

# InformGloucestershire

## **The Economy of Gloucestershire**

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## 1. Key Statistics

Indicator	Gloucestershire figure	Source
Total Population	617,162	Mid 2015 Population Estimates, ONS
16-64 year old population	380,385	Mid 2015 Population Estimates, ONS
Economic activity rate (16-64 year olds)	83.5%	Annual Population Survey, April 2015 – March 2016, ONS
Employment rate (16-64 year olds)	79.9%	Annual Population Survey, April 2015 – March 2016, ONS
Claimant count rate (16-64 year olds)	1.1%	Claimant Count, July 2016, ONS
Total Jobs	336,000	Job Density, 2014, ONS
Total enterprises	28,295	UK Business Counts, 2016, ONS
Total GVA	£15.97 billion	Regional Gross Value Added (Income Approach), 2015, ONS

## 2. Executive Summary

Gloucestershire has a prosperous and resilient economy set within a highly attractive natural environment, which offers a high standard of living for local residents. The county is predominantly rural with two urban centres that serve as the main business and commercial heartland. The urban settlements are complemented by vibrant market towns that act as valuable employment hubs and key providers of services. The development of the county has been strongly influenced by connectivity to the Midlands and South West via the M5 corridor and to London and the South East via the M4 corridor.

The total output of the Gloucestershire economy was approximately £15.97 billion in 2015, representing 13% of the value of output in the South West and 1% of the UK economy<sup>1</sup>. According to latest figures, GVA per head in

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<sup>1</sup> Regional Gross Value Added (Income Approach), 1997 to 2015, ONS  
<http://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regionalgrossvalueaddedincomeapproach>

Gloucestershire was £25,872, which was above the South West (£23,031) and UK average (£25,601)<sup>2</sup>.

The health of the Gloucestershire labour market which deteriorated after the recession in line with national trends has recovered gradually to a position of strength. The employment rate (the proportion of residents aged from 16 to 64 who were in work) stood at 75.6% during the peak of the recession (April 2009-March 2010) and has recovered to 79.9% during the period April 2015 to March 2016, which is well above the national average of 73.7%<sup>3</sup>. The corresponding unemployment rates have consequently reduced. Although worklessness may be less of a challenge than previously and in other parts of the country there are however, still issues in the county particularly in relation to youth unemployment and long term unemployment.

Gloucestershire has a better qualified population than the country as a whole. This is reflected in the county's occupation structure, with a greater proportion of professional occupations than at the regional and national level. Attrition rates are notably low with 83% of residents in Gloucestershire also working in the county<sup>4</sup>.

There are around 28,295<sup>5</sup> businesses in the county supporting a well-qualified and highly skilled employed workforce of approximately 289,400 people<sup>6 7</sup>.

Both manufacturing and health are significant sectors in terms of employment. Other major sectors include public administration and defence (e.g GCHQ), education, construction and retail<sup>8</sup>. Employment growth is predicted in the health, business administration and support services, construction, accommodation and food services and the mining, quarrying and utilities sector<sup>9</sup>.

There is a positive entrepreneurial culture in Gloucestershire, and businesses starting up have very high survival rates. The county also ranks highly in terms of self employment.

The characteristics of the job vacancies advertised reflect the demand across a range sectors indicating a healthy balance across industrial activities in the county.

The Strategic Economic Plan sets out ambitious plans to accelerate economic growth by focusing on key drivers of productivity and supporting growth in high value sectors. They include the nuclear-based power generation industry, high tech manufacturing particularly relating to aerospace and precision engineering and medical instruments and knowledge intensive services including the finance and insurance sectors; the ICT sector (particularly digital media) and businesses in professional, scientific and technical activities. While these sectors provide a focus, Gloucestershire will also offer a supportive environment for all businesses to move up the value chain regardless of which sector they are in. For example,

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<sup>2</sup> *Ibid.*

<sup>3</sup> Annual Population Survey, April 2015-March 2016, ONS <https://www.nomisweb.co.uk>.

<sup>4</sup> 2011 Census, ONS <https://www.nomisweb.co.uk>

<sup>5</sup> UK Business Counts – Enterprises, 2016, ONS <https://www.nomisweb.co.uk>.

<sup>6</sup> Business Register and Employment Survey, 2015, ONS <https://www.nomisweb.co.uk>

<sup>7</sup> This includes employees plus working owners, it is a workplace based measure meaning it captures those that work in the county, rather than those who live in Gloucestershire.

<sup>8</sup> Business Register and Employment Survey, 2015, ONS <https://www.nomisweb.co.uk>

<sup>9</sup> LEFM

there are opportunities for productivity growth in agriculture through agri-tech which has been identified by government as one of 'eight great technologies' needed to address the increasing demand for more efficient food production and land management<sup>10</sup>.

Maintaining economic growth in light of global and local issues such as the ageing workforce, retention of young qualified people, skill shortages in certain sectors and matching of skill supply and demand within a highly influential global activity will present many challenges and opportunities to the future economy of Gloucestershire.

### 3. Global economic setting<sup>11</sup>

The global outlook for 2016/17 has worsened, with projections suggesting growth will slow to 3.1% in 2016 before recovering to 3.4% in 2017. This reflects a more subdued outlook for advanced economies following the June UK vote in favor of leaving the European Union (Brexit) and weaker-than-expected growth in the United States.

These developments have put further downward pressure on global interest rates. Although the initial market reaction to the Brexit shock was limited, the ultimate impact remains very unclear, as the fate of institutional and trade arrangements between the United Kingdom and the European Union is uncertain.

### 4. Labour Supply

A labour supply comprises people who are employed, as well as those people defined as unemployed or economically inactive, who can be considered as a potential labour supply. The labour supply can be influenced by various factors including, availability and accessibility of jobs, rates of pay and the national social security system.

Key indicators of labour supply include economic activity rates and unemployment.

Figure 1 shows that in 2015 Gloucestershire had an estimated population of 617,162 people, of which 380,385 (61.6%) were aged 16-64 years old. Of the 16-64 year old population, 300,500 (79.9%) were employed<sup>12</sup> – a higher proportion than nationally. A further 13,800 (3.7%) were unemployed<sup>13</sup>, and 61,900 (16.5%) were classed as non-working, or economically inactive<sup>14</sup>. The majority of those who are economically inactive do not want a job.

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<sup>10</sup> GFirst Strategic Economic Plan, <http://www.gfirstlep.com/Our-Priorities/Our-Vision/>

<sup>11</sup> World Economic Outlook, October 2016 <http://www.imf.org/external/pubs/ft/weo/2016/02/>

<sup>12</sup> This is a resident based figure and differs from the 289,400 quoted in section 4.3 of the report which is a workplace based figure.

<sup>13</sup> The unemployment rate is based on the ILO definition of unemployment (wanting a job, seeking in the last four weeks and available to start in the next two), which is higher than the claimant count measure cited in the rest of this report.

<sup>14</sup> These are people who are not in work, but who do not satisfy all the criteria for ILO unemployment), such as those in retirement and those who are not actively seeking work

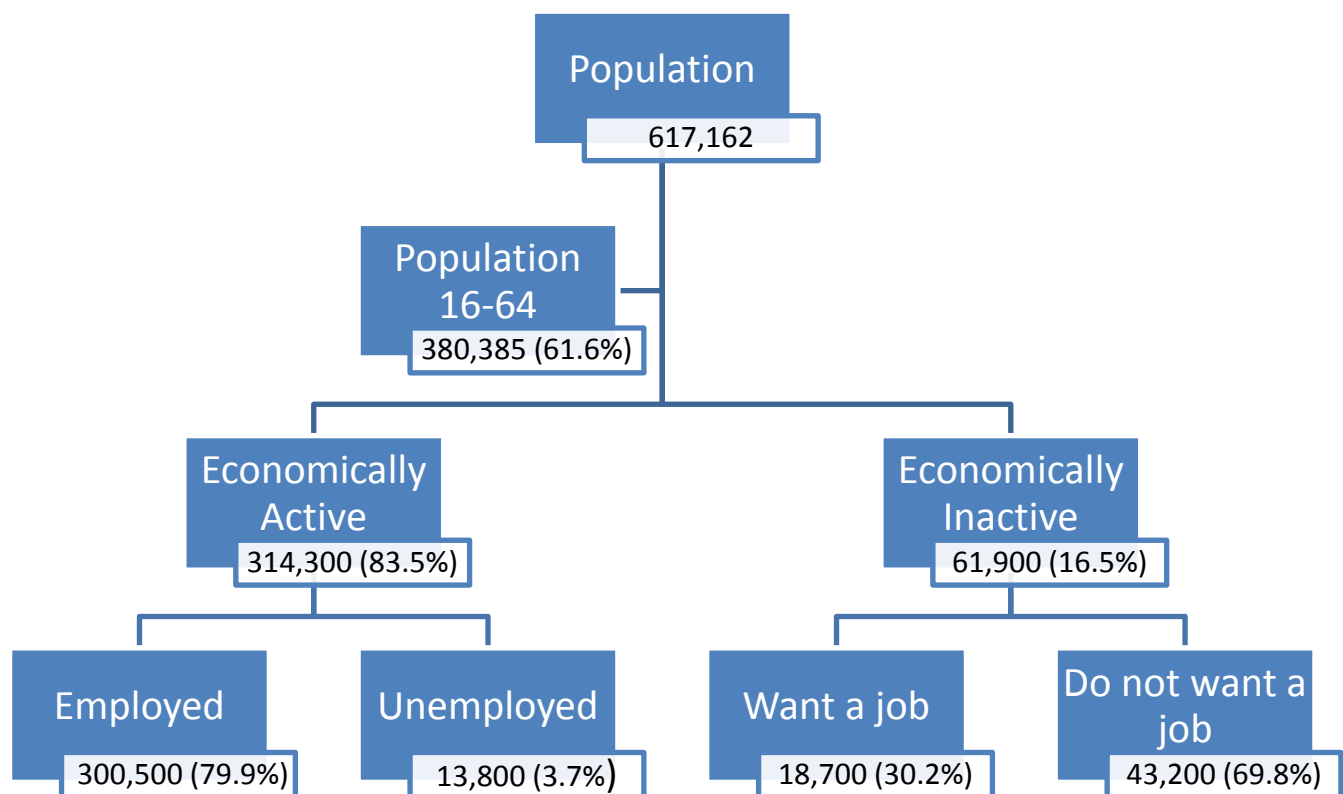


Figure 1: Labour Market Structure, Gloucestershire 2015<sup>15</sup>

#### 4.1 Economic activity

A high economic activity rate<sup>16</sup> indicates a healthy labour market where a large proportion of residents aged 16-64 year are available or potentially available to work.

During the period April 2015 to March 2016, Gloucestershire had an economic activity rate of 83.5%, which was above both the South West and Great Britain average of 80.8% and 77.8% respectively. There are some differences between districts, with Stroud having the highest economic activity rate (88.7%) and Cheltenham the lowest (78.6%)<sup>17</sup>.

<sup>15</sup> Mid 2015 Population Estimate, ONS and Annual Population Survey, April 2015-March 2016, ONS <https://www.nomisweb.co.uk>.

<sup>16</sup> A person is defined as being economically active if they are either employed or are unemployed but want to supply their labour to produce goods and services.

<sup>17</sup> Annual Population Survey, April 2015-March 2016, ONS <https://www.nomisweb.co.uk>

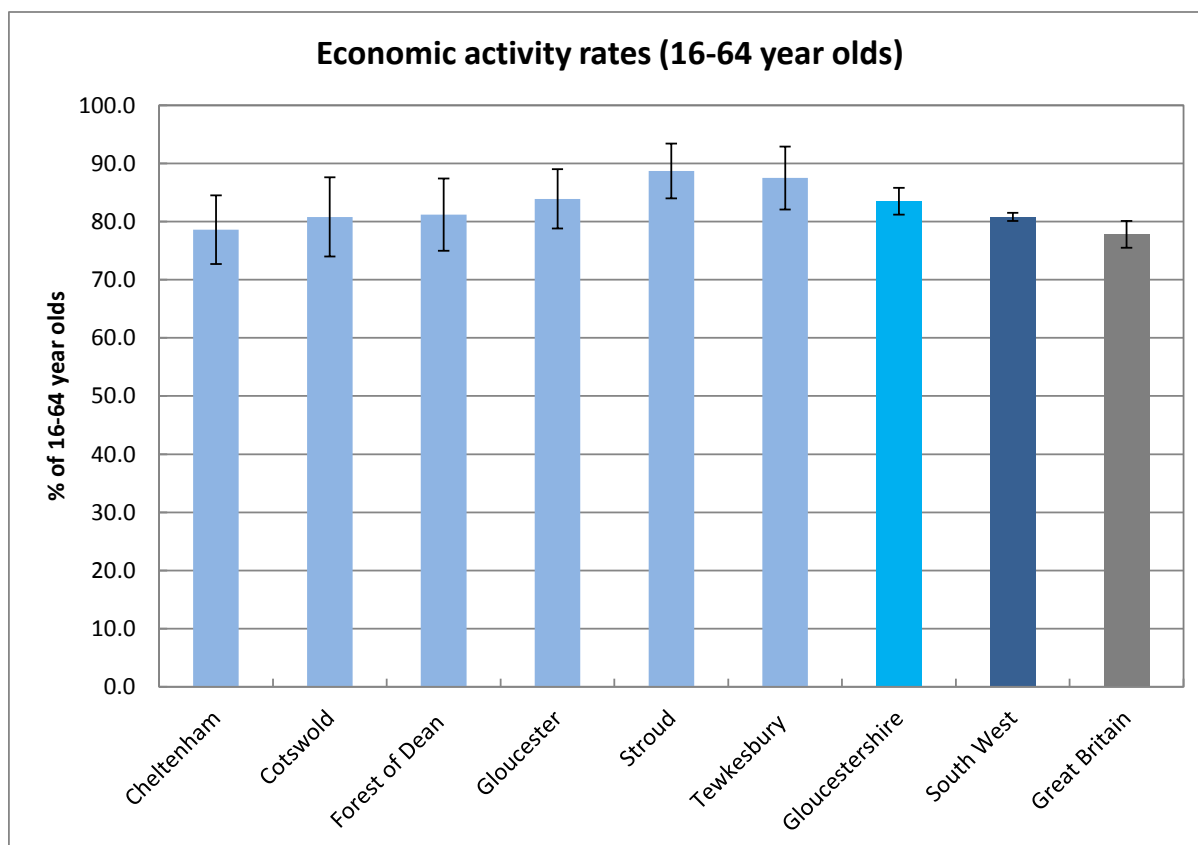


Figure 2: Economic activity rates, April 2015-March 2016<sup>1819</sup>

The economic activity rate of 16-24 years olds (72.9%) is lower than that of 25-49 year olds (87.4%) and 50-64 year olds (82.8%). In Gloucestershire the gap (14.5 percentage points) between the 16-24 year olds and 25-49 year olds is narrower than in the South West (19.8 percentage points) or Great Britain (23.3 percentage points). This is because, despite similar activity rates for 25-49 year olds, economic activity among 16-24 year olds Gloucestershire is higher than in the South West or Great Britain<sup>20</sup>. One reason for this is that in Gloucestershire a smaller proportion of the 16-24 year old population is likely to be in full time education (i.e. out of the labour market)<sup>21</sup>.

<sup>18</sup> *Ibid.*

<sup>19</sup> For information about interpreting error bars please see Appendix 1.

<sup>20</sup> Annual Population Survey, April 2015-March 2016 <https://www.nomisweb.co.uk>

<sup>21</sup> 2011 Census, ONS <https://www.nomisweb.co.uk>

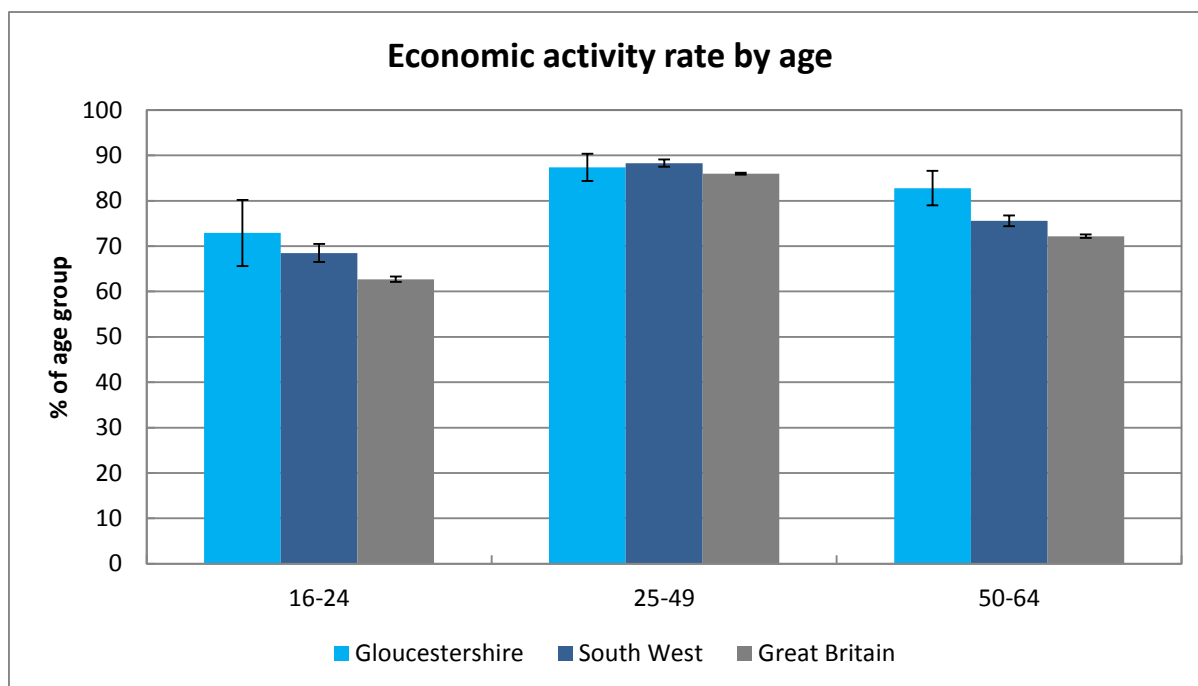


Figure 3: Economic activity rate by age, April 2015-March 2016<sup>22 23</sup>

## 4.2 Employment

During the period April 2015 to March 2016 an estimated 314,700 residents of Gloucestershire were in employment, of these 300,500 or 96% were aged 16-64. This equates to a resident based <sup>24</sup> employment rate of 79.9% which is higher than the South West and Great Britain averages of 77.4% and 73.7% respectively. Employment rates in the county range from a low of 75.2% in Cheltenham, to a high of 86.1% in Stroud<sup>25</sup>. This could in part be due to the fact that Cheltenham has a larger proportion of students in full time education (i.e. out of the labour market) than the other districts.

<sup>22</sup> Annual Population Survey, April 2015-March 2016, ONS <https://www.nomisweb.co.uk>

<sup>23</sup> For information about interpreting error bars please see Appendix 1.

<sup>23</sup> 2011 Census, ONS <https://www.nomisweb.co.uk>

<sup>24</sup> This means it includes residents who work outside of the county, conversely it will not capture workers that work in the county but live elsewhere.

<sup>25</sup> Annual Population Survey, April 2015-March 2016, ONS <https://www.nomisweb.co.uk>



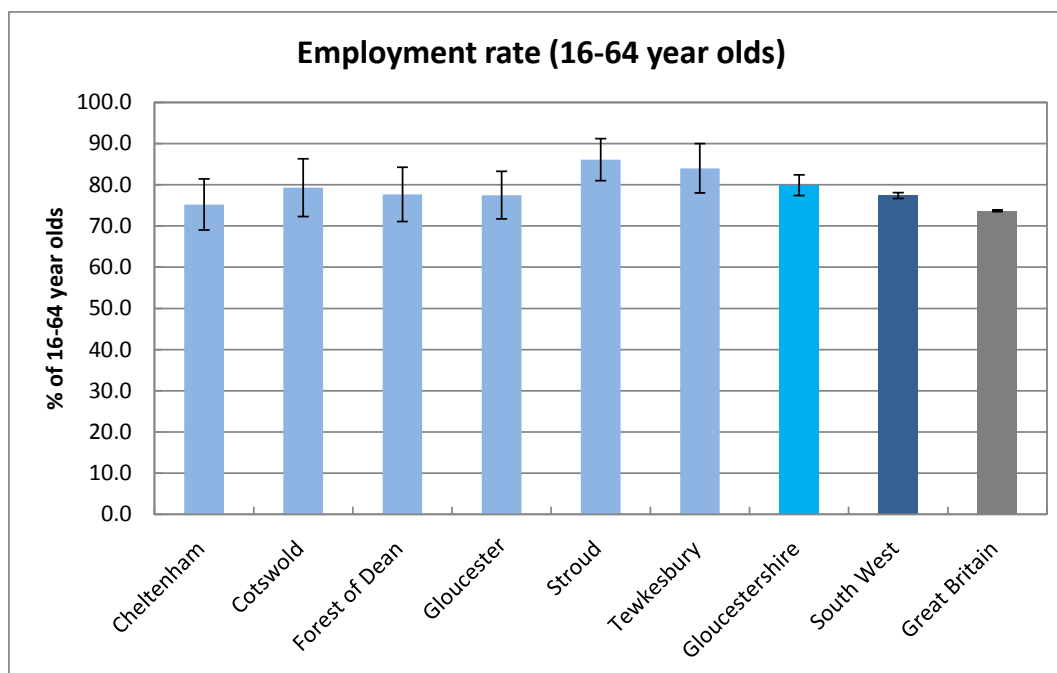


Figure 4: Employment rates (16-64 year olds) April 2015-March 2016<sup>26 27</sup>

Apart from a blip during the period April 2013-March 2014 employment rates in Gloucestershire have increased slightly over the last five years, following the regional and national trend.

