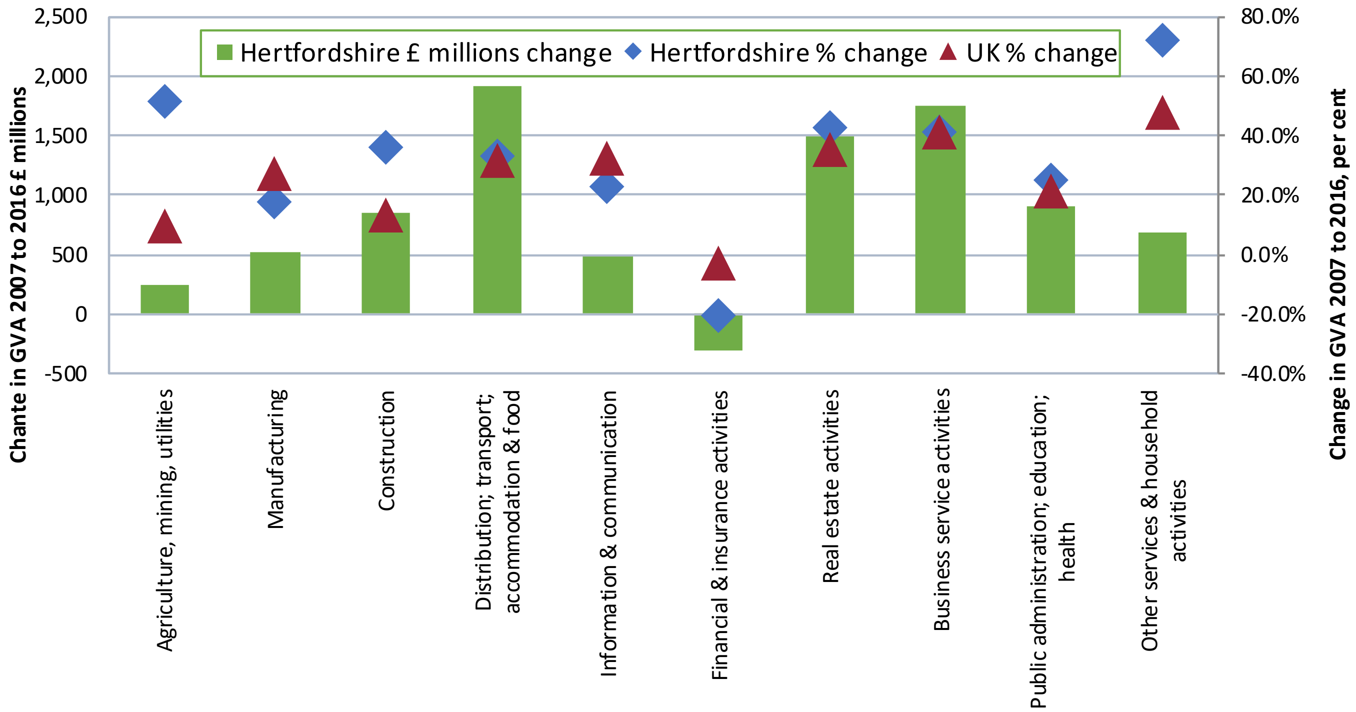
Stevenage's average annual rate of growth, at half the national average, can largely be explained by differences in GVA performance by industry. It has been estimated that there was much lower GVA growth in industries including Construction (a contraction of 0.1 per cent per annum compared to 1.4 per cent growth nationally), Distribution (0.9 per cent growth compared to 2.7 per cent nationally) Information and communications (decline of 0.2 per cent annually compared to the national average of 2.8 per cent), Real estate (1.2 per cent growth compared to 3.1 per cent nationally) and Business services (1.8 per cent growth compared to 3.7 per cent nationally). Similarly, Broxbourne had lower rates of growth compared to the national average in Manufacturing, Distribution, Finance and Real Estate.

FIGURE 1.8: ESTIMATES OF GVA BY LOCAL AUTHORITY AREA

		Average annual rate of growth	
Area	Total GVA in 2015 £millions	Over 10 years: 2006-2015	Over 5 years: 2011-2015
Broxbourne	2,249	1.7%	1.4%
Dacorum	4,013	2.6%	4.7%
East Hertfordshire	3,652	1.8%	2.4%
Hertsmere	3,252	2.9%	3.9%
North Hertfordshire	3,409	2.2%	3.6%
Stevenage	2,406	1.4%	2.2%
Three Rivers	3,005	3.3%	5.8%
Watford	3,836	3.6%	5.8%
St Albans	4,251	2.1%	2.5%
Welwyn Hatfield	3,791	1.7%	1.6%
Hertfordshire	34,452	2.6%	3.8%
United Kingdom	1,684,937	2.5%	2.9%

Source: Regional Gross Value Added (Income Approach) by Local Authority in the UK, Office for National Statistics.

FIGURE 1.9: CHANGE IN GVA OUTPUT BY INDUSTRY BETWEEN 2007 AND 2016 (OVER TEN YEARS)



Source: Regional Accounts, December 2017 Release, Office for National Statistics. Note: Current values, unadjusted for inflation.

PRODUCTIVITY PERFORMANCE

Productivity in Hertfordshire is just above the national average, and below most competitor LEP areas

As can be seen in **Figure 1.10**, Hertfordshire's estimated GVA per hour worked was £32.80 in 2016. This is just above the national (UK) average of £32.58, and is the second lowest performance amongst comparator areas, just above Cambridgeshire (£32.23). Berkshire has a high rate of productivity with a GVA of £41.00 per hour worked.

Productivity performance relative to the national average has declined in recent years

As detailed in **Figure 1.11**, Hertfordshire's productivity advantage has declined relative to the national average. Evidently, this is a long-term trend, with major declines in the County's productivity advantage between 2008 and 2012. Since 2012, productivity growth trends have been very similar to national trends. As can be further seen in **Figure 1.12**, a significant reduction in hours worked occurred between 2008 and 2009, with a far steeper decline than experienced nationally.

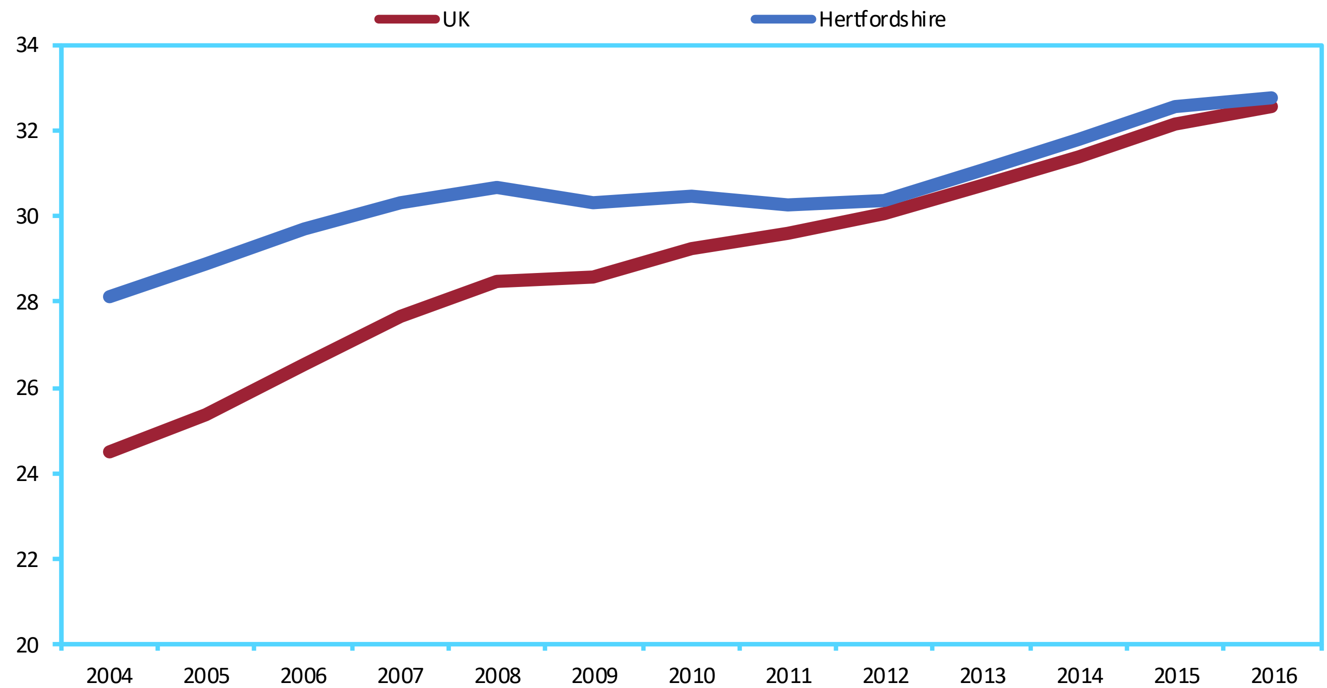
Hertfordshire's rank for GVA per hour worked has declined from the 23rd highest (out of 168 Nuts 3 areas) in 2004 to the 48th highest in 2016.

FIGURE 1.10: NOMINAL (SMOOTHED) GVA (B) PER HOUR WORKED (£); NUTS 2 AND NUTS 3 SUBREGIONS, 2004 - 2016

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Hertfordshire	28.13	28.89	29.73	30.32	30.68	30.34	30.47	30.28	30.38	31.08	31.82	32.55	32.80
Buckinghamshire CC	29.05	29.97	31.09	32.00	32.99	33.47	34.86	35.36	35.68	36.01	36.42	37.01	37.27
Cheshire	26.79	27.94	29.40	30.69	31.38	31.36	31.93	32.31	32.71	33.05	33.35	33.66	33.91
Cambridgeshire CC	24.08	24.78	25.82	26.84	27.56	27.48	28.46	29.44	30.65	31.28	31.68	31.97	32.23
Berkshire	32.04	33.11	34.43	35.64	36.64	36.75	37.41	37.64	38.13	39.01	39.78	40.61	41.00
England	25.03	25.92	27.14	28.26	29.11	29.17	29.81	30.12	30.56	31.21	31.88	32.64	33.05
UNITED KINGDOM	24.51	25.38	26.56	27.65	28.49	28.6	29.27	29.63	30.09	30.74	31.42	32.17	32.58

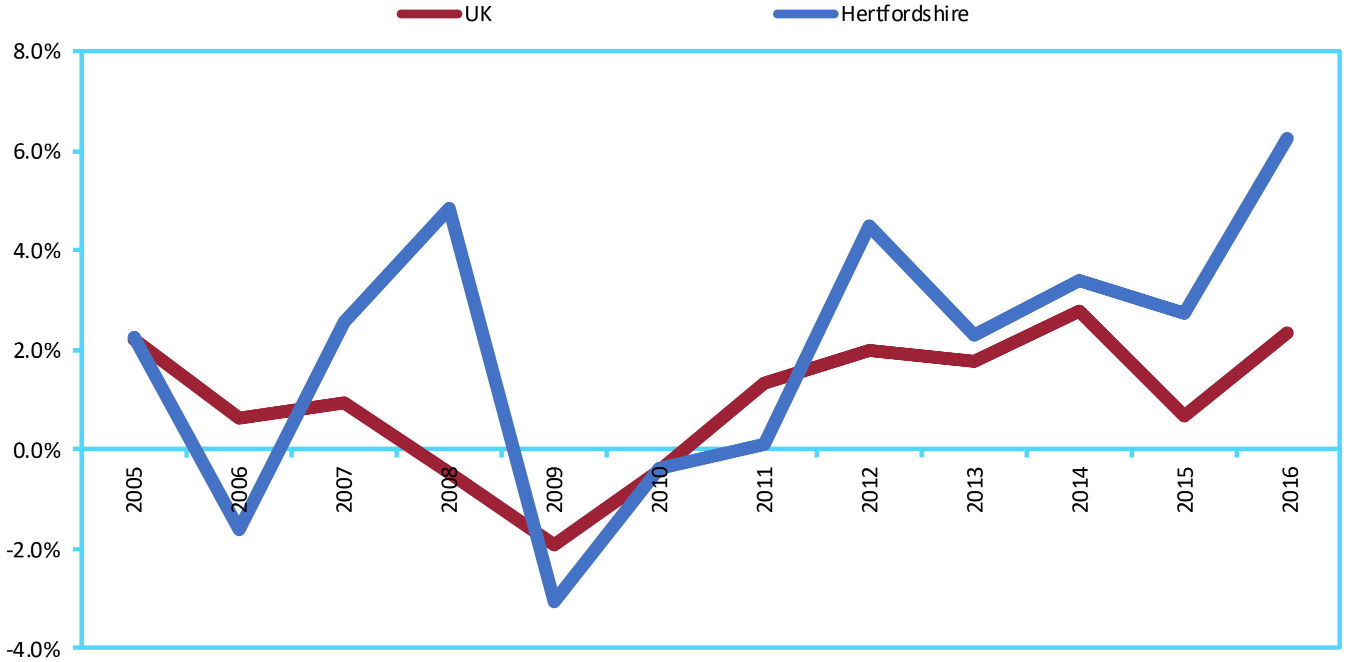
Source: Subregional Productivity, February 2018 edition, Office for National Statistics.

FIGURE 1.11 NOMINAL (SMOOTHED) GVA (B) PER HOUR WORKED (£)



Source: Subregional Productivity, February 2018 edition, Office for National Statistics.

FIGURE 1.12: ANNUAL PERCENTAGE CHANGE IN TOTAL HOURS WORKED



Source: Subregional Productivity, February 2018 edition, Office for National Statistics.

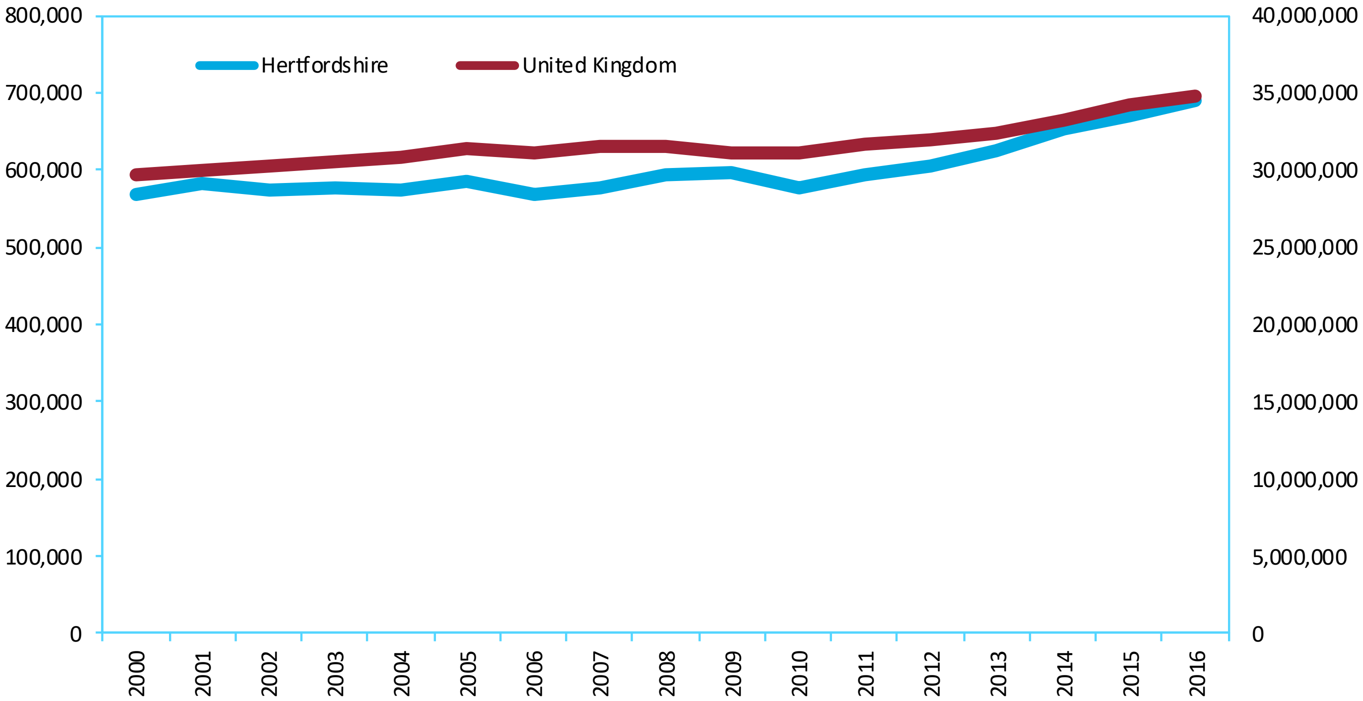
JOBS GROWTH

The rate of jobs growth has been high in Hertfordshire, particularly compared to nearby competing lep areas

There were 690,000 jobs in Hertfordshire in 2016[3]. Over the 10 years since 2007, the county has added 113,000 jobs, with the bulk of these – 97,000 - added over the past five years. Hertfordshire's annual rate of jobs growth accelerated above the UK average from 2010 onwards, after lagging behind it slightly between 2001 and 2006. Between 2012 and 2016 the annual average rate of jobs growth in Hertfordshire was 2.7 per cent – above the UK average of 1.7 per cent.

Hertfordshire out-performed all of its peer LEP areas on jobs growth, with only GCGP coming near – with +85,000 jobs between 2012 and 2016, followed by Cheshire and Warrington with +58,000.

FIGURE 1.14: TOTAL WORKFORCE JOBS 2000 TO 2016



Source: Jobs Density, Office for National Statistics.

[3] Workforce jobs are the sum of jobs including those supported by employers, self-employment, government-supported trainees, and Her Majesty's Forces. Statistics on workforce jobs can be accessed from the Jobs Density data series or Workforce Jobs series from the Office for National Statistics.

POPULATION GROWTH AND OUTLOOK

Hertfordshire has experienced a high rate of population growth

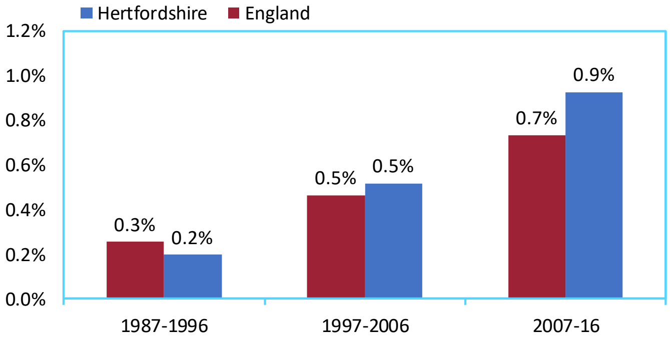
Hertfordshire had a population of 1,176,000 in 2016. The total population had grown by 103,400 over the decade between 2007 and 2016 – representing a growth rate of 9.6 per cent (**Figure 1.16**). This rate of growth was well above the UK average of 7.1 per cent, and above all other comparator areas.

Hertfordshire districts with particularly strong rates of population growth over the 10 years from 2006 to 2016 include Watford (+13,700 or +16.5 per cent growth), and Welwyn Hatfield (+14,300 or + 13.4 per cent).
Comparing annual growth rates over the past 30 years, Hertfordshire's annual population growth rate exceeded the England average over the decades from 1997 to 2006 and 2007 to 2016 (**Figure 1.17**).

High population growth rates are set to continue over the next two decades

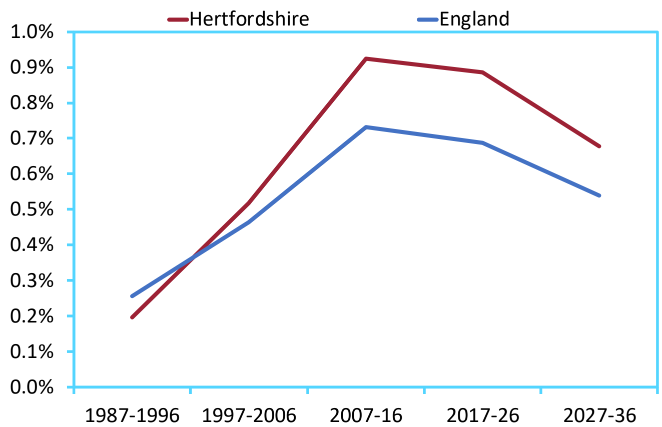
Higher rates of population growth than the national average are projected to continue beyond 2016, as **Figure 1.18** demonstrates. Between 2017 and 2026, Hertfordshire's population is projected increase by 109,700 – an even higher increase than the previous decade.

FIGURE 1.16: POPULATION GROWTH IN HERTFORDSHIRE AND ENGLAND BY DECADE, COMPOUND ANNUAL GROWTH RATES



Source: Mid-year Population Estimates, Office for National Statistics.

FIGURE 1.17: POPULATION GROWTH 2004-2014



Source: Mid-year Population Estimates, Sub-national Population Projections, Office for National Statistics.

FIGURE 1.15: TOTAL POPULATION IN 2016, AND GROWTH BETWEEN 2006 AND 2016

	HISTORIC GROWTH				PROJECTED GROWTH			
	Population in 2016	Total growth 2007-2016	% annual growth 2007-2016	% total growth 2007-2016	Total growth 2017-2026	% annual growth 2017-2026	Total growth 2027-2036	% annual growth 2027-2036
Hertfordshire	1,176,400	103,400	0.8	9.6	109,700	0.9%	91,800	0.7%
Broxbourne	96,900	6,100	0.6	6.7	8,000	0.8%	7,700	0.7%
Dacorum	152,400	12,900	0.8	9.2	15,600	1.0%	13,000	0.7%
East Hertfordshire	146,100	12,700	0.8	9.5	15,400	1.0%	12,900	0.8%
Hertsmere	103,700	7,400	0.6	7.7	10,100	0.9%	8,900	0.8%
North Hertfordshire	132,700	9,700	0.6	7.9	14,400	1.0%	12,300	0.8%
St Albans	147,000	12,700	0.8	9.5	15,200	1.0%	11,700	0.7%
Stevenage	87,300	6,600	0.7	8.2	7,200	0.8%	6,800	0.7%
Three Rivers	92,700	7,400	0.7	8.7	8,900	0.9%	7,700	0.7%
Watford	96,600	13,700	1.3	16.5	13,400	1.3%	10,000	0.9%
Welwyn Hatfield	121,000	14,300	1.2	13.4	13,600	1.1%	11,700	0.8%
Buckinghamshire TV	533,100	39,600	0.7	8.0	-	-	-	-
Cheshire and Warrington	922,000	31,100	0.3	3.5	-	-	-	-
GCGP	1,661,100	137,300	0.7	9.0	-	-	-	-
Thames Valley Berkshire	901,500	71,200	0.7	8.6	-	-	-	-
England	55,268,100	3,887,000	0.6	7.6	3,916,500	0.7%	3,268,700	0.5%
Great Britain	63,785,900	4,228,500	0.6	7.1	-	-	-	-
UK	65,648,100	4,329,000	0.6	7.1	-	-	-	-

Source: Mid-year Population Estimates, Office for National Statistics.

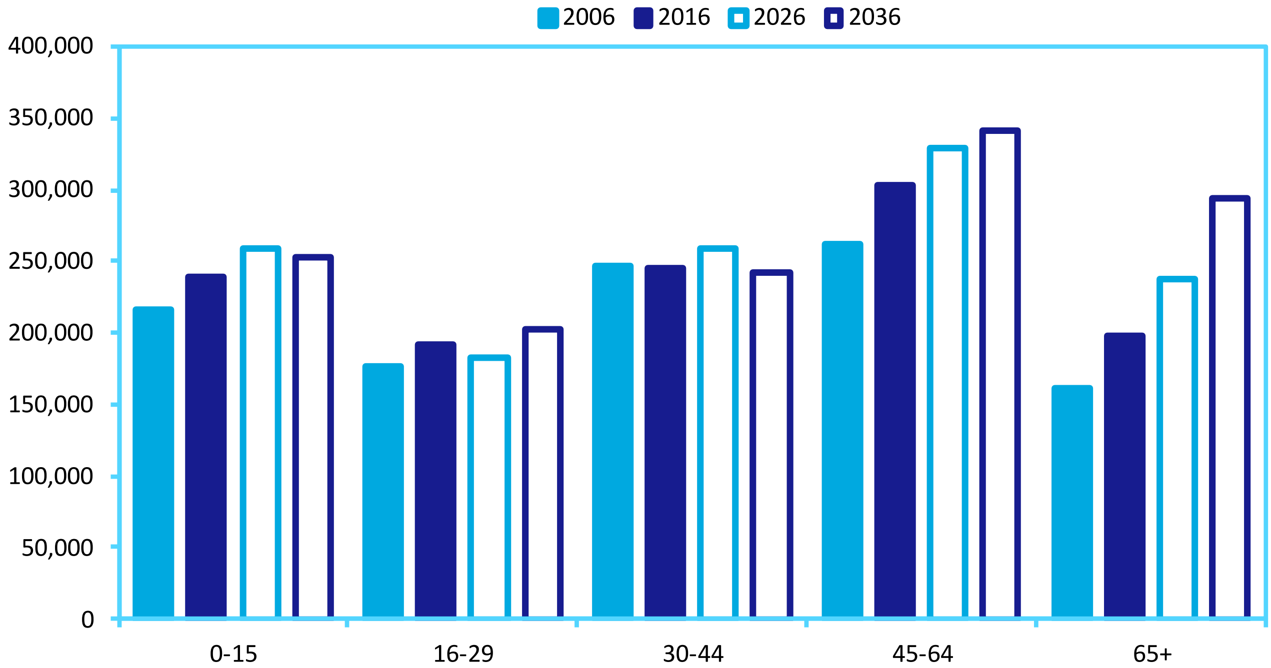
Hertfordshire's population is ageing at a lower rate than the national average

Examining the age composition of the population, as detailed in **Figure 1.18**, 16.8 per cent of the population was aged 65 or over in 2016, compared to 15.2 per cent in 2006. This is forecast to increase further, to 18.7 per cent and 22.1 per cent in 2026 and 2036 respectively. The population of Hertfordshire is gradually "ageing" – but notably, at a rate below the national (England) average. The 16-24 age cohort makes up a slightly lower share of the total population in Hertfordshire, compared to the England average. Notably, the 0-15 age group makes up a higher share of population in all decades, recent and projected. As detailed in **Figure 1.19**, the 54-64 age group has the largest population in all years, past and projected.