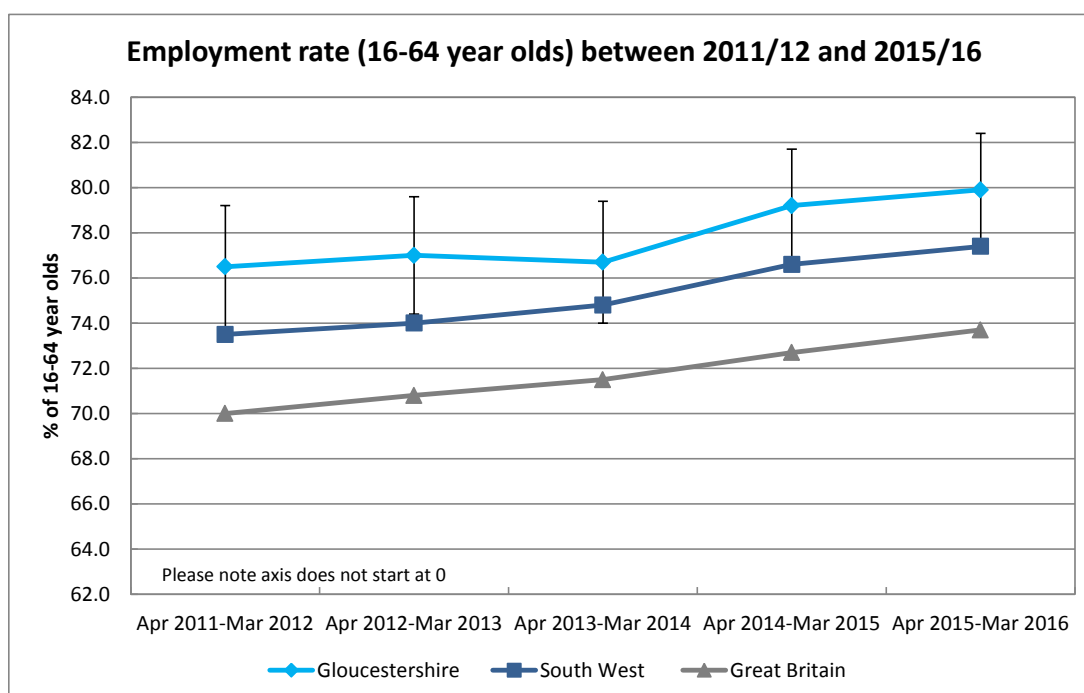


Figure 5: Employment rate (16-64 year olds) between April 2011-March 2012 and April 2015-March 2016<sup>28 29</sup>

<sup>26</sup> Annual Population Survey, April 2015-March 2016, ONS <https://www.nomisweb.co.uk>

<sup>27</sup> For information about interpreting error bars please see Appendix 1.

<sup>28</sup> Annual Population Survey, April 2015-March 2016, ONS <https://www.nomisweb.co.uk>

<sup>29</sup> For information about interpreting error bars please see Appendix 1.

Figure 6 shows the breakdown of employment rates by age, unsurprisingly it reflects a similar pattern to economic activity, with employment rates being at their highest amongst the 25-49 year old age group and at their lowest for 16-24 year olds.

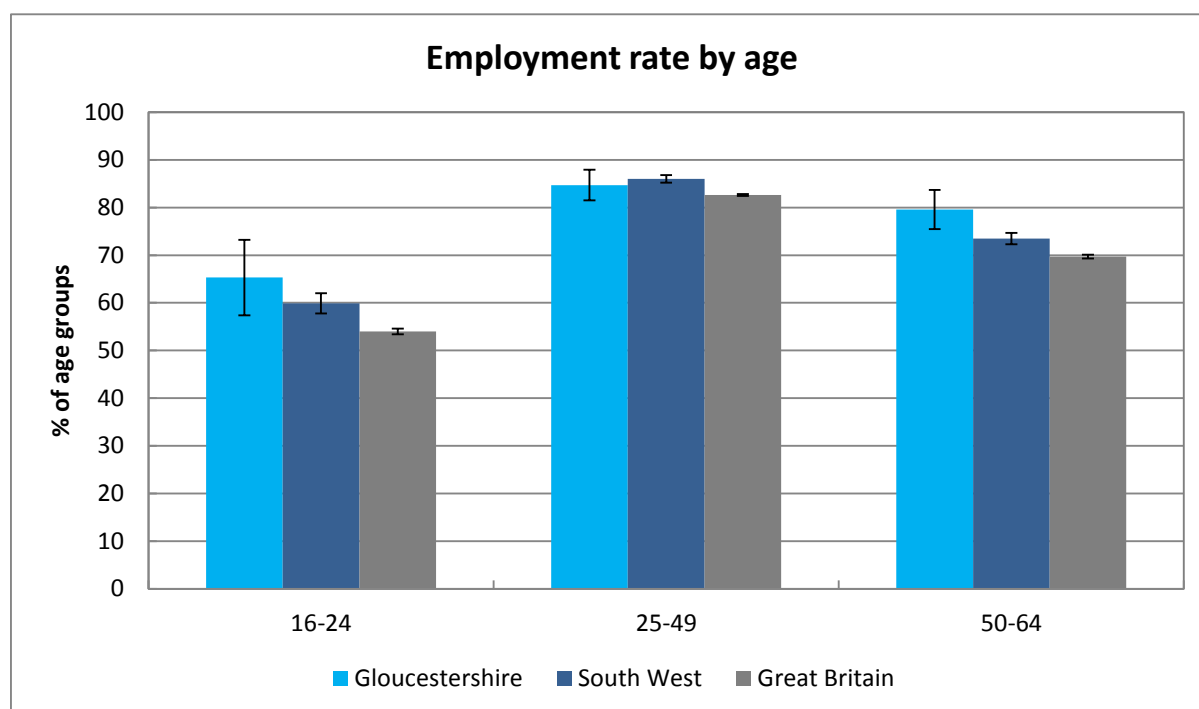


Figure 6: Employment rate by age, April 2015 – March 2016<sup>30 31</sup>

In terms of employment status, the majority of people in employment (73.8%) worked full time, reflecting the regional and national picture<sup>32</sup>.

### 4.3 Self employment

Of the 300,500 people aged 16-64 who were in employment during the period April 2015-March 2016, 15.6% or 46,800 were self employed. This is above the national and regional figures of 13.8% and 14.4% respectively. Self employment rates vary considerably across the county from 6.2% in Gloucester to 24.3% in Cotswold<sup>33</sup>.

Self-employment, on its own, is not a definitive indicator of a high degree of entrepreneurship in the area. However, alongside a high rate of business births and strong survival rates of start-ups it suggests a strong entrepreneurial spirit across the county

<sup>30</sup> Annual Population Survey, April 2015-March 2016, ONS <https://www.nomisweb.co.uk>

<sup>31</sup> For information about interpreting error bars please see Appendix 1.

<sup>32</sup> Annual Population Survey, April 2015-March 2016, ONS <https://www.nomisweb.co.uk>

<sup>33</sup> *Ibid.*

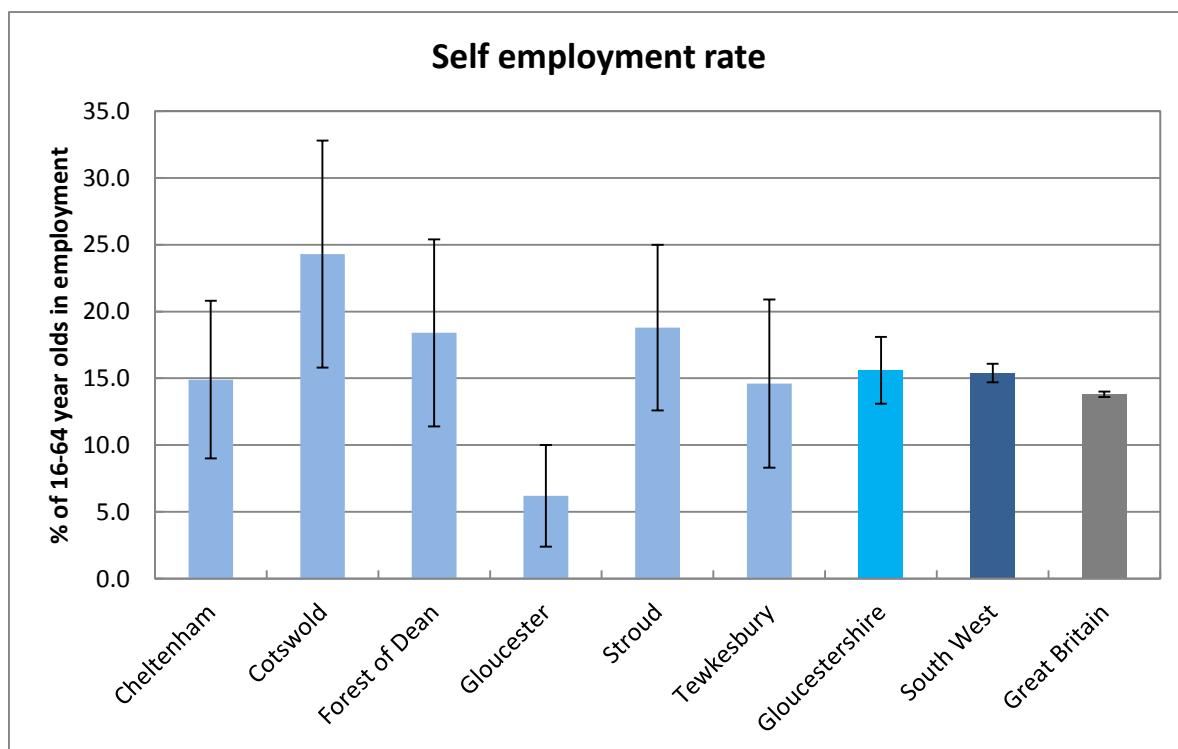


Figure 7: Self employment rate, April 2015-March 2016 <sup>34 35</sup>

#### 4.4 Unemployment

There are two commonly used measures of unemployment. The first is the International Labour Organisation (ILO) measure which is based on national survey data of a sample of the total population. The measure counts all people aged 16 and over without a job who are available to and able to start work. This is classed as the 'official' measure of unemployment.

According to the International Labour Organisation measure there were 13,800 16-64 year old's unemployed in Gloucestershire during the period April 2015 to March 2016. This equates to an unemployment rate of 3.7% which was lower than the national figure of 4.1% and higher than the regional figure of 3.3%<sup>36</sup>

The second measure of unemployment is the number of people claiming unemployment related benefits, known as the claimant count. This measure is a narrower measure because it only counts those residents who are out of work and qualify for benefits meaning that it can underestimate the true extent of unemployment, however, it does have many benefits as it is more up to date and can be broken down to smaller geographies that allows us to gain a better understanding of the local economy.

From 1996 until the recent introduction of Universal Credit (in May 2015 in Gloucestershire) the claimant count was based on the number of people claiming Jobseeker's Allowance (JSA). However, since Universal Credit was introduced, some unemployment benefit claimants will be claiming this new benefit instead of

<sup>34</sup> *Ibid.*

<sup>35</sup> For information about interpreting error bars please see Appendix 1.

<sup>36</sup> Annual Population Survey, April 2015-March 2016, ONS <https://www.nomisweb.co.uk>

JSA. To reflect this change, the Claimant Count has now been expanded to include not only people claiming JSA, but also those who claim Universal Credit and are out of work.

#### 4.4.1 Current unemployment trends

The number of people claiming unemployment related benefits peaked at 12,694 (3.6%) in April 2009, in July 2016 this figure had fallen to 4,180, a rate of 1.1%. The unemployment claimant rate for Gloucestershire has closely followed the regional rate and although both mirror the national trend they have been some 1% below it.

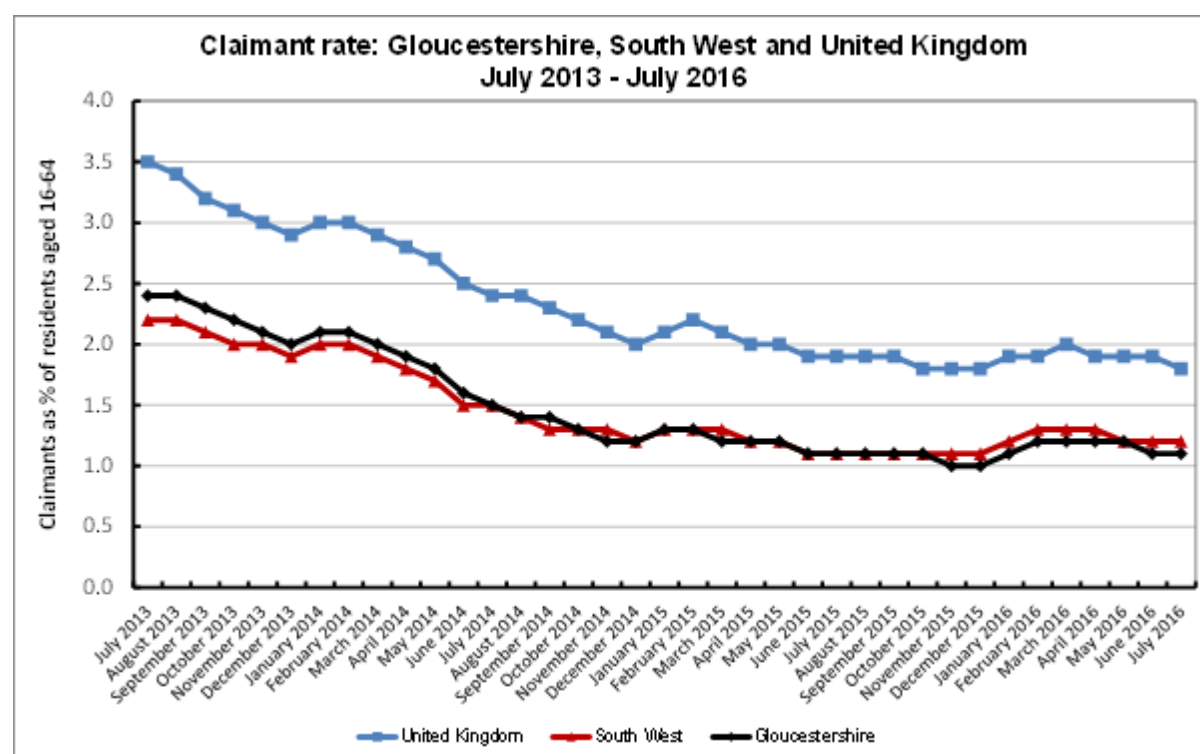


Figure 8: Unemployment claimant rate Jul 2013 to Jul 2016: Gloucestershire, South West and United Kingdom<sup>37</sup>

Although unemployment in the county is generally low, there were 39 wards (of 146) with claimant rates above the July 2016 county average of 1.1%, as shown in Table 1. The wards with the highest claimant rates are Westgate, Tewkesbury Prior's Park and Barton & Tredworth.

<sup>37</sup> Claimant Count, ONS <https://www.nomisweb.co.uk>

*Table 1: Ward claimant rate above county average<sup>38</sup>*

District	Ward	Rate
Cheltenham	St Paul's	1.2
	Swindon Village	1.2
	Springbank	1.3
	All Saints	1.4
	Hesters Way	2.1
	St Mark's	2.1
	Oakley	2.2
Cotswold	Watermoor	2.0
Forest of Dean	Lydbrook and Ruardean	1.2
	Newland and St Briavels	1.2
	Littledean and Ruspidge	1.3
	Lydney North	1.3
	Alvington, Aylburton and West Lydney	1.4
	Bream	1.4
	Coleford East	1.5
	Newent Central	1.7
	Cinderford East	1.9
	Coleford Central	1.9
	Cinderford West	2.1
	Lydney East	2.5
Gloucester	Barnwood	1.2
	Grange	1.2
	Tuffley	1.6
	Kingsholm and Wotton	2.2
	Moreland	2.3
	Matson and Robinswood	2.8
	Podsmead	2.8
	Barton and Tredworth	3.2
	Westgate	4.0
Stroud	Valley	1.2
	Central	1.4
	Farmhill and Paganhill	1.4
	Slade	1.9
Tewkesbury	Hucclecote	1.2
	Innsworth with Down Hatherley	1.2
	Northway	1.2
	Shurdington	1.4
	Tewkesbury Town with Mitton	1.4
	Tewkesbury Prior's Park	3.2

#### **4.4.2 Unemployment by Age**

Looking at the age of unemployed claimants reveals a very similar overall pattern in Gloucestershire to the South West and the UK. Figure 9 indicates that there is a higher proportion of 18-24 year olds who are unemployed than any other age group. This presents itself in Gloucestershire, as well as in the South West and UK. Across all age groups, except 16-17 year olds, the proportions of claimants in Gloucestershire and the South West are substantially lower than the UK figure.

<sup>38</sup> *Ibid.*

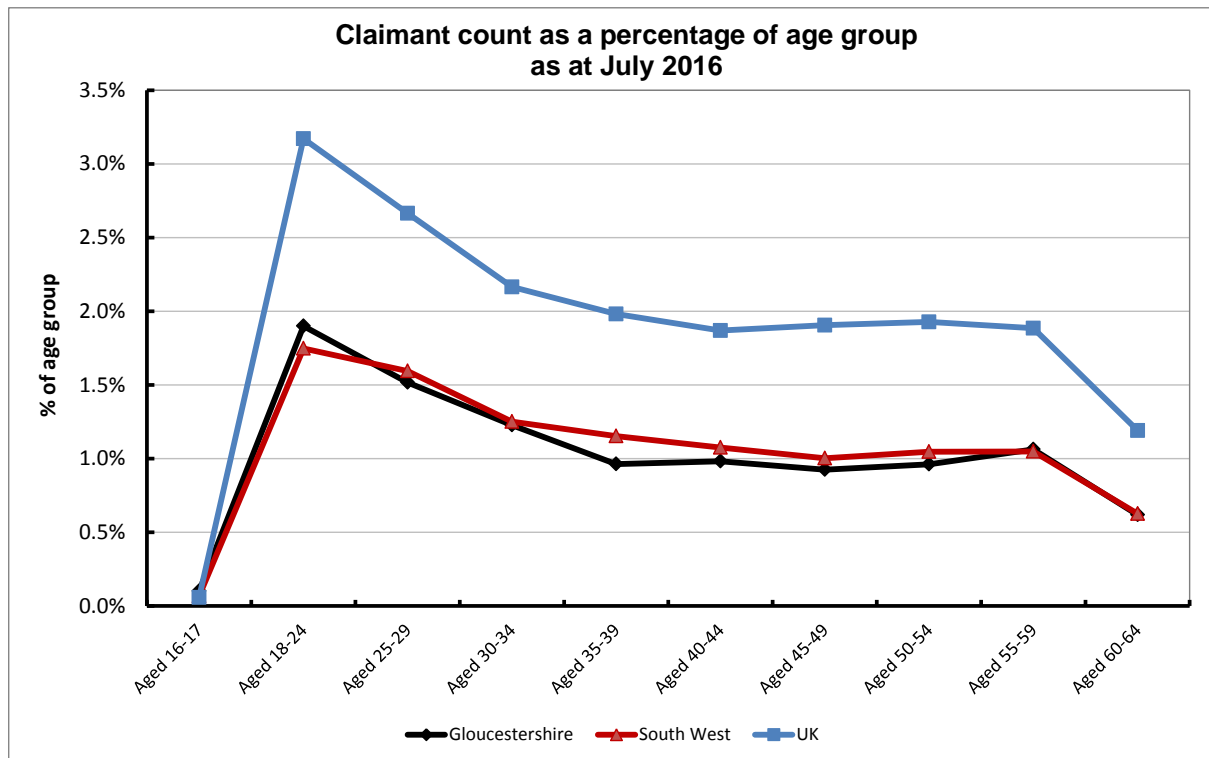


Figure 9: Claimant count as a percentage of age group, as at Jul 2016: Gloucestershire, South West and United Kingdom<sup>39</sup>

#### 4.4.3 Youth Unemployment (18-24 Year Olds)

Youth unemployment has been shown to have significant impacts on individuals, including reducing their life chances<sup>40</sup>. In July 2016 there were 925 18-24 year olds claiming unemployment related benefits in the county, this represents 22.1% of all claimants. The situation relating to those 18-24 year olds claiming unemployment benefits in Gloucestershire is one of improvement from July 2013 to July 2016, with the number of claimants falling from 2,360 to 925 people, as shown in Figure 10. This represents a decrease of 61% over the three year period. As a proportion of total working age claimants, the percentage of 18-24 year old claimants has decreased from 26.1% to 22.1% over the same period.