FIGURE 1.19: COMPOSITION OF TOTAL POPULATION BY AGE GROUP – ESTIMATED AND PROJECTED

Hertfordshire				
	2006	2016	2026	2036
0-15	20.3%	20.3%	20.4%	19.0%
16-29	16.7%	16.3%	14.4%	15.2%
30-44	23.3%	20.8%	20.5%	18.1%
45-64	24.6%	25.8%	26.0%	25.6%
65+	15.2%	16.8%	18.7%	22.1%
England				
	2006	2016	2026	2036
0-15	19.2%	19.1%	18.9%	17.7%
16-29	18.3%	18.0%	16.5%	17.3%
30-44	22.1%	19.6%	19.5%	17.7%
45-64	24.5%	25.4%	25.0%	23.8%
65+	15.8%	17.9%	20.2%	23.5%

FIGURE 1.18: TOTAL POPULATION BY AGE GROUP IN 2007 AND 2016



Source: Mid-year Population Estimates and Subnational Population Projections, Office for National Statistics.

COMMUTING PATTERNS AND EXTERNAL LABOUR DEMAND

Hertfordshire is a net exporter of labour – where the number of working residents exceeds the number of jobs located in the county

Figure 1.20 shows the number of people with jobs based in each local authority and LEP area, compared with the number of residents in work in December 2017. It shows that there were 520,900 people working in Hertfordshire, and 588,800 Hertfordshire residents in employment. Interpreting this, there are fewer employee jobs in Hertfordshire than there are residents in work – and the County has net out-commuting for employment.

As can be seen, the majority of districts within Hertfordshire have net out-commuting, with only three having net in-commuting: Stevenage, Watford and Welwyn Hatfield. In the comparator LEP areas, Buckinghamshire Thames Valley has a similar level of net out-commuting to Hertfordshire, but Thames Valley Berkshire has very low net out-commuting.

Figure 1.21 details workplace versus resident employee jobs by occupational category of job for Hertfordshire. It shows that Hertfordshire has net out-commuting mainly in the highest three skilled categories of occupation: Managers, Directors and Senior Officials (21,600 net out-commuting), Professional Occupations (30,200 net out-commuting), and Associate Professional & Technical Occupations (26,600 net out-commuting). By contrast, Hertfordshire has positive net in-commuting for lower skilled occupational categories. Putting it crudely, Hertfordshire is a net exporter of highly skilled employees and a net importer of low-skilled employees.

FIGURE 1.20: COMPARING WORKPLACE EMPLOYEES (THE WORKDAY POPULATION OF HERTFORDSHIRE) WITH RESIDENTS IN EMPLOYMENT, DECEMBER 2017

	Workplace	Residents	Net out-commuting
Broxbourne	25,000	46,100	21,100
Dacorum	64,500	78,200	13,700
East Hertfordshire	56,500	71,900	15,400
Hertsmere	41,400	51,400	10,000
North Hertfordshire	48,400	64,900	16,500
St Albans	65,700	70,900	5,200
Stevenage	53,300	43,700	-9,600
Three Rivers	21,100	44,000	22,900
Watford	76,700	51,800	-24,900
Welwyn Hatfield	68,300	66,000	-2,300
Hertfordshire	520,900	588,800	67,900
Buckinghamshire Thames Valley	208,500	263,500	55,000
Cheshire and Warrington	468,700	421,000	-47,700
Greater Cambridge and Greater Peterborough	789,400	797,800	8,400
Thames Valley Berkshire	456,800	454,100	-2,700
England	25,854,300	26,035,400	181,100
United Kingdom	30,473,900	30,750,500	276,600

Source: Annual Population Survey, Office for National Statistics.

FIGURE 1.21: COMPARING THE OCCUPATION (TYPE OF JOB) OF WORKPLACE EMPLOYEES (THE WORKDAY POPULATION OF HERTFORDSHIRE) WITH RESIDENTS IN EMPLOYMENT, DECEMBER 2017

	Workplace	Residents	Net out-commuting
1 Managers, Directors and Senior Officials	62,200	83,800	21,600
2 Professional Occupations	111,900	142,100	30,200
3 Associate Prof & Tech Occupations	79,300	105,900	26,600
4 Administrative and Secretarial Occupations	55,700	61,500	5,800
5 Skilled Trades Occupations	56,800	56,600	-200
6 Caring, Leisure and Other Service Occupations	52,000	48,200	-3,800
7 Sales and Customer Service Occupations	41,200	40,100	-1,100
8 Process, Plant and Machine Operatives	30,700	22,400	-8,300
9 Elementary occupations	51,500	47,200	-4,300
Total	541,300	607,800	66,500

Source: Annual Population Survey, Office for National Statistics.

Labour market containment refers to the level of reliance between employers and residents. A labour market is highly self-contained if most of its jobs are filled by its residents. There are two measures of self-containment – demand-side, which measures the proportion of jobs filled by residents; and supply-side, which measures how reliant a local area's residents are on local jobs.

DEMAND-SIDE SELF-CONTAINMENT

In 2011, there were 460,000 people working in Hertfordshire. 325,900 or 70.9 per cent of these were Hertfordshire residents both living and working in Hertfordshire. 134,100 or 29.1 per cent of these were resident in areas outside of Hertfordshire and commuted into the county to work. 2011 Census data is the latest data available to analyse this in detail.

In-commuters were mainly sourced from adjacent areas. The top 10 sources of in-commuting workers were from the local authority districts of:

Central Bedfordshire	18,300
Luton	11,800
Barnet	9,100
Harlow	8,700
Harrow	6,400
Hillingdon	5,500
Enfield	5,500
Aylesbury Vale	4,500
South Cambridgeshire	4,400
Epping Forest	2,900

At 70.9 per cent, demand-side self-containment is moderately high –much of the employment demand in Hertfordshire could be satisfied by the available workforce within the county, and many of the in-commuters were from adjacent local areas.

SUPPLY-SIDE SELF-CONTAINMENT

In 2011, there were 568,700 residents in Hertfordshire who worked. Out of these, 325,900 or 57.3 per cent of working residents worked in Hertfordshire. 173,800 or 30.6 per cent of these worked outside of the county and were therefore out-commuters. The remaining 9 per cent of residents in work had no fixed place of work, worked overseas/offshore or had an unspecified place of work. 117,700 or 20.7 per cent of working residents commuted to work in London.

There are substantial external demand pressures on the hertfordshire workforce, particularly from london

At 57.3 per cent, supply-side self-containment is low – a significant share of Hertfordshire's resident workforce commute to work outside of the County.

Hertfordshire has a fairly open labour market, as demonstrated by the high proportion of residents who commute to work outside of the County. It is therefore relevant to examine labour demand trends in the local areas adjoining Hertfordshire, particularly those that already have high numbers of commuting workers who are resident in Hertfordshire.

As can be seen from **Figure 1.22**, the two areas which account for the largest number of Hertfordshire residents out-commuting to work in 2011 have both experienced significant jobs growth. In 2011, 117,700 Hertfordshire residents commuted to jobs in London, representing 20.7 per cent of working residents. London experienced significant jobs growth in the decade from 2002 to 2012, with 16.4 per cent growth in jobs, or +738,000 over this period. Essex was the next largest destination for Hertfordshire's out-commuters, accounting for 15,300 working residents or 2.7 per cent of total working residents. Essex experienced a 7.8 per cent growth in jobs, or +47,000 jobs over this period.

FIGURE 1.22: AREAS OF SIGNIFICANT OUT-COMMUTING FOR HERTFORDSHIRE RESIDENTS IN 2011 AND GROWTH IN JOBS 2002-2012

Area	Number of Hertfordshire residents working in/ commuting to these areas in 2011		Growth in jobs 2002-2012	
	No.	Per cent	No	Per cent
London	117,700	20.7	+738,000	16.4
Essex	15,300	2.7	+47,000	7.8
Buckinghamshire	7,100	1.3	+2,000	0.8
Luton	6,600	1.2	+3,000	3.4
Cambridgeshire	5,900	1.0	+15,000	4.9
Central Bedfordshire	4,600	0.8	+6,000	6.2
Milton Keynes	2,100	0.4	+18,000	12.5
Bedford	1,100	0.2	+7,000	9.7
Slough	1,100	0.2	+5,000	6.0
Oxfordshire	700	0.1	+21,000	5.8
Hertfordshire	-	-	+31,000	5.4

Source: 2011 Census; Jobs Density – Office for National Statistics.

2. Demand for Labour and Skills

SUMMARY: DEMAND FOR LABOUR AND SKILLS

The Hertfordshire economy supports 690,000 jobs and a much higher rate of job growth than the national average

Since 2007, over 10 years the county has added 113,000 jobs, with the bulk of these – 97,000 - added over the past five years. Between 2012 and 2016 the annual average rate of jobs growth in Hertfordshire was 2.7 per cent – above the UK average of 1.7 per cent.

Rates of jobs growth vary significantly within Hertfordshire

Growth rates show significant variation - from very high rates of jobs growth in Watford, with average annual growth of 5.3 per cent over 10 years – to Broxbourne – with an annual average contraction of 0.5 per cent per year since 2012.

Part-time working is more prevalent in Hertfordshire, particularly in Watford and St Albans

A slightly higher share of employment is part-time (35.2 per cent) in Hertfordshire compared to the national average (GB = 32.2 per cent). Part-time employment as a share of total employment was particularly high in the local authority districts of Watford (47.4 per cent) and St Albans (41.4 per cent).

Workers in Hertfordshire earn eight per cent more per hour than the national average

Average annual (workplace) earnings for full-time workers in Hertfordshire were £31,047 in 2017, eight per cent higher than the UK average (£28,758). Compared to peer areas, Hertfordshire's earnings were similar to Buckinghamshire (£31,859), Cambridgeshire (£30,287) and West Berkshire (£31,660); but lower than other areas of Thames Valley Berkshire, particularly Bracknell Forest (£36,519) and Reading (£36,117).

The wholesale and retail industry is the largest employer in Hertfordshire

Hertfordshire's largest employing industry, in terms of total employees is Wholesale and retail trade; repair of motor vehicles and motorcycles, employing 107,000 or 17.7 per cent of all employees in 2016. This was followed by Administrative and support service activities, employing 87,500 or 14.5 per cent of the total.

Administrative and support service activities are 1.6 times more important for employment than nationally, followed by Professional, scientific and technical activities (1.4), and Construction (1.4).

A large proportion of jobs in Hertfordshire are highly skilled

In 2017, 57.3 per cent of employees working in Hertfordshire were in highly skilled jobs, compared to the national average of 55.9 per cent

Comprising 310,200 Hertfordshire employees working in skilled jobs increased by 8.3 per cent over the decade from 2008 to 2017, or by +23,700 employees.

In 2017, Hertfordshire's vacancy rate exceeded the national average but was below all but one of the comparator areas

According to the UK Employer Skills Survey, conducted in 2017, 51 per cent of establishments (both public and private sector organisations) in Hertfordshire had recruited in the past 12 months. This was the same rate as nationally (England).

At the time of the survey in 2017 (summer), there were 22,300 vacancies in Hertfordshire – representing 4.0 per cent of total employment. There were more vacancies in Hertfordshire than in Buckinghamshire Thames Valley (9,700), Cheshire and Warrington (22,100), and Thames Valley Berkshire (18,600), but less than in Greater Cambridge Greater Peterborough (41,000).

JOBS AND EMPLOYMENT

The Hertfordshire economy supports 690,000 jobs and a much higher rate of job growth than the national average

There were 690,000 jobs in Hertfordshire in 2016[4]. Since 2007, over 10 years the county has added 113,000 jobs, with the bulk of these – 97,000 - added over the past five years. As can be seen in **Figure 2.1** Hertfordshire's annual rate of jobs growth accelerated above the UK average from 2010 onwards, after lagging behind it slightly between 2001 and 2006. Between 2012 and 2016 the annual average rate of jobs growth in Hertfordshire was 2.7 per cent – well above the UK average of 1.7 per cent.

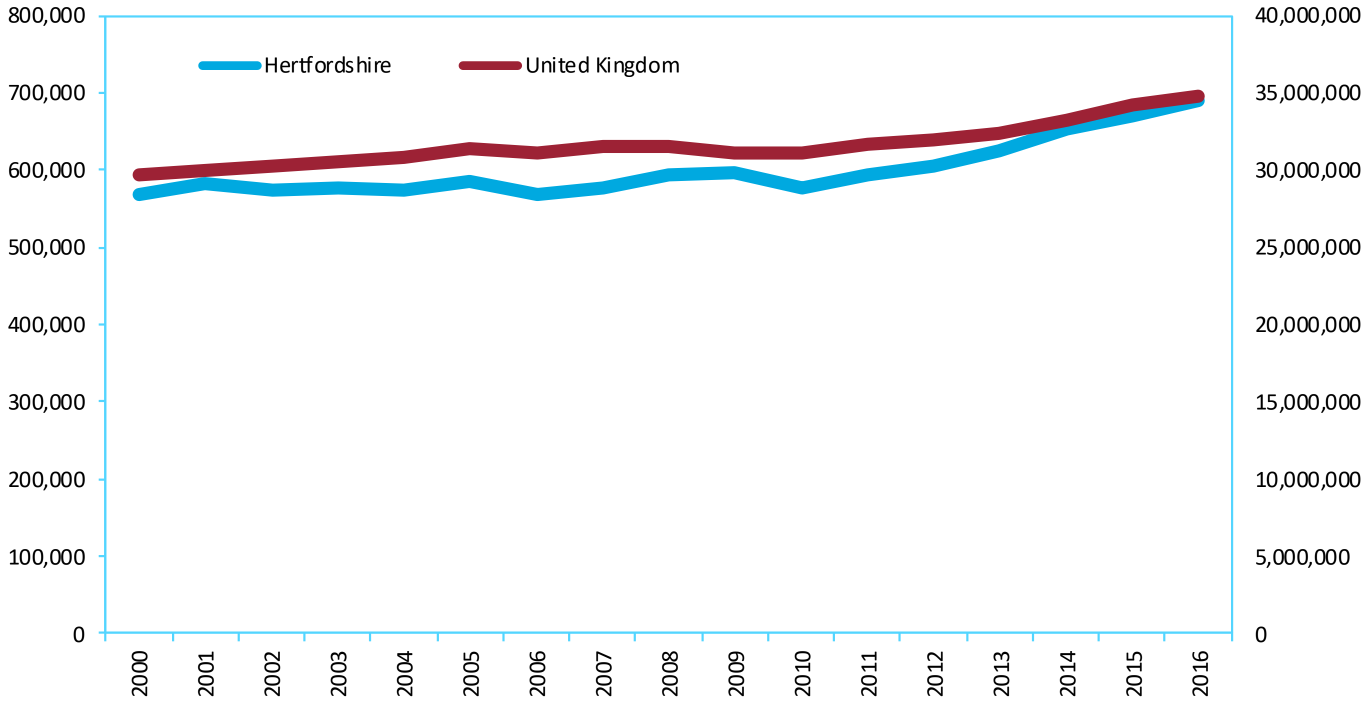
Hertfordshire out-performed all of its peer LEP areas on jobs growth, with only GCGP coming near – with +92,000 jobs between 2012 and 2016, followed by Cheshire and Warrington with +65,000.

Rates of jobs growth vary significantly within Hertfordshire

Within Hertfordshire, as detailed in **Figure 2.2**, Watford has notably had very strong rates of jobs growth since 2006. The average annual rate of jobs growth over the 10 years from 2007 to 2016 was 5.3 per cent, and jobs growth was higher over the five years from 2012 to 2016 – at 5.4 per cent per annum on average. Three Rivers and Welwyn Hatfield have also had high rates of growth. In East Hertfordshire, employment growth has picked up markedly since 2011. Broxbourne stands out as the only district to record a decrease in jobs – with an annual average contraction of 0.5 per cent per year since 2012.

Figure 2.3 notes Workforce Jobs in Hertfordshire and its constituent districts between 2012 and 2016. It should be noted that Workforce Jobs are calculated differently from workplace jobs reported by the Annual Population Survey (APS) and presented in **Figure 1.20.** The APS estimates workplace jobs based on a survey of approximately 50,000 households. The Workforce Jobs survey takes the APS figures and enhances them with a survey of 83,400 employers and 1,5000 public sector employers. Workforce Jobs data is considered to be more accurate than APS data for total jobs. Employment (measured by the APS as the number of people working at least one hour during the survey reference week) differs from the concept of jobs, since a person can have more than one job, and some jobs may be shared by more than one person.

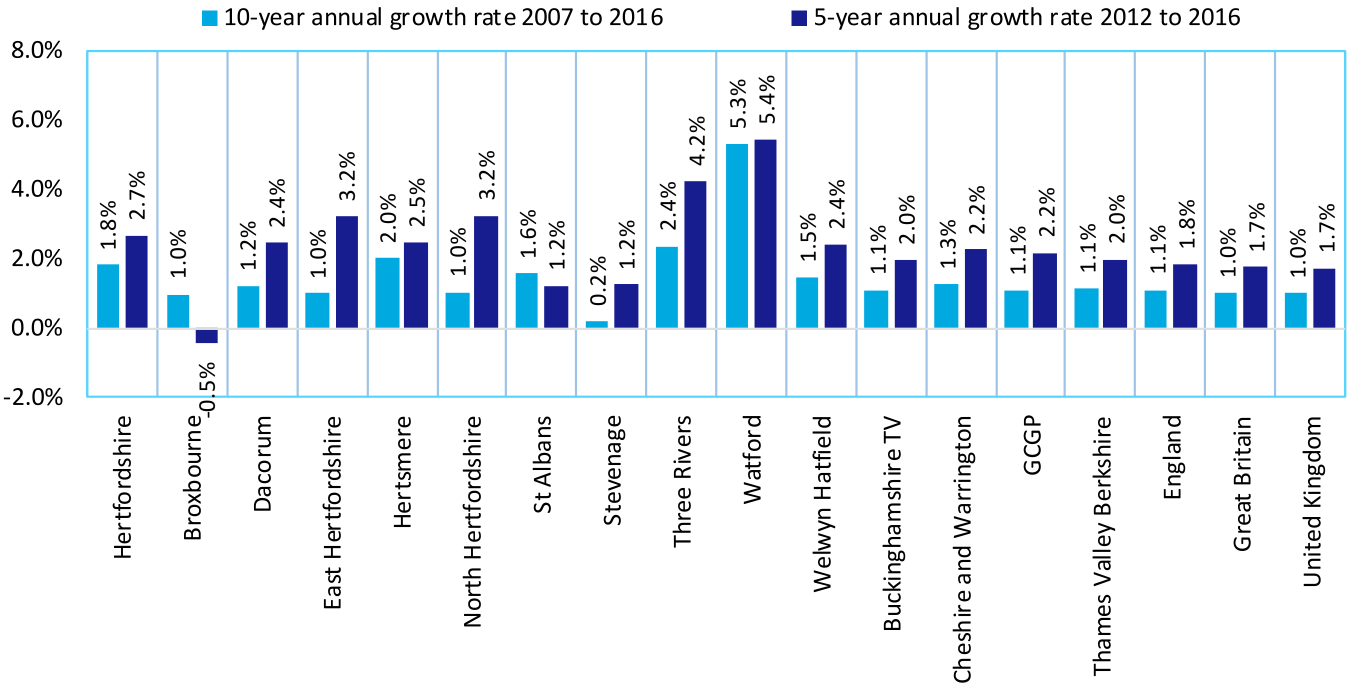
FIGURE 2.1: TOTAL JOBS IN HERTFORDSHIRE AND ENGLAND FROM 2000 TO 2016



Source: Jobs Density, Office for National Statistics.

[4] Workforce jobs are the sum of jobs including those supported by employers, self-employment, government-supported trainees, and Her Majesty's Forces. Statistics on workforce jobs can be accessed from the Jobs Density data series or Workforce Jobs series from the Office for National Statistics.

FIGURE 2.2: 5-YEAR (2011-2016) AND 10-YEAR (2006-2016) ANNUAL JOBS GROWTH RATES



Source: Business Register Employment Survey, Office for National Statistics.

FIGURE 2.3: GROWTH IN JOBS BETWEEN 2012 AND 2016

	Total workforce jobs		Growth in total employees 2011 to 2016		Annual Growth Rate 2011 to 2016
	2012	2016	No.	Per cent	
Hertfordshire	605,000	690,000	85,000	14.0%	2.7%
Broxbourne	44,000	43,000	-1,000	-2.3%	-0.5%
Dacorum	70,000	79,000	9,000	12.9%	2.4%
East Hertfordshire	64,000	75,000	11,000	17.2%	3.2%
Hertsmere	54,000	61,000	7,000	13.0%	2.5%
North Hertfordshire	52,000	61,000	9,000	17.3%	3.2%
St Albans	79,000	84,000	5,000	6.3%	1.2%
Stevenage	47,000	50,000	3,000	6.4%	1.2%
Three Rivers	39,000	48,000	9,000	23.1%	4.2%
Watford	76,000	99,000	23,000	30.3%	5.4%
Welwyn Hatfield	79,000	89,000	10,000	12.7%	2.4%
Buckinghamshire TV	254,000	280,000	26,000	10.2%	2.0%
Cheshire and Warrington	493,000	551,000	58,000	11.8%	2.2%
GCGP	807,000	899,000	92,000	11.4%	2.2%
Thames Valley Berkshire	531,000	586,000	55,000	10.4%	2.0%
England	27,117,000	29,707,000	2,590,000	9.6%	1.8%
United Kingdom	31,957,000	34,822,000	2,865,000	9.0%	1.7%

Source: Jobs Density, Office for National Statistics.

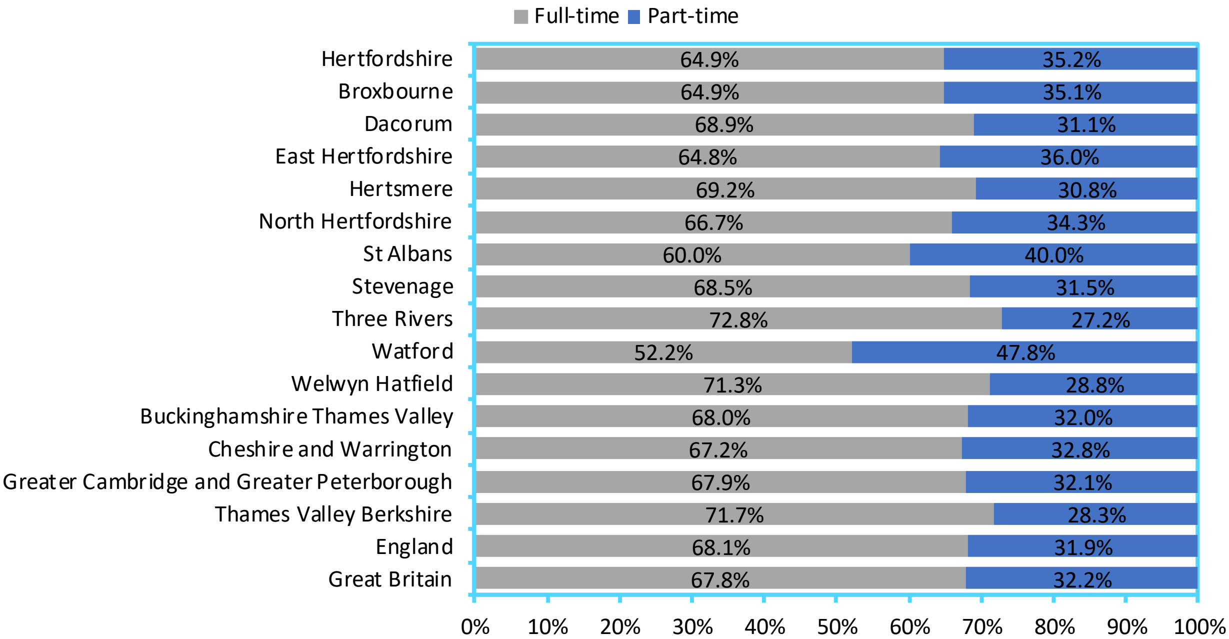
Part-time working is slightly more prevalent in Hertfordshire, particularly in watford and St Albans

A slightly higher share of employment is part-time (35.2 per cent) in Hertfordshire compared to the national average (GB = 32.2 per cent). Part-time employment is also higher than all of the other comparator LEP areas.

Part-time employment as a share of total employment has declined slightly in Hertfordshire – from 34.9 per cent in 2011 to 34.6 per cent in 2015[5]. However, part-time employment declined at a greater rate nationally, declining from 32.5 per cent in 2011 in GB to 31.3 per cent in 2015.

In 2016, part-time employment as a share of total employment was particularly high in the local authority districts of Watford (47.4 per cent) and St Albans (41.4 per cent).

FIGURE 2.4: SHARE OF FULL-TIME AND PART TIME EMPLOYMENT IN 2016



Source: Business Register Employment Survey, Office for National Statistics.