<sup>39</sup> *Ibid*; Mid-2015 Population Estimates, Office for National Statistics

<sup>40</sup> Youth unemployment produces multiple scarring effects, <http://blogs.lse.ac.uk/politicsandpolicy/multiple-scarring-effects-of-youth-unemployment/>

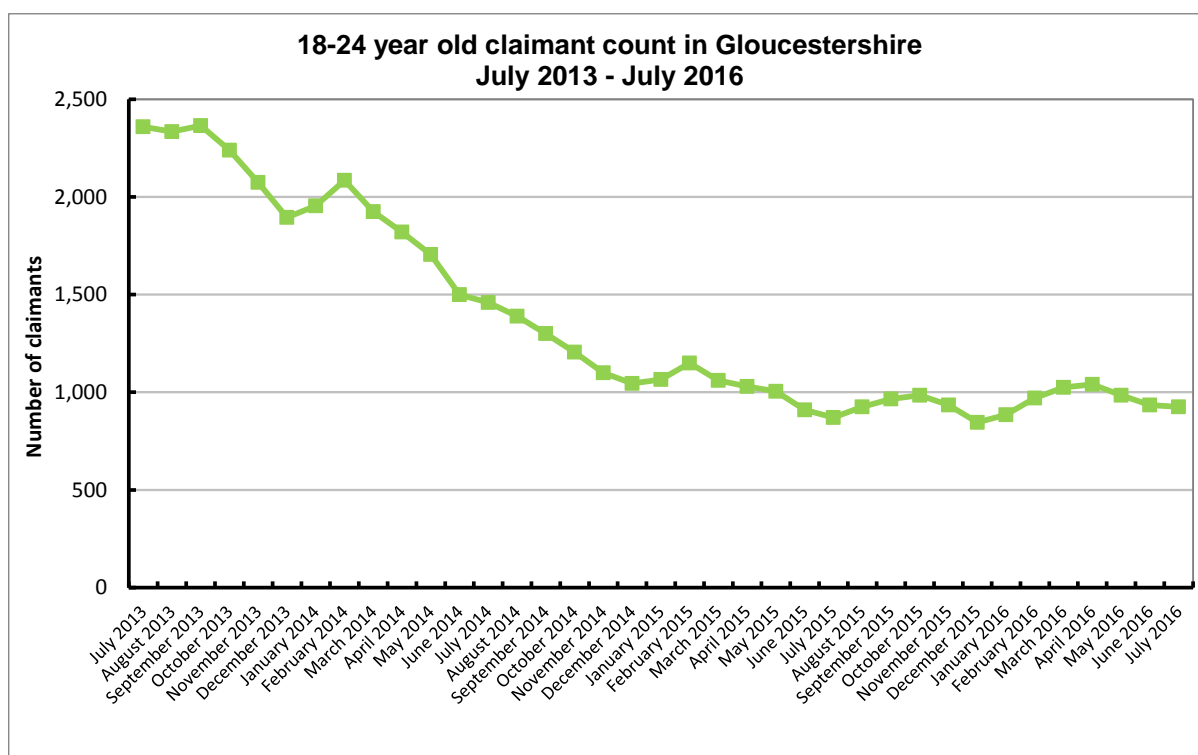


Figure 10: 18-24 year old claimant count Jul 2013 to Jul 2016: Gloucestershire<sup>41</sup>

#### 4.4.1 Unemployment by Duration

Gloucestershire figures for unemployment by duration are currently only available for Jobseekers Allowance, and therefore only go up to April 2015<sup>42</sup>. Looking at the two year period up to April 2015, Figure 11 shows that unemployment lasting between 6-12 months has declined the most, with Jobseekers claiming for 6-12 months decreasing from 1,675 in April 2013 to 585 in April 2015 an amount of 1,090 people (65%). The number unemployed for more than 12 months has also decreased by a similarly large amount (1,600 people, 61%), this would suggest an overall decrease in the number of people claiming unemployment benefit for more than 6 months, rather than a shift of claimants into the “more than 12 months” duration band.

<sup>41</sup> Claimant Count, ONS, <https://www.nomisweb.co.uk>

<sup>42</sup> Universal Credit was introduced in May 2015 in Cotswold and the Forest of Dean, and June 2015 for the remaining districts. All new claimants from this point onwards claimed Universal Credit instead of JSA. In addition, any claimants whose circumstances may have changed after this time could have been moved from JSA to Universal Credit. Long term unemployment figures from NOMIS are for JSA only, not the claimant count which is a combination of JSA and Universal Credit. Therefore, unemployment data by duration after April 2015 may be missing data for claimants of Universal Credit.

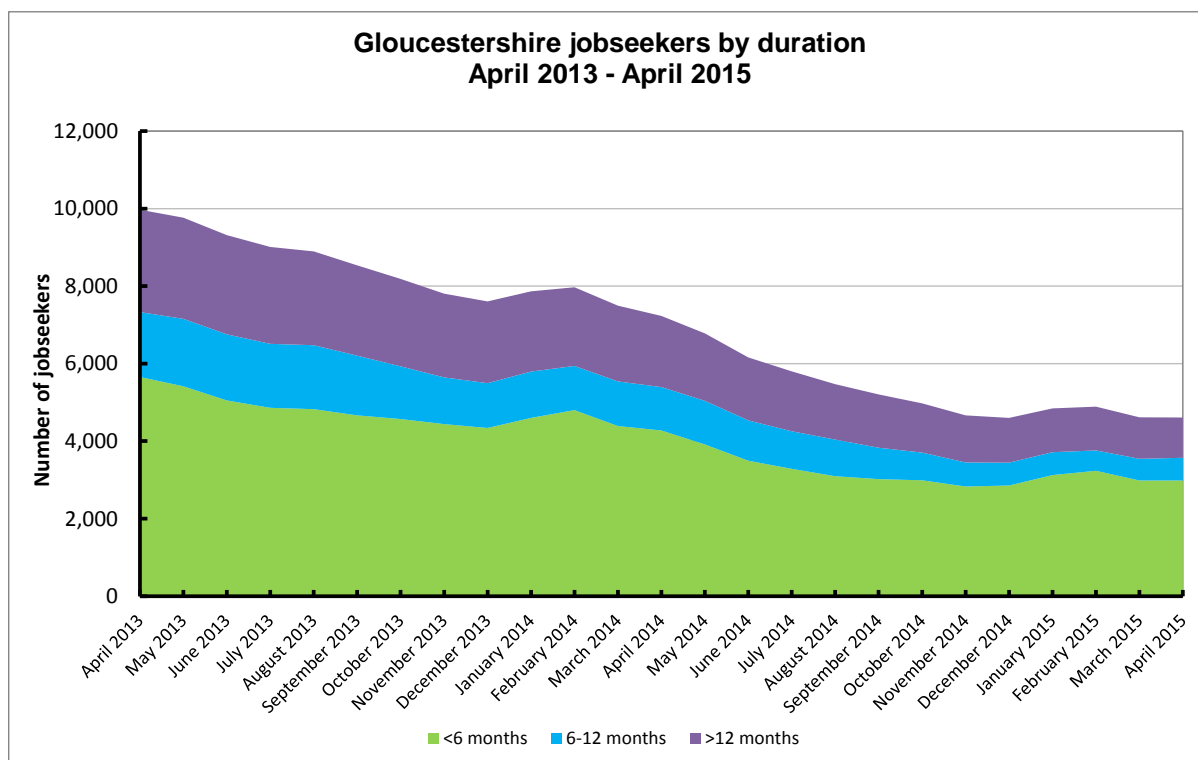


Figure 11: Jobseekers by duration, Apr 2013 to Apr 2016: Gloucestershire<sup>43</sup>

#### 4.4.2 Long Term Unemployment

Long term unemployment can lead to a loss of skills and the motivation to work, and can result in individuals being permanently excluded from the labour market<sup>44</sup>. Long term unemployment is defined by the International Labour Organization as all unemployed persons with continuous periods of unemployment extending for one year or longer (52 weeks and over)<sup>45</sup>.

The trend of long term unemployment for Gloucestershire, the South West and the UK up to April 2015 can be seen in Figure 12. In terms of long term unemployment rates, Gloucestershire and the South West region have both seen an improvement over the two year period shown, and fare better than the rest of the UK which displays the same proportion of long term unemployed in April 2015 as it did two years earlier in April 2013.

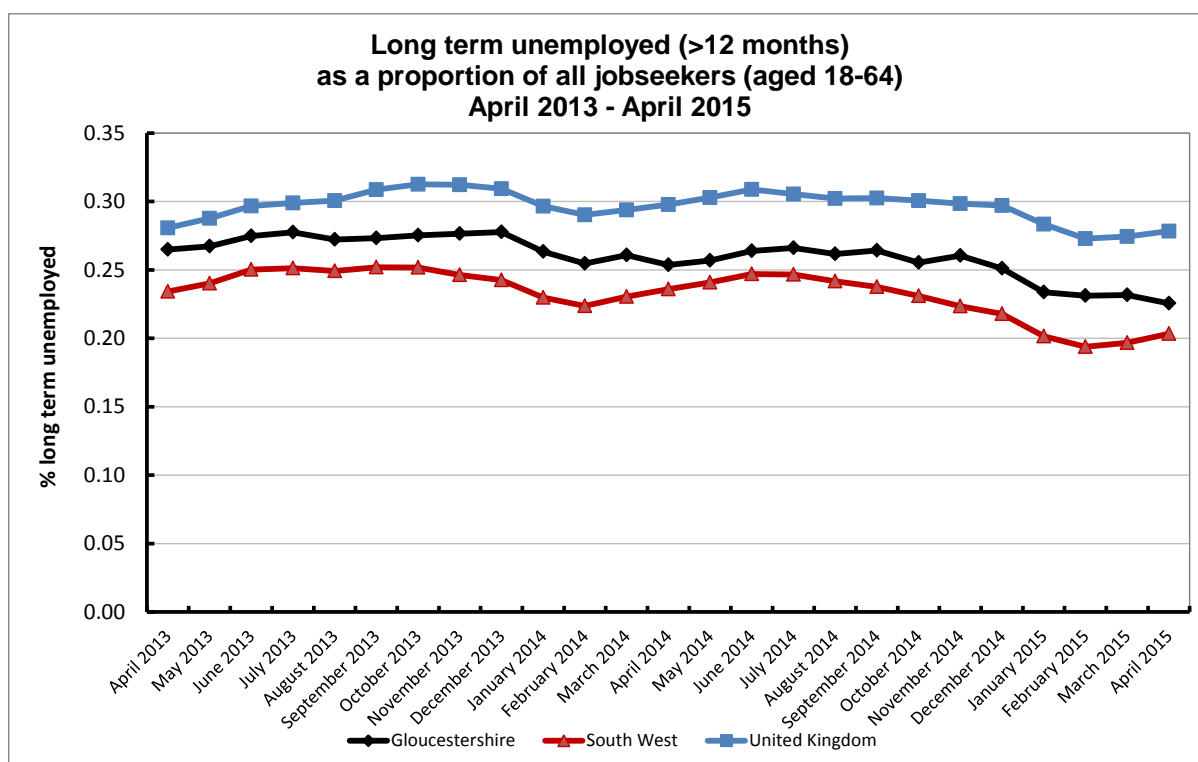
Gloucestershire shows a higher proportion of long term unemployed than the South West. This is in contrast to the overall claimant count rate shown in Figure 8, which shows the total claimant count rate in Gloucestershire and the South West to be very similar, especially for the 12 months up to April 2015.

<sup>43</sup> Jobseeker's Allowance, ONS <https://www.nomisweb.co.uk>

<sup>44</sup> Tackling long-term unemployment: the research evidence, CentrePiece

<sup>45</sup> International Labour Organization, <http://kilm.ilo.org/2015/download/kilm11EN.pdf>, accessed 13/09/16





*Figure 12: Long term unemployed (more than 12 months) as a percentage of all jobseekers (aged 18-64), Apr 2013 to Apr 2015: Gloucestershire, South West and United Kingdom<sup>46</sup>*

The steady decrease in long term unemployment during the two year period up to April 2015 is evident across all age groups, as can be seen in Figure 13. This shows that in terms of the number of claimants, long term unemployment has decreased most for 25-54 year olds, with the smallest decrease being for claimants in the 55+ age group in Gloucestershire. However, as most claimants fall into the 25-54 year old age bracket, the picture is slightly different when expressed as a percentage change within each age group; in this case the largest percentage decrease is in the 18-24 year old age group, and the smallest percentage decrease remains in the 55+ age group.

<sup>46</sup> Jobseeker's Allowance, ONS, <https://www.nomisweb.co.uk>

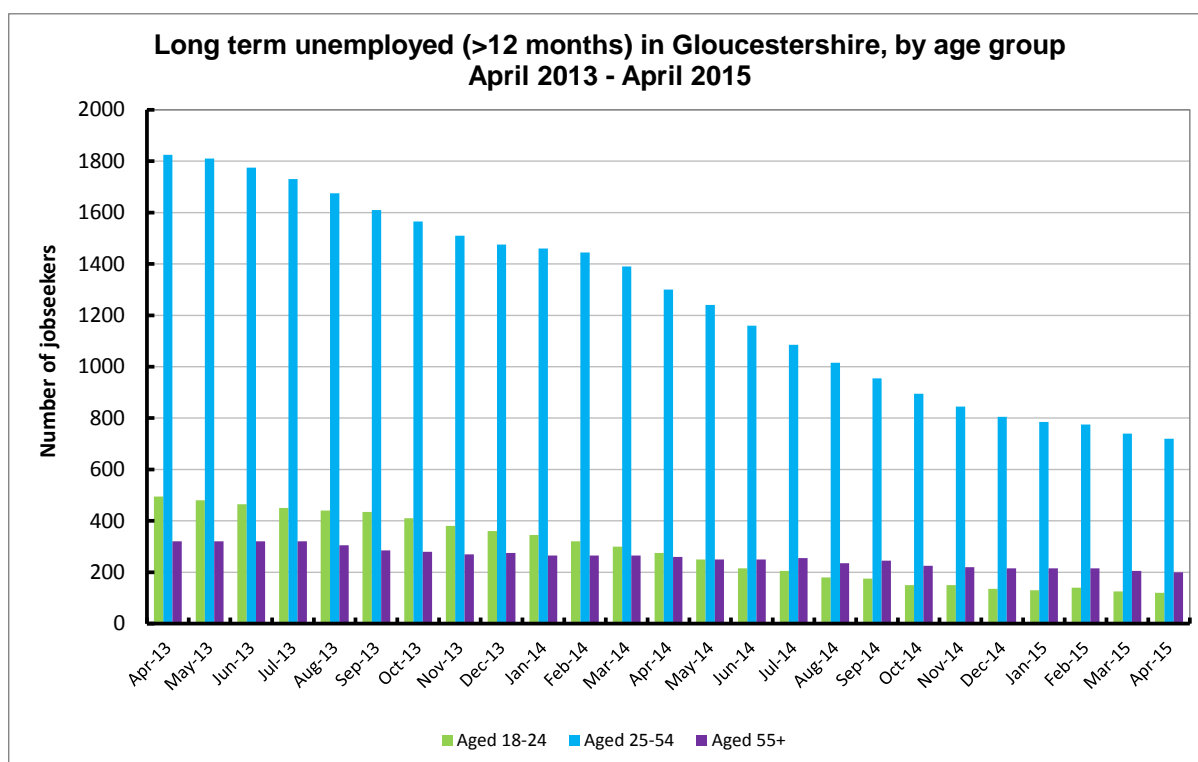


Figure 13: Long term unemployed (more than 12 months) by age band, Apr 2013 to Apr 2015: Gloucestershire<sup>47</sup>

#### 4.4.3 NEETs (16-18 Year Olds)

“NEETs” are 16-18 year olds who are not in education, employment or training, and include young people actively seeking education, employment or training as well as those young people who are either not yet ready or who are unable to access these opportunities because of their personal circumstances. Figures used in this section include young people in both of these categories.

The number of NEET’s in Gloucestershire as depicted in Figure 14 has decreased over the last three years from 580 in July 2013 to 429 people in July 2016. This represents an overall decrease of 26% over the three year period. Rates<sup>48</sup> of NEETs, although seeing seasonal increases around the month of September, have also shown an overall decrease. Over the same period, NEET rates have decreased from 4.5% to 3.3% in Gloucestershire.

<sup>47</sup> Jobseeker’s Allowance, ONS, <https://www.nomisweb.co.uk>

<sup>48</sup>

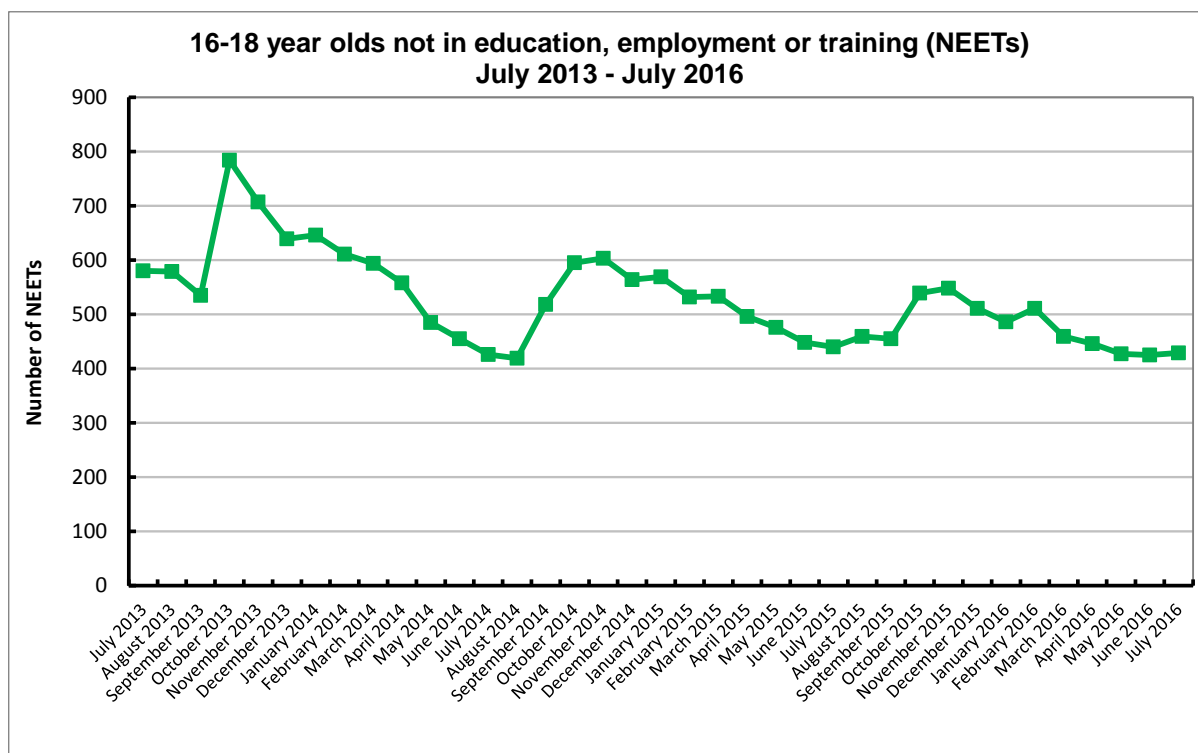


Figure 14: Number of 16-18 year olds Not in Education, Employment or Training (NEETs) in Gloucestershire: July 2013 to July 2016<sup>49</sup>

## 5. Labour Demand

The demand for labour relates to the job opportunities within the economy and will be affected by industrial change and the location and performance of companies. Key indicators relating to the demand for labour include the number of jobs, job density, workplace based employment and job vacancies.

### 5.1 Total jobs

The total number of jobs in Gloucestershire amounted to 336,000 in 2014<sup>50</sup>. This figure is a workplace measure<sup>51</sup> and includes employees, self employed, government supported trainees and HM Forces. The largest number of jobs was located in Cheltenham (75,000) and Gloucester (68,000) and the smallest in the Forest of Dean (31,000).

<sup>49</sup> Prospects

<sup>50</sup> Job Density, 2014, ONS <https://www.nomisweb.co.uk>

<sup>51</sup> This means it includes jobs done by residents who work in the area (of any age) and jobs done by workers (of any age) who commute into the area

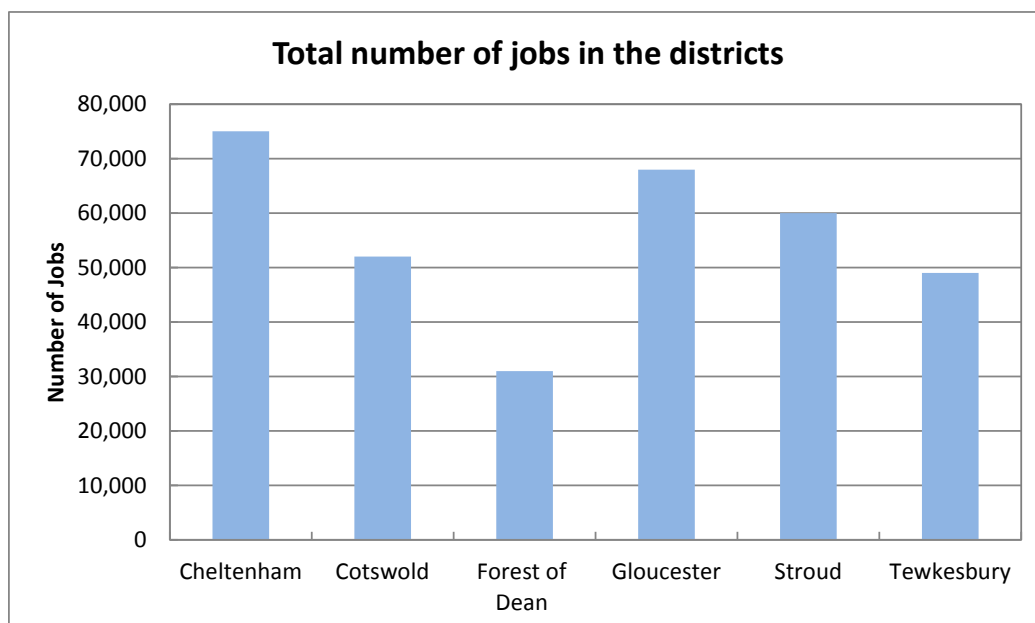


Figure 15: Total number of jobs in the districts, 2014<sup>52</sup>

## 5.2 Job Density

Jobs density is an estimation of the overall balance between jobs and people. It is defined as the number of filled jobs in an area divided by the number of people of working age resident in that area, a job density of 1.0 would mean that there is one job for every resident of working age. In 2014 Gloucestershire had a job density of 0.89 which is higher than the regional (0.86) and Great Britain (0.82) averages. By district, Cotswold has the highest job density (1.01) and Forest of Dean the lowest (0.59)<sup>53</sup>.

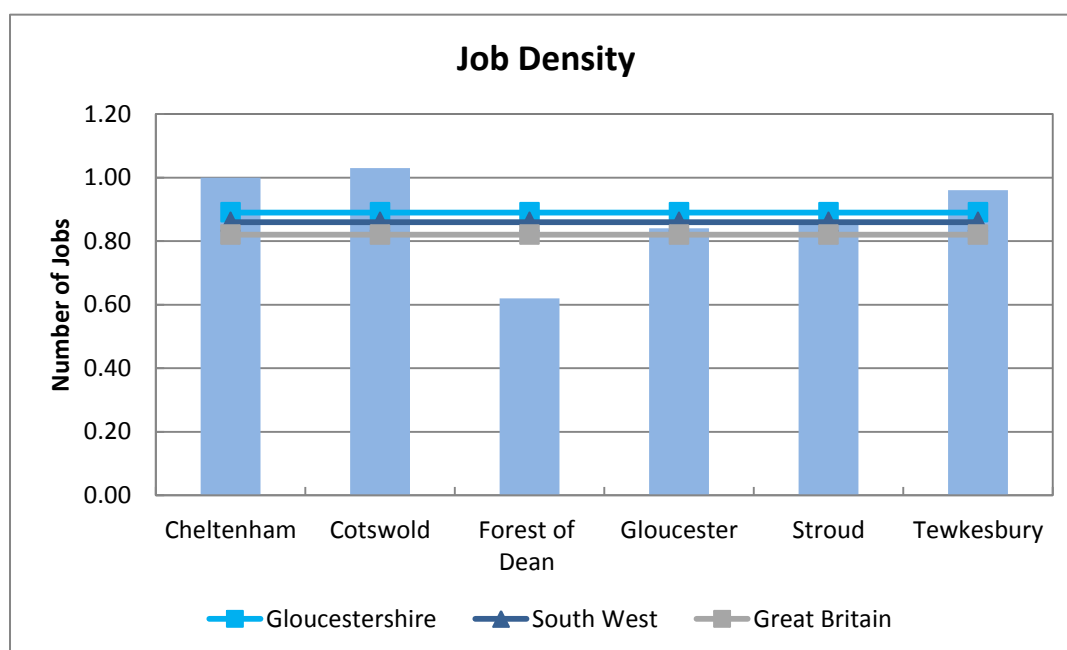


Figure 16: Job Density, 2014<sup>54</sup>

<sup>52</sup> Job Density, 2014, ONS <https://www.nomisweb.co.uk>

<sup>53</sup> Ibid.

<sup>54</sup> Ibid.

### 5.3 Workplace based employment

A further measure of labour demand is workplace based employment, this includes employees and working owners that work within an area. It is a narrower measure than the measure of total jobs, as it does not include government supported trainees, HM Forces and some self employed. However, it can be broken down in a number of ways that the total jobs figure can not, that allows us to gain a better understanding of the local economy.

In 2014 there were an estimated 289,400 people in employment in Gloucestershire. Cheltenham and Gloucester are the major employment bases, with 66,800 and 64,100 people employed in these districts respectively<sup>55 56</sup>.

Over the last five years the number in employment in Gloucestershire has increased by 13,300 or 4.8%. The average annual growth stands at 1.2%, which was higher than the regional rate but lower than the national rate. At district level the greatest growth has been in Tewkesbury (2.6%) and Cheltenham (2.0%), the Forest of Dean experienced the lowest rate of growth (0.1%)<sup>57</sup>.

*Table 2: Change in employment, 2011-2015<sup>58 59</sup>*

	2011	2015	2011-2015		
			Net change	Overall change %	Average annual change %
Cheltenham	61,700	66,800	5,100	8.2	2.0
Cotswold	39,000	41,100	2,100	5.3	1.3
Forest of Dean	24,100	24,200	100	0.3	0.1
Gloucester	63,100	64,100	1,000	1.6	0.4
Stroud	47,500	48,400	900	1.9	0.5
Tewkesbury	40,600	44,800	4,200	10.2	2.6
Gloucestershire	276,200	289,400	13,300	4.8	1.2
South West	2,394,000	2,485,600	91,600	3.8	1.0
Great Britain	27,796,500	29,545,600	1,749,100	6.3	1.6

In 2015 the majority (65.8%) of employment in Gloucestershire was full time, this was slightly higher than the regional figure and lower than the national figure. Tewkesbury has a considerably higher proportion of full time employment (75.3%) than the other districts, the county, the region and the country<sup>60</sup>.

<sup>55</sup> This is a workplace based figure and differs from the 300,500 quoted in section 3 of the report which is a residence based figure.

<sup>56</sup> Business Register and Employment Survey, 2015, ONS <https://www.nomisweb.co.uk>

<sup>57</sup> *Ibid.*

<sup>58</sup> *Ibid.*

<sup>59</sup> Please note figures may not sum due to rounding

<sup>60</sup> Business Register and Employment Survey, ONS <https://www.nomisweb.co.uk>

Table 3: Employment Status, 2015<sup>61 62</sup>

	Full time employees		Part time employees		Working owners	
	Number	%	Number	%	Number	%
Cheltenham	42,600	63.8	22,900	34.3	1,300	1.9
Cotswold	25,900	63.0	13,200	32.2	2,000	4.8
Forest of Dean	15,100	62.6	7,900	32.5	1,200	4.9
Gloucester	40,800	63.7	22,100	34.4	1,200	1.9
Stroud	32,200	66.6	14,400	29.8	1,700	3.6
Tewkesbury	33,700	75.3	9,800	21.9	1,200	2.8
Gloucestershire	190,400	65.8	90,300	31.2	8,600	3.0
South West	1,557,300	62.7	806,100	32.4	122,100	4.9
Great Britain	19,719,300	66.7	8,811,800	29.8	1,014,400	3.4

Over the last five years Gloucestershire has seen a decline in the number of part-time employees and working owners and a growth in full time employment. This trend was also observed at a regional level and in the majority of districts, at national level the number of working owners fell but there was an increase in full-time and part-time employees.

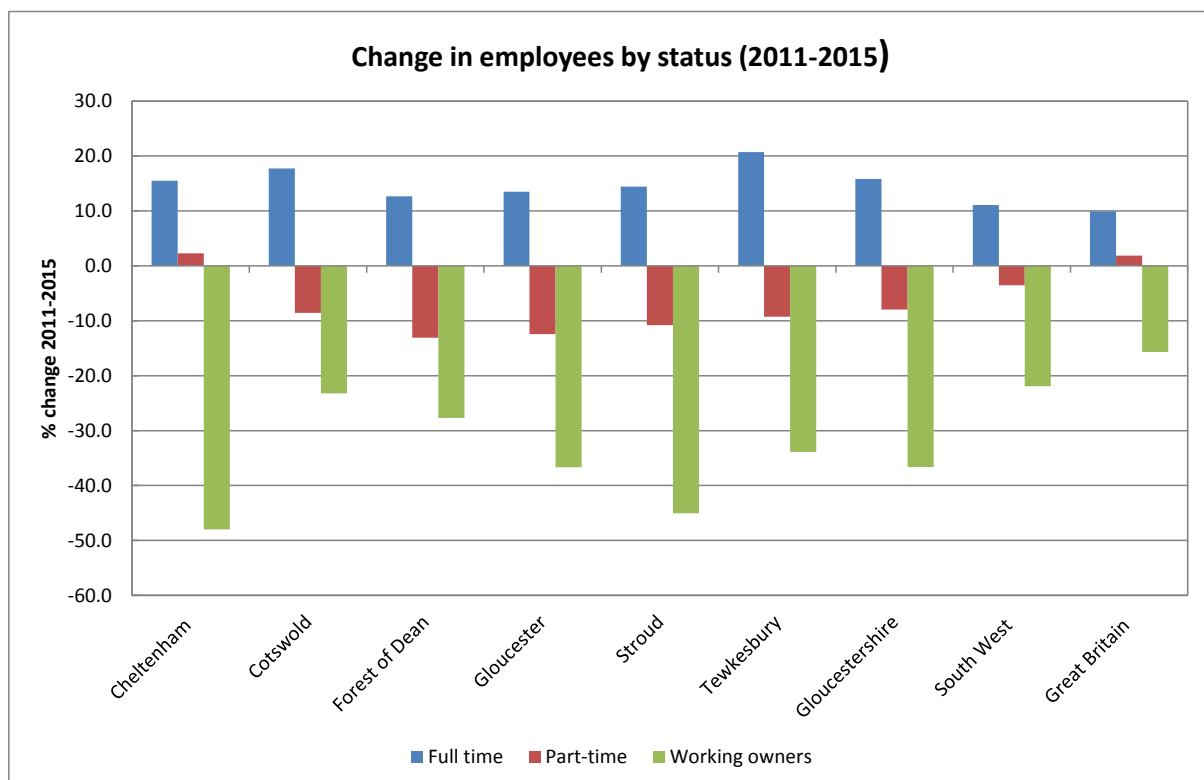


Figure 17: Change in employees by status (2011-2015)<sup>63</sup>

<sup>61</sup> *Ibid.*

<sup>62</sup> Please note figures may not sum due to rounding

<sup>63</sup> Business Register and Employment Survey, ONS <https://www.nomisweb.co.uk>

### **5.3.1 Past workplace employment by industrial sector (2011-2015)**

Figure 18 illustrates the distribution of employment by broad industrial sector, while Figure 19 shows the industrial sectors in terms of their size, growth and local concentration. The sectors employing the most people in the county are those represented by the largest bubbles in Figure 18. Those in the top-left quadrant are more concentrated in Gloucestershire than in England as a whole, but crucially have experienced falling employment in Gloucestershire in recent years. The upper-right quadrant of the diagram shows sectors which are growing and in which Gloucestershire has a structural advantage in terms of local concentration of employment.

The health sector is the largest in terms of employees accounting for some 14.1% or 39,700 of the total number in employment. Hospital activities account for the largest number of health employees followed by residential care. This locally concentrated sector has experienced an annual average growth rate of 3.7%.

The manufacturing sector is the second largest sector with 34,000 people employed in the sector equating to 12.1% of total employment. This is well above the regional and national figures indicating that the sector is the most locally concentrated of all the sectors. The following sub sectors account for the highest number of manufacturing employees: manufacture of fabricated metal products; aerospace; machinery and equipment; computer, electronic and optical products; food products; rubber and plastics; and electrical equipment. Despite the sector as a whole experiencing a decline since the previous year most of the above sub sectors did exhibit growth.

Retail, is the third largest sector in terms of employment. It has experienced decline over the last five years but is important not only in terms of a tourist attraction and as an important facilities for residents.

The education sector is also large as and well represented from primary through to higher education levels. The county boasts a number of well established and respected schools, colleges and two universities, however, this sector has suffered a decline in employment numbers mainly in the primary and secondary sub sectors.

The professional, scientific & technical sector is significant in terms of employees and growth as a result of activities relating particularly to management and technical consultancies, veterinary activities, architectural activities and head offices located within the county.

The number of employees in the business administration and support services sector has grown over the last five years and is dominated by the recruitment agency activities, cleaning and landscape activities, general business support and private security activities.

The accommodation & food services sector which is related to the tourism industry is not unsurprisingly important to Gloucestershire in terms of employment. Over the last five years there has been a growth in accommodation and food service activities, while beverage serving activities have declined.

The number of people employed in the construction sector has increased over the last five years which is a result of growth in the construction of utility projects and specialized construction activities.

The public administration and defence sector is also important in the county, particularly given the presence of GCHQ. Decline in the number of employees is however, inevitable in light of the central government cuts

The arts, entertainment & recreation sector is not well represented in terms of the number of employees as much of this sector is made up of self employed workers etc that are not recorded by the Business Register and Employment Survey. The growth over the last five has been driven by an increase in the number of people employed in the sports activities and amusement and recreation sub sector.

The wholesale sector has undergone growth in terms of number of employees over the last five years, this has been driven by growth in the majority of sub sectors with the exception of wholesale of food, beverages and tobacco which underwent a decline.

The number of people employed in the finance & insurance sector is comparatively small, although the sector is important locally. It has undergone growth over the last five years which has been driven by increased employment in activities auxiliary to insurance and pension funding.

The transport and storage and information and communication sectors are underrepresented locally and comparatively small. However, they have experienced growth over the last five years. The growth in the transport and storage sector is largely driven by a growth in the number of people employed in warehousing and support activities for transportation and postal and communication activities. The growth in the information and communication sector is a result of increasing employment in telecommunications and information service activities.

The motor trade sector is a growing sector and is overrepresented locally, however it employs a relatively small number of people. The maintenance and repair of motor vehicles accounts for the largest proportion of employment in the sector

The number of people employed in the property sector has increased in recent years, however the numbers involved are relatively small.

The mining, quarrying and utilities sector is important to Gloucestershire and is potentially a large employer relating to nuclear power generation. Two technical offices associated with Horizon and EDF have been established in the county and as the likelihood of nuclear power station new build draws near the number of associated employees is likely to increase.

Although the Agriculture, forestry & fishing sector appears small<sup>64</sup>, it is an important sector in Gloucestershire. According to the June 2013 statistics from Defra the sector accounted for a total labour force of about 6,200 people in the

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<sup>64</sup> The Agriculture, forestry and fishing sector is not wholly represented in the BRES data



county which was a 1% increase on the 2010 figure<sup>65</sup>. With the effects of the recession and having to cope with vagaries of the industry, farmers needed to improve the profitability of their farms and face the prospect of providing a non-farming income which they have successfully managed through various forms of diversification and specialisation with enterprises such as the reintroduction of rare breeds, organic farming, biomass production, farm open days and other tourism related activities in order to maintain their livelihood.

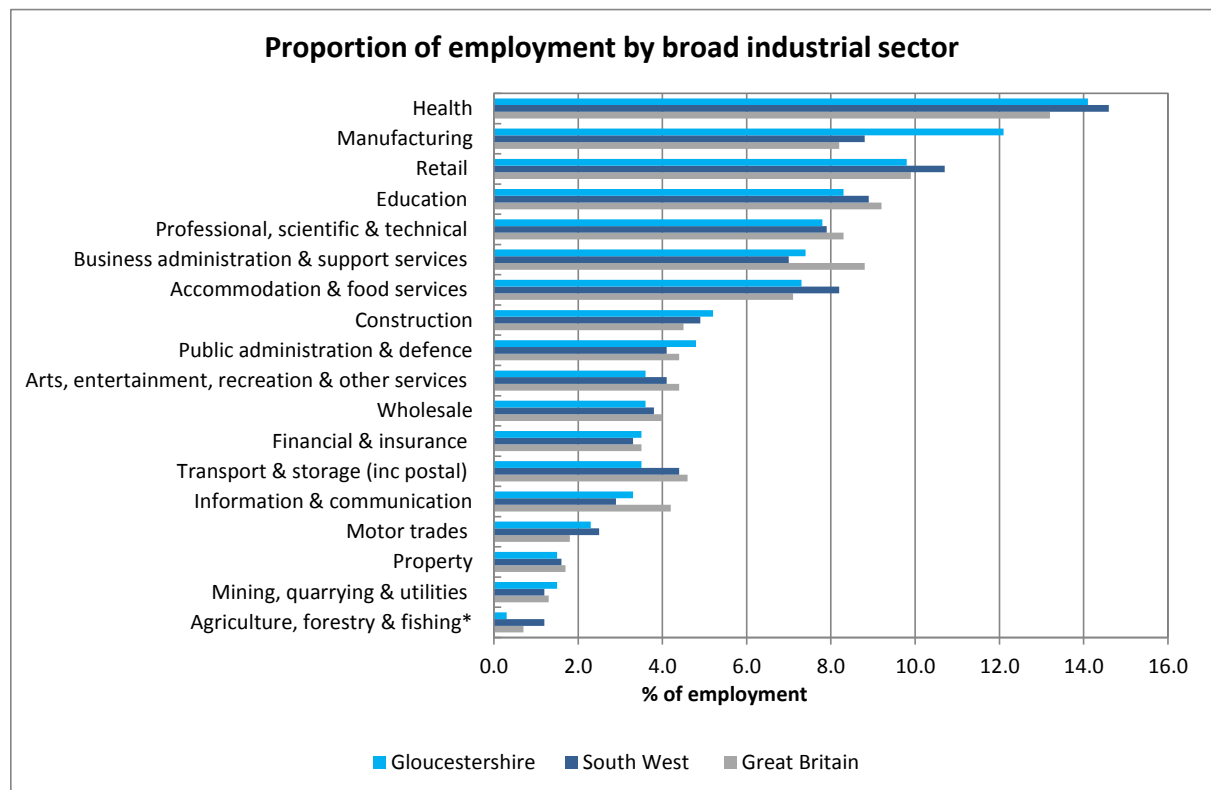


Figure 18: Proportion of employment by broad industrial sector, 2015<sup>66 67</sup>

<sup>65</sup> Structure of the agricultural industry in England and UK at June 2013, Defra  
<https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june>

<sup>66</sup> Business Register and Employment Survey, ONS <https://www.nomisweb.co.uk>

<sup>67</sup> The Agriculture, forestry and fishing sector is not wholly represented in the BRES data

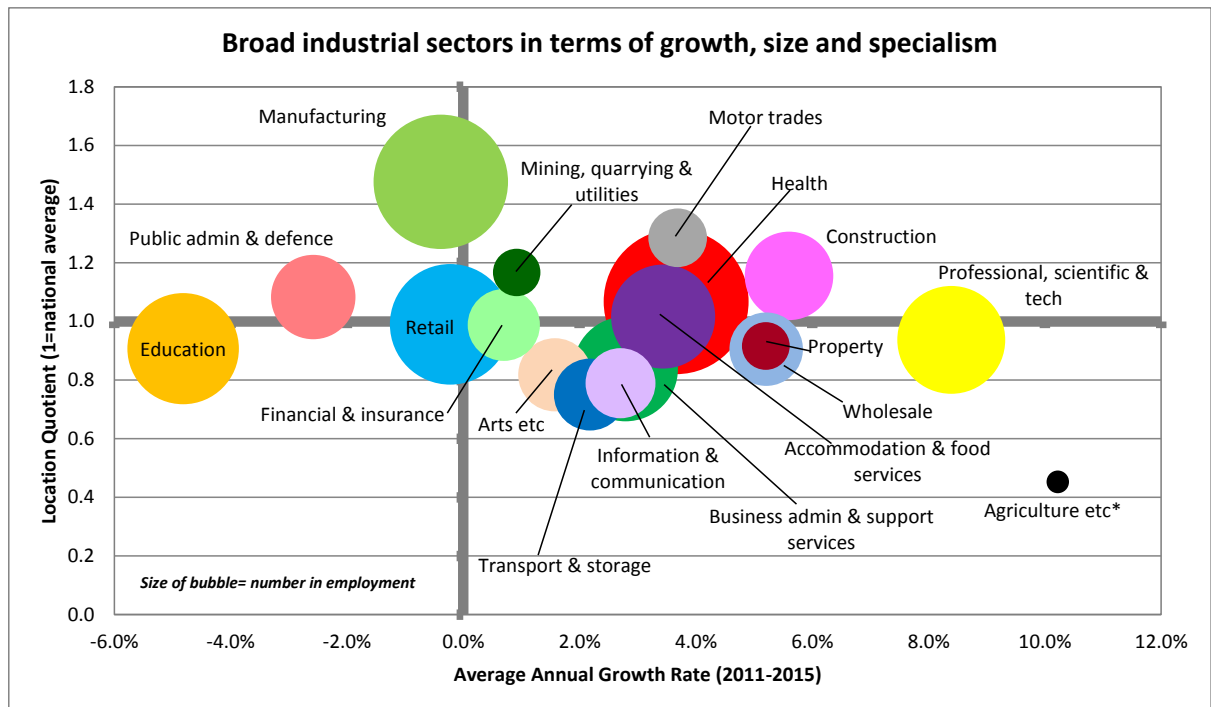


Figure 19: Broad industrial sectors in terms of growth, size and specialism<sup>68 69 70</sup>

Figure 20 illustrates the sectoral employment structure at district level. In the urban centres of Gloucester and Cheltenham the health sector is the major employer, which is unsurprising due to the presence of the two large hospitals; Cheltenham General and Gloucestershire Royal Hospital. Manufacturing accounts for the greatest proportion of employment in Stroud, Tewkesbury and the Forest of Dean, while in Cotswold district it is the accommodation & food services sector, reflecting the importance of tourism in the area.