FIGURE 2.5: SHARE OF FULL-TIME AND PART TIME EMPLOYMENT IN 2011 AND 2015

	2011				2015			
Area	Employees	Full-time employees	Part-time employees	Part-time as % of total employees	Employees	Full-time employees	Part-time employees	Part-time as % of total employees
Hertfordshire	518,000	337,000	181,000	34.9%	582,500	381,000	201,500	34.6%
Broxbourne	37,500	25,000	12,500	33.3%	40,500	25,000	15,500	38.3%
Dacorum	57,000	39,000	18,000	31.6%	64,500	45,000	19,500	30.2%
East Hertfordshire	55,500	35,500	20,000	36.0%	60,500	40,500	20,500	33.9%
Hertsmere	44,000	30,500	13,500	30.7%	52,000	37,000	15,000	28.8%
North Hertfordshire	45,000	29,500	15,000	33.3%	50,500	34,000	16,500	32.7%
St Albans	64,000	37,500	26,500	41.4%	75,500	46,500	29,000	38.4%
Stevenage	44,000	29,000	14,500	33.0%	43,000	30,000	13,000	30.2%
Three Rivers	32,500	23,500	9,000	27.7%	42,000	31,000	11,000	26.2%
Watford	67,500	35,500	32,000	47.4%	84,000	44,500	40,000	47.6%
Welwyn Hatfield	71,000	51,500	19,500	27.5%	69,500	47,500	22,000	31.7%
Buckinghamshire Thames Valley	206,500	137,500	69,000	33.4%	226,000	157,000	69,000	30.5%
Cheshire and Warrington	430,000	299,000	131,000	30.5%	472,000	327,000	145,000	30.7%
Greater Cambridge and Greater Peterborough	676,000	461,000	214,500	31.7%	742,000	515,500	226,500	30.5%
Thames Valley Berkshire	459,500	324,000	135,500	29.5%	491,000	358,500	132,500	27.0%
England	23,073,000	15,612,000	7,461,500	32.3%	24,867,500	17,189,500	7,677,500	30.9%
Great Britain	26,593,500	17,942,000	8,651,500	32.5%	28,533,500	19,607,500	8,926,000	31.3%

Source: Business Register Employment Survey, Office for National Statistics.

[5] Due to changes in methodology, BRES data from 2016 is comparable to 2015, but not to earlier years. In order to provide a better time series – the previous edition of BRES is used for data between 2011 and 2015.

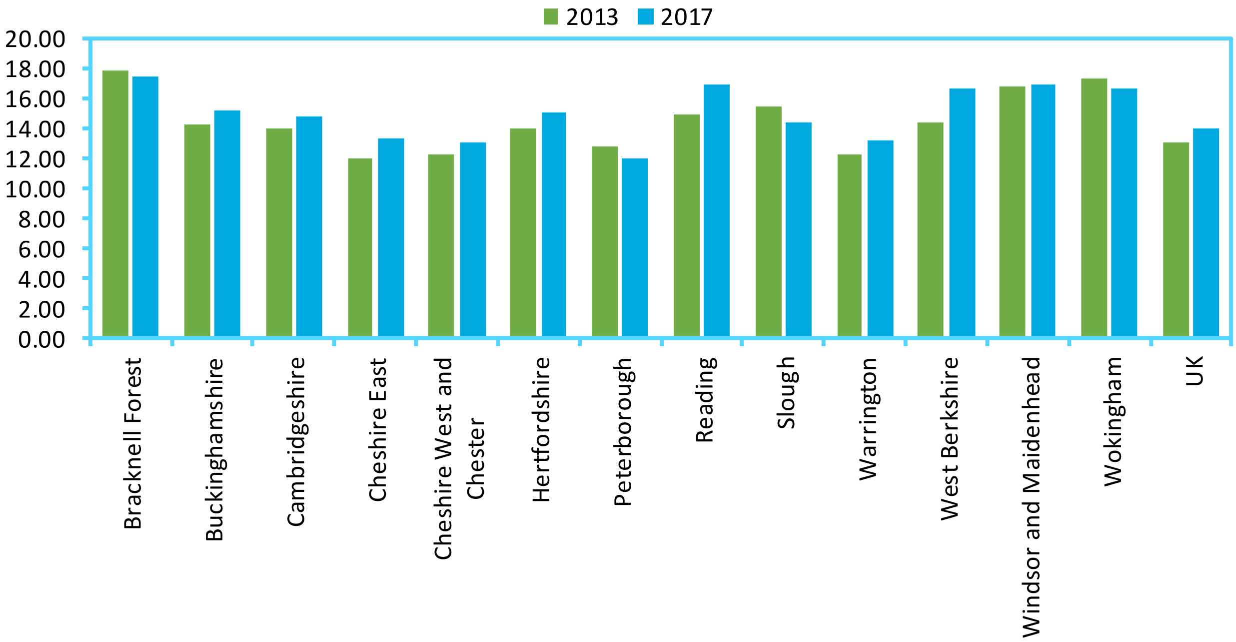
EARNINGS

Workers in Hertfordshire earn eight per cent more per hour than the national average

Average annual (workplace) earnings for full-time workers in Hertfordshire were £31,047 in 2017, 8 per cent higher than the UK average (£28,758). As detailed in **Figure 2.6**, compared to peer areas, Hertfordshire's earnings were similar to Buckinghamshire (£31,859), Cambridgeshire (£30,287) and West Berkshire (£31,660); but lower than other areas of Thames Valley Berkshire, particularly Bracknell Forest (£36,519) and Reading (£36,117).

Annual earnings have increased at a slower rate than average (**Figure 2.7**). Between 2013 and 2017, annual earnings increased by 8.1 per cent, and below the increase experienced in Buckinghamshire (9.7 per cent), Cheshire East (10.7 per cent), and Reading (14.3 per cent). Hertfordshire's hourly earnings (full-time workers) increased by 7.5 per cent – higher than the UK average rate of increase of 6.6 per cent.

FIGURE 2.6: AVERAGE HOURLY EARNINGS (WORKPLACE-BASED) IN 2013 AND 2017



Source: Annual Survey of Hours and Earnings, Office for National Statistics. Median hourly earnings.

FIGURE 2.7: AVERAGE HOURLY AND ANNUAL EARNINGS IN 2013 AND 2017

	Hourly earnings £			Annual earnings £		
Area	**2013**	**2017**	**Change 2013 to 2017, per cent**	**2013**	**2017**	**Change 2013 to 2017, per cent**
Bracknell Forest	17.87	17.43	-2.5%	36,901	36,519	-1.0%
Buckinghamshire	14.33	15.18	5.9%	29,037	31,859	9.7%
Cambridgeshire	14.07	14.87	5.7%	28,637	30,287	5.8%
Cheshire East	12.01	13.28	10.6%	25,377	28,086	10.7%
Cheshire West and Chester	12.21	13.11	7.4%	24,135	26,994	11.8%
Hertfordshire	14.02	15.07	7.5%	28,732	31,047	8.1%
Peterborough	12.77	12.00	-6.0%	27,036	25,612	-5.3%
Reading	14.91	16.99	14.0%	31,591	36,117	14.3%
Slough	15.52	14.44	-7.0%	33,113	32,047	-3.2%
Warrington	12.24	13.16	7.5%	26,183	27,520	5.1%
West Berkshire	14.43	16.74	16.0%	31,169	31,660	1.6%
Windsor and Maidenhead	16.77	16.95	1.1%	33,749	35,917	6.4%
Wokingham	17.31	16.71	-3.5%	34,899	34,274	-1.8%
UK	13.13	14.00	6.6%	27,011	28,758	6.5%

Source: Annual Survey of Hours and Earnings, Office for National Statistics. Median hourly earnings.

INDUSTRIAL STRUCTURE

The wholesale and retail industry is the largest employer in Hertfordshire

Hertfordshire's largest employing industry, in terms of total employees is Wholesale and retail trade; repair of motor vehicles and motorcycles, employing 107,000 or 17.7 per cent of all employees in 2016. This was followed by Administrative and support service activities, employing 87,500 or 14.5 per cent of the total.

Industry employment quotients (EQs) quantify how concentrated an industry is in an area compared with the national average. EQs are calculated by comparing an industry's share of employment in a local area with its share of national employment. An EQ of 1.0 means that an industry's share of employment is the same in a local area as it is nationally. An EQ above 1.0 means that employment in an industry is more concentrated in a local area than nationally, while an EQ below 1.0 means that employment is less concentrated.

Calculating Employment Quotients provides an analysis of industrial categories where the share of employment in Hertfordshire is higher than the national average share. These can be regarded as the broad industrial specialisms of Hertfordshire. As indicated in **Figure 2.8**, Administrative and support service activities are 1.6 times more important for employment than nationally, followed by Professional, scientific and technical activities (1.4), and Construction (1.4).

By contrast, several broad industrial categories are less well represented in employment terms compared to the national average, including Electricity, gas, steam and air conditioning supply (0.4), Financial and insurance activities (0.6) and Public administration and defence; compulsory social security (0.6), and Human health and social work activities (0.7).

There have been significant structural changes in terms of employment by industry

Figure 2.9 shows how the structure of the Hertfordshire economy has changed, in employment terms over the five years from 2011 to 2015. As can be seen, industrial categories where employment has increased significantly include:

- Professional, scientific and technical activities (+25,000 or +52.6 per cent)
- Administrative and support service activities (+19,000 or +29.9 per cent)
- Information and communication (+8,500 or +35.4 per cent)
- Construction (+5,500 or +16.9 per cent)

Industrial categories where employment has decreased significantly include:

- Wholesale and retail trade; repair of motor vehicles and motorcycles (-9,000 or -7.9 per cent)
- Financial and insurance activities (-1,000 or -7.7 per cent)
- Manufacturing (-1,000 or -2.9 per cent)
- Arts, entertainment and recreation (-1,000 or -7.7 per cent)

FIGURE 2.8: SHARE OF EMPLOYMENT BY INDUSTRY IN HERTFORDSHIRE AND GB IN 2016

Industry category (SIC section)	Hertfordshire Total employees	Hertfordshire % share employees	GB	Percentage Point Difference	Hertfordshire Employment Quotient
Mining and quarrying	100	0.0%	0.2%	-0.2%	0.1
Manufacturing	35,000	5.8%	8.1%	-2.3%	0.7
Electricity, gas, steam and air conditioning supply	**1,000**	**0.2%**	**0.4%**	**-0.3%**	**0.4**
Water supply; sewerage, waste management and remediation activities	4,000	0.7%	0.7%	0.0%	1.0
Construction	**38,000**	**6.3%**	**4.6%**	**1.7%**	**1.4**
Wholesale and retail trade; repair of motor vehicles and motorcycles	107,000	17.7%	15.2%	2.5%	1.2
Transportation and storage	22,500	3.7%	4.8%	-1.1%	0.8
Accommodation and food service activities	35,500	5.9%	7.4%	-1.5%	0.8
Information and communication	32,500	5.4%	4.2%	1.2%	1.3
Financial and insurance activities	**12,500**	**2.1%**	**3.5%**	**-1.5%**	**0.6**
Real estate activities	9,000	1.5%	1.6%	-0.1%	0.9
Professional, scientific and technical activities	**73,000**	**12.1%**	**8.6%**	**3.5%**	**1.4**
Administrative and support service activities	**87,500**	**14.5%**	**8.9%**	**5.6%**	**1.6**
Public administration and defence; compulsory social security	**15,000**	**2.5%**	**4.3%**	**-1.8%**	**0.6**
Education	49,500	8.2%	8.9%	-0.7%	0.9
Human health and social work activities	54,000	8.9%	13.2%	-4.3%	0.7
Arts, entertainment and recreation	14,500	2.4%	2.5%	-0.1%	0.9
Other service activities	14,500	2.4%	2.0%	0.3%	1.2

Source: Business Register Employment Survey, Office for National Statistics. All employee jobs figure are rounded to the nearest hundred.

FIGURE 2.9: EMPLOYMENT CHANGE BY INDUSTRIAL CATEGORY (SECTION), OVER FIVE YEARS 2011 TO 2015

	2011		2015		Change 2011-2015	
Industry	**No.**	**% share total**	**No.**	**% share total**	**No.**	**% change**
C : Manufacturing	35,000	6.8%	34,000	5.8%	-1,000	-2.9%
D : Electricity, gas, steam and air conditioning supply	1,000	0.2%	1,100	0.2%	200*	18.4%
E : Water supply; sewerage, waste	2,500	0.5%	4,000	0.7%	1,500	60.0%
F : Construction	32,500	6.3%	38,000	6.5%	5,500	16.9%
G : Wholesale and retail trade	113,500	22.0%	104,500	17.9%	-9,000	-7.9%
H : Transportation and storage	18,000	3.5%	18,500	3.2%	500	2.8%
I : Accommodation and food service activities	29,500	5.7%	33,000	5.7%	3,500	11.9%
J : Information and communication	24,000	4.6%	32,500	5.6%	8,500	35.4%
K : Financial and insurance activities	13,000	2.5%	12,000	2.1%	-1,000	-7.7%
L : Real estate activities	8,000	1.5%	8,500	1.5%	500	6.3%
M : Professional, scientific and technical activities	47,500	9.2%	72,500	12.4%	25,000	52.6%
N : Administrative and support service activities	63,500	12.3%	82,500	14.1%	19,000	29.9%
O : Public administration and defence	14,000	2.7%	14,000	2.4%	0	0.0%
P : Education	43,000	8.3%	47,000	8.1%	4,000	9.3%
Q : Human health and social work activities	47,500	9.2%	53,500	9.2%	6,000	12.6%
R : Arts, entertainment and recreation	13,000	2.5%	12,000	2.1%	-1,000	-7.7%
S : Other service activities	11,500	2.2%	15,500	2.7%	4,000	34.8%

Source: Business Register Employment Survey, Office for National Statistics. All employee jobs figure are rounded to the nearest hundred. *This is due to rounding to the nearest hundred, as require by BRES disclosure agreements.

INDUSTRIAL SPECIALISATION AND MAJOR EMPLOYERS

Figure 2.10 provides data on employment by detailed (2-digit standard industrial classification) industry and on industries that are major employers (10,000 employees or greater). This gives further insight into industrial specialisation and the scale of certain industries in Hertfordshire.

In terms of significant specialisations, the industries that are more than twice as important as the national average in terms of their share of total employment, include:

- 95: Repair of computers and personal and household goods
- 21: Manufacture of basic pharmaceutical products and pharmaceutical preparations
- 39: Remediation activities and other waste management services
- 78: Employment activities
- 72: Scientific research and development

Out of these, Employment activities – which includes employment agencies account for 46,500 employees.

There are also a number of industries, with a large number of employees which are between 1.5 and 2.0 times more important in terms of their employment share in Hertfordshire, compared to nationally:

- 70: Activities of head offices; management consultancy activities
- 81: Services to buildings and landscape activities
- 69: Legal and accounting activities
- 41: Construction of buildings

Further, **Figure 2.10** lists detailed industrial categories which are major employers. 47: Retail trade employs 63,500, and accounts for 10.5 per cent of total employment. 85: Education is also a significant employer (49,500 employees).

FIGURE 2.10 INDUSTRIAL SPECIALISMS AND MAJOR EMPLOYERS BY 2-DIGIT INDUSTRIAL CLASSIFICATION

Industry categories with significant specialisms in Hertfordshire	**Number employees**	**% share total (excl. agriculture)**	**Employment Quotient (EQ)**
95 : Repair of computers and personal and household goods	4,000	0.7%	3.2
21 : Manufacture of basic pharmaceutical products and pharmaceutical preparations	2,100	0.4%	2.9
39 : Remediation activities and other waste management services	300	0.0%	2.6
78 : Employment activities	46,500	7.7%	2.3
72 : Scientific research and development	6,500	1.1%	2.3
77 : Rental and leasing activities	5,500	0.9%	1.8
42 : Civil engineering	8,000	1.3%	1.7
70 : Activities of head offices; management consultancy activities	26,500	4.4%	1.7
36 : Water collection, treatment and supply	1,250	0.2%	1.7
81 : Services to buildings and landscape activities	23,500	3.9%	1.7
69 : Legal and accounting activities	21,500	3.6%	1.6
41 : Construction of buildings	14,000	2.3%	1.6
32 : Other manufacturing	2,300	0.4%	1.5
61 : Telecommunications	6,500	1.1%	1.5
11 : Manufacture of beverages	1,100	0.2%	1.5
Other major employers			
47 : Retail trade, except of motor vehicles and motorcycles	63,500	10.5%	1.1
85 : Education	49,500	8.2%	0.9
56 : Food and beverage service activities	31,000	5.1%	0.9
46 : Wholesale trade, except of motor vehicles and motorcycles	29,500	4.9%	1.2
86 : Human health activities	29,000	4.8%	0.6
62 : Computer programming, consultancy and related activities	18,000	3.0%	1.3
43 : Specialised construction activities	15,500	2.6%	1.1
84 : Public administration and defence; compulsory social security	15,000	2.5%	0.6
45 : Wholesale and retail trade and repair of motor vehicles and motorcycles	14,000	2.3%	1.3
87 : Residential care activities	12,500	2.1%	0.9
88 : Social work activities without accommodation	12,000	2.0%	0.6
93 : Sports activities and amusement and recreation activities	11,000	1.8%	1.2

Source: Business Register Employment Survey, Office for National Statistics. All employee jobs figure are rounded to the nearest hundred.

TYPES OF JOBS AND SKILLS

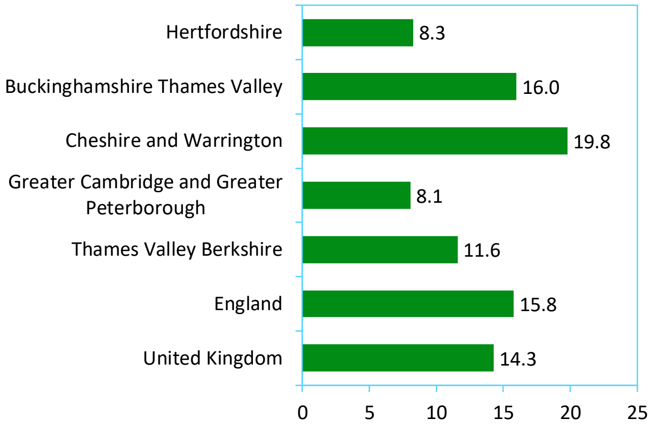
A large proportion of jobs in Hertfordshire are highly skilled

In 2017, 57.3 per cent of employees working in Hertfordshire were in highly skilled jobs, compared to the national average of 55.9 per cent (**Figure 2.11**). The share of highly skilled jobs was higher than Greater Cambridge and Greater Peterborough (54.4 per cent), but lower than in Buckinghamshire Thames Valley (61.2 per cent), Cheshire and Warrington (57.8 per cent), and Thames Valley Berkshire (63.6 per cent).

Highly-skilled jobs have grown at a slower rate than the national average and other lep areas

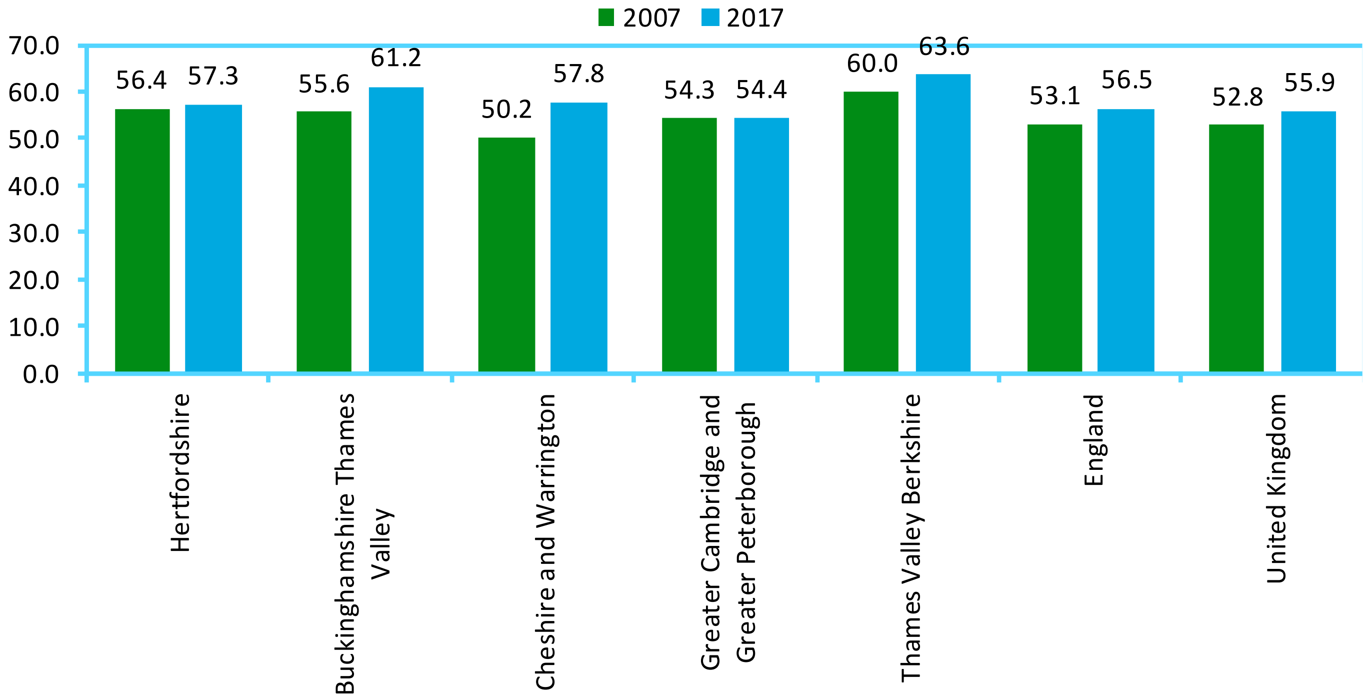
Comprising 310,200 Hertfordshire employees working in skilled jobs increased by 8.3 per cent over the decade from 2008 to 2017, or by +23,700 employees (**Figure 2.12**). This rate of increase was above Greater Cambridge Greater Peterborough, but below all other comparator LEP areas.

FIGURE 2.12: PERCENTAGE GROWTH IN SKILLED JOBS (OCCUPATIONS) OVER TEN YEARS BETWEEN 2008 AND 2017



Source: Annual Population Survey, Office for National Statistics.

FIGURE 2.11: SHARE OF EMPLOYMENT BASED IN EACH LEP AREA IN HIGHLY SKILLED JOBS IN 2007 AND 2017, PER CENT



Source: Annual Population Survey, Office for National Statistics. Highly skilled jobs are categorised as the Standard Occupational Categories of Level 4: 11 Corporate managers, 11 Corporate managers and directors, 21 Science and technology professionals, 21 Science, research, engineering and technology professionals 22 Health professionals 22 Health professionals 23 Teaching and research professionals, 23 Teaching and educational professionals, 24 Business and public service professionals, 24 Business, media and public service professionals; Level 3: 12 Managers and proprietors in agriculture services, 12 Other managers and proprietors, 31 Science and technology associate professionals, 31 Science, engineering and technology associate professionals, 32 Health and social welfare associate professionals, 32 Health and social care associate professionals, 33 Protective service occupations, 33 Protective service occupations, 34 Culture, media and sports occupations, 34 Culture, media and sports occupations, 35 Business and public service associate professionals, 35 Business and public service associate professionals, 51 Skilled agricultural trades, 51 Skilled agricultural and related trades, 52 Skilled metal and electrical trades, 52 Skilled metal, electrical and electronic trades, 53 Skilled construction and building trades, 53 Skilled construction and building trades, 54 Textiles, printing and other skilled trades, 54 Textiles, printing and other skilled trades.

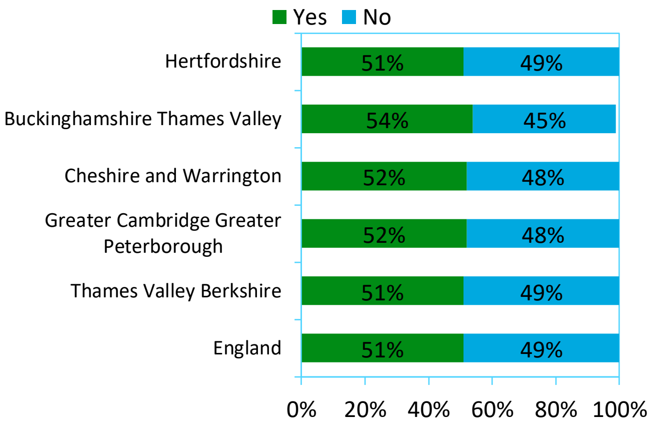
RECRUITMENT AND VACANCIES

In 2017, Hertfordshire's vacancy rate exceeded the national average but was below all but one of the comparator areas

According to the UK Employer Skills Survey, conducted in 2017, 51 per cent of establishments (both public and private sector organisations) in Hertfordshire had recruited in the past 12 months (**Figure 2.13**). This was the same rate as nationally (England).

At the time of the survey in 2017 (summer), there were 22,300 vacancies in Hertfordshire – representing 4.0 per cent of total employment (**Figure 2.14**). There were more vacancies in Hertfordshire than in Buckinghamshire Thames Valley (9,700), Cheshire and Warrington (22,100), and Thames Valley Berkshire (18,600), but less than in Greater Cambridge Greater Peterborough (41,000). As a share of total employment – the vacancy rate in Hertfordshire was higher than the national (England) average of 3.6 per cent, and higher than Thames Valley Berkshire (3.9 per cent), but below the rates found in the other comparator areas.

FIGURE 2.13: SHARE OF ESTABLISHMENTS THAT RECRUITED ANYONE IN THE PAST 12 MONTHS

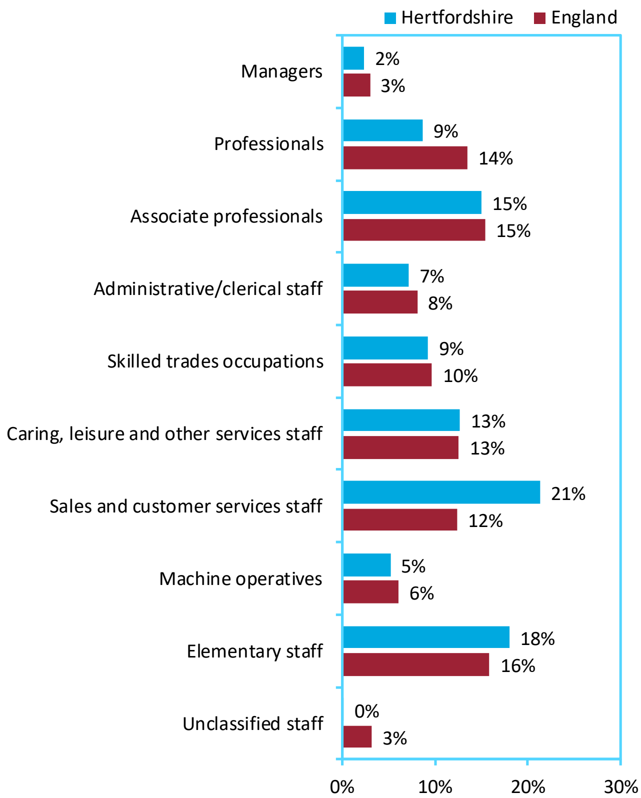


Source: UK Employer Skills Survey 2017, Department for Education.