<sup>68</sup> Business Register and Employment Survey, ONS <https://www.nomisweb.co.uk>

<sup>69</sup> The Agriculture, forestry and fishing sector is not wholly represented in the BRES data

<sup>70</sup> Location quotients (LQ) are used for identifying specialism. A simple ratio has been used to compare the share of local employment in an industry to the share of GB employment in that industry. A LQ that is greater than 1 indicates the local area has a higher concentration of employment in the industrial activity relative to GB.

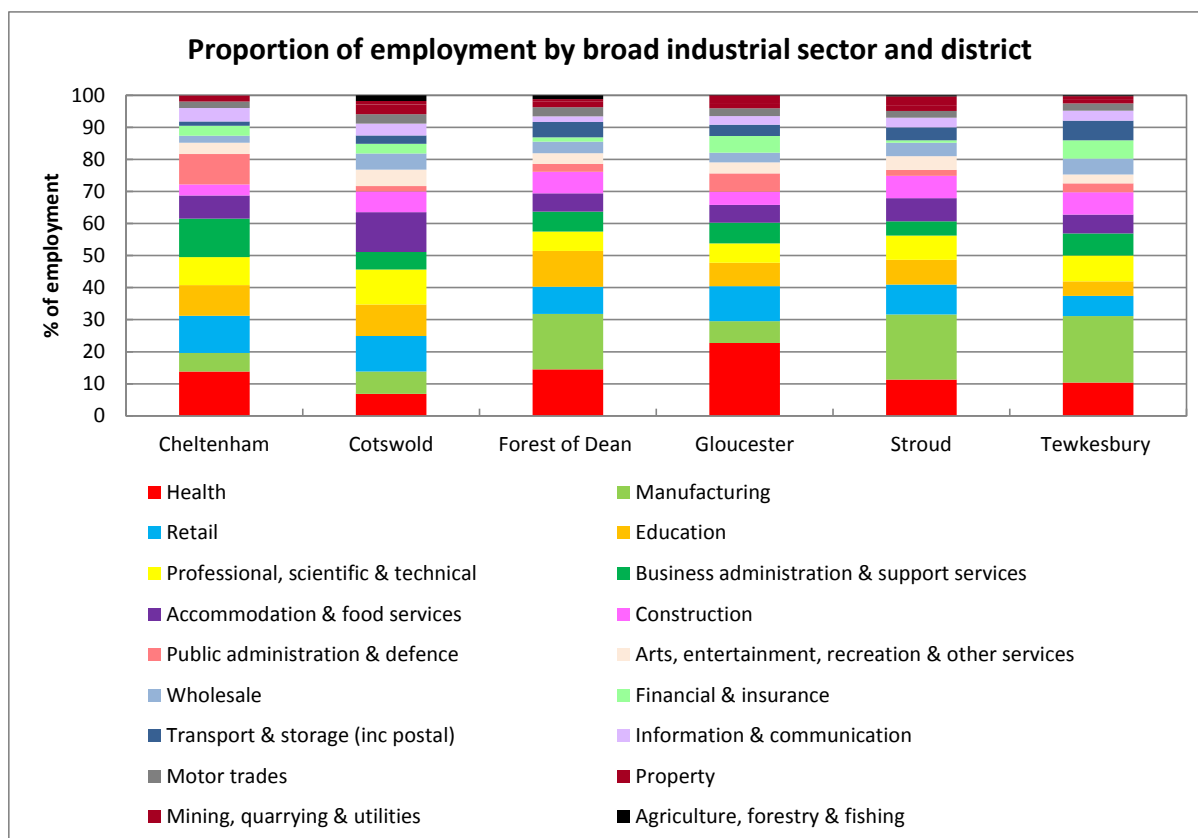


Figure 20: Proportion of employment by broad industrial sector and district<sup>71 72</sup>

### 5.3.2 Future workplace based employment (2015-2025)

Economic projections generated by the Local Economic Forecasting Model (LEFM)<sup>73</sup>, provide an indication of future economic growth and predict potential changes in employment.

These projections are presented as a guide, they do not take into account the impact of current policies and initiatives. According to LEFM employment (employees and self-employed) in Gloucestershire is set to increase between 2015 and 2025 to 340,500 people, however, growth is expected to be at a more conservative rate than that it has been recently, with a projected average annual change of 0.3% which is lower than the South West and nationally as shown in Figure 21<sup>74</sup>.

<sup>71</sup> Business Register and Employment Survey, ONS <https://www.nomisweb.co.uk>

<sup>72</sup> The Agriculture, forestry and fishing sector is not wholly represented in the BRES data

<sup>73</sup> The LEFM has been developed to forecast economic activity in local areas in a way that is consistent with regional and national forecasts. Although the model includes a number of econometric relationships, lack of data currently precludes the estimation of a complete model in the conventional sense. Many of the relationships are therefore imposed by assumption, based on the broader regional or national models estimated by Cambridge Econometrics and the Institute for Economic Research (University of Warwick) LEFM should therefore be regarded primarily a simulation model rather than an accurate econometric representation of a local economy

<sup>74</sup> LEFM

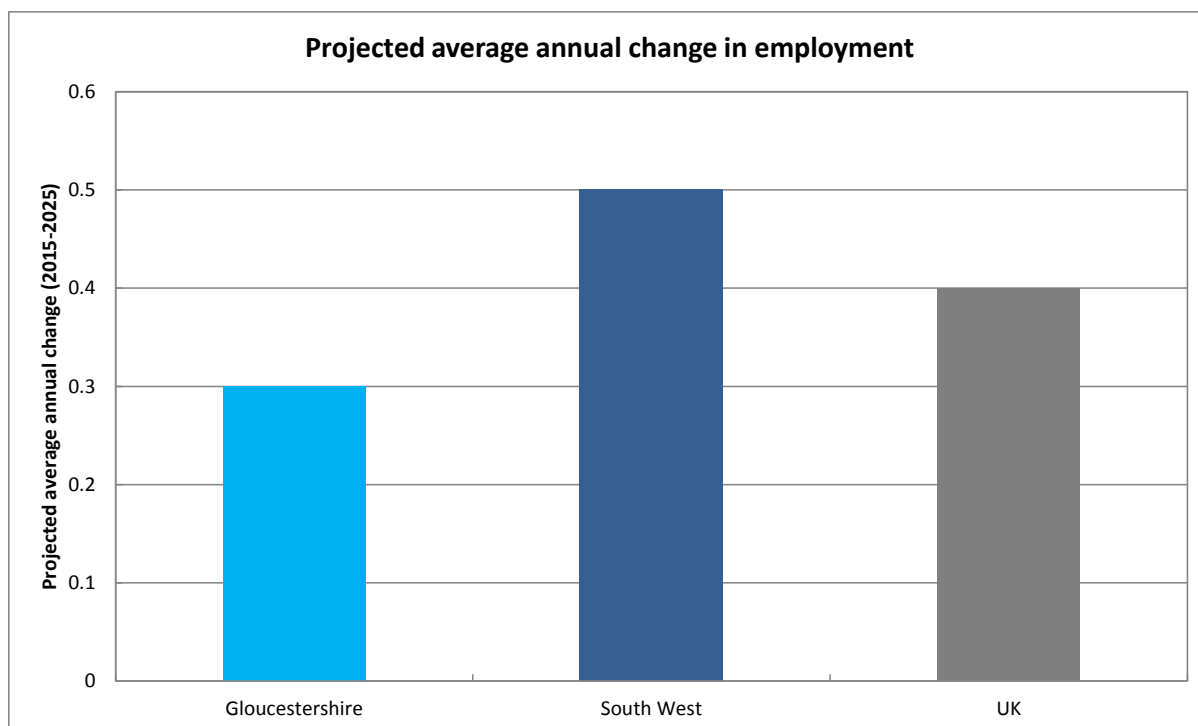


Figure 21: Projected average annual change in employment, 2015-2025<sup>75</sup>

### 5.3.3 Future workplace employment by industrial sector (2015-2025)

Considering the projected employment by sector over the next ten years for Gloucestershire compared to the UK average, four sectors, namely, accommodation & food services, construction, other services<sup>76</sup> and mining, quarrying & utilities are predicted to experience the most growth. These sectors along with the business administration & support services sectors are all expected to grow at well above the national rate. The agriculture, forestry & fishing and manufacturing sectors match the decline expected nationally but to a greater degree while the wholesale sector is expected to decline in complete opposition to the national picture as depicted in Figure 22.

<sup>75</sup> LEFM

<sup>76</sup> Other services include activities of membership organisations, repair of computers, personal and household goods, other personal service activities e.g. hairdressing, beauty and other personal services.

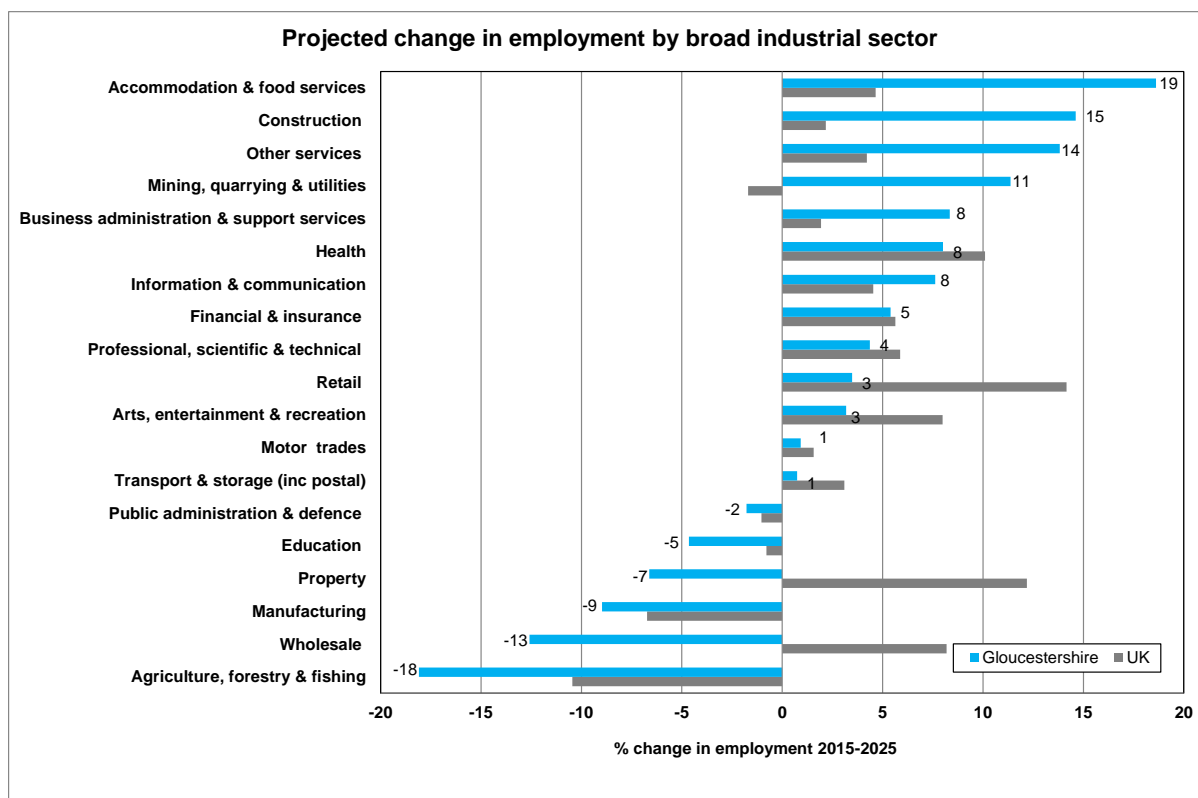


Figure 22: Projected change in employment by broad industrial sector, 2015-2025<sup>77</sup>

Table 4 shows the net change in employment in Gloucestershire by sector over the next ten years. In absolute numbers the greatest increase in employment is expected to be in accommodation & food services, construction and health. Conversely the greatest fall is projected to be in manufacturing, followed by agriculture, forestry & fishing, education and wholesale.

<sup>77</sup> LEFM

*Table 4: Net change in employment in Gloucestershire from 2015-2025<sup>78</sup>*

	Net Change in Employment
Accommodation & food services	4,800
Construction	3,400
Health	3,400
Business administration & support services	2,000
Other services	1,300
Retail	1,000
Professional, scientific & technical	1,000
Information & communication	800
Financial & insurance	600
Mining, quarrying & utilities	400
Arts, entertainment & recreation	300
Motor trades	100
Transport & storage (inc postal)	100
Public administration & defence	-300
Property	-400
Wholesale	-1,200
Education	-1,200
Agriculture, forestry & fishing	-1,500
Manufacturing	-3,500

## 5.4 Job Vacancies

The data relating to job vacancies is provided by Labour Insight, an interactive tool which delivers real time access to job vacancies from a comprehensive range of sources including job boards, employer sites, newspapers, public agencies etc. Data extraction and analysis technologies mine and code data from each job listing to provide analysis on industries, occupations, skills and qualifications. The tool will inevitably not capture all vacancies.

Figure 23 shows the trend in new vacancies for each month from November 2014 to October 2016. The number of new vacancies presents an overall increasing trend from 3,109 vacancies in November 2014 to 6,342 in October 2016. In the last year 73,660 jobs were advertised this compares to 53,704 in the previous year.

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<sup>78</sup> *Ibid.*

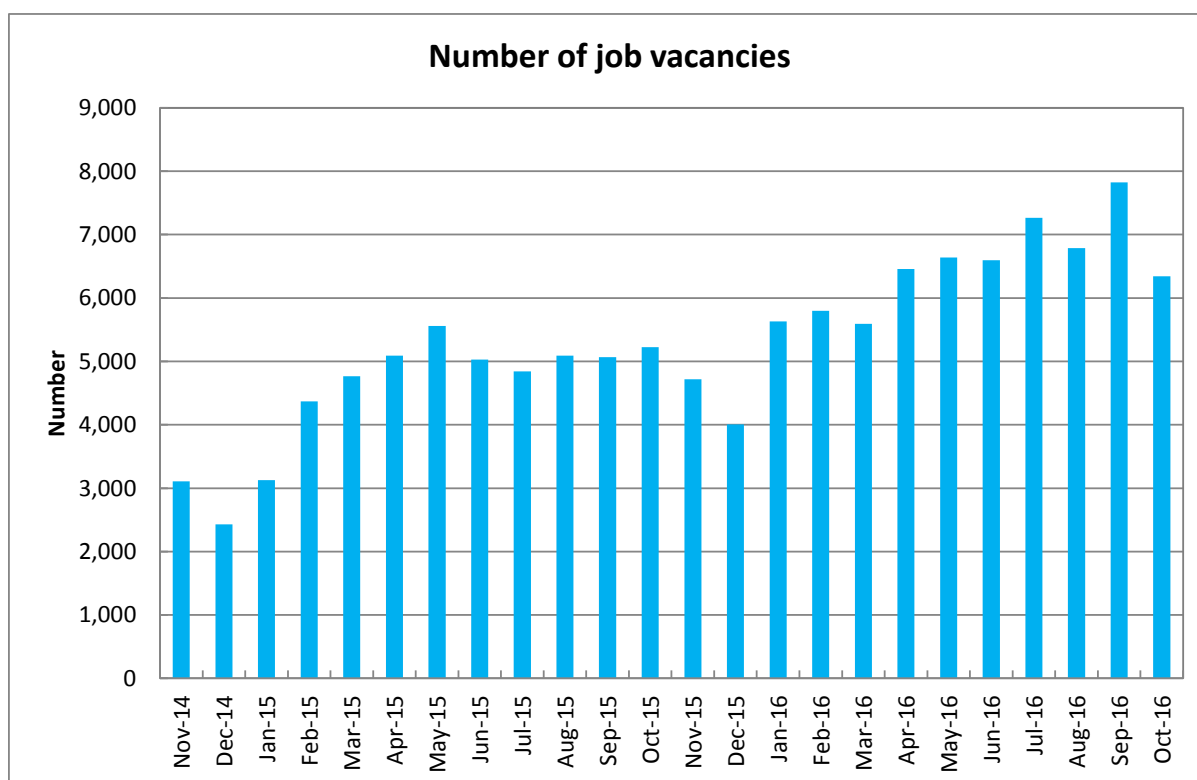


Figure 23: Number of job vacancies, November 2014- October 2016<sup>79</sup>

The highest number of vacancies between November 2015 and October 2016 was for programmers and software developers (4,497), administrative occupations (2,075), nurses (2,025) and chefs (1,950). These are the occupations that consistently come out as the most in-demand, however, compared to the same period in the previous year administrative occupations and nurses have replaced chefs in the top three. The high number of vacancies related to information technology indicates the importance in these requirements across all sectors of industry. The demand for chefs points to the key role played by the accommodation and food services sector with its links to tourism. The administrative occupations are also an indication of the need for these roles across all sectors and the demand for nursing occupations reflects the increasing importance of the health sector in the county.

<sup>79</sup> Labour Insight

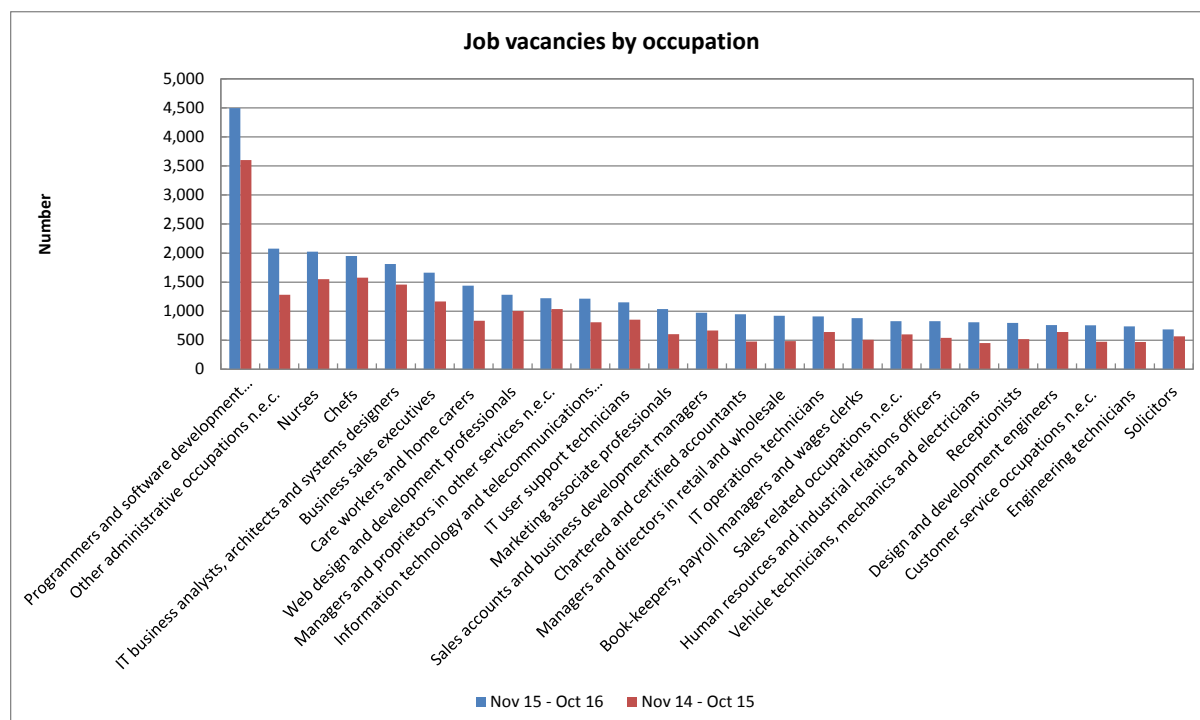


Figure 24: Job vacancies by occupation, 2015<sup>80</sup>

## 6. Qualifications, Occupations and other characteristics

In order to realise the benefits of economic growth, local economies need a good match between labour demand and labour supply – the right skill levels and the right sort of skills<sup>81</sup>.

### 6.1 Qualifications

The main measure of skills is in terms of the qualifications people hold or the jobs they do (occupations). Figure 25 shows Gloucestershire has a better qualified population than the country as a whole, in 2015 those with degrees or equivalent accounted for 30.1% of the 16-64 year old population which was above the national average of 28.5%. At the other end of the scale some 6.5% of the 16-64 year old population had no qualifications which was some 2% below the national average and amounted to 24,000 people<sup>82 83</sup>. Although the proportion of people with no qualifications is relatively small in Gloucestershire, it can have a significant impact on individuals and the ability of employers to find the skills they require. A report by the Office for National Statistics suggests people with no qualifications are more likely to be out of work, with the

<sup>80</sup> *Ibid.*

<sup>81</sup> Realising Talent: employment and skills for the future, <http://www.local.gov.uk/documents/10180/11431/Realising+talent+-+employment+and+skills+for+the+future/be9a4027-7cc6-47bc-a3d7-7b89eaf3ae69>

<sup>82</sup> Annual Population Survey, January 2015- December 2016, ONS <https://www.nomisweb.co.uk>

<sup>83</sup> For information about interpreting error bars please see Appendix 1.



unemployment rate for people with no qualifications being more than three times higher than of those with a degree or equivalent <sup>84</sup>.

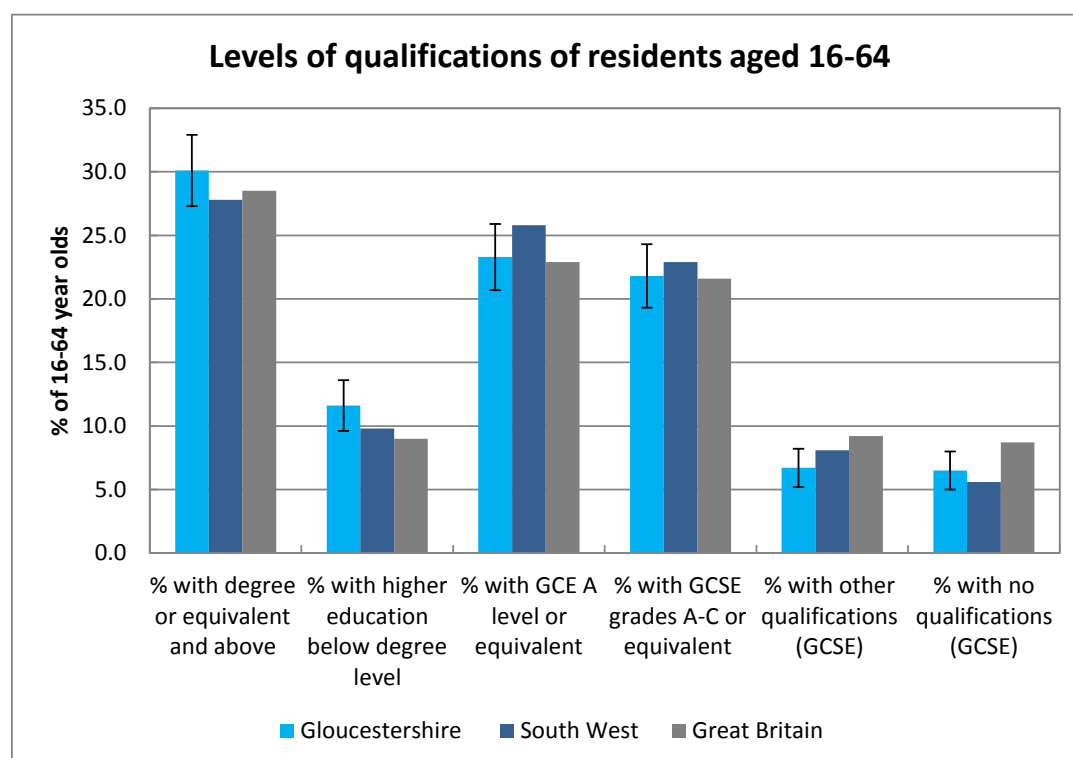


Figure 25: Levels of qualifications of residents aged 16-64<sup>85</sup>

## 6.2 Occupations

The high skill level of the population is reflected in the county's occupation structure.

Professional and associate professional occupations feature highly in Gloucestershire and when combined with skilled trades account for almost 50% of employment as shown in Figure 26.

The Managers, directors and senior officials account for a higher proportion of the resident based employment in the county compared to the regional and national averages.

The skilled trade occupations are also over-represented when compared to the national average, reflecting the importance of the manufacturing sector in the county.

<sup>84</sup> Characteristics of the short-term and long term unemployed, <http://www.ons.gov.uk/ons/rel/lms/labour-market-trends--discontinued-/volume-112--no--4/characteristics-of-the-short-term-and-long-term-unemployed.pdf>

<sup>85</sup> Annual Population Survey, January 2015- December 2016, ONS <https://www.nomisweb.co.uk>

<sup>85</sup> For information about interpreting error bars please see Appendix 1.

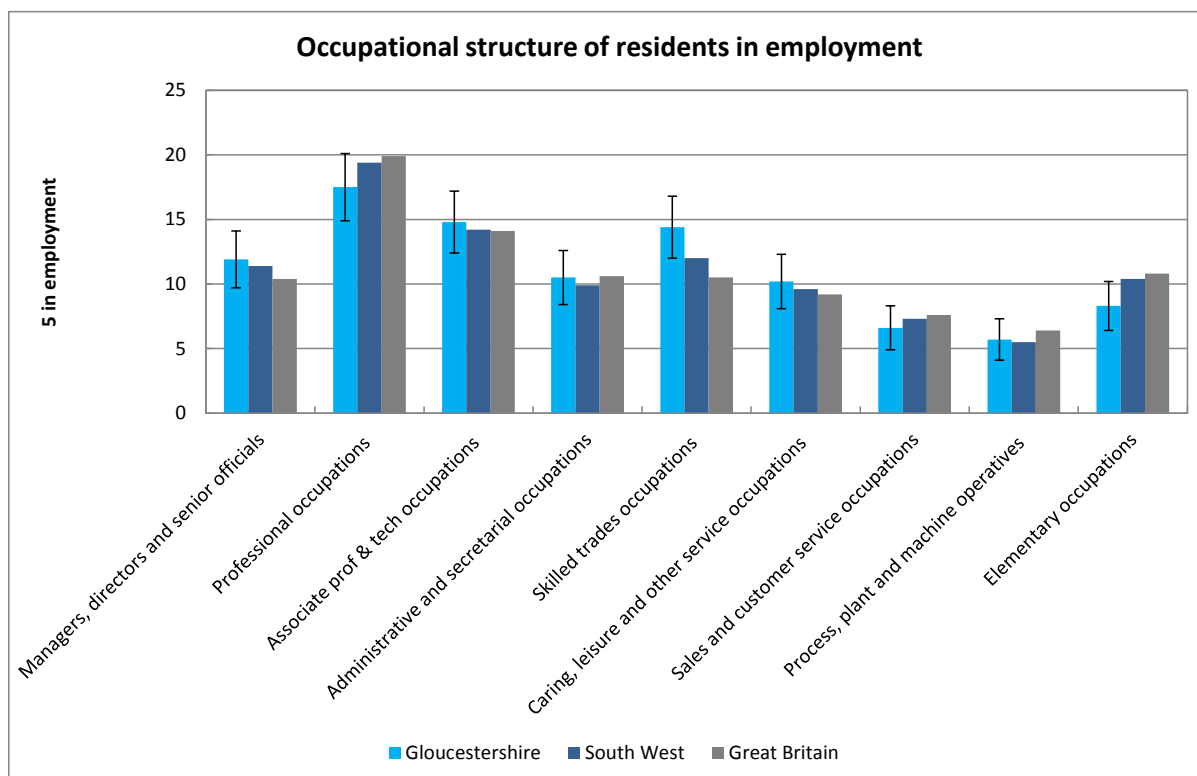


Figure 26: Occupational structure of residents in employment, April 2015 – March 2016<sup>86 87</sup>

Figure 27 shows the projected growth of occupational employment over the next ten years, the greatest growth is expected to be in managers, directors & senior officials followed by caring, leisure & other service occupations, both of which are also expected to increase at national level. Process, plant & machine operatives and skilled trade occupations are forecast to increase in Gloucestershire in complete opposition to the national picture.

Employment in sales & customer service occupations and associate professional & technical occupations are projected to decline in Gloucestershire and the United Kingdom.

<sup>86</sup> Annual Population Survey, April 2015 - March 2016, ONS <https://www.nomisweb.co.uk>

<sup>87</sup> For information about interpreting error bars please see Appendix 1.



Figure 27: Projected change in employment by broad occupational structure 2015-2025<sup>88</sup>

### 6.3 Travel to work and working at home

A mismatch between labour supply and labour demand can lead to commuting in or out of an area for work.

In 2011, of the 240,320 residents aged 16 and over in Gloucestershire who commuted to work, some 83.1% equating to 199,735 people worked within the county<sup>89</sup>.

Table 5: Commuting to work within Gloucestershire, 2011<sup>90</sup>

Resident Origin	Workplace Destination						
	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Cheltenham	29,462	1,768	311	4,454	1,191	6,313	43,499
Cotswold	1,487	16,221	147	796	957	687	20,295
Forest of Dean	1,073	329	15,379	4,036	467	1,646	22,930
Gloucester	5,057	948	1,054	29,407	4,699	7,053	48,218
Stroud	1,947	2,334	283	5,492	23,998	1,791	35,845
Tewkesbury	8,293	873	464	5,457	946	12,915	28,948
Gloucestershire	47,319	22,473	17,638	49,642	32,258	30,405	199,735

<sup>88</sup> LEFM

<sup>89</sup> 2011 Census, ONS <https://www.nomisweb.co.uk>

<sup>90</sup> *Ibid.*

Conversely some 40,585 (16.9%) residents commuted out of Gloucestershire to work. Of these some 42% travelled to the rest of the South West, 24% commuted to the West Midlands region, 13% went to the South East region and remaining work destinations were in Wales and London<sup>91</sup>. Figure 28 provides more detail and shows the most common district of work for residents who commute to work outside of the county. South Gloucestershire was the most common destination accounting for 13.8% of the total, this was followed by Bristol and Swindon accounting for 8.8% and 8.7% respectively.

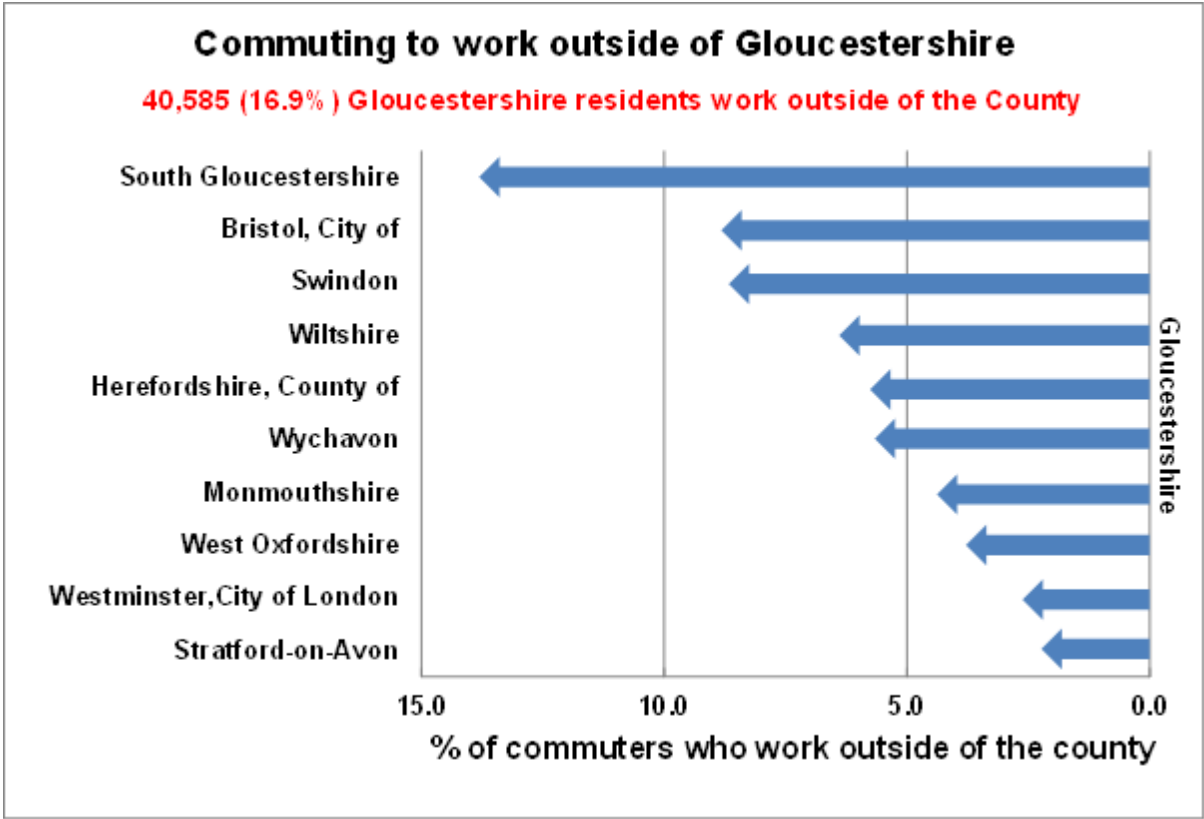


Figure 28: Commuting to work outside of Gloucestershire<sup>92</sup>

In addition some 38,148 (16.7%) workers commuted in to the county, of these nearly 40% came from the West Midlands region, 35% from the rest of the South West region, and the rest mainly from Wales and the South East region. Figure 29 provides more detail and shows the most common district of residence for workers who live outside of the county. Wychavon was the most common district of residence accounting for 13.1% of the total, this was followed by South Gloucestershire and Herefordshire accounting for 9.1% and 8.1% respectively.

<sup>91</sup> Ibid.  
<sup>92</sup> Ibid.

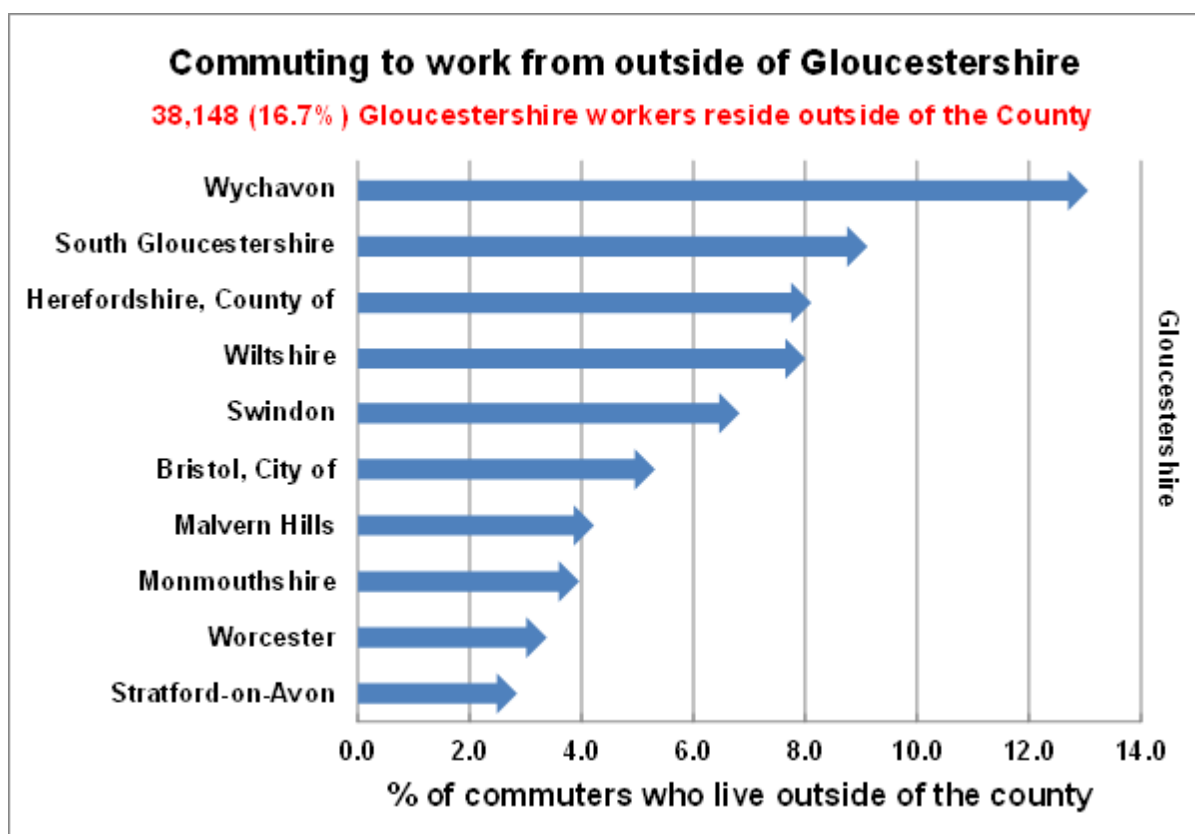


Figure 29: Commuting to work from outside of Gloucestershire<sup>93</sup>

Overall there is a net outward flow from Gloucestershire, with more people going out of the county for work than coming in as shown in Table 6.

Table 6: Number of workers commuting in or out of Gloucestershire districts 2011<sup>94</sup>

Commuting to work	Total outward	Total inward	Net
Cheltenham	19,782	24,148	4,366
Cotswold	13,820	15,709	1,889
Forest of Dean	14,627	6,015	-8,612
Gloucester	23,617	26,131	2,514
Stroud	20,526	13,287	-7,239
Tewkesbury	20,566	25,211	4,645
Gloucestershire (includes offshore installation & outside UK)	40,585	38,148	-2,437

In addition to those who commuted to work in 2011 there were another 38,200 people who worked at home in Gloucestershire equating to 13% of those employed residents aged 16 and over as shown in Table 7 this represents an increase of 2% since 2001.

<sup>93</sup> Ibid.

<sup>94</sup> Ibid.

The comparatively high proportion of those working at home coupled with the relatively large number of self employed are perhaps an indication of how the nature of the industrial structure of the county combined with improvements in communication and other technological advances have enabled businesses to locate and function much more efficiently in the more rural areas of the county.

*Table 7: Proportion of residents in employment who work at home 2011<sup>95</sup>*

Area	Work mainly at or from home Number	Work mainly at or from home as % of residents aged 16+ in employment
Cheltenham	6,199	10
Cotswold	8,268	20
Forest of Dean	5,618	14
Gloucester	4,439	7
Stroud	8,353	14
Tewkesbury	5,331	13
Gloucestershire	38,208	13

## 6.4 Earnings

There are two main measures of earnings, workplace based earnings and residence base earnings. The difference between the two is often related to commuting patterns, areas with higher workplace based earnings tend to be centres of employment attracting commuters from elsewhere, while areas with higher residence based earnings are generally residential areas where people commute from.

In 2016 median workplace-based gross annual earnings (before tax) for a full time worker working Gloucestershire was £27,384 this was slightly lower than residence-based gross annual earnings which stood at £27,818. This reflects the data around commuting which showed Gloucestershire is a net exporter of workers<sup>96</sup>.

Both residence and workplace based earnings are higher than the regional averages but lower than the national averages.

<sup>95</sup> *Ibid.*

<sup>96</sup> Annual Survey of Hours and Earnings, ONS [www.nomisweb.co.uk](http://www.nomisweb.co.uk)

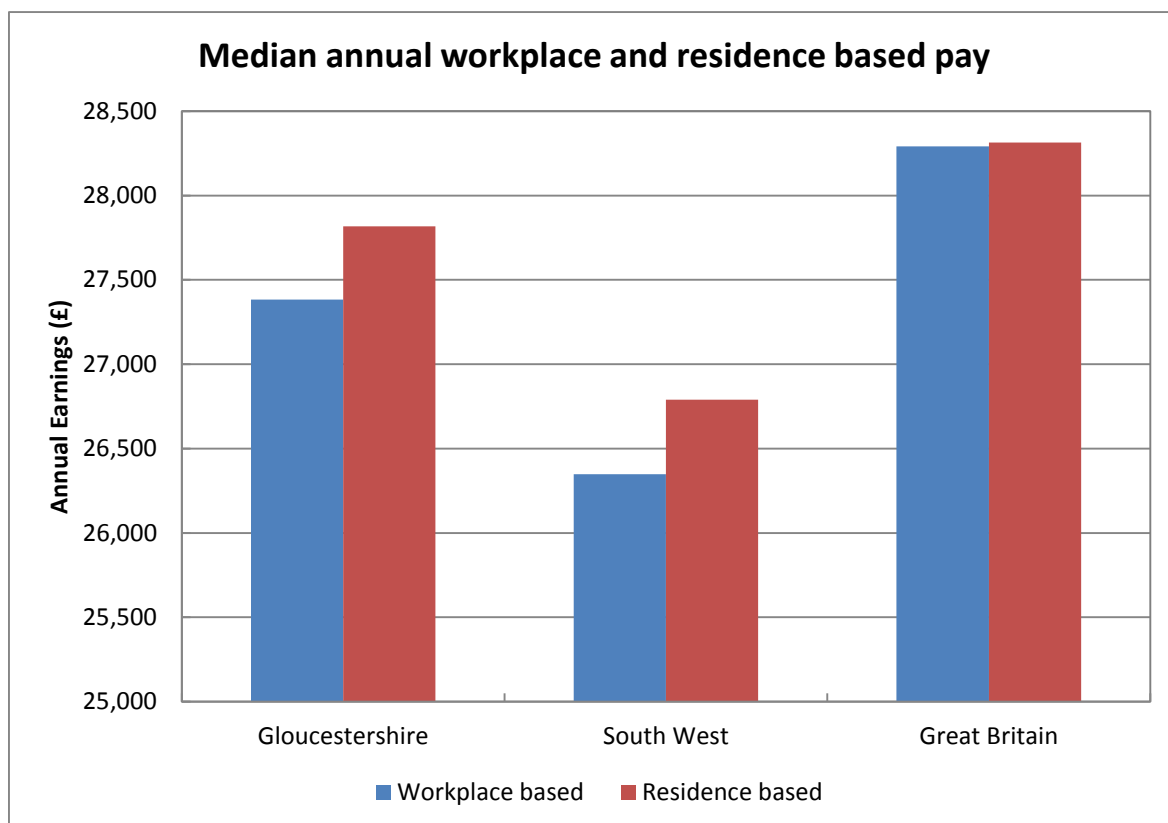


Figure 30: Median annual workplace and residence based pay, 2016<sup>97</sup>

## 7. Businesses

### 7.1 Active Businesses

Labour demand is determined by the businesses within an area. In 2016 there were around 28,295 businesses<sup>98</sup> in Gloucestershire, this equates to a rate of 744 per 10,000 working age population which was higher than the regional and national averages of 677 and 623 per 10,000 population respectively. Gloucester (440) has the least number of businesses per 10,000 working age population and is the only district with a lower rate than the national average. Cotswold (1,192) has the most businesses per 10,000 working age population.