A larger share of vacancies in Hertfordshire are for sales and customer staff and Elementary staff compared to the national average

As **Figure 2.15** indicates, the greatest share of vacancies in the summer of 2017 was for Sales and customer services staff – comprising 21 per cent of vacancies in Hertfordshire, compared to 12 per cent nationally. This was followed by vacancies for Elementary staff.

FIGURE 2.15: SHARE OF TOTAL VACANCIES BY OCCUPATION IN 2017



Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 2.14: TOTAL NUMBER OF CURRENT VACANCIES AT TIME OF SURVEY IN 2017

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	England
Total number of vacancies	22,300	9,700	22,100	41,000	18,600	872,500
Total number of hard-to-fill vacancies	8,800	3,200	6,400	20,800	5,600	286,800
Total number of skills shortage vacancies-prompted or unprompted	6,200	1,600	3,500	8,700	4,100	193,800
Total number of vacancies as % share of total employment	4.0%	4.4%	4.7%	5.3%	3.9%	3.6%
Total number of hard-to-fill vacancies as % share of total employment	1.6%	1.5%	1.4%	2.7%	1.2%	1.2%
Total number of skills shortage vacancies-prompted or unprompted as % share of total employment	1.1%	0.7%	0.8%	1.1%	0.9%	0.8%

Source: UK Employer Skills Survey 2017, Department for Education.

DRIVERS OF SKILLS DEMAND

Legislation, new technologies, and new products and services are all driving the need for new skills

The 2017 UK Employer Skills Survey also asked a series of questions about reasons for recruitment, which is instructive. As indicated in **Figure 2.16**, the main reasons for expected skills needs over the next 12 months, in both Hertfordshire and England related to any need for upskilling – to meet new legislative or regulatory requirements, to deal with new technologies or equipment, the development of new products and services, or the introduction of new working practices. In Hertfordshire, in 2017, Brexit was cited as the reason for the expected need for new skills by 14 per cent of establishments.

Managers were the occupation most affected by the need for new skills

Managers were the occupation most affected by the need for new skills – cited by 48 per cent of Hertfordshire establishments anticipating a need for a new skill over the next 12 months. This rate was similar to the national average, and other comparator areas, although in the other areas and nationally, there was a slightly higher share of establishments who cited Professional occupations as most affected by the need for new skills. A higher share of establishments in Hertfordshire cited Sales and customer service occupations compared to other comparator areas and nationally.

Establishments were asked about the skills that need developing among the workforce (**Figure 2.17**), and in Hertfordshire to top 5 skills were cited as:

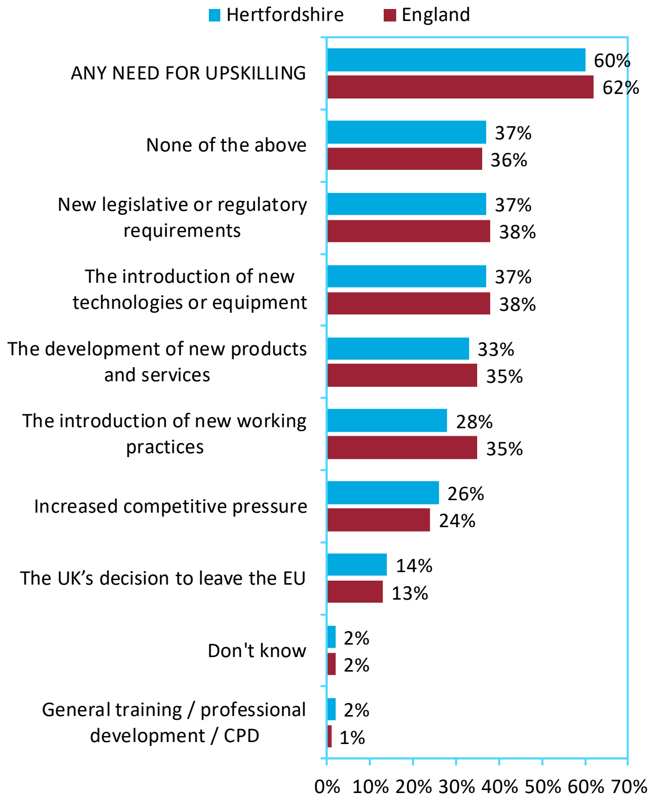
- Knowledge of products and services offered by your organisation and organisations like yours (49 per cent)
- Specialist skills or knowledge needed to perform the role (49 per cent)
- Adapting to new equipment or materials (45 per cent)
- Solving complex problems requiring a solution specific to the situation (36 per cent)
- Computer literacy / basic IT skills (33 per cent)

Customer handling, time management, sales and team working skills were the top people skills development needs

The top five cited people skills that will need developing amongst staff (**Figure 2.18**) included:

- Customer handling skills (49 per cent)
- Ability to manage own time and prioritise own tasks (48 per cent)
- Sales skills (46 per cent)
- Team working (44 per cent)
- Instructing teaching or training people (39 per cent)

FIGURE 2.16: REASONS FOR EXPECTED NEED FOR NEW SKILLS IN NEXT 12 MONTHS – PERCENTAGE OF ALL ESTABLISHMENTS RESPONDING



Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 2.17: OCCUPATION MOST AFFECTED BY NEED FOR NEW SKILLS - PERCENTAGE ESTABLISHMENTS WHO ANTICIPATE A NEED FOR NEW SKILLS IN NEXT 12 MONTHS

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	England
Managers	48%	38%	44%	45%	45%	43%
Professional occupations	5%	12%	5%	9%	9%	8%
Associate professional and technical occupations	3%	4%	4%	7%	2%	4%
Administrative and secretarial occupations	9%	3%	6%	5%	2%	6%
Skilled trades occupations	6%	6%	11%	7%	4%	8%
Caring Leisure and Other Service Occupations	2%	3%	6%	3%	2%	4%
Sales and customer service occupations	14%	9%	10%	6%	10%	7%
Process plant and machine operatives	1%	5%	1%	2%	8%	4%
Elementary occupations	3%	12%	2%	8%	6%	6%

Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 2.18: SKILLS THAT WILL NEED DEVELOPING AMONG WORKFORCE - % OF ALL ESTABLISHMENTS WHO ANTICIPATE A NEED FOR NEW SKILLS IN NEXT 12 MONTHS

	Hertfordshire	England
Knowledge of products and services offered by your organisation and organisations like yours	49%	48%
Specialist skills or knowledge needed to perform the role	49%	47%
Adapting to new equipment or materials	45%	43%
Solving complex problems requiring a solution specific to the situation	36%	38%
Computer literacy / basic IT skills	33%	31%
Knowledge of how your organisation works	31%	30%
Advanced or specialist IT skills	26%	30%
More complex numerical or statistical skills and understanding	23%	19%
Reading and understanding instructions guidelines manuals or reports	22%	26%
Basic numerical skills and understanding	22%	15%
Writing instructions guidelines manuals or reports	21%	22%
Manual dexterity	12%	13%
Communicating in a foreign language	10%	12%
COMPLEX ANALYTICAL SKILLS	44%	43%
OPERATIONAL SKILLS	57%	52%
DIGITAL SKILLS	46%	48%

Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 2.19: PEOPLE SKILLS THAT WILL NEED DEVELOPING AMONG WORKFORCE - % OF ESTABLISHMENTS WHO ANTICIPATE A NEED FOR NEW SKILLS IN NEXT 12 MONTHS

	Hertfordshire	England
Customer handling skills	49%	36%
Ability to manage own time and prioritise own tasks	48%	45%
Sales skills	46%	31%
Team working	44%	39%
Instructing teaching or training people	39%	35%
Managing or motivating other staff	39%	39%
Persuading or influencing others	36%	31%
Managing their own feelings or handling the feelings of others	36%	33%
Setting objectives for others and planning human financial and other resources	34%	31%
Making speeches or presentations	18%	19%
None of the above	25%	28%
MANAGEMENT AND LEADERSHIP SKILLS	54%	53%
SALES AND CUSTOMER SKILLS	60%	44%
SELF-MANAGEMENT SKILLS	56%	52%

Source: UK Employer Skills Survey 2017, Department for Education.

RECRUITMENT DIFFICULTIES

HARD-TO-FILL VACANCIES

There is a higher rate of hard to fill vacancies (H2FVs) in Hertfordshire compared to the national average

Hard to fill vacancies are those that employers report are proving difficult to fill. They may be hard to fill for a variety of reasons – including skills shortages, lack of accessibility of site, and relatively uncompetitive pay and conditions.

In 2017, 50 per cent of all establishments with a vacancy in Hertfordshire that reported they had at least one vacancy that was hard to fill. This was higher than the England average of 40 per cent). As detailed in **Figure 2.20**, out of the comparator areas, this was the second highest – after Greater Cambridge Greater Peterborough, at 51 per cent.

These employers reported that 39.6 per cent of all of their vacancies were hard to fill. As **Figure 2.21** shows, this was higher than the England average of 32.9 per cent.

Figure 2.22 provides information on hard-to-fill vacancies by job type, or occupation. Almost one-fifth (18.4 per cent) of all hard-to-fill vacancies in Hertfordshire were for Elementary staff (18.4 per cent), with the next highest occupational category being Managers (18.0 per cent), then Sales and customer services staff (13.2 per cent).

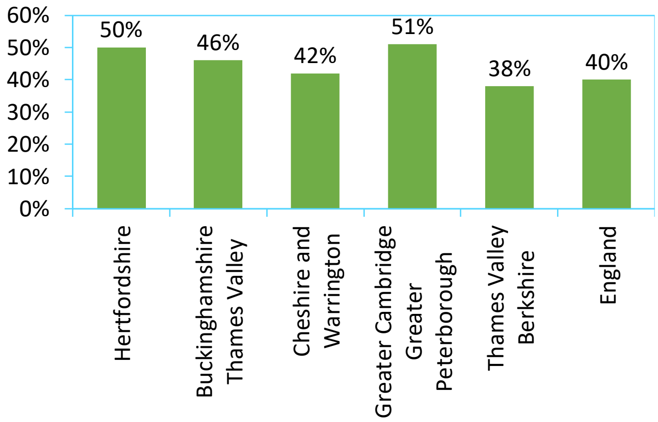
Low numbers of applicants were the main reason for hard-to-fill vacancies

In 2017, 38 per cent of all establishments in Hertfordshire with H2FVs claimed that there were low numbers of applicants with the required skills (the same as the England average), while 29 per cent stated that there were not enough people interested in doing this type of job, higher than the England average of 24 per cent (**Figure 2.23**).

The majority (93 per cent) of establishments in Hertfordshire with H2FVs reported that these had a negative impact on their business. The main implication was that H2FVs increased workloads for existing staff (85 per cent of establishments), followed by difficulties meeting quality standards (51 per cent), losing business or orders to competitors (41 per cent), and higher operating costs (39 per cent) (**Figure 2.24**).

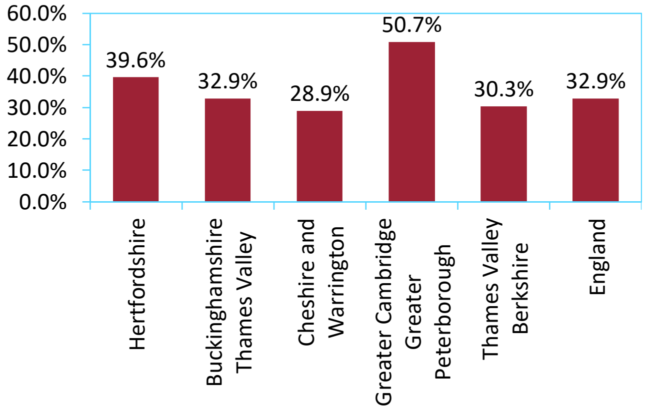
The main actions (**Figure 2.25**) taken to overcome finding candidates for hard-to-fill vacancies included: increasing advertising/recruitment spend (39 per cent of establishments with hard-to-fill vacancies), and using new recruitment methods or channels (35 per cent).

FIGURE 2.20: SHARE OF ESTABLISHMENT WITH JOB VACANCIES, WHERE AT LEAST ONE IS HARD-TO-FILL



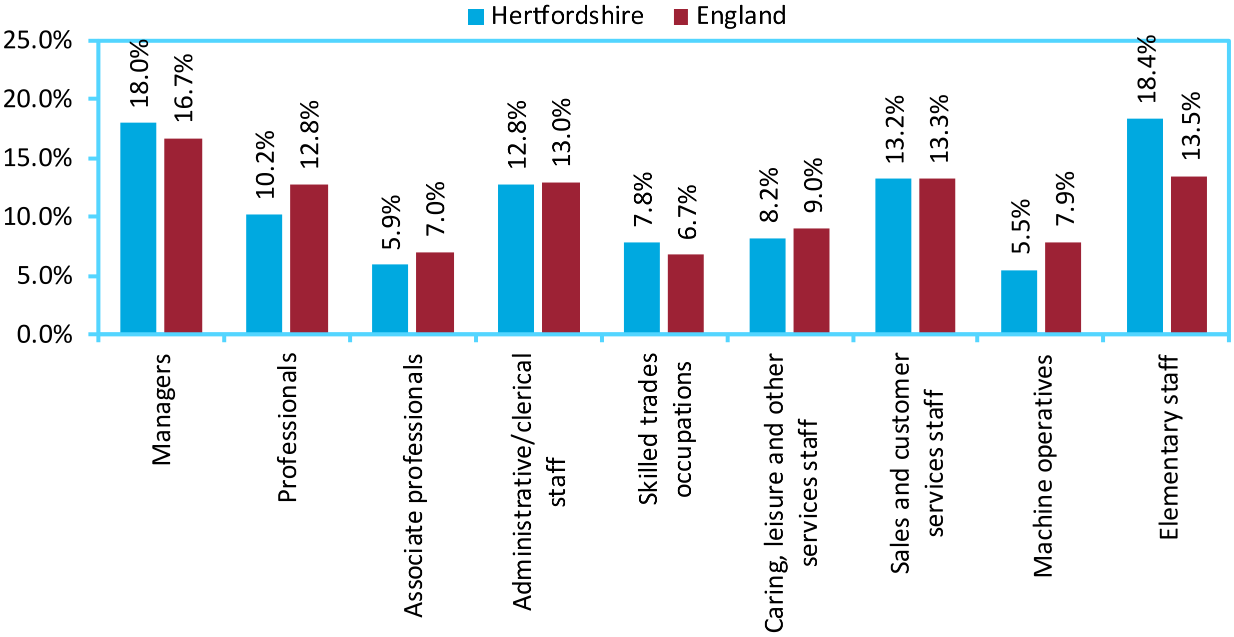
Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 2.21: HARD-TO-FILL VACANCIES AS A SHARE OF ALL VACANCIES IN 2017



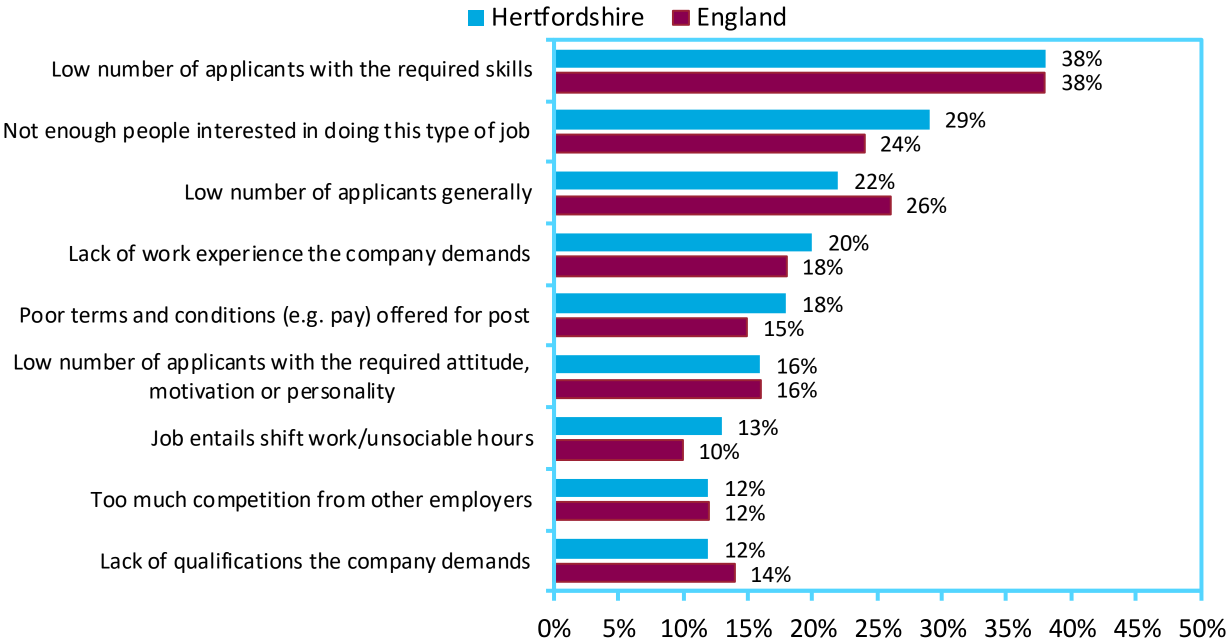
Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 2.22: SHARE OF ALL VACANCIES THAT ARE HARD-TO-FILL BY OCCUPATION



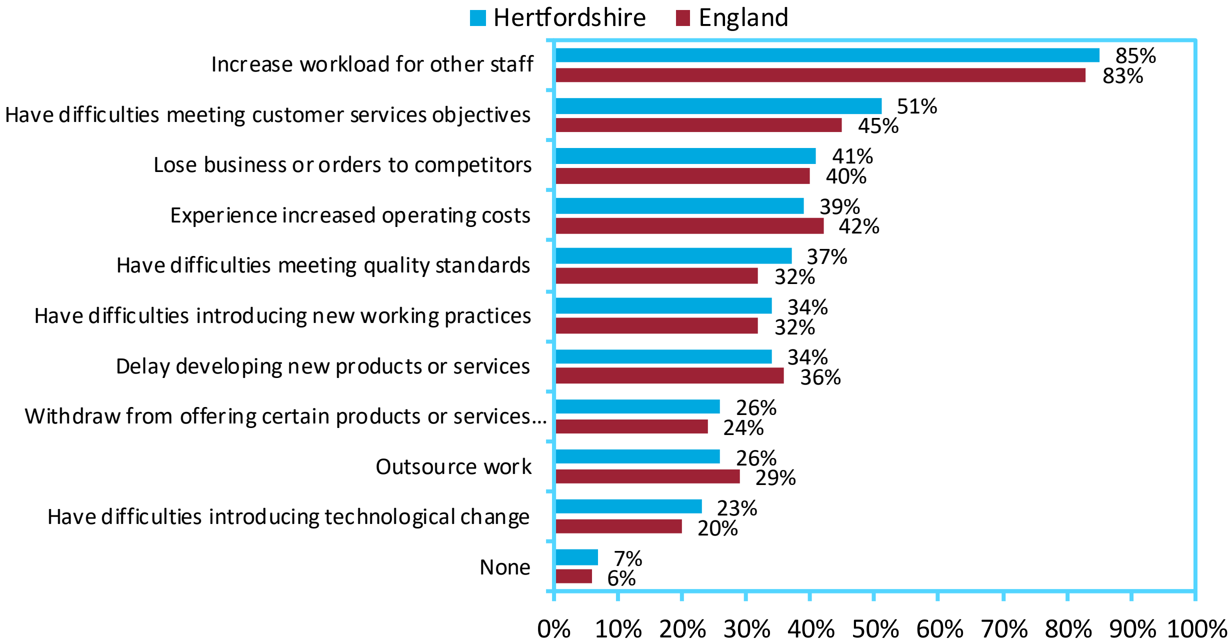
Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 2.23: MOST COMMON REASONS WHY VACANCIES ARE HARD-TO-FILL (PERCENTAGE OF EMPLOYERS WITH H2FVS)



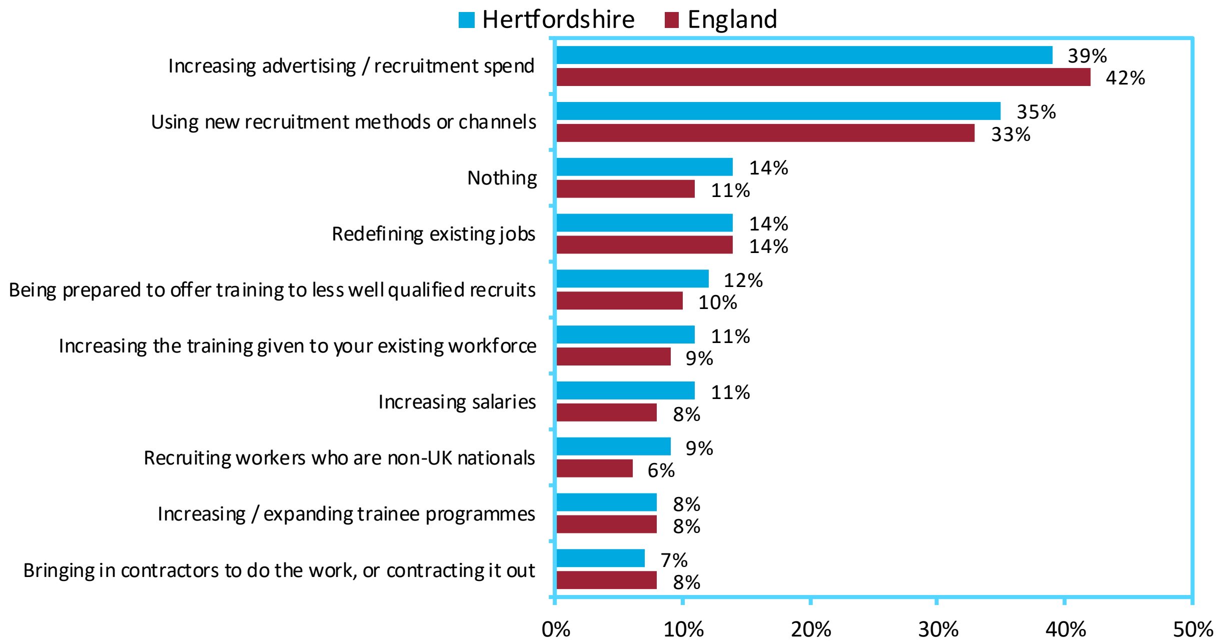
Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 2.24: IMPACT OF HARD-TO-FILL VACANCIES ON EMPLOYERS (PERCENTAGE OF EMPLOYERS WITH H2FVS)



Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 2.25: ACTIONS TAKEN TO OVERCOME DIFFICULTIES FINDING CANDIDATES TO FILL HARD-TO-FILL VACANCIES – PERCENTAGE SHARE OF EMPLOYERS WITH HARD-TO-FILL VACANCIES



Source: UK Employer Skills Survey 2017, Department for Education.

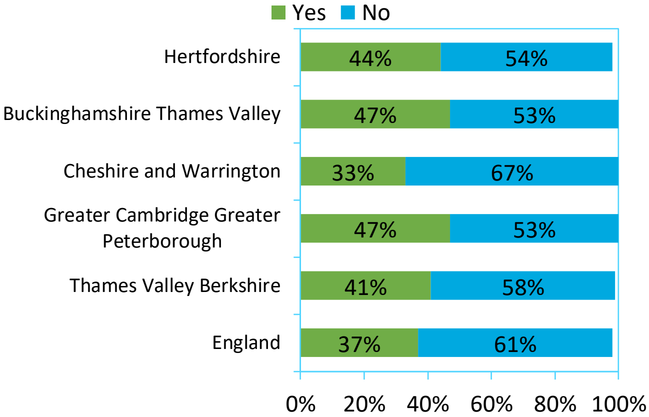
RECRUITMENT OF IMMIGRANT LABOUR TO RESOLVE HARD-TO-FILL VACANCIES

The 2017 UK Employer Skills Survey included a series of follow-up questions to gauge the role of EU and immigrant labour in helping establishments deal with recruitment and skills needs.

As detailed in **Figure 2.26**, 44 per cent of establishments in Hertfordshire with hard-to-fill vacancies recruited, or attempted to recruit workers who are non-UK nationals in order to fill them. As **Figure 2.27** further clarifies, the majority of routes sought were EU nationals, but recruitment was also sought from non-EU countries.

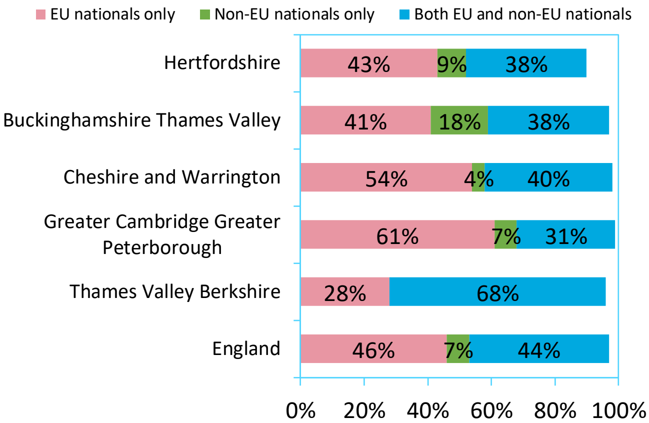
This is within the context (**Figure 2.28**) of an estimated 9 per cent of employees in Hertfordshire being non-UK, EU nationals – close to the national average of 10 per cent.

FIGURE 2.26: WHETHER RECRUITED, OR TRIED TO RECRUIT, WORKERS WHO ARE NON-UK NATIONALS IN ORDER TO FILL HARD-TO-FILL VACANCIES – PERCENTAGE SHARE OF EMPLOYERS WITH HARD-TO-FILL VACANCIES



Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 2.27: WHETHER THE NON-UK NATIONALS RECRUITED/SOUGHT TO HELP FILL HARD-TO-FILL VACANCIES HAVE BEEN EU NATIONALS, NON-EU NATIONALS OR BOTH – PERCENTAGE SHARE OF ALL WHO RECRUITED NON-UK NATIONALS TO FILL HARD-TO-FILL VACANCIES



Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 2.28: NUMBER OF STAFF THAT ARE FROM EU MEMBER STATES (EXCLUDING UK) AS A PROPORTION OF ALL STAFF - PERCENTAGE OF EMPLOYERS RESPONDING

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	England
None (0%)	77%	64%	85%	77%	70%	79%
Some but less than 20%	8%	9%	9%	11%	11%	8%
20-49%	8%	10%	4%	5%	8%	6%
50-80%	4%	3%	1%	4%	6%	3%
More than 80% but not all					1%	
All of them (100%)	2%	9%		1%	2%	2%
Estimated % of workforce that are non-UK EU nationals (among those who knew how many EU nationals they employ)	9%	11%	5%	12%	13%	10%

Source: UK Employer Skills Survey 2017, Department for Education.

3. Supply of Labour and Skills

SUMMARY: SUPPLY OF LABOUR

Hertfordshire's workforce has grown at a much higher rate than nationally

Hertfordshire had a working-age population (residents) of 740,000 in 2016. This is also referred to as the 'workforce'. On average, the working age population increased by 0.6 per cent annually over the ten years from 2007 to 2016 – above the rate of change nationally (UK), of 0.4 per cent per year.

The working-age population is projected to continue to increase at a rate greater than the national average between from 2016 onwards.

Hertfordshire's has high rates of economic participation

The economic activity rate – the share of working-age residents in work or actively seeking work – in Hertfordshire was 82.0 per cent, above the UK average of 78.2 per cent.

79.5 per cent of working age residents in Hertfordshire were in employment (the employment rate) in December 2017 – above the UK average of 74.7 per cent. Hertfordshire's employment rate was above all other LEP comparator areas apart from Buckinghamshire Thames Valley (81.8 per cent).

There are fewer foreign nationals registering to work in Hertfordshire

National Insurance Number registrations for EU citizens have decreased markedly in Hertfordshire (by 28.5 per cent) and Nationally (by 24.4 per cent) when comparing the years to March 2016 and March 2018. There has also been a decrease for workers from other countries outside of the EU.

The share of the workforce with degree-level qualifications or higher is above the national average but below most comparator LEP areas

In 2017 it was estimated that 46.6 per cent of working-age residents were qualified to VQ level 4 (degree-level) or above in Hertfordshire. This was above the UK average of 42.8 per cent, and above GCGP (40.9 per cent). However, all other comparator LEP areas had higher shares of the workforce qualified to VQ level 4+.

Other LEP areas have made higher gains in terms of workforce qualifications at degree-level or above.

Hertfordshire has very low rates of unemployment

18,600 working-age residents in Hertfordshire were categorised as officially unemployed in December 2017 – and Hertfordshire's unemployment rate (unemployed as a share of the total working age population) was 3.1 per cent, well below the UK rate of 4.5 per cent.

Skills gaps – skills deficiencies in existing employees - are slightly more prevalent in Hertfordshire than across England

2017, 5 per cent of staff in Hertfordshire were not fully proficient – only slightly higher than the England average of 4 per cent. Skills gaps affected 18 per cent of employers in Hertfordshire, compared to 13 per cent in England.

Most skills gaps are transitionary

The main reasons for skills gaps were transitionary: that the employee's training was only partially completed (62 per cent of employers reporting skills gaps), or that they were new to the role (61 per cent).

Employers in Hertfordshire were less likely to report that skills gaps had a negative impact on their business: 60 per cent of all establishments with skills gaps reported that skills gaps had a negative impact, lower than England average (65 per cent).

The main implications of Skills gaps in Hertfordshire are that they increase the workload for other staff – reported by 52 per cent of establishments reporting a skills gap.

WORKFORCE

Hertfordshire's workforce has grown at a much higher rate than the national average

In 2016, it was estimated that there was a working-age population of 740,000 in Hertfordshire (**Figure 3.1**). On average, the working age population increased by 0.6 per cent annually over the ten years from 2007 to 2016 – above the rate of change nationally (UK), of 0.4 per cent per year.

The working age population changed significantly in Welwyn Hatfield (1.3 per cent per annum) and Watford (1.2 per cent per annum) between 2007 and 2016. Apart from Broxbourne, all Hertfordshire districts increased their working age population at a rate the same as, or above the national average.

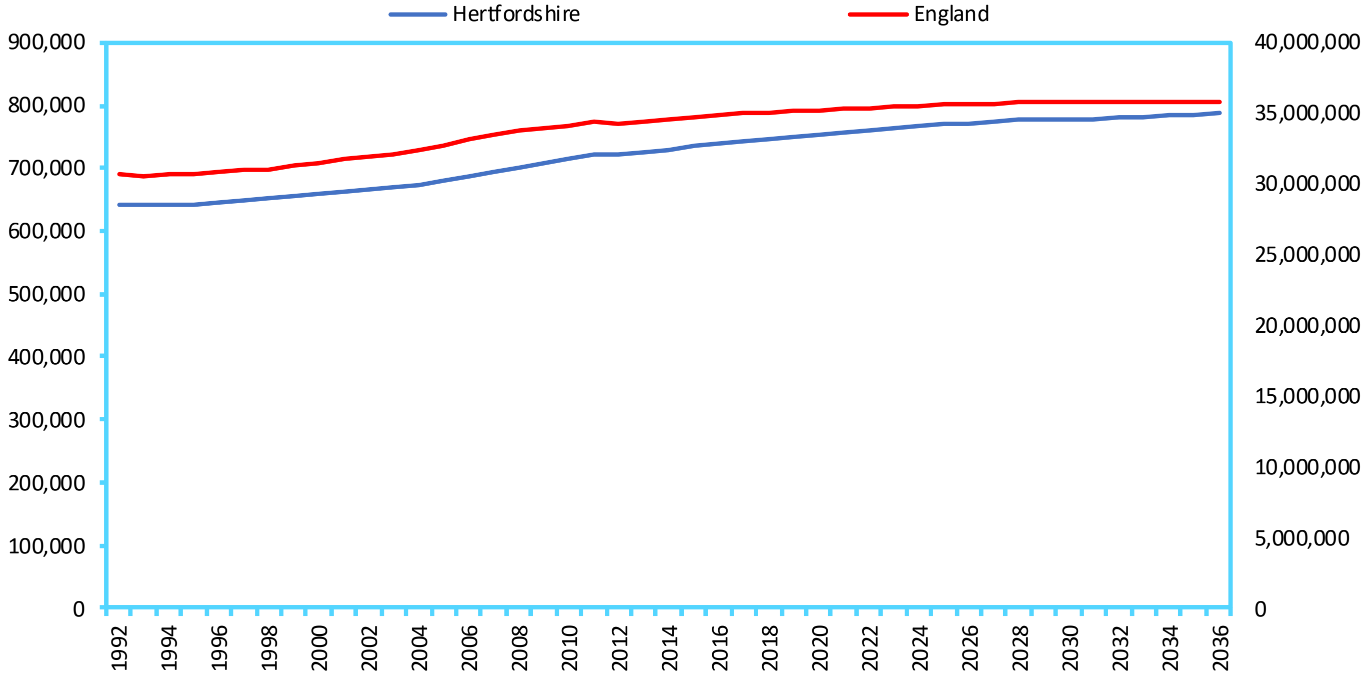
The working-age population is projected to continue to increase at a rate greater than the national average between 2016 and 2026, and 2026 and 2036 – as indicated in **Figures 3.1 and 3.2.**

FIGURE 3.1: WORKING AGE POPULATION – ESTIMATED AND PROJECTED

Area	Estimated working-age population in 2016	Annual average % change between 2007 and 2016	Estimated working-age population in 2026	Annual average % change between 2017 and 2026	Estimated working-age population in 2036	Annual average % change between 2027 and 2036
Broxbourne	60,300	0.3%	771,600	0.4%	786,600	0.2%
Dacorum	96,200	0.6%	62,000	0.3%	62,800	0.1%
East Hertfordshire	91,900	0.6%	100,200	0.4%	102,100	0.2%
Hertsmere	63,400	0.3%	96,000	0.4%	97,000	0.1%
North Hertfordshire	82,000	0.4%	64,400	0.2%	65,100	0.1%
St Albans	90,000	0.5%	85,200	0.3%	86,300	0.1%
Stevenage	56,200	0.6%	93,500	0.4%	94,400	0.1%
Three Rivers	57,100	0.5%	57,700	0.2%	58,300	0.1%
Watford	63,000	1.2%	59,600	0.4%	60,800	0.2%
Welwyn Hatfield	80,000	1.3%	67,200	0.6%	69,400	0.3%
Hertfordshire	740,000	0.6%	86,000	0.6%	90,500	0.4%
England	34,856,100	0.4%	35,659,600	0.2%	35,788,800	0.0%
United Kingdom	41,443,900	0.4%	42,201,700	0.2%	42,128,600	0.0%

Source: Mid-year Population Estimates and Subnational Population Projections, Office for National Statistics.

FIGURE 3.2: ESTIMATED AND PROJECTED WORKING-AGE POPLATION IN HERFTFORDSHIRE (LEFT-HAND AXIS) AND ENGLAND (RIGHT-HAND AXIS) BETWEEN 1992 AND 2036



Source: Mid-year Population Estimates and Subnational Population Projections, Office for National Statistics.

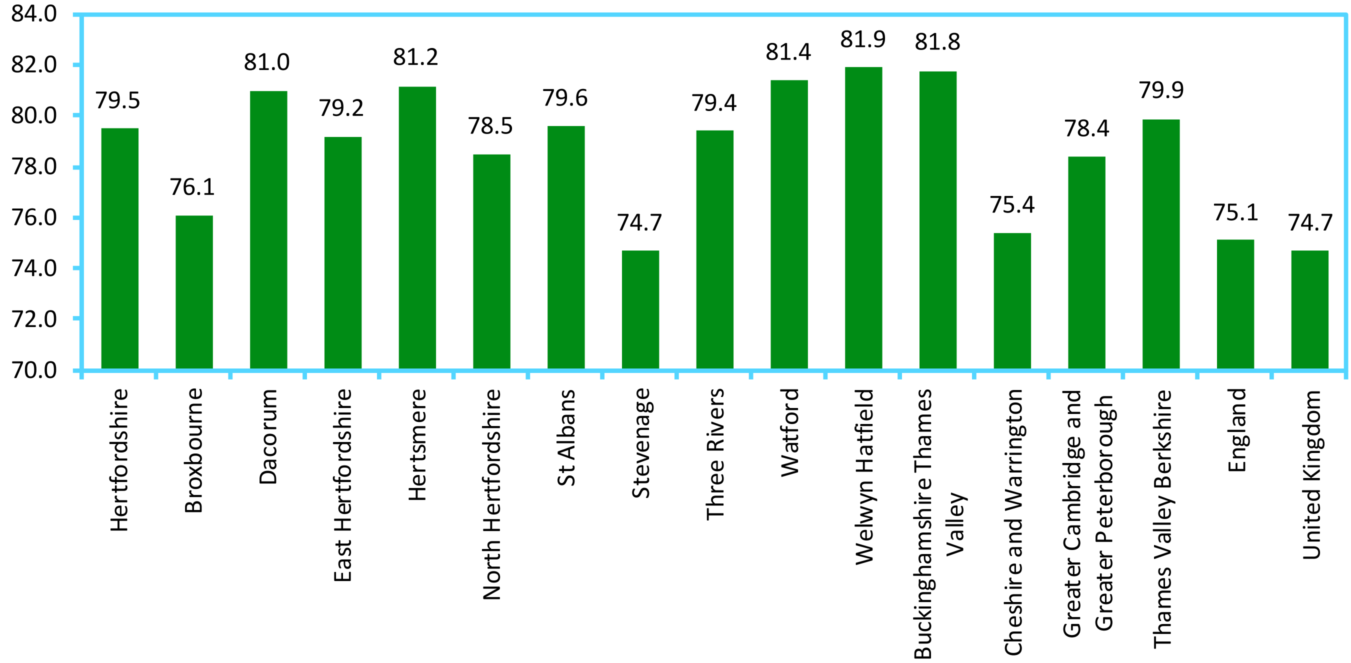
PARTICIPATION IN EMPLOYMENT

Hertfordshire has high rates of economic participation

79.5 per cent of working age residents in Hertfordshire were in employment (the employment rate) in December 2017 – above the UK average of 74.7 per cent (**Figure 3.3**). Hertfordshire's employment rate was above all other LEP comparator areas apart from Buckinghamshire Thames Valley (81.8 per cent). Within Hertfordshire, district employment rates were above the national average, apart from Stevenage – where it was the same as the national average.

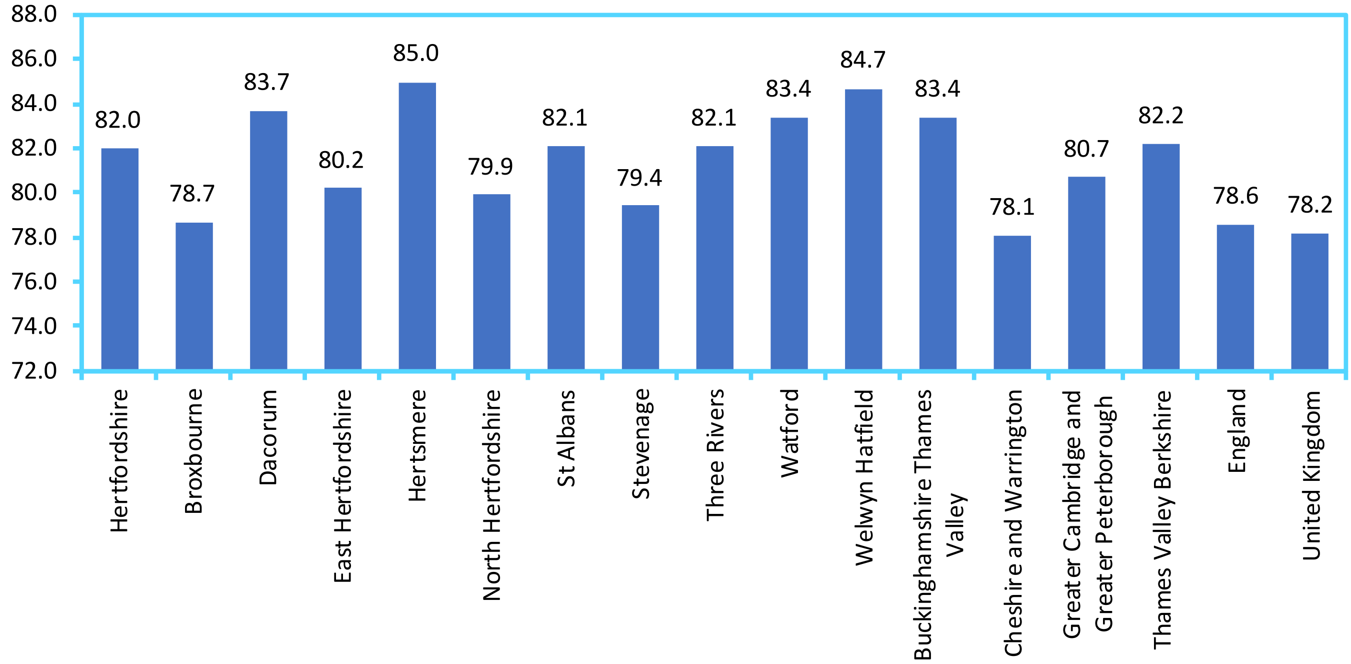
Similarly, the economic activity rate – the share of working-age residents in work or actively seeking work – in Hertfordshire was 82.0 per cent, above the UK average of 78.2 per cent (**Figure 3.4**). Economic activity rates were high across all Hertfordshire districts.

FIGURE 3.3: EMPLOYMENT RATES IN JANUARY 2017 – DECEMBER 2017



Source: Annual Population Survey, Office for National Statistics.

FIGURE 3.4: ECONOMIC ACTIVITY RATES IN JANUARY 2017 – DECEMBER 2017



Source: Annual Population Survey, Office for National Statistics

Economic participation is higher than the national average for both the male and female working age population

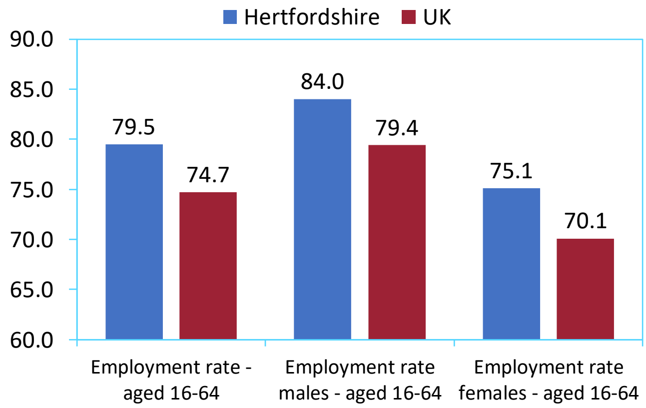
As detailed in **Figure 3.5**, employment rates are higher than the national average for adults aged between 16 and 64 across all genders. In Hertfordshire, the female employment rate was 75.1 per cent in 2017, compared to the male employment rate of 84.0 per cent.

Similarly, economic activity rates are higher than the national average for both genders, and the female activity rate is lower than the male rate in Hertfordshire (**Figure 3.6**).

Across all age groups, a higher share of adults are in employment, compared to the national average

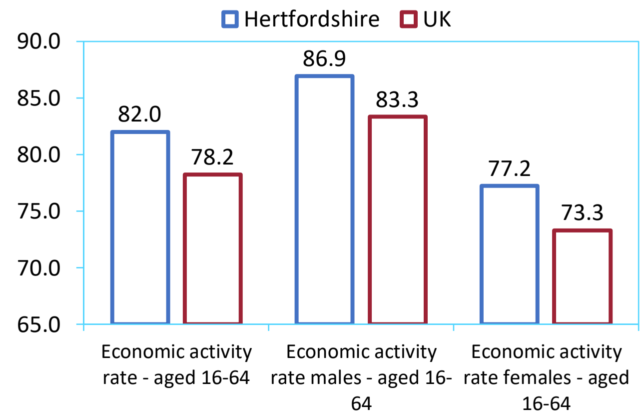
Employment rates in Hertfordshire are higher than the national average across all age groups apart from those aged 65+ as detailed in **Figure 3.7**.

FIGURE 3.5: EMPLOYMENT RATES BY GENDER, JANUARY 2017 TO DECEMBER 2017



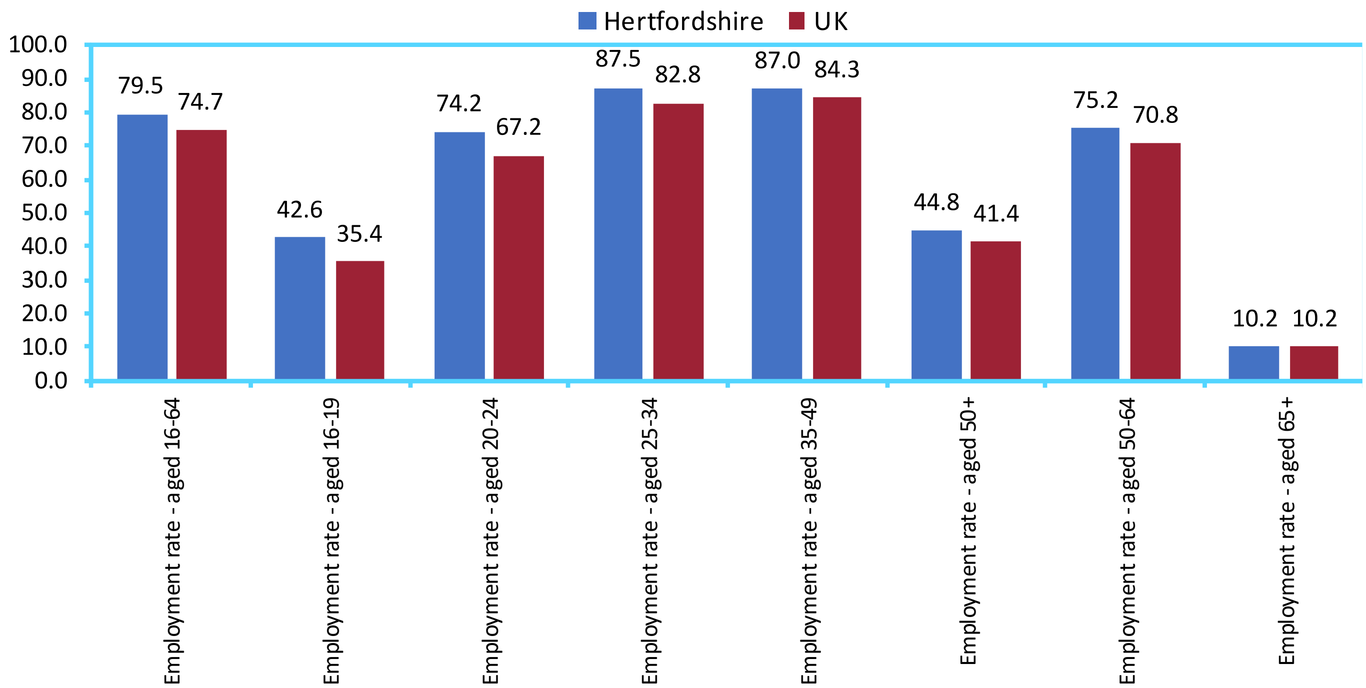
Source: Annual Population Survey, Office for National Statistics.

FIGURE 3.6: ECONOMIC ACTIVITY RATES BY GENDER, JANUARY 2017 TO DECEMBER 2017



Source: Annual Population Survey, Office for National Statistics.

FIGURE 3.7: EMPLOYMENT RATES BY AGE, JANUARY 2017 TO DECEMBER 2017



Source: Annual Population Survey, Office for National Statistics.

MIGRANT WORKERS

Brexit has reduced the number of workers from the eu and rest of the world registering for national insurance in hertfordshire and the uk

Analysing National Insurance Number Registrations (NINoS) in **Figure 3.8**, it can be seen that NINoS for EU citizens have decreased markedly in Hertfordshire (by 28.5 per cent) and Nationally (by 24.4 per cent) when comparing the years to March 2016 and March 2018. NINoS have also decreased for workers from other countries outside of the EU.

It can be concluded that the EU Referendum vote, and the subsequent developments have discouraged foreign nationals from taking employment opportunities in the UK and Hertfordshire. However, 7,469 NINoS were still issued in the year to March 2018, demonstrating that whilst Brexit has had an impact, it has not completely shut down the use of immigrant labour, or worker registration from overseas.

FIGURE 3.8: NATIONAL INSURANCE NUMBER REGISTRATIONS BY OVERSEAS CITIZENS IN THE YEAR TO MARCH 2016 AND MARCH 2018

	March 2016			March 2018			Total change in NI number registrations in the year to March 2016 to the year to March 2018		
Area	Total	EU	Rest of World (ex-EU)	Total	EU	Rest of World (ex-EU)	Total	EU	Rest of World (ex-EU)
Hertfordshire	13,068	10,440	2,620	10,117	7,469	2,673	-22.6%	-28.5%	2.0%
Broxbourne	943	838	99	774	646	125	-17.9%	-22.9%	26.3%
Dacorum	1,319	1,081	238	1,082	852	233	-18.0%	-21.2%	-2.1%
East Hertfordshire	1,265	1,088	169	1,056	918	137	-16.5%	-15.6%	-18.9%
Hertsmere	1,480	1,259	225	992	810	183	-33.0%	-35.7%	-18.7%
North Hertfordshire	624	457	168	471	332	140	-24.5%	-27.4%	-16.7%
St Albans	1,150	884	272	909	646	268	-21.0%	-26.9%	-1.5%
Stevenage	925	722	214	743	480	269	-19.7%	-33.5%	25.7%
Three Rivers	600	453	151	445	336	101	-25.8%	-25.8%	-33.1%
Watford	2,313	1,845	462	1,825	1,239	595	-21.1%	-32.8%	28.8%
Welwyn Hatfield	2,449	1,813	622	1,820	1,210	622	-25.7%	-33.3%	0.0%
UK	823,366	627,220	195,085	667,059	474,397	191,877	-19.0%	-24.4%	-1.6%

Source: Department for Work and Pensions.