<sup>97</sup> *Ibid.*

<sup>98</sup> UK Business Counts – Enterprises, 2016 <https://www.nomisweb.co.uk>.

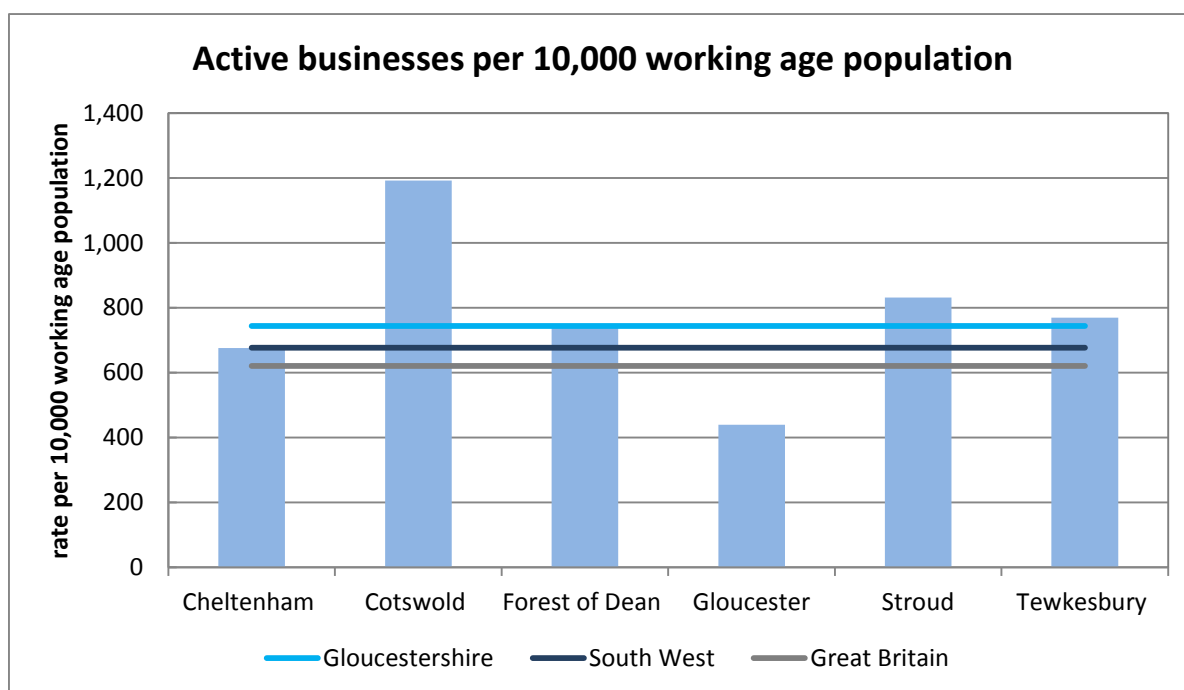


Figure 31: Active businesses per 10,000 working age population<sup>99</sup>

Over the last five years the number of businesses in Gloucestershire has increased by 2,095 or 12.3% which was lower than the regional and national average. At district level the greatest growth has been in Gloucester (17.8%), the Forest of Dean experienced the lowest rate of growth (7.6%)<sup>100</sup>.

Table 8: Change in the number of businesses 2011-2016<sup>101</sup>

	2012	2016	2012-2016		
			Net change	Overall change %	Average annual change %
Cheltenham	4,440	5,080	640	14.4	3.6
Cotswold	5,445	5,995	550	10.1	2.5
Forest of Dean	3,505	3,770	265	7.6	1.9
Gloucester	3,035	3,575	540	17.8	4.4
Stroud	5,275	5,865	590	11.2	2.8
Tewkesbury	3,500	4,015	515	14.7	3.7
Gloucestershire	25,200	28,295	3,095	12.3	3.1
South West	200,500	226,570	26,070	13.0	3.3
Great Britain	2,081,700	2,485,410	403,710	19.4	4.8

Much in accordance with the national structure the majority of businesses (88.9%) are small, employing up to nine people. There are however, a number of larger businesses employing 250+ people (100 equating to 0.4%).

<sup>99</sup> Ibid.

<sup>100</sup> Ibid.

<sup>101</sup> Ibid.



Table 9: Businesses by size, 2016<sup>102</sup>

	Number of businesses			Percentage of businesses		
	Gloucestershire	South West	Great Britain	Gloucestershire	South West	Great Britain
0 to 4	21,875	174,185	1,931,755	77.3	76.9	77.7
5 to 9	3,275	27,485	284,110	11.6	12.1	11.4
10 to 19	1,695	13,630	144,775	6.0	6.0	5.8
20 to 49	890	7,235	76,455	3.1	3.2	3.1
50 to 99	295	2,150	24,820	1.0	0.9	1.0
100 to 249	165	1,150	14,015	0.6	0.5	0.6
250 to 499	50	385	4,620	0.2	0.2	0.2
500 to 999	30	170	2,285	0.1	0.1	0.1
1000+	20	185	2,580	0.1	0.1	0.1
Total	28,295	226,575	2,485,415	100	100	100

Figure 32 illustrates the distribution of businesses by broad industrial sector, while Figure 33 shows the industrial sectors in terms of their size, growth and local concentration. The sectors with the most businesses in the county are those represented by the largest bubbles. Those in the top-left quadrant are more concentrated in Gloucestershire than in England as a whole, but crucially have experienced falling numbers in Gloucestershire in recent years. The upper-right quadrant of the diagram shows sectors which are growing and in which Gloucestershire has a structural advantage in terms of local concentration of businesses.

The professional, scientific & technical sector accounts for the largest number of businesses with 5,130 companies accounting for 18.1% of the business base, this is followed by the construction industry which accounts for 11.7% of the total. With the exception of wholesale and retail, all sectors have experienced a growth in the number of businesses over recent years, the greatest growth has been in public administration and defence. In terms of specialisms, Gloucestershire has a concentration of businesses in agriculture and public administration and defence when compared to the national average.

<sup>102</sup> *Ibid.*

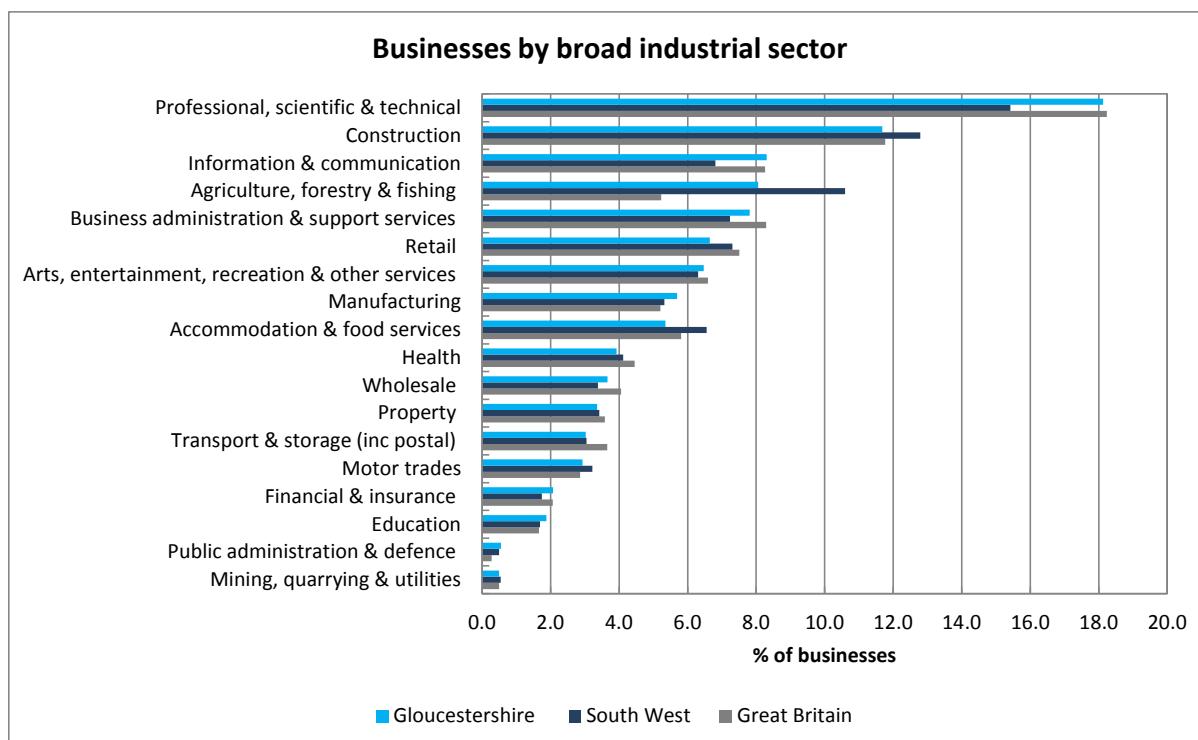


Figure 32: Businesses by broad industrial sector, 2016<sup>103</sup>

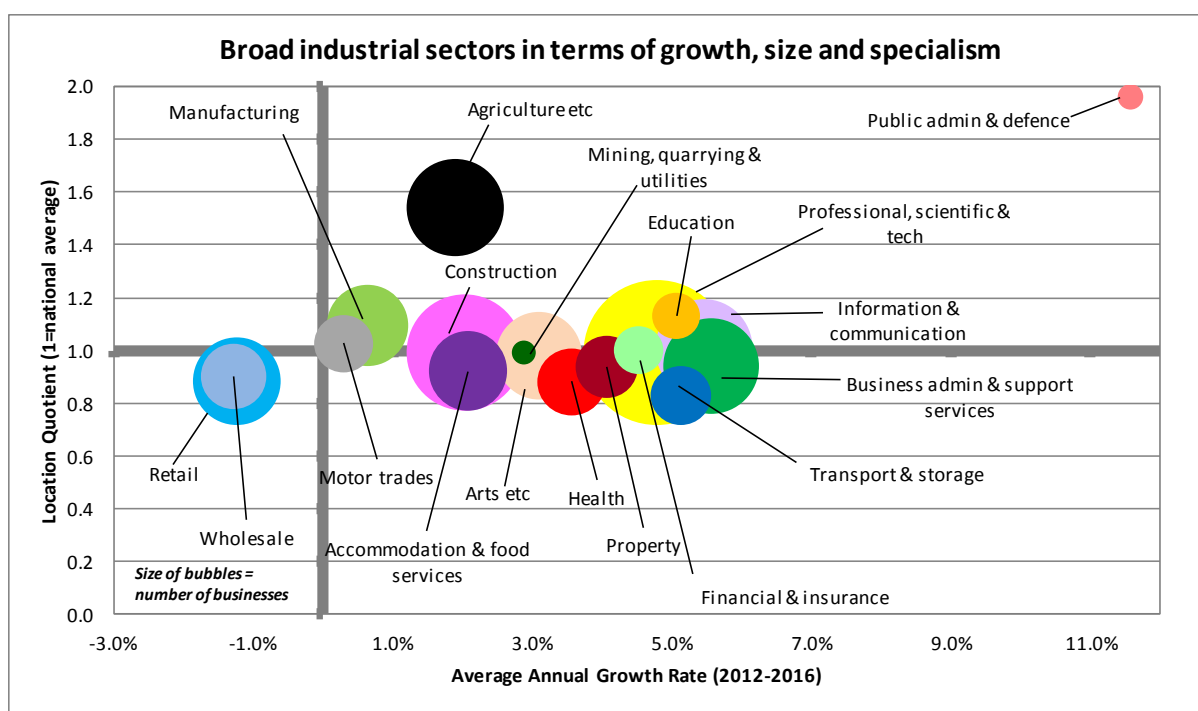


Figure 33: Broad industrial sectors in term of growth, size and specialism<sup>104</sup>

There are some differences at district level. Figure 34 shows that the professional scientific and technical sector accounts for the largest proportion of

<sup>103</sup> Ibid.

<sup>104</sup> Ibid.

businesses in Cheltenham, Cotswold, Stroud and Tewkesbury, while in the Forest of Dean agriculture is the largest sector in terms of businesses and in Gloucester it is the construction industry.

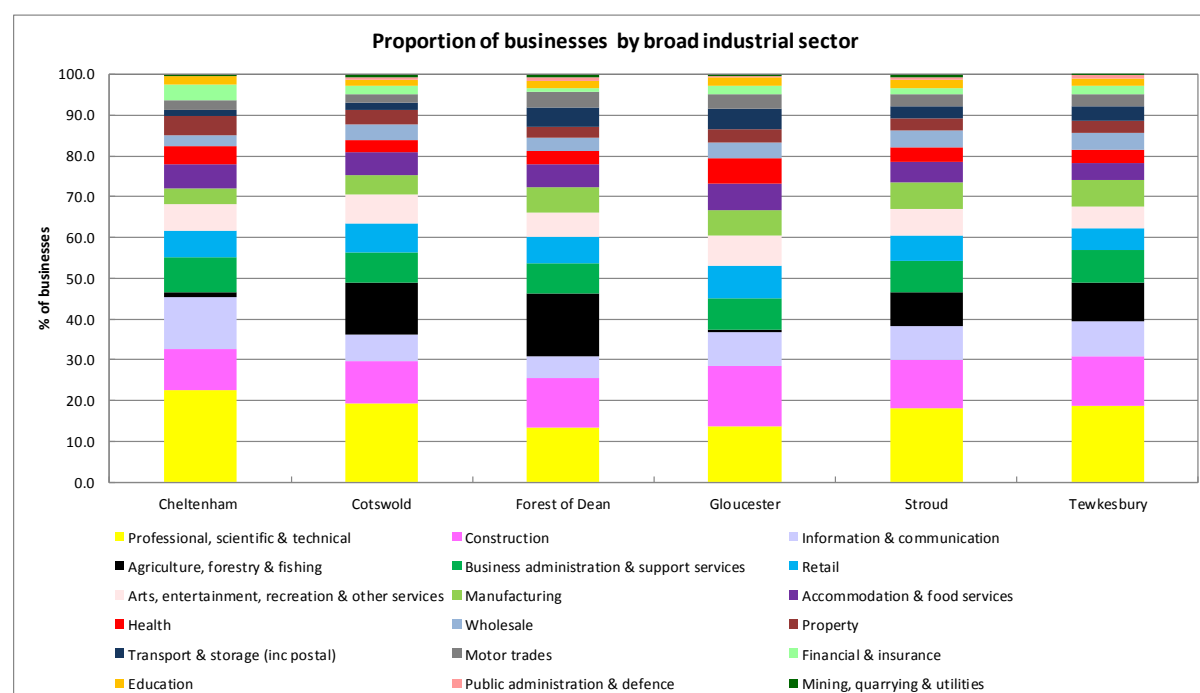


Figure 34: Proportion of businesses by broad industrial sector, 2016<sup>105</sup>

## 7.2 Business births

In 2015, 3,235 new companies were created in Gloucestershire. This equates to a rate of 85.0 business 'births' per 10,000 of the working age resident population, which was higher than the regional rate of 78.2 births per 10,000 working age population but lower than the national rate of 94.3. Gloucester (66.4) has the lowest rate of business births per 10,000 working age population closely followed by the Forest of Dean (66.7). Cotswold (120.3) has the most business births per 10,000 working age population.

<sup>105</sup> Ibid.

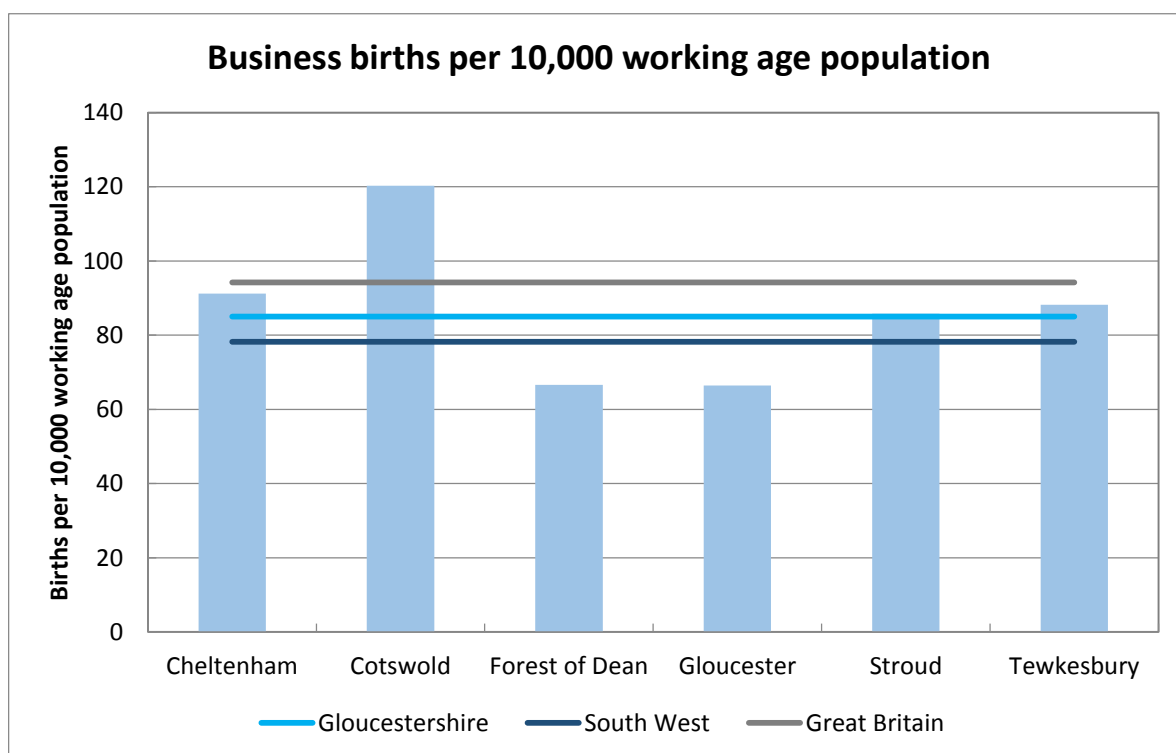


Figure 35: Business births per 10,000 working age population<sup>106</sup>

Over the last five years the number of business births in Gloucestershire has increased by 765 or 31.0% which was lower than the regional and national rates of growth. At district level the greatest growth has been in Gloucester (52.1%), Cheltenham experienced the lowest rate of growth (17.1%)

Table 10: Change in the number of business births, 2011-2015<sup>107</sup>

	2011	2015	2011-2015		
			Net change	% change	Average annual change
Cheltenham	585	685	100	17.1	4.3
Cotswold	480	605	125	26.0	6.5
Forest of Dean	245	340	95	38.8	9.7
Gloucester	355	540	185	52.1	13.0
Stroud	475	605	130	27.4	6.8
Tewkesbury	330	460	130	39.4	9.8
Gloucestershire	2,470	3,235	765	31.0	7.7
South West	19,750	26,155	6,405	32.4	8.1
Great Britain	257,625	377,635	120,010	46.6	11.6

<sup>106</sup> Business Demography, ONS

<https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/datasets/business-demographyreferencetable>

<sup>107</sup> Ibid.

### 7.3 Business deaths

There were 2,390 business deaths (companies closing) in Gloucestershire in 2015, this means business births outnumbered business deaths. This equates to a rate of 62.8 business deaths per 10,000 working age population, which was broadly in line with the regional and national averages of 58.0 and 61.9 respectively. By district Gloucester (43.7) and the Forest of Dean (52.0) had the lowest rates of business deaths, while Cheltenham (80.5) and Cotswold (85.5) had the highest, this reflects the picture seen when looking at business births.