QUALIFICATIONS

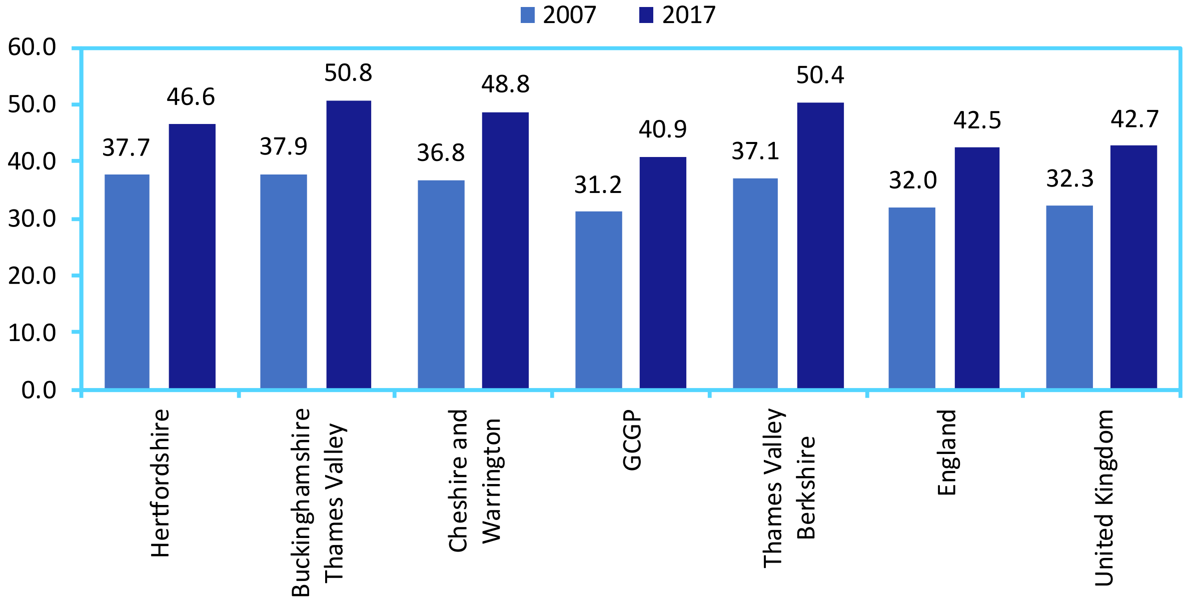
The share of the workforce with degree-level qualifications or higher is above the national average but below most comparator lep areas

In 2017 it was estimated that 46.6 per cent of working-age residents were qualified to VQ level 4 (degree-level) or above in Hertfordshire. This was above the UK average of 42.8 per cent, and above GCGP (40.9 per cent). However, all other comparator LEP areas had higher shares of the workforce qualified to VQ level 4+.

As can be seen from **Figure 3.9**, other LEP areas have made higher gains in terms of workforce qualifications at degree-level or above.

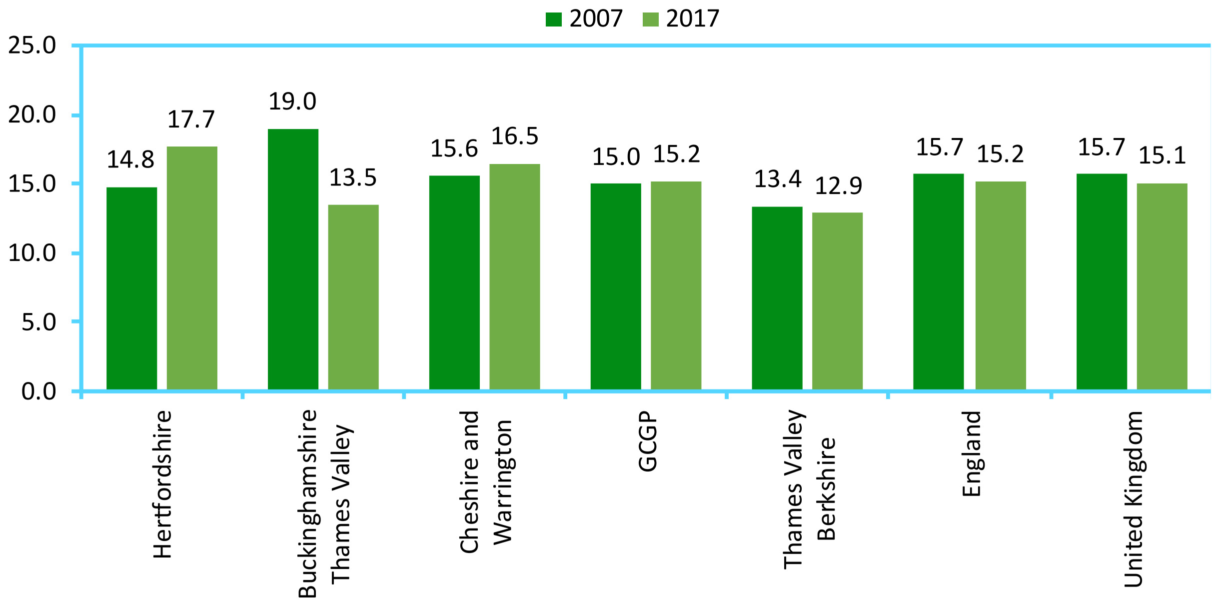
17.7 per cent of working-age adults had a level 2 (equivalent to 5 GCSEs at grades A* to C), as their highest level of qualification. This was higher than the UK average (15.1 per cent) and other comparator LEP areas. 3.9 per cent of working-age adults (23,700) had no qualifications in Hertfordshire, below the UK average of 5.1 per cent. This was comparable to the other LEP areas in **Figure 3.10**.

FIGURE 3.9: SHARE OF WORKING-AGE RESIDENTS QUALIFIED TO LEVEL 4+ IN 2007 AND 2017



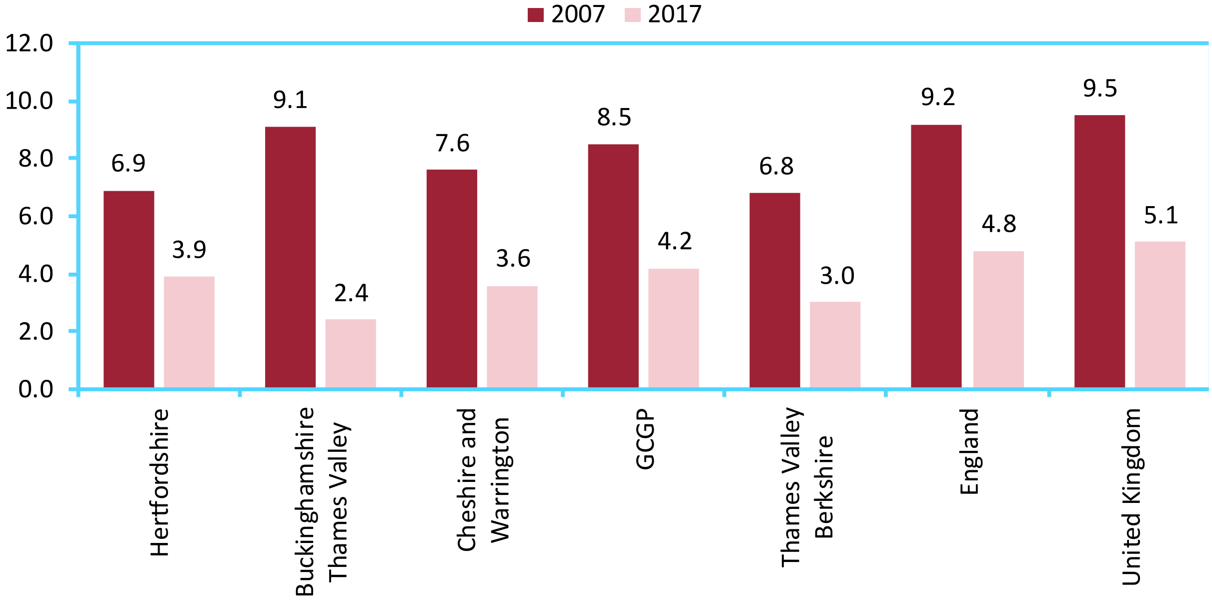
Source: Annual Population Survey, Office for National Statistics

FIGURE 3.10: SHARE OF WORKING-AGE RESIDENTS WITH HIGHEST QUALIFICATION AT LEVEL 2 IN 2007 AND 2017



Source: Annual Population Survey, Office for National Statistics

FIGURE 3.11: SHARE OF WORKING-AGE RESIDENTS WITH NO QUALIFICATIONS IN 2007 AND 2017



Source: Annual Population Survey, Office for National Statistics.

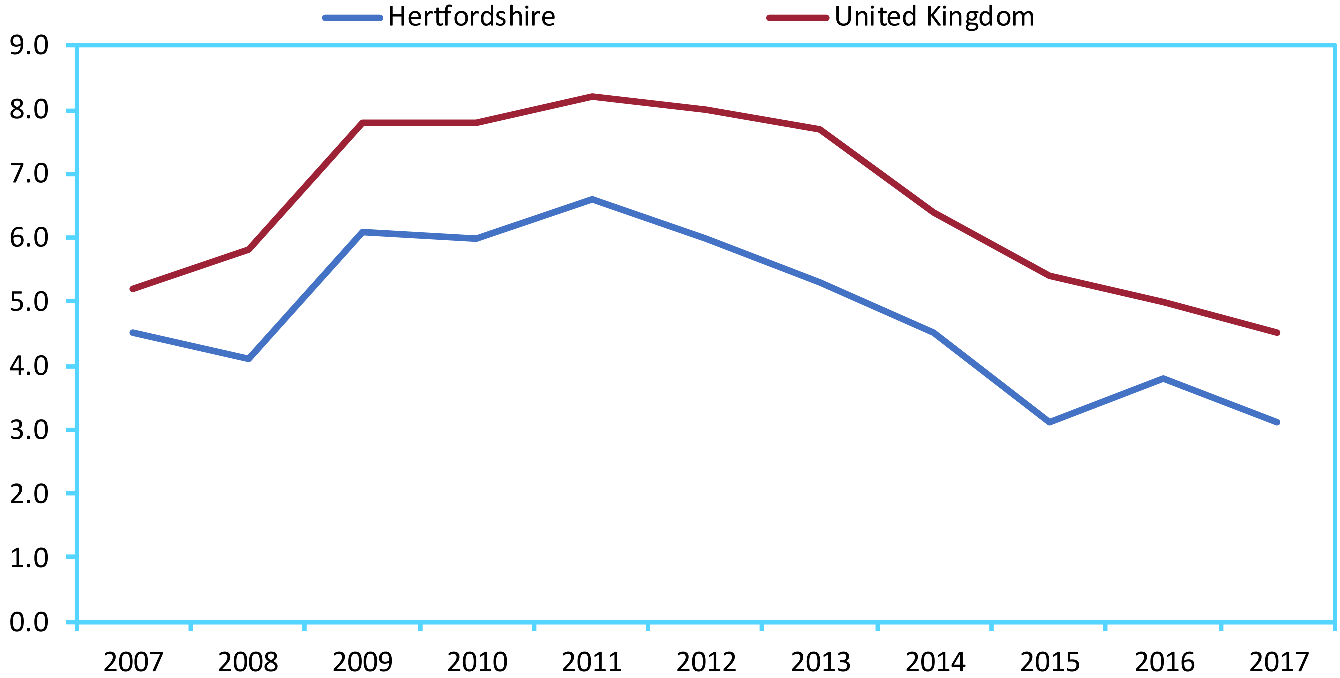
UNEMPLOYMENT

Hertfordshire has very low rates of unemployment

18,600 working-age residents in Hertfordshire were categorised as officially unemployed[6] in December 2017. Hertfordshire's unemployment rate (unemployed as a share of the total working age population) was 3.1 per cent, well below the UK rate of 4.5 per cent. As can be seen in **Figure 3.12**, Hertfordshire's unemployment rate has been consistently lower than the national rate for the past decade.

Both the male (3.4 per cent) and female (2.6 per cent) rate of unemployment is lower than the UK average (male: 4.6 per cent, female: 4.3 per cent).

FIGURE 3.12: UNEMPLOYMENT RATES FROM 2007 TO 2017



Source: Annual Population Survey, Office for National Statistics.

[6] Unemployment, as officially classified in the UK and consistent with the internationally-agreed International Labour Organisation, is where anyone aged 16 years and over is without a job, wants a job, has actively sought work in the last four weeks and is available to start work in the next two weeks, or is out of work, has found a job and is waiting to start it in the next two weeks. The unemployment rate is the share of economically-active adults (those in work or actively seeking work) that are unemployed.

JOBSEEKER'S ALLOWANCE CLAIMANTS

Hertfordshire's claimant unemployment rate is much lower than the UK average

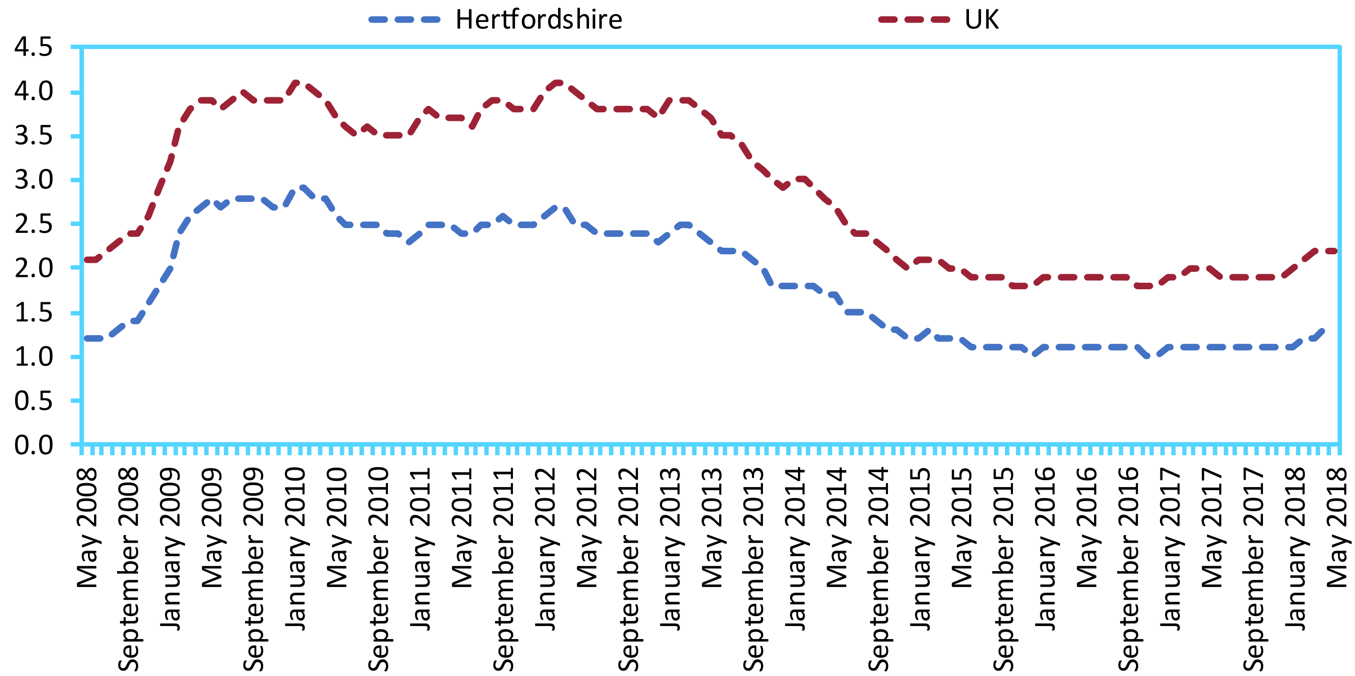
There were 9,605 unemployed claimants, receiving the Jobseekers' Allowance benefit (which includes Universal Credit Claimants for unemployment-related benefits) in Hertfordshire in May 2018 – a claimant count rate of 1.3 per cent, compared with the UK rate of 2.2 per cent. As with the official unemployment rate, Hertfordshire's claimant rate has been historically below the UK rate, as illustrated in **Figure 3.13**. The number of Jobseekers' Allowance claimants peaked in February 2010, and 20,450 and reduced to just below 8,000 in November 2015. The current trend is for a slight increase in claimants – with total claimants increasing by 15.3 per cent in the year since May 2017.

A greater share of all claimants are aged 50+ in Hertfordshire compared to the national (England) average

Figure 3.14 examines the composition of Jobseekers' Allowance claimants (claimant unemployed) by age group. As can be seen, a greater share of all claimants are aged 50+ in Hertfordshire compared to the national (UK) average, particularly amongst males.

Long-term unemployed claimants (**Figure 3.15**) represent a lower share of claimants in Hertfordshire (34.8 per cent) compared to the UK average (39.6 per cent).

FIGURE 3.13: JOBSEEKERS' ALLOWANCE CLAIMANT RATES, MAY 2008 TO MAY 2018



Source: Jobcentre Plus.

FIGURE 3.14: SHARE OF JOB SEEKERS' ALLOWANCE CLAIMANTS BY AGE-GROUP

	Total		Male		Female	
Hertfordshire	**Aug-14**	**Aug-18**	**Aug-14**	**Aug-18**	**Aug-14**	**Aug-18**
Total claimants	10,595	4,440	6,370	2,505	4,220	1,935
Aged 16-24	21.7%	10.7%	22.0%	11.0%	21.3%	10.1%
Aged 25-49	55.3%	51.0%	53.8%	48.7%	57.5%	54.3%
Aged 50+	23.0%	38.3%	24.3%	40.3%	21.2%	35.7%
UK	**Aug-14**	**Aug-18**	**Aug-14**	**Aug-18**	**Aug-14**	**Aug-18**
Total claimants	959,035	405,585	603,410	241,880	355,630	163,705
Aged 16-24	24.3%	12.6%	24.2%	13.1%	24.3%	11.9%
Aged 25-49	56.3%	54.4%	56.1%	52.9%	56.6%	56.6%
Aged 50+	19.4%	33.0%	19.7%	34.0%	19.0%	31.5%

Source: Jobcentre Plus.

FIGURE 3.15: SHARE OF JOB SEEKERS' ALLOWANCE CLAIMANTS WHO HAVE BEEN CLAIMING FOR ONE YEAR OR MORE, BY AGE-GROUP

	Total		Male		Female	
Hertfordshire	**Aug-14**	**Aug-18**	**Aug-14**	**Aug-18**	**Aug-14**	**Aug-18**
Total claimants for 1 year or more	2,750	1,545	1,675	910	1,075	635
Claimants 1 year or more as a share of total claimants	26.0%	34.8%	26.3%	36.3%	25.5%	32.8%
Aged 16-24	10.2%	5.8%	10.4%	6.6%	9.8%	4.7%
Aged 25-49	57.5%	46.9%	54.6%	44.0%	61.9%	51.2%
Aged 50+	32.4%	47.2%	34.6%	50.0%	28.4%	43.3%
UK	**Aug-14**	**Aug-18**	**Aug-14**	**Aug-18**	**Aug-14**	**Aug-18**
Total claimants	289,430	160,615	188,820	101,360	100,610	59,255
Claimants 1 year or more as a share of total claimants	30.2%	39.6%	31.3%	41.9%	28.3%	36.2%
Aged 16-24	12.7%	5.7%	12.8%	5.9%	12.5%	5.3%
Aged 25-49	60.6%	53.1%	59.4%	51.4%	62.8%	56.1%
Aged 50+	26.7%	41.2%	27.7%	42.7%	24.7%	38.6%

Source: Jobcentre Plus.

SKILLS GAPS – SKILLS DEFICIENCIES IN EXISTING EMPLOYEES

Skills gaps are slightly more prevalent in Hertfordshire than across England. In 2017, 5 per cent of staff in Hertfordshire were not fully proficient – only slightly higher than the England average of 4 per cent. Skills gaps affected 18 per cent of employers in Hertfordshire, compared to 13 per cent in England.

Skills gaps were more prevalent than the national average in Managers, Administrative and clerical staff, Sales and customer services staff, and elementary staff.

The main reasons for skills gaps were transitionary: that the employee's training was only partially completed (62 per cent of employers reporting skills gaps), or that they were new to the role (61 per cent)

Employers in Hertfordshire were less likely to report that skills gaps had a negative impact on their business: 60 per cent of all establishments with skills gaps reported that skills gaps had a negative impact, lower than England average (65 per cent).

As **Figure 3.16** shows, the main implications of Skills gaps in Hertfordshire are that they increase the workload for other staff – reported by 52 per cent of establishments reporting a skills gap. 27 per cent reported higher costs and 25 per cent reported a loss of orders to competitors. It is notable that 44 per cent reported no particular problems.

Actions taken to address skills gaps included training (65 per cent of establishments with a skills gap), increased supervision of staff (56 per cent), and mentoring/buddying (42 per cent)

FIGURE 3.16: INCIDENCE OF SKILLS GAPS

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	England
Number of staff with skills gaps	30,600	8,000	26,800	47,500	12,500	1,060,000
% of employees with skills gaps	5%	4%	6%	6%	3%	4%
% of employers with skills gaps	18%	16%	17%	17%	11%	13%

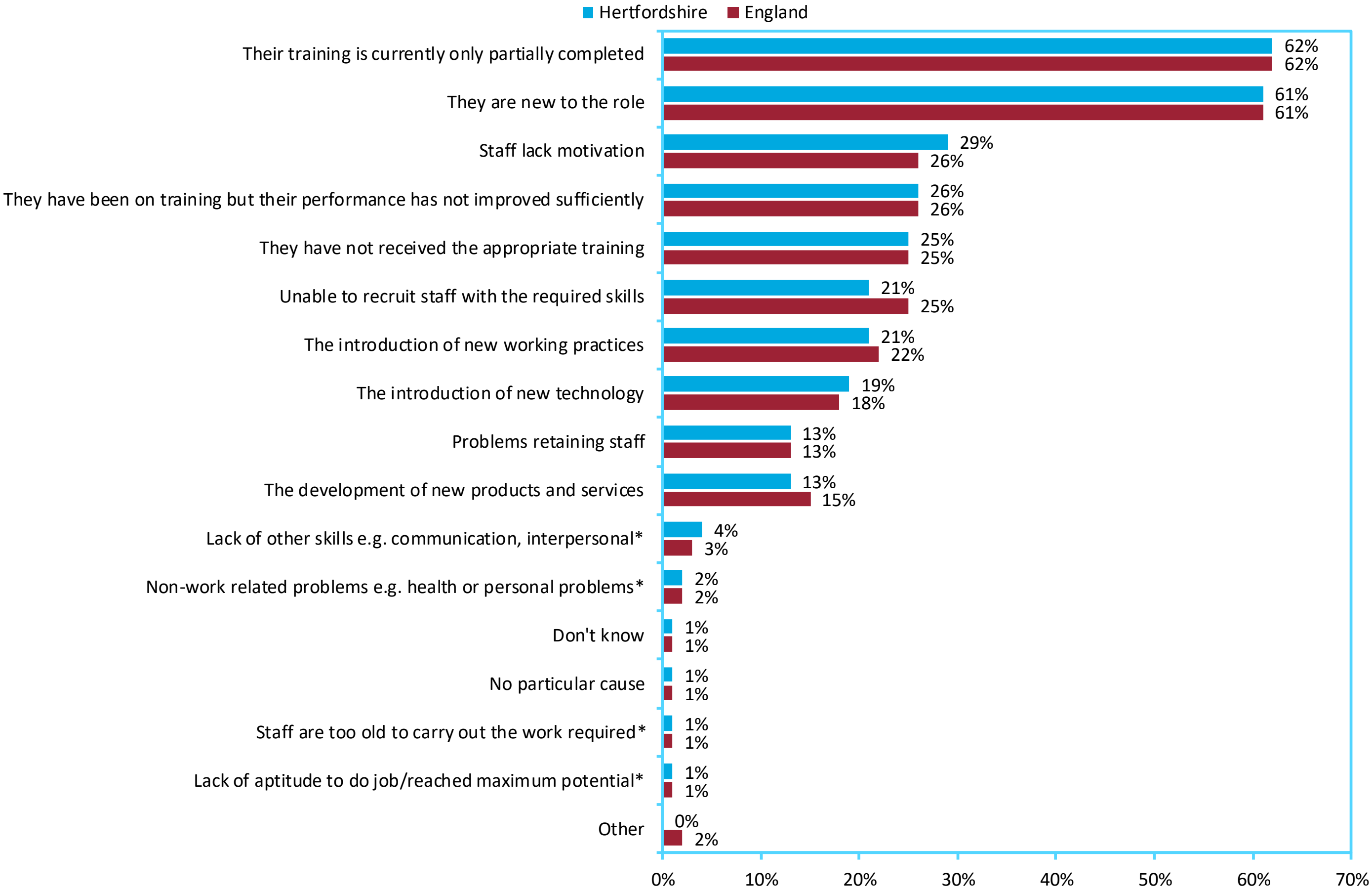
Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 3.17: SHARE OF EMPLOYEES THAT ARE NOT FULLY PROFICIENT BY OCCUPATION

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	England
Total not fully proficient	5.5%	3.6%	5.7%	6.2%	2.6%	4.3%
Managers	0.5%	0.2%	1.2%	0.4%	0.2%	0.3%
Professionals	0.2%	0.4%	0.3%	0.4%	0.3%	0.3%
Associate professionals	0.2%	0.1%	0.2%	0.6%	0.2%	0.3%
Administrative/clerical staff	0.7%	0.1%	0.6%	0.7%	0.4%	0.5%
Skilled trades occupations	0.6%	0.2%	0.4%	0.5%	0.3%	0.4%
Caring, leisure and other services staff	0.3%	0.7%	0.6%	0.6%	0.3%	0.3%
Sales and customer services staff	1.1%	1.1%	0.9%	0.8%	0.6%	0.9%
Machine operatives	0.3%	0.2%	0.6%	0.7%	0.2%	0.4%
Elementary staff	1.7%	0.6%	1.0%	1.4%	0.2%	0.9%
HIGH-SKILL	0.9%	0.7%	1.7%	1.4%	0.6%	1.0%
MIDDLE-SKILL	1.3%	0.3%	1.0%	1.2%	0.7%	0.9%
SERVICE-INTENSIVE	1.4%	1.9%	1.4%	1.4%	0.9%	1.3%
LABOUR-INTENSIVE	1.9%	0.8%	1.6%	2.1%	0.4%	1.3%

Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 3.18: REASONS FOR SKILLS GAPS – PERCENTAGE OF EMPLOYERS WITH SKILLS GAPS



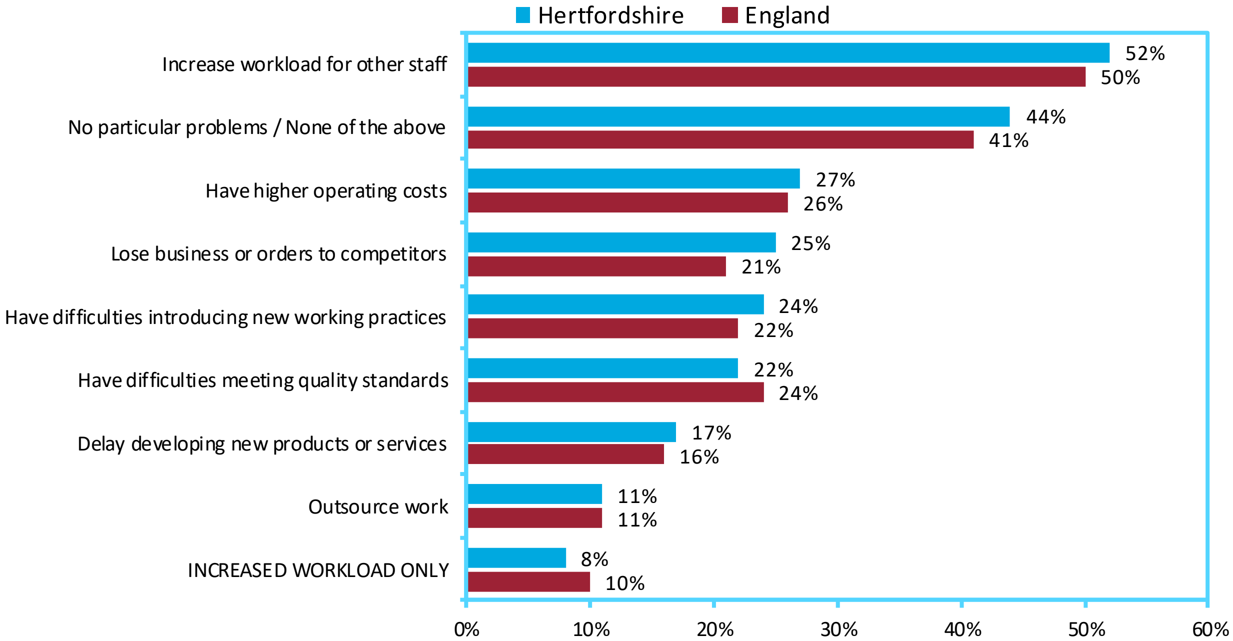
Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 3.19: DO SKILLS GAPS IMPACT ON HOW THE ESTABLISHMENT PERFORMS? % OF ALL ESTABLISHMENTS WITH SKILLS GAPS

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	Total
Yes - major impact	15%	25%	12%	16%	12%	17%
Yes - minor impact	45%	53%	45%	52%	60%	48%
No	40%	22%	43%	32%	28%	35%
ANY IMPACT	60%	78%	57%	68%	72%	65%

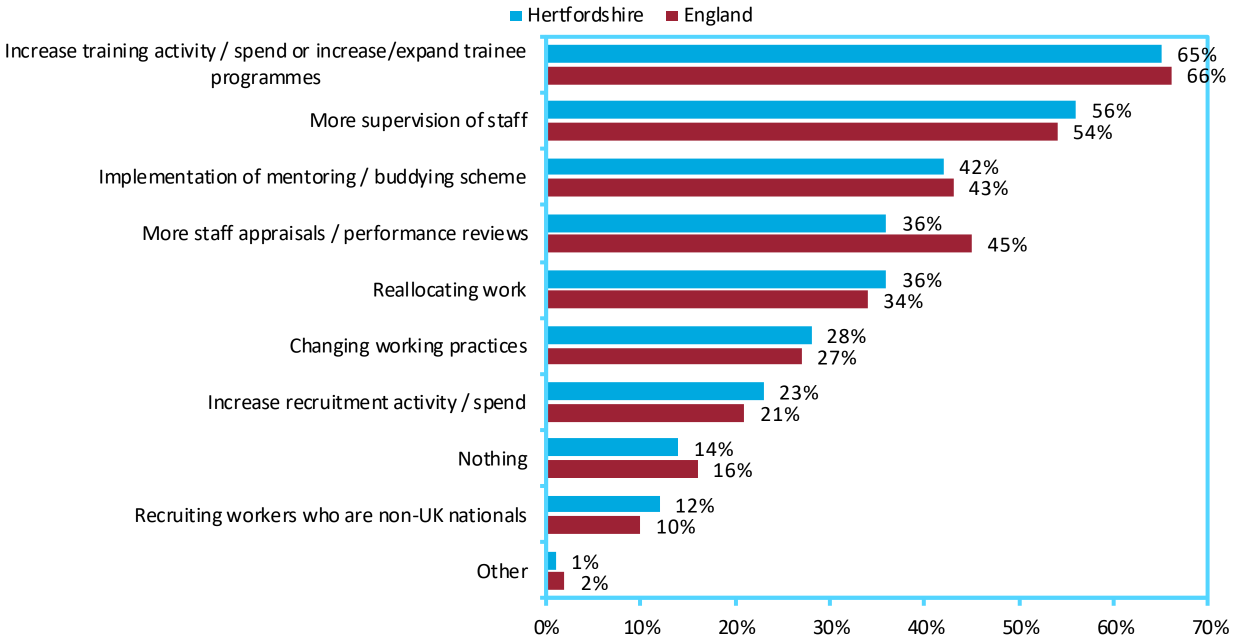
Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 3.20: IMPLICATIONS OF SKILLS GAPS



Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 3.21: ACTIONS TAKEN TO ADDRESS SKILLS GAPS – PERCENTAGE OF EMPLOYERS WITH SKILLS GAPS



Source: UK Employer Skills Survey 2017, Department for Education.

4. Education and Training

SUMMARY: EDUCATION AND TRAINING

Hertfordshire performs significantly better than the national average on school qualifications attainment

Hertfordshire's attainment at Key Stage 4 (Attainment 8 measures) exceeds the national average significantly but is slightly behind Slough, Buckinghamshire and Wokingham. Hertfordshire significantly out-performs Cambridgeshire and Peterborough.

Hertfordshire's level 3 qualifications attainment is significantly higher than the national average

68.0 per cent of 19-year olds attained level 3 qualifications in 2017 – well above the England average of 57.5 per cent. Hertfordshire is slightly outperformed by Slough, Buckinghamshire and Wokingham education authorities but performs much better than Cambridgeshire and Peterborough.

Commitment to staff training is similar in Hertfordshire to the national average, but below nearby LEP areas

In 2017, 66 per cent of establishments in Hertfordshire had a training plan or discrete training budget – the same as the England average (66 per cent). Buckinghamshire Thames Valley (72 per cent) and Thames Valley Berkshire (74 per cent) LEP areas had much higher rates than Hertfordshire and the national average.

In the same year, 70 per cent of establishments in Hertfordshire had funded or arranged training for staff over the past 12 months. This was higher than the England average (66 per cent), but lower than three out of the four comparator LEP areas.

Higher-skill occupations receive the highest incidence of training

In Hertfordshire in 2017, 62 per cent of Managers receiving training, followed by 32 per cent of Administrative/clerical staff and 22 per cent of Sales and customer service.

The main type of training funded or arranged were job specific training (82 per cent of establishments offering training), and basic induction training for new starts (62 per cent).

Online training, e-learning and self-learning are all prevalent forms of training

Online training, e-learning and self-learning are popular methods of training. 52 per cent of establishments providing training offered online training or e-learning, with 42 per cent offering other self-learning.

Under-employment affects about nine per cent of all staff employed in Hertfordshire

In 2017, 9.2 per cent of staff in all establishments in Hertfordshire were under-utilised, higher than the national average of 8.5 per cent, and other comparator LEP areas.

34 per cent of establishments in Hertfordshire stated that they had one or more staff that were under-utilised in terms of having more advanced qualifications and skills than required for their current job role.

SCHOOL QUALIFICATIONS

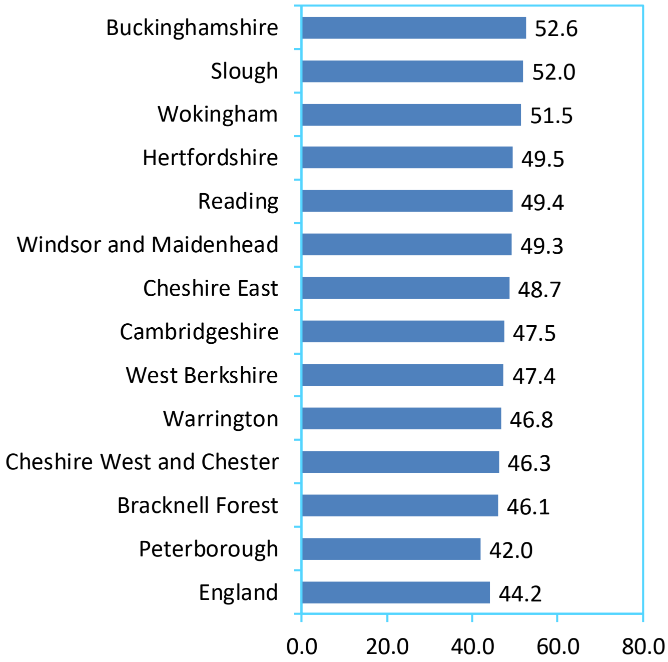
Hertfordshire performs significantly better than the national average on school qualifications attainment

Hertfordshire's attainment at Key Stage 4 (qualifications at age 16) exceeds the national average significantly (**Figure 4.1**) but is slightly behind Slough, Buckinghamshire and Wokingham. Hertfordshire significantly out-performs Cambridgeshire and Peterborough.

Attainment 8 measures the achievement of a pupil across 8 qualifications including mathematics (double weighted) and English (double weighted), 3 further qualifications that count in the English Baccalaureate (EBacc) measure and 3 further qualifications that can be GCSE qualifications (including EBacc subjects) or any other non-GCSE qualifications on the DfE approved list. Each individual grade a pupil achieves is assigned a point score, which is then used to calculate a pupil's Attainment 8 score. The points allocated according to grades the pupil achieves for all 8 subjects are added together to give the Attainment 8 score. English and maths point scores are double weighted to signify their importance.

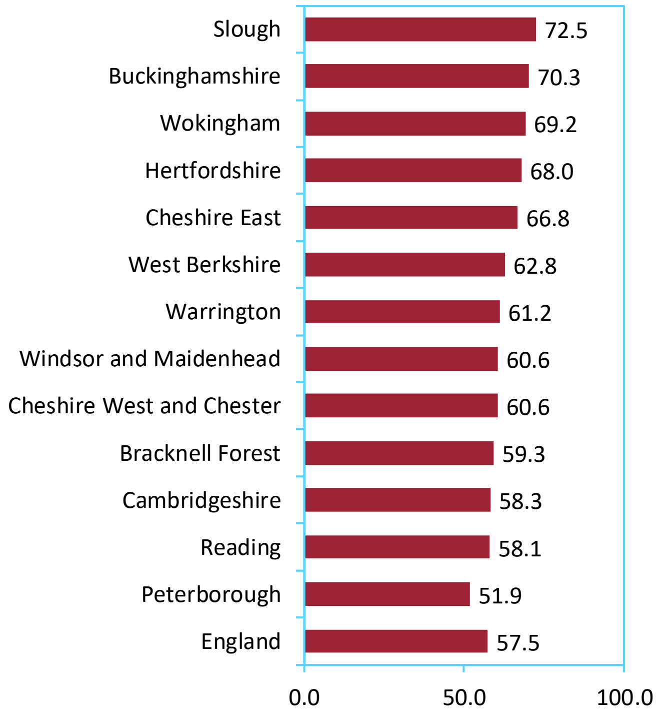
Hertfordshire performs similarly in terms of the percentage of 19-year olds qualified to Level 3, as demonstrated in **Figure 4.2**, where 68.0 per cent of 19-year olds attained level 3 qualifications in 2017 – well above the England average of 57.5 per cent. Again, Hertfordshire is slightly outperformed by Slough, Buckinghamshire and Wokingham education authorities but performs much better than Cambridgeshire and Peterborough.

FIGURE 4.1: ATTAINMENT 8 MEASURES FOR KEY STAGE 4 QUALIFICATIONS



Source: Department for Education.

FIGURE 4.2: PERCENTAGE OF 19-YEAR OLDS QUALIFIED TO LEVEL 3 IN 2017



Source: Department for Education. Source: Department for Education.

EMPLOYER TRAINING

Commitment to staff training is similar in hertfordshire to the national average, but below nearby lep areas

In 2017, 66 per cent of establishments in Hertfordshire had a training plan or discrete training budget – the same as the England average (66 per cent). Buckinghamshire Thames Valley (72 per cent) and Thames Valley Berkshire (74 per cent) LEP areas had much higher rates than Hertfordshire and the national average (**Figure 4.3**).

70 per cent of establishments in hertfordshire trained staff in 2017

In the same year, 70 per cent of establishments in Hertfordshire had funded or arranged training for staff over the past 12 months (**Figure 4.4**). This was higher than the England average (66 per cent), but lower than three out of the four comparator LEP areas.

When establishments who offered no training were asked for the reasons why (**Figure 4.5**), the majority (66 per cent) cited that all of their staff were fully proficient with no need for training. Only seven per cent cited that money was a barrier to training. Four per cent of non-training establishments cited the reason as no training available in the relevant subject area.

Higher-skill occupations receive the highest incidence of training

62 per cent of Managers receiving training, followed by 32 per cent of Administrative/clerical staff and 22 per cent of Sales and customer service (**Figure 4.6**).

The majority of training offered is job-specific

The main type of training funded or arranged were job specific training (82 per cent of establishments offering training), and basic induction training for new starts (62 per cent) – as detailed in **Figure 4.7**.

Online training, e-learning and self-learning are all prevalent forms of training

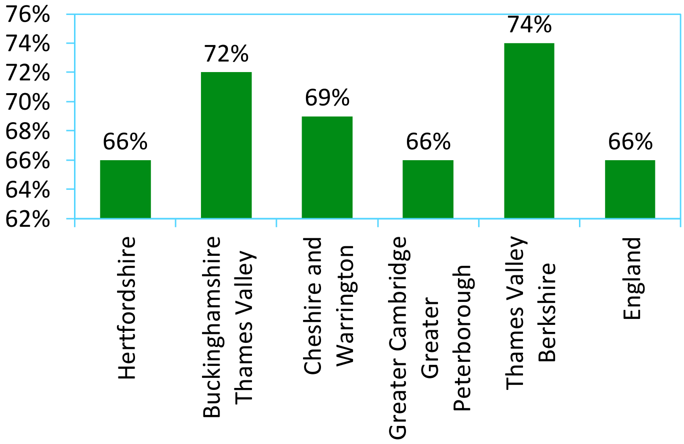
Online training, e-learning and self-learning are popular methods of training. 52 per cent of establishments providing training offered online training or e-learning, with 42 per cent offering other self-learning.

The average number of days training given was much lower than other competitor LEP areas in 2017

On aggregate, Hertfordshire's employers offered fewer average days of training per trainee or employee compared to nationally, or compared to other peer LEP areas. Hertfordshire's average training days per trainee were 6.12 compared to the national average of 6.41, and 8.53 in Buckinghamshire Thames Valley, and 7.05 in Thames Valley Berkshire.

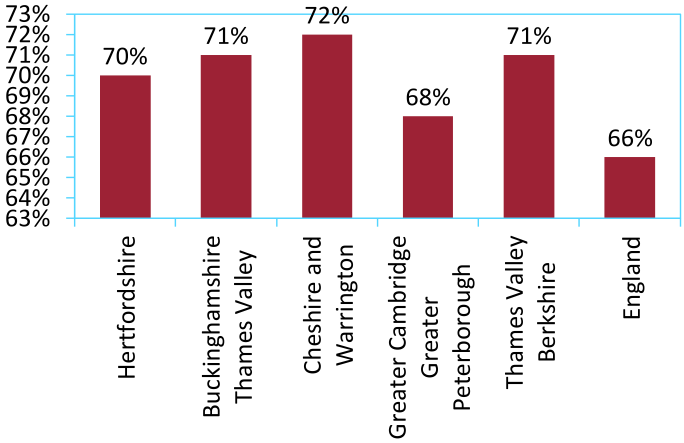
44 per cent of establishments providing training trained staff towards a nationally recognised qualification, compared to 46 per cent in England, 49 per cent in Greater Cambridge Greater Peterborough, and 46 per cent in Cheshire and Warrington.

FIGURE 4.3: SHARE OF ESTABLISHMENTS WITH A TRAINING PLAN OR BUDGET



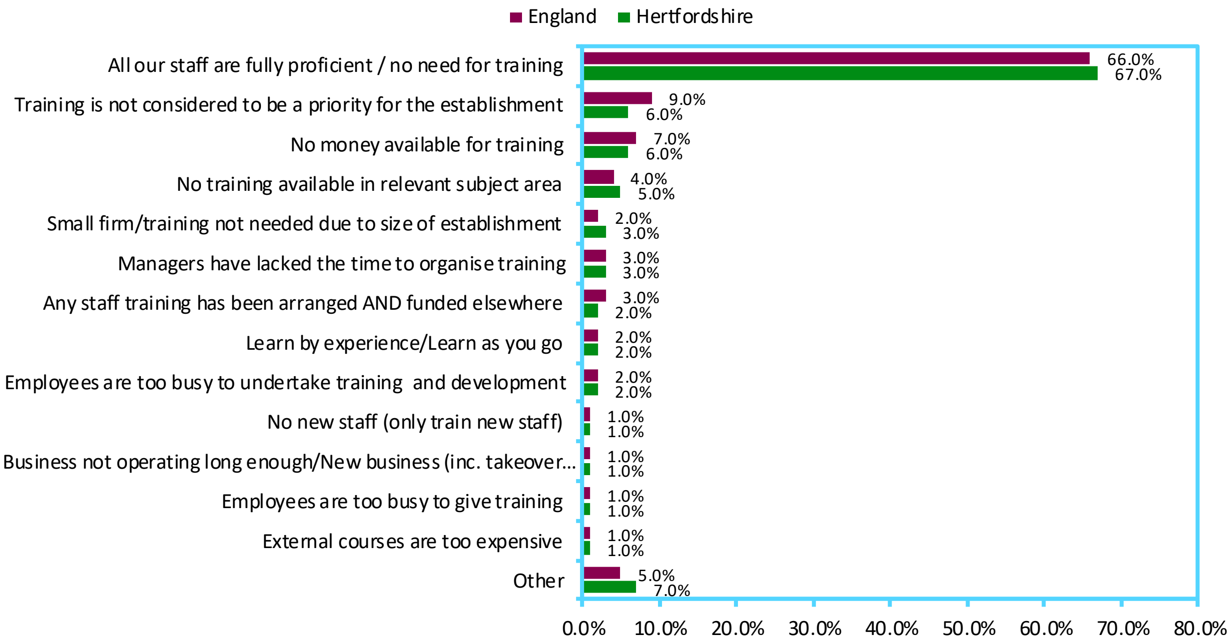
Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 4.4: SHARE OF ESTABLISHMENTS THAT UNDERTAKE ANY TRAINING



Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 4.5: REASONS FOR NOT PROVIDING TRAINING - % OF NON-TRAINERS (ESTABLISHMENTS)



Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 4.6: INCIDENCE OF TRAINING IN LAST 12 MONTHS BY OCCUPATION

	Hertfordshire	England
Managers	62%	63%
Professionals	14%	16%
Associate professionals	12%	11%
Administrative/clerical staff	32%	34%
Skilled trades occupations	16%	16%
Caring, leisure and other services staff	10%	11%
Sales and customer services staff	22%	21%
Machine operatives	7%	8%
Elementary staff	15%	17%
Other	2%	1%
Don't know	1%	1%
Arrange training for all categories of staff employed	50%	53%
Arrange training for some but not all categories of staff employed	50%	47%
HIGH-SKILL	70%	71%
MIDDLE-SKILL	44%	45%
SERVICE-INTENSIVE	32%	31%
LABOUR-INTENSIVE	19%	24%

Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 4.7: TYPES OF TRAINING FUNDED OR ARRANGED FOR EMPLOYEES

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	England
Basic induction training new staff receive when they start the job	62%	67%	64%	62%	62%	65%
More extensive induction training for new staff	36%	26%	35%	34%	33%	36%
Health and safety/first aid training	68%	61%	73%	75%	71%	74%
Job specific training	86%	87%	84%	86%	87%	83%
Supervisory training	32%	29%	32%	31%	35%	35%
Management training	32%	30%	35%	32%	37%	35%
Training in new technology	50%	45%	51%	48%	58%	47%
Personal Development Training*	2%	-	1%	2%	1%	1%
Any other types	-	-	-	1%	-	1%
None of these	1%	-	1%	-	-	1%
Don't know	-	0%	-	-	1%	-

Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 4.8: WHETHER ESTABLISHMENT HAS FUNDED OR ARRANGED ONLINE TRAINING OR E-LEARNING, OR OTHER SELF-LEARNING, OVER THE PAST 12 MONTHS - % OF ALL ESTABLISHMENTS PROVIDING TRAINING

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	England
Online training or e-learning	52%	61%	56%	52%	59%	52%
Other self-learning where the employee does the learning at a time of their own choosing	42%	46%	44%	42%	47%	43%
Neither	38%	29%	34%	39%	32%	36%
Don't know	1%	1%	1%	*%	1%	1%
ANY	61%	71%	65%	61%	66%	63%
BOTH	33%	37%	35%	33%	39%	32%

Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 4.9: AVERAGE NUMBER OF DAYS TRAINING PER TRAINEE

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	England
Share of establishments providing training – average number of days training:						
1 day or less	13%	11%	13%	13%	12%	14%
7-10 days	11%	12%	11%	12%	16%	12%
11+ days	13%	16%	14%	15%	14%	15%
11-20 days	7%	7%	6%	8%	7%	9%
Training days per trainee	6.12	8.53	5.75	7.01	7.05	6.41
Training days per staff	4.04	5.57	3.81	4.24	4.07	3.99

Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 4.10: WHETHER ANY STAFF TRAINED TOWARDS A NATIONALLY RECOGNISED QUALIFICATION IN PAST 12 MONTHS

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	England
All establishments providing training						
Yes	44%	42%	46%	49%	37%	46%
No	54%	57%	51%	49%	60%	52%
Don't know	2%	2%	2%	2%	3%	2%
All establishments						
Yes	31%	30%	33%	33%	26%	30%
No	68%	69%	65%	65%	72%	68%
Don't know	1%	1%	2%	2%	2%	2%

Source: UK Employer Skills Survey 2017, Department for Education.

UNDER-EMPLOYMENT

Under-employment affects about nine per cent of all staff employed in Hertfordshire

34 per cent of establishments in Hertfordshire stated that they had one or more staff that were under-utilised in terms of having more advanced qualifications and skills than required for their current job role. This is the same rate as the national average (**Figure 4.11**), below Buckinghamshire Thames Valley (40 per cent) and above Thames Valley Berkshire (28 per cent). 16 per cent of establishments in Hertfordshire had under-utilised staff that comprised 50 per cent or more of total employees, similar to the national average.

It is estimated from the 2017 Employer Skills Survey that 9.2 per cent of staff in all establishments are under-utilised, higher than the national average of 8.5 per cent, and other comparator LEP areas (**Figure 4.12**).

FIGURE 4.11: PROPORTION OF STAFF THAT ARE UNDER-UTILISED (I.E. THOSE THAT HAVE BOTH QUALIFICATIONS AND SKILLS THAT ARE MORE ADVANCED THAN REQUIRED FOR THEIR CURRENT JOB ROLE) – PERCENTAGE SHARE OF ESTABLISHMENTS

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	England
0%	57%	52%	57%	56%	59%	56%
5 - 9.99%	2%	3%	3%	3%	3%	2%
10 - 19.99%	5%	4%	4%	6%	4%	4%
20 - 29.99%	6%	5%	7%	7%	4%	6%
30 - 49.99%	6%	6%	5%	4%	5%	5%
50 - 99.99%	11%	13%	8%	9%	8%	9%
100%	5%	8%	5%	4%	4%	7%
Don't know	9%	8%	9%	9%	13%	9%
ANY UNDER-UTILISED STAFF	34%	40%	34%	35%	28%	34%

Source: UK Employer Skills Survey 2017, Department for Education.

FIGURE 4.12: PROFICIENCY OF WORKFORCE SUMMARY

	Hertfordshire	Buckinghamshire Thames Valley	Cheshire and Warrington	Greater Cambridge Greater Peterborough	Thames Valley Berkshire	England
Total not fully proficient	5.5%	3.6%	5.7%	6.2%	2.6%	4.3%
Total number of staff fully proficient	94.5%	96.4%	94.3%	93.8%	97.4%	95.7%
Total number of staff under-utilised	9.2%	8.0%	7.2%	7.3%	6.2%	8.5%

Source: UK Employer Skills Survey 2017, Department for Education.

Glossary of terms

ANNUAL POPULATION SURVEY

The Annual Population Survey (APS) is a combined statistical survey of households in Great Britain which is conducted quarterly by the Office for National Statistics (ONS). It combines results from the Labour Force Survey (LFS) and the English, Welsh and Scottish Labour Force Survey boosts which are funded by the Department for Education and Skills (DfES), the Department for Work and Pensions (DWP), the National Assembly for Wales and the Scottish Executive. The APS is mainly concerned with workforce and labour market characteristics of adults – including economic status, type of job undertaken, pay and remuneration, previous jobs, qualifications, area of work and residence, and other socio-economic characteristics.

AVERAGE

An average is a number or value used to indicate the "generally prevailing amount" or "the ordinary standard". For example – if we have 100 people who earn various amounts of money per week, we may want to gauge what is the typical amount of earnings or the earnings "norm". There are several common ways of calculating an average:

Mean: the sum of a series of individual cases, divided by the number of cases (also known as the arithmetic mean). For example, if we have 10 people who earn a total cumulative weekly wage of £4,000, then the mean weekly wage would be £4,000 divided by ten which equals £400. Calculating the average on this basis is useful, but can be problematic if there is a wide variation in values or there are a few values which are significantly different to the rest. For example, if 9 people earned £400 per week and one earned £4000 per week then the mean would be £760. However, we can calculate the standard deviation of values around the mean to indicate the range of values in the sample.

Median: the middle observation, for example if we have 21 people in employment and we want to calculate the average working hours per week, we would firstly rank everyone in order of lowest to highest total weekly working hours and then we would take the value of the 11th person in that rank as the median average weekly working hours. Conversely to the mean, the median ignores extreme values or outlier statistics, and gives no picture of the range of values.

Mode: the most frequently appearing number, for example if we have 50 people and we wanted to calculate the average modal age, if the most amount of people of one single age was four individuals of 30 years of age, then the mode would be 30. A drawback of using the modal average is that it can be difficult to measure if values are not round

BUSINESSES

In the local economic assessment this refers to any legal organisation which can pay either one or more of corporation tax, national insurance, or manages a payroll (PAYE). It can include public sector organisations as well as private sector and charities.

CENSUS

An official enquiry concerning the number and characteristics of the population of a given area. Censuses are usually carried out by official bodies, by means of questionnaires, reply to which is usually compulsory. In the UK, the principal Census is the Census of Population, undertaken every 10 years, last in 2011. It covers a wide range of demographic, educational and economic topics and provides accurate outputs even for small groups because – unlike many other surveys, which are conducted on a sample basis – every household is required to respond to the Census of Population.

CHURN RATE

The 'churn rate' refers to the sum of openings (or births) and closures (or deaths) of enterprises. It indicates how frequently new firms are created and how often existing enterprises close down. In fact, the number of openings and closures of enterprises accounts for a sizeable proportion of the total number of firms in most economies. The indicator reflects an area's degree of 'creative destruction', and it is of high interest for analysing, for example, the contribution of firm churning to aggregate productivity growth.

CLAIMANT COUNT, CLAIMANT COUNT RATE, CLAIMANT COUNT PROPORTION

The claimant count records the number of people claiming Jobseeker's Allowance (JSA) and National Insurance credits, at Jobcentre Plus (www.jobcentreplus.gov.uk) local offices. People claiming JSA must declare that they are out of work but capable of, available for, and actively seeking work during the week in which the claim is made. Claimant count data are provided by Jobcentre Plus. Jobseeker's Allowance (which replaced both Unemployment Benefit and unemployment-related Income Support in 1996) claimant figures are announced five weeks after the date to which they refer.

Claimant count rate: the number of claimants resident in an area expressed as a percentage of the sum of claimants and workforce jobs in the area. Published only at national or regional level.

Claimant count proportion: the number of claimants resident in an area as a percentage of the working-age population resident in that area. These rates are published for local areas.

The claimant count is not the same as the number unemployed: for more information on this topic, see unemployment.

CONSTANT PRICES

Constant prices are used to compare the value of outputs produced at different times. They are needed because a price rise that occurs over time does not reflect the true change in value of an item. For example, if a packet of biscuits cost 50 pence in 1991 and in 2001 cost £1, but the average wage increased by 50% during this period, then we could say that a packet of biscuits took up a higher proportion of someone's pay in 2001 than it did in 1991. That is, the real cost of a packet of biscuits rose, but not by 100% as we would think. Because wages rose by 50%, then to some extent extra pay offsets the higher price.

Overall, prices don't always indicate the relative values of items. This is especially true in eras of high inflation when both prices, incomes and money supply can increase.

Thus the Office for National Statistics may use constant 1995 prices to show the change in the total value of the UK economy, or in a particular sector, with the effects of price inflation removed for example. Therefore, if a sector is growing, its total output will be worth more now than in 1995, even if 1995 prices still applied. Such growth may be due to increased output, or to the production of better quality or higher value added output that would have commanded a premium in 1995, as well as at the current time.

DECILE

Another name for "one-tenth" or 10%. Statistical cases are sometimes divided into "deciles", e.g. to highlight the earnings of the best-paid 10% of workers or the least well paid.

DEMAND (IN LABOUR MARKET TERMS)

Demand is the quantity of a good or service that people wish to buy. Labour demand refers to the total number of workers or even working hours required by employers, and is usually measured by the number of jobs plus vacancies. Demand is influenced by the customer's (employer's) purchasing power, the price of the good or service (the wages and other costs of employing someone) and the availability of alternatives (e.g. machines). "Effective demand" is the desire to purchase a good or service backed by the actual means to do so.

DEMOGRAPHY/DEMOGRAPHICS

Demography refers to the scientific discipline that deals with aspects of population – including change, births, deaths, and migration. It often involves making projections of future populations levels and structural compositions. When we talk about the demographics of an area we are usually referring to the nature of the population there in terms of age structure, gender, fertility, birth rates and so on.

DEPRIVATION

Deprivation is a term which, from a dictionary definition literally means "dispossessed". In social and economic development, the term is also often used in the sense of "having little", usually relative to others, not just in comparison to an individual's previous (less deprived) state. Deprivation is a term often used in connection with concerns that a proportion of the population have a significantly lower standard and quality of life compared to the average. However, the exact definition of who is deprived and how to measure this varies amongst different commentators, agencies and governments.

EARNINGS

A measure of gross remuneration people receive in return for work done. It includes salaries and bonuses but does not include non-monetary perks such as benefits in kind. This differs from income, which is the amount of money received from all sources, e.g. interest from building society and bank accounts, dividends from shares, benefit receipts, trust funds, etc.

ECONOMIC ACTIVITY, ECONOMIC ACTIVITY RATE

Economically active people are those adults who are actively engaged in the economy and are in, or are seeking work. In strict terms we include people of working age who are either in employment, or are unemployed but actively seeking work and are available for work. The activity rate is the proportion of a population engaged in economic activity. It is conventionally measured by dividing the labour force by the population of working age. Activity rates can also be calculated for specific groups such as males or females or for age groups.

ECONOMIC INACTIVITY, ECONOMIC INACTIVITY RATE

Economically inactive people are those adults who are not actively engaged in the economy – they are not employed nor are seeking work. In strict terms, the economically inactive includes those not in employment, not classified as unemployed (by the ILO measure), or not either actively seeking work or available for work. The economic inactivity rate is the number of economically inactive people as a percentage of the total population aged 16 and over – however, official measures sometimes calculate the rate for the working age population only. It can be calculated for any population group.

EMPLOYMENT – MEASUREMENT OF

There are several definitions, methods and sources used to measure employment in the UK – all of which are used throughout this report.

Workforce jobs is a quarterly measure of jobs in the UK, and is the preferred source of statistics when comparing changes in employment over time. A variety of outputs are produced, including industry, region, gender and full or part time status. The number of jobs measured are the sum of employee jobs, self-employment jobs, government supported trainees and Her Majesty's Forces. measures the number of jobs in the UK. Workforce jobs are estimated using an employer's survey (sample size of 83,400), the quarterly public sector employment survey (QPSES has 1,500 contributors) and the Annual Population Survey (50,000 households). Estimates are seasonally adjusted, and time series data are available from 1959.

Employee jobs: An employee is defined as anyone aged 16 years or over that is paid directly from the payroll, in return for carrying out a full-time or part-time job or being on a training scheme. Employment includes employees plus the number of working owners who receive drawings or a share of the profits. Full-time is defined as working more than 30 hours per week with part-time defined as working 30 hours or less per week. Employee job numbers are estimated from the Business Register and Employment Survey (BRES), conducted annually. BRES is the primary source for employee estimates at a detailed regional and industrial level. Employee jobs do not include government supported trainees and Her Majesty's Forces. Employee jobs are allocated to the area in which the businesses completing the survey questionnaire say the employee works.

Workplace jobs: refers to the count of employment by the location of the jobs in the workplace.

Resident jobs: refers to the count of residents in an area, who have jobs – they may work outside the area of concern.

The concept of employment (measured by the APS as the number of people working at least one hour during the survey reference week) differs from the concept of jobs, since a person can have more than one job, and some jobs may be shared by more than one person.

There are two ways of looking at employment: the number of people in employment or the number of jobs. These two concepts represent different things, as one person can have more than one job. People aged 16 or over are classed as employed by the Annual Population Survey, if they have done at least one hour of work in the reference week surveyed or are temporarily away from a job (e.g. on holiday). Employed people can be classified into one of four categories: employees, self-employed, unpaid family worker (doing unpaid work for a family-run business) or participating in a government supported training programme. Employment rates can be presented for any population group as the proportion of that group who are in employment. The main presentation of employment rates is the proportion of the population of working age (16-59 for females and 16-64 for males) who are in employment.

ESTABLISHMENTS

This usually means business units, and includes multiple counts of multiple units of the same business – e.g. branches or offices. Establishments are the unit of employers often used in the National Employer Skills Survey conducted by the UK Commission for Employment and Skills.

FORECASTING

Forecasting is concerned with production of estimates of future events. They can be based on the output of econometric models, based on previous performance and patterns, assumed to be a guide to the future, or they can be based on individuals' (e.g. employers, analysts) views on what is likely to happen. Forecasts should always be used with care, increasingly so as they become more detailed or localised, or try to look further into the future. It is never possible to predict the future with absolute certainty: there are many uncertainties, as well as gaps in our knowledge and understanding of past and present performance as a guide to future events. Sudden shocks or changes are also by their nature unpredictable.

FULL TIME (FT)

In employment terms, this usually refers to a job requiring more than 30 paid hours per week. In some surveys – such as the Annual Population Survey – respondent are allowed to decide whether they consider themselves to be full-or-part-time.

GROSS DOMESTIC PRODUCT (GDP)

Gross Domestic Product (GDP) is one of the most important measures of economic activity, in simple terms the value of all output in an area. "Gross" indicates that it does not account for any capital consumption (e.g. on-going wear and tear), whilst "domestic" means that it includes all activity in the area, regardless of ownership (overseas owned firms may repatriate profits, whilst domestic firms' overseas earnings are not counted). A monetary value is usually applied to GDP, and it is often divided by the total population – GDP per capita – to provide a more meaningful measure of wealth.

GROSS VALUE ADDED (GVA)

Gross Value Added (GVA) is an estimate of the value of the economic output of a local area, region or nation. Gross Value Added (GVA) per head or per capita is an estimation of the value of economic output produced per resident, and is a useful method of comparing economic performance between local areas. GVA is one of three methods available to estimate the economic output or Gross Domestic Product (GDP) of an area.

Although available to relatively local levels, care must be exercised in using GVA as a local indicator of wealth. GVA creation is concentrated where high value creating employment is prevalent. Thus cities and areas of high value manufacturing tend to have high GVA per head, partly due to the value of the goods and services produced but also because they tend to be where net in-commuting is found. This means that although wealth is created in one place, it may be created by in-commuters. Conversely, suburban or net out-commuting areas may have low GDP per head since data is calculated on a workplace, rather than a residence basis. Where larger areas are used (thus in-and-out commuting is minimised), GVA is a more valid indicator with which to compare areas. Calculating on a per job basis reduces some of these problems.

GROSS VALUE ADDED PER HEAD / PER WORKER / PER HOUR WORKED

Gross Value Added per head measures the value of GVA per resident in the particularly country, region or locality. GVA Per worker measures GVA per working age adult, aged 16-64. GVA per hour worked is GVA divided by total hours worked by all workers in the area – and is often used as a measure of productivity.

HIGH AND MEDIUM TECHNOLOGY MANUFACTURING

High and Medium Technology Definitions

This report uses the standard OECD definitions and applies them to 3 digit SIC classifications as follows:

201 : Manufacture of basic chemicals, fertilisers and nitrogen compounds, plastics and synthetic rubber in primary forms
202 : Manufacture of pesticides and other agrochemical products
203 : Manufacture of paints, varnishes and similar coatings, printing ink and mastics
204 : Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
205 : Manufacture of other chemical products
206 : Manufacture of man-made fibres
211 : Manufacture of basic pharmaceutical products
212 : Manufacture of pharmaceutical preparations
261 : Manufacture of electronic components and boards
262 : Manufacture of computers and peripheral equipment
263 : Manufacture of communication equipment
264 : Manufacture of consumer electronics
265 : Manufacture of instruments and appliances for measuring, testing and navigation; watches and clocks
266 : Manufacture of irradiation, electromedical and electrotherapeutic equipment
267 : Manufacture of optical instruments and photographic equipment
268 : Manufacture of magnetic and optical media
271 : Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus
272 : Manufacture of batteries and accumulators
273 : Manufacture of wiring and wiring devices
274 : Manufacture of electric lighting equipment
275 : Manufacture of domestic appliances
279 : Manufacture of other electrical equipment
281 : Manufacture of general purpose machinery
282 : Manufacture of other general-purpose machinery
283 : Manufacture of agricultural and forestry machinery
284 : Manufacture of metal forming machinery and machine tools
289 : Manufacture of other special-purpose machinery
291 : Manufacture of motor vehicles
292 : Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semitrailers
293 : Manufacture of parts and accessories for motor vehicles
302 : Manufacture of railway locomotives and rolling stock
303 : Manufacture of air and spacecraft and related machinery
304 : Manufacture of military fighting vehicles
309 : Manufacture of transport equipment n.e.c.
331 : Repair of fabricated metal products, machinery and equipment
332 : Installation of industrial machinery and equipment

HIGHLY-SKILLED JOBS

Highly skilled jobs are categorised as the Standard Occupational Categories of Level 4: 11 Corporate managers, 11 Corporate managers and directors, 21 Science and technology professionals, 21 Science, research, engineering and technology professionals 22 Health professionals 22 Health professionals 23 Teaching and research professionals, 23 Teaching and educational professionals, 24 Business and public service professionals, 24 Business, media and public service professionals; Level 3: 12 Managers and proprietors in agriculture services, 12 Other managers and proprietors, 31 Science and technology associate professionals, 31 Science, engineering and technology associate professionals, 32 Health and social welfare associate professionals, 32 Health and social care associate professionals, 33 Protective service occupations, 33 Protective service occupations, 34 Culture, media and sports occupations, 34

Culture, media and sports occupations, 35 Business and public service associate professionals, 35 Business and public service associate professionals, 51 Skilled agricultural trades, 51 Skilled agricultural and related trades, 52 Skilled metal and electrical trades, 52 Skilled metal, electrical and electronic trades, 53 Skilled construction and building trades, 53 Skilled construction and building trades, 54 Textiles, printing and other skilled trades, 54 Textiles, printing and other skilled trades.

INNOVATION

Innovation is the successful exploitation of new ideas. Innovation plays a critical role in economic development and growth. Innovation can create new markets, provide new or adapted goods and services and lead to new organisational forms and processes. Innovation can help build market leadership and can improve efficiency and productivity. Many firms adopt innovations rather than create them, yet still realise the advantages in terms of productivity and competitive advantage.

KNOWLEDGE WORK AND KNOWLEDGE WORKERS

Knowledge-intensive work can be most easily thought of as activities which depend on the use of the high-level, 'tacit' knowledge that resides in people's minds. This tacit knowledge takes the form of expertise and/or experience, rather than being written down (or codified) in manuals, guides, lists and procedures. Examples of knowledge-intensive tasks include bespoke statistical analysis, system maintenance, graphic design or software design (sourced from The Work Foundation).

Knowledge economy industry definitions

This report uses the standard OECD definitions and applies them to 3 digit SIC classifications as follows:

181 : Printing and service activities related to printing
182 : Reproduction of recorded media
262 : Manufacture of computers and peripheral equipment
263 : Manufacture of communication equipment
581 : Publishing of books, periodicals and other publishing activities
582 : Software publishing
591 : Motion picture, video and television programme activities
601 : Radio broadcasting
602 : Television programming and broadcasting activities
611 : Wired telecommunications activities
612 : Wireless telecommunications activities
613 : Satellite telecommunications activities
619 : Other telecommunications activities
620 : Computer programming, consultancy and related activities
631 : Data processing, hosting and related activities; web portals
639 : Other information service activities
641 : Monetary intermediation
642 : Activities of holding companies
643 : Trusts, funds and similar financial entities
649 : Other financial service activities, except insurance and pension funding
651 : Insurance
652 : Reinsurance
653 : Pension funding
661 : Activities auxiliary to financial services, except insurance and pension funding
662 : Activities auxiliary to insurance and pension funding
663 : Fund management activities
691 : Legal activities
692 : Accounting, bookkeeping and auditing activities; tax consultancy
701 : Activities of head offices
702 : Management consultancy activities
711 : Architectural and engineering activities and related technical consultancy

712 : Technical testing and analysis
721 : Research and experimental development on natural sciences and engineering
722 : Research and experimental development on social sciences and humanities
731 : Advertising
732 : Market research and public opinion polling
741 : Specialised design activities
742 : Photographic activities
743 : Translation and interpretation activities
749 : Other professional, scientific and technical activities n.e.c.
821 : Office administrative and support activities
822 : Activities of call centres
823 : Organisation of conventions and trade shows
829 : Business support service activities n.e.c.
854 : Higher education
910 : Libraries, archives, museums and other cultural activities

EMPLOYEE JOBS (FROM THE BUSINESS REGISTER AND EMPLOYMENT SURVEY)

An employee is defined as anyone aged 16 years or over that is paid directly from the payroll, in return for carrying out a full-time or part-time job or being on a training scheme. Employment includes employees plus the number of working owners who receive drawings or a share of the profits. This measure (from the Business Register Employment Survey) does not include estimates for self-employee jobs, HM Forces, Government sponsored trainee jobs and unpaid family workers

EMPLOYMENT QUOTIENT

The Employment Quotient Technique is the most commonly utilized economic base analysis method. Simply stated, the employment quotient method compares Local Employment to National Employment. The employment quotient technique is based upon a calculated ratio between the local economy and the economy of some reference unit. This ratio, called an industry "employment quotient" gives this technique its name.

For example if 2 per cent of local employment is in computer manufacturing, and 1 per cent of national employment is in computer manufacturing, then the Location Quotient (with reference to national) is 2. Locally, this sector is twice as important in employment terms than nationally.

EQ < 1.0 = All Employment is Non-Basic
A EQ that is less than zero suggests that local employment is less than was expected for a given industry. Therefore, that industry is not even meeting local demand for a given good or service. Therefore all of this employment is considered non-basic by definition.

A EQ = 1.0 = All Employment is Non-Basic
A EQ that is equal to zero suggests that the local employment is exactly sufficient to meet the local demand for a given good or service. Therefore, all of this employment is also considered non-basic because none of these goods or services are exported to non-local areas.

A EQ > 1.0 = Some Employment is Basic
A EQ that is greater than zero provides evidence of basic employment for a given industry. When an LQ > 1.0, the analyst concludes that local employment is greater than expected and it is therefore assumed that this "extra" employment is basic. These extra jobs then must export their goods and services to non-local areas which, by definition, makes them Basic sector employment.

HARD-TO-FILL VACANCY

This is a vacancy that an employer struggles to fill. There may be a number of reasons relating to both supply (e.g. availability of labour, availability of skills) to demand (e.g. wage offered, location of employer).

NOMINAL / UNADJUSTED

This means that no account has been taken for inflation. For example, real growth takes into account inflation – e.g. if the monetary value of production has increased by 5 per cent between 2010 and 2011; then we would factor in inflation, at say, 3 per cent – which would reveal real growth of 2 per cent. In reality, price inflation varies according to types of goods and services; and also local cost. It is very complicated to calculate real rates of economic growth at a local level because there are too many factors to consider and too little data – therefore nominal growth tends to be reported.

NUTS (NOMENCLATURE OF TERRITORIAL UNITS FOR STATISTICS)

NUTS (Nomenclature of territorial units for statistics) areas aim to provide a single and coherent territorial breakdown for the compilation of EU regional statistics. The current version of NUTS (2008) subdivides the territory of the European Union and its 28 Member States into 98 NUTS 1 regions, 272 NUTS 2 regions and 1315 NUTS 3 regions. NUTS 2 regions generally consist of traditional county-based geographies and metropolitan counties. NUTS 3 regions generally consist of large districts, boroughs or unitary authorities; or groupings of smaller authorities.

http://www.ons.gov.uk/ons/guide-method/geography/beginner-s-guide/eurostat/relationship-of-nuts-to-uk-administrative-geographies.html

PATENTS

A patent is a form of intellectual property. It consists of a set of exclusive rights granted by a sovereign state to an inventor or their assignee for a limited period of time in exchange for the public disclosure of an invention. For a patent application to be granted, it must be capable of being made or used in some kind of industry. Therefore rates of patenting are a good measure of the levels of innovation in local areas. Patents tend to be taken out for scientific, engineering, physical and process technologies and software. They are much less likely to be taken out for business models and creative design. There is also a number of other legal mechanisms to protect intellectual property, such as trademarks, designs and university licences. Therefore, it is often the case that local areas with a high level of employment and activity in engineering, manufacturing, technology, life sciences and software tend to have higher rates of patenting, but that patent data will not always reflect innovation in services, business models and creative industries.

PER CAPITA

This means a value that is calculated per resident.

PUBLIC-SECTOR EMPLOYMENT

Public-sector employment as defined here encompasses employment in central government (including HM Forces, courts and the NHS), local government (including police forces, schools) and public corporations (including Royal Mail, London Underground Ltd, Royal Bank of Scotland and Lloyds Banking Group). Public-sector employment does not include university employees or employees of private-sector companies providing contracted out services to the public sector.

QUALIFICATIONS

Qualifications are endowments or achievements (often formally certified) that demonstrate an individual's competence and proficiency in a specified area of activity. Vocational Qualification Levels or VQs refer to a categorisation of broad levels of qualification equivalency as follows:

NVQ Level 1 = foundation GNVQ, three to four GCSEs at grades D–E, Business & Technology Education Council (BTEC) first certificate

NVQ Level 2 = five GCSEs at grades A*–C, BTEC first diploma

NVQ Level 3 = two or more A levels, BTEC Ordinary National Diploma (OND), City & Guilds Advanced Craft

NVQ Level 4 = Degree and sub–degree qualifications, including honours and ordinary degrees, BTEC Higher National Certificate (HNC) or Higher National Diploma (HND), or City & Guilds Full Technological Certificate / Diploma

NVQ Level 5 = Higher degree (postgraduate degree or doctorate).

NVQ Level 4+ is often used as a category to denote the attainment of graduate or postgraduate degree level qualifications or their equivalent

Trade Apprenticeship refers to a traditional form of apprenticeship undertaken before formal accreditation was instituted.

Other qualifications refer to qualifications which cannot be made equivalent to full NVQ levels or have not been accredited (e.g. may have been gained as part-units of courses or overseas)

RECESSION

A recession is a period of time when the value of economic output of a nation or area declines. An official recession is when economic output declines for two or more quarters (a quarter is a three month period) in a row.

RESIDENTS / RESIDENT - BASED

This refers to a calculation being made on the basis of area of residence. E.g. in the case of resident average earnings – it calculates the average earnings of residents living at an address within the specified area.

SELF-CONTAINMENT

Supply-side self-containment refers to the share of an area's residents that work in the same area as they live. In 2011, there were 568,700 residents in Hertfordshire who worked. Out of these, 325,900 or 57.3 per cent of working residents worked in Hertfordshire. The supply-side self-containment rate was therefor 57.3 per cent.

Demand-side self-containment refers to the share of an area's jobs that are undertaken by local residents. In 2011, there were 460,000 people working in Hertfordshire. 325,900 or 70.9 per cent of these were Hertfordshire residents both living and working in Hertfordshire. The Demand-side self-containment rate is therefore 70.9 per cent. 134,100 or 29.1 per cent of these were resident in areas outside of Hertfordshire and commuted into the county to work.

SKILLS

Skill(s) is a broad concept that covers the wide range of aptitudes and abilities that are necessary to make a worker competent to undertake their job. Skills can be obtained through a formal course of study leading to qualifications, work experience or simply be a function of personal characteristics. In the UK government's Standard Occupational Classification, they define the concept of skill in two ways: 1) skill level - the complexity of the tasks and duties to be performed; and 2) skill specialisation – the field of knowledge required for competent, thorough and efficient conduct of the tasks. Skills can be difficult to measure – qualifications are sometimes used to indicate types and levels of skill, but the two concepts are not the same. An individual can have a skill without it being represented by a qualification. Some skills are hard to accredit to qualifications, especially personal characteristics or attributes.

SKILL DEFICIENCIES

Skill shortages and skill gaps are both examples of skill deficiencies.

SKILL GAPS

A skill gap exists when an employer thinks a worker doesn't have enough skills to perform their job with full proficiency. Skill gaps apply to existing employees.

SKILLS SHORTAGE

A skill shortage vacancy is a specific type of hard-to-fill vacancy that occurs when an employer can't find applicants with the skills, qualifications or experience to do the job.

Skill shortages occur when an employer is having difficulty recruiting new staff.

Vacancies can also be hard-to-fill because of a lack of applicants, or because the applicants are considered by employers to lack the appropriate motivation or attitude. These are not skill shortages.

UNEMPLOYMENT

Unemployment, as officially classified in the UK and consistent with the internationally-agreed International Labour Organisation, is where anyone aged 16 years and over is without a job, wants a job, has actively sought work in the last four weeks and is available to start work in the next two weeks, or is out of work, has found a job and is waiting to start it in the next two weeks. The unemployment rate is the share of economically-active adults (those in work or actively seeking work) that are unemployed.

Claimant unemployed refers to individuals claiming Jobseekers Allowance and National Insurance Credits. These benefits are paid to those who are registered as unemployed at a Job Centre and are actively seeking work. Claimants must be capable of work; available for work; actively seeking work; under statutory retirement age; and not working, or working on average less than 16 hours a week. Not everyone who is unemployed claims these benefits.

WORKFORCE JOBS

Workforce jobs are the sum of jobs including those supported by employers, self-employment, government-supported trainees, and Her Majesty's Forces. Statistics on workforce jobs can be accessed from the Jobs Density data series or Workforce Jobs series from the Office for National Statistics.

WORKPLACE / WORKPLACE - BASED

This refers to a calculation being made on the basis of area of work. E.g. in the case of workplace-based average earnings – it calculates the average earnings of workers working at an address within the specified area.

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