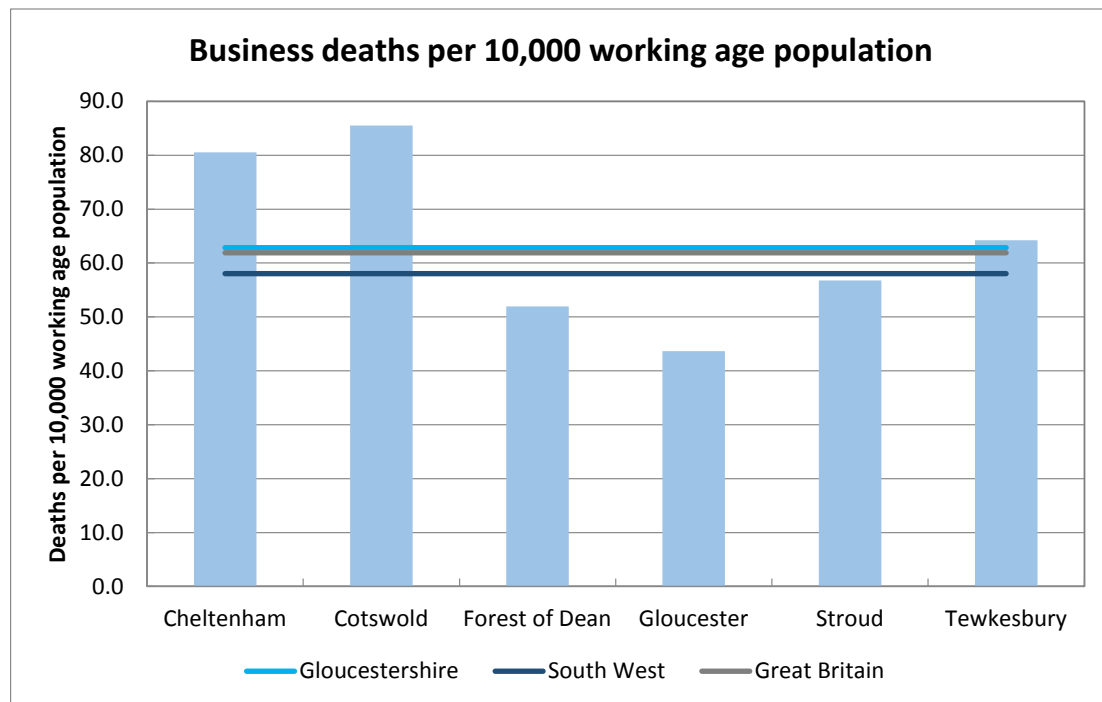


Figure 36: Business deaths per 10,000 working age population<sup>108</sup>

Over the last five years the number of business deaths in Gloucestershire has decreased by 15 or 0.6%, in contrast the number of business deaths has increased at regional (3.2%) and national level (10.4%). At district level Tewkesbury (19.6%) and Stroud (2.6%) saw an increase in business deaths, while the remaining districts saw a decline.

<sup>108</sup> Ibid.

Table 11: Change in the number of business deaths, 2011-2015<sup>109</sup>

	2011	2015	2011-2015		
			Net change	% change	Average annual change
Cheltenham	620	605	-15	-2.4	-0.6
Cotswold	475	430	-45	-9.5	-2.4
Forest of Dean	280	265	-15	-5.4	-1.3
Gloucester	360	355	-5	-1.4	-0.3
Stroud	390	400	10	2.6	0.6
Tewkesbury	280	335	55	19.6	4.9
Gloucestershire	2,405	2,390	-15	-0.6	-0.2
South West	18,805	19,415	610	3.2	0.8
Great Britain	224,745	248,055	23,310	10.4	2.6

## 7.4 Business survival rates

In Gloucestershire, for businesses started in 2010:

- 88.7% survived 1 year
- 74.6% survived 2 years
- 60.4% survived 3 years
- 52.2% survived 4 years
- 44.8% survived 5 years

Gloucestershire's survival rates were consistently higher than the regional and national averages. At district level Gloucester had the highest first year survival rate, but one of the lowest survival rates for the following years. Cotswold had the highest survival rate in years 2 to 5.

Table 12: Survival rates for businesses born in 2010<sup>110</sup>

	Survival rates (%)				
	1 year	2 year	3 year	4 year	5 year
Cheltenham	88.2	72.5	57.8	48.0	40.2
Cotswold	89.5	77.9	64.2	55.8	48.4
Forest of Dean	86.5	73.1	59.6	53.8	46.2
Gloucester	90.0	74.3	55.7	48.6	42.9
Stroud	87.7	74.1	63.0	53.1	45.7
Tewkesbury	90.0	75.0	61.7	55.0	46.7
Gloucestershire	88.7	74.6	60.4	52.2	44.8
South West	88.1	74.2	59.9	51.0	44.2
Great Britain	86.7	72.5	57.1	48.1	41.4

<sup>109</sup> *Ibid.*

<sup>110</sup> *Ibid.*

## 8. Gross Value Added

### 8.1 Total Gross Value Added

Gross Value Added (GVA) is used to measure the economic value of the goods and services produced in an area.

In 2015 the total output of the Gloucestershire economy was approximately £15.97 billion, representing 13% of the value of output in the South West and 1% of the UK economy<sup>111</sup>.

Figure 37 shows the annual rate of growth in GVA during the period 1997-2015. Between 1997 and 2007 Gloucestershire, the South West and the UK experienced consistent growth in GVA. The recession in 2009 saw a fall in GVA, with the UK experiencing a greater decline than Gloucestershire and the South West. Since 2010 Gloucestershire, the South West and the UK have all returned to positive growth and in recent years the rate of growth in Gloucestershire has exceeded the regional and national average.

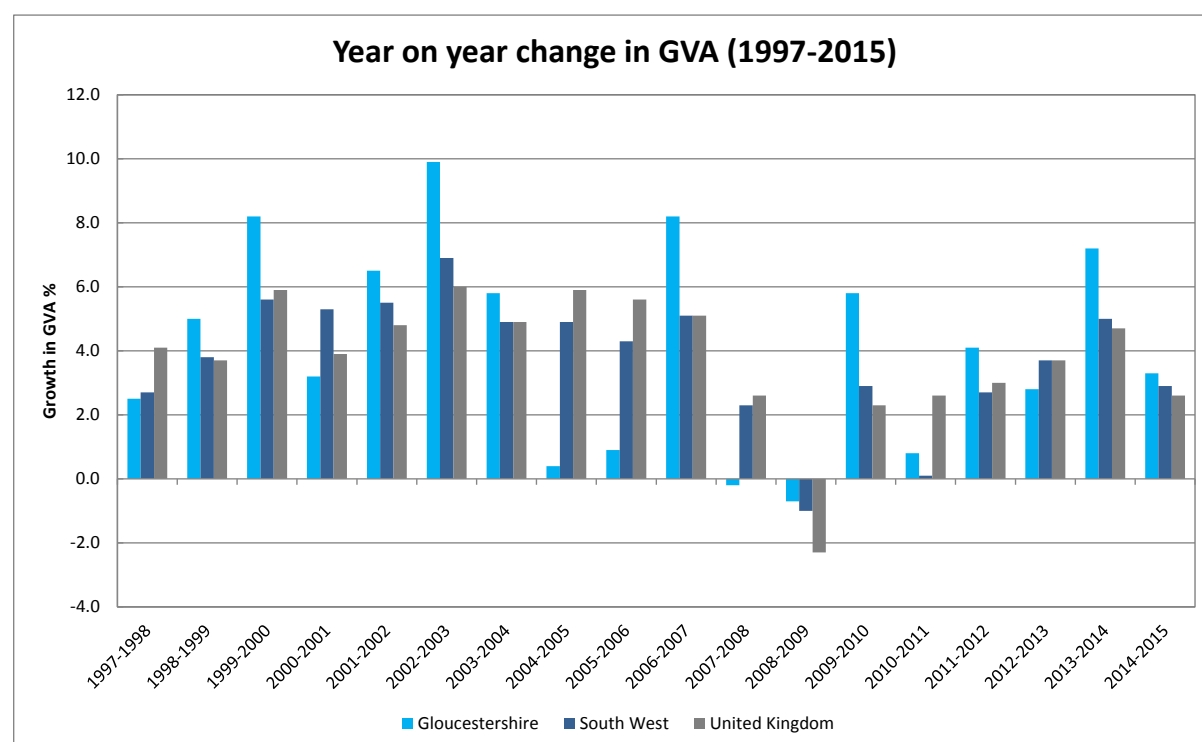


Figure 37: Year on year change in GVA, 1997-2015<sup>112</sup>

### 8.2 Gross Value Added by sector

In 2015, the largest sectors by share of overall GVA in Gloucestershire were public administration, education and health (19.2%) and distribution, transport, accommodation and food (17.1%), this reflects the picture seen at regional and

<sup>111</sup> Regional Gross Value Added (Income Approach), 1997 to 2015, ONS

<http://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regionalgrossvalueaddedincomeapproach>

<sup>112</sup> Ibid.

national level. The manufacturing sector was the third largest sector in Gloucestershire in terms of GVA and accounts for a higher proportion of total GVA than at a regional or national level, this reflects the local concentration of the sector observed in employment and businesses.

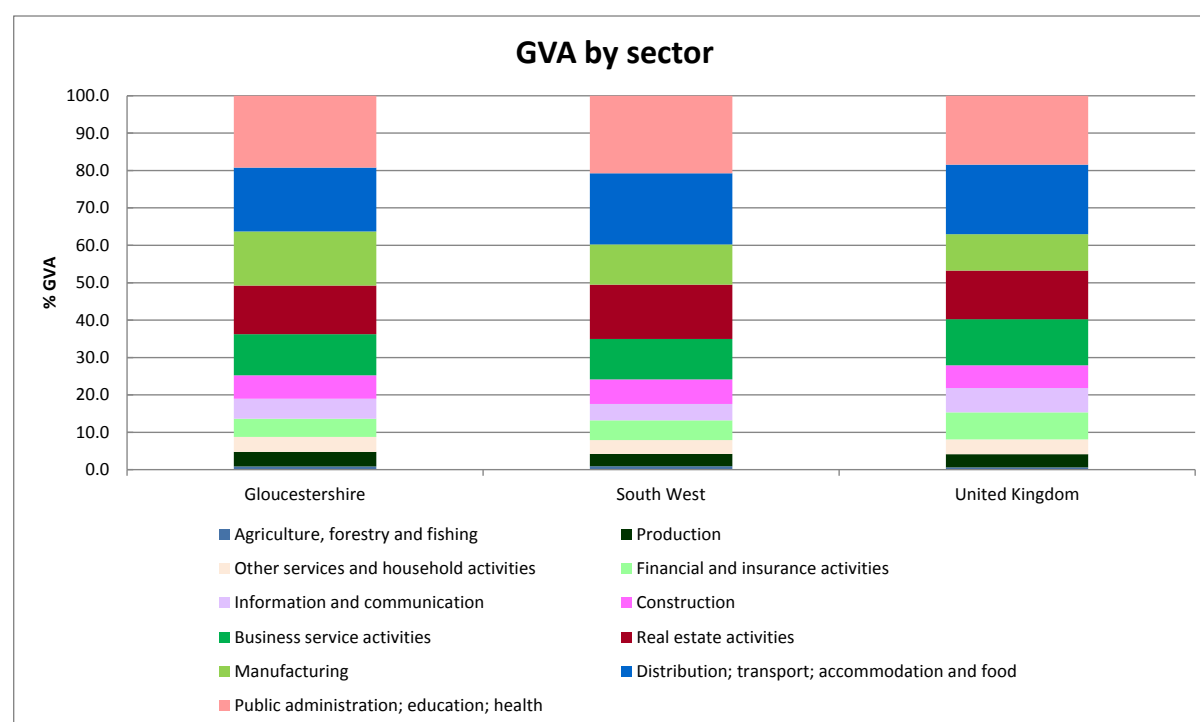


Figure 38: GVA by sector as a percentage of total GVA, 2015<sup>113</sup>

Between 2011 and 2015 all sectors experienced a growth in output. The greatest growth was in the production sector (50.1%) which may reflect the growing importance of the energy industry in the county. Other sectors that experienced high levels of growth include business service activities and other services. In contrast the lowest rates of growth were seen by the agriculture, forestry and fishing and finance and insurance sectors.

Table 13: GVA by Sector 2011-2015<sup>114</sup>

	% of total		2011-2015	
	2011	2015	£m change	% change
Agriculture, forestry and fishing	1.0	0.9	4	2.9
Production	3.0	3.9	206	50.1
Manufacturing	16.1	14.4	131	6.0
Construction	5.6	6.2	244	32.4
Distribution; transport; accommodation and food	16.3	17.1	534	24.4
Information and communication	4.8	5.3	203	31.3
Financial and insurance activities	5.5	4.9	28	3.7
Real estate activities	12.9	13.0	344	19.8
Business service activities	9.5	11.0	485	38.0
Public administration; education; health	21.7	19.2	142	4.8
Other services and household activities	3.6	4.0	163	33.9

<sup>113</sup> Ibid.

<sup>114</sup> Ibid.



### 8.3 Gross Value Added per head

Gross Value Added (GVA) per head can be a useful way of comparing regions of different sizes. According to latest figures, GVA per head in Gloucestershire was £25,872, which was above the South West (£23,031) and UK average (£25,601)<sup>115</sup>. Unsurprisingly the annual rate of growth in GVA per head, reflects the trend observed in total GVA.

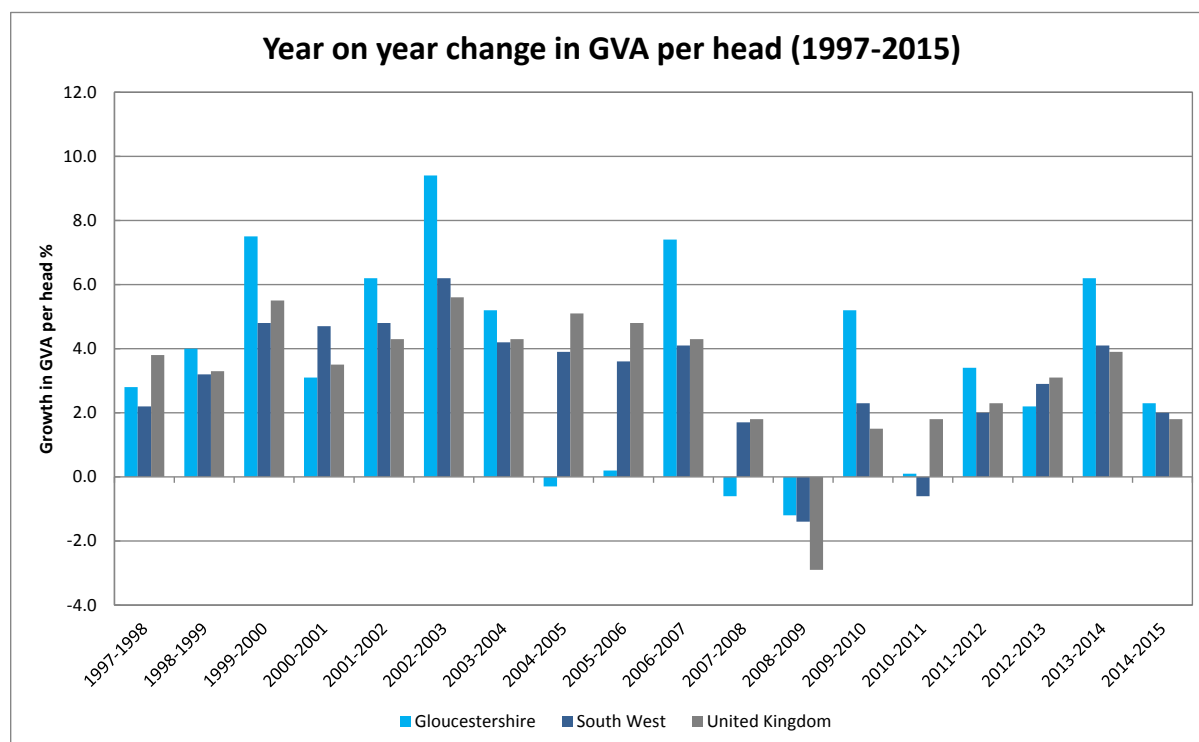


Figure 39: Year on year change in GVA per head 1997-2015<sup>116</sup>

### 8.4 Gross Value Added per job and per hour worked

Gross Value Added can also be represented on a 'GVA per job and GVA per hour worked' basis as productivity. These measures are particularly useful when comparing those areas with high net in or out commuting, because it compares a workplace measure of economic output (GVA) with those who are directly employed in the production process, rather than those who may not be in employment or be employed elsewhere.

According to latest figures, GVA per head in Gloucestershire was £48,8741, which was above the South West (£45,361) but below the UK average (£50,830)<sup>117</sup>.

GVA per hour worked divides GVA by the total hours worked by the workforce in the area. There are some differences between this and GVA per job because the average of hours worked per job varies from area to area as a result of

<sup>115</sup> *Ibid.*

<sup>116</sup> *Ibid.*

<sup>117</sup> Regional and sub-regional productivity in the UK: Jan 2017, ONS, <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/regionalandsubregionalproductivityintheuk/jan2017/relateddata>

differences in labour market structure and working patterns. For example, an area with high levels of part-time employment will tend to have lower average hours worked per job. In 2015 Gloucestershire's GVA per hour worked was £30.2, this was above the South West average (£29.4) but below the UK average (£31.8) reflecting the picture seen in GVA per job<sup>118</sup>.

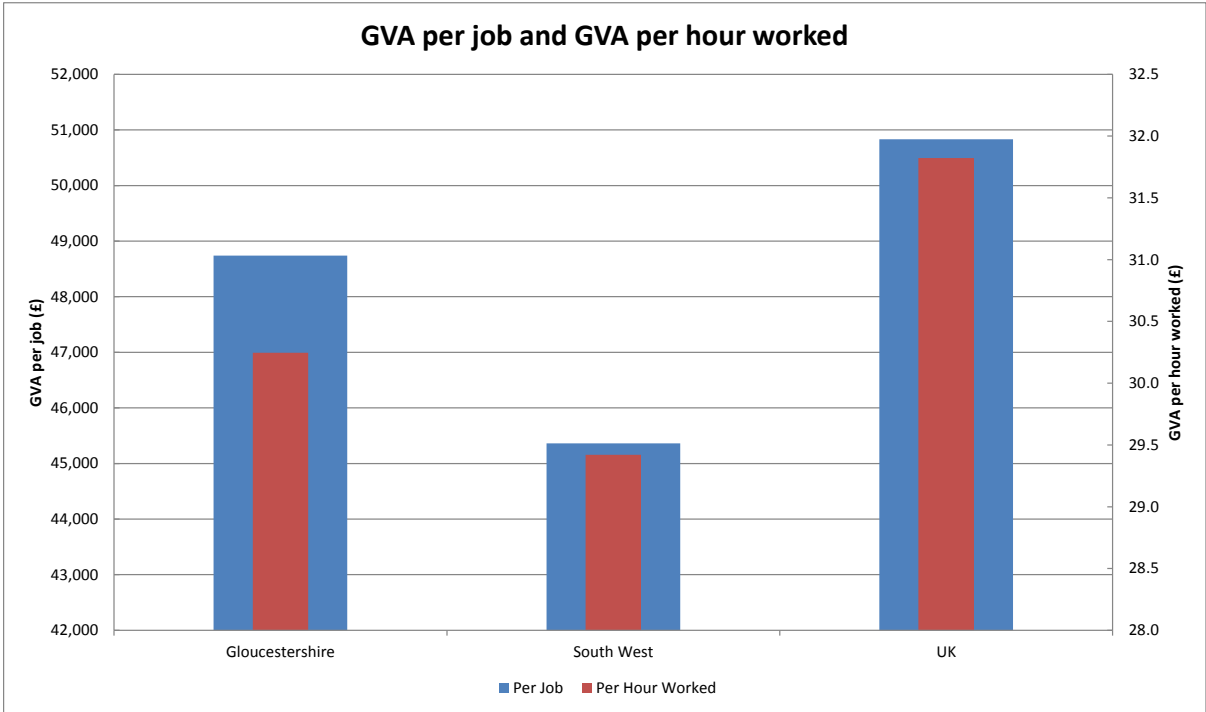


Figure 40: GVA per job and GVA per hour worked, 2015<sup>119</sup>

<sup>118</sup> Ibid.  
<sup>119</sup> Ibid.

## **Appendix 1: Error Bars**

The Annual Population Survey is a sample survey, it provides estimates of population characteristics rather than exact measures. In principle, many random samples could be drawn and each would give different results, due to the fact that each sample would be made up of different people, who would give different answers to the questions asked. The spread of these results is the sampling variability. The error bars indicate the level of confidence for each value on the graph. Longer/wider intervals mean more uncertainty. When two intervals do not overlap it is reasonably certain that the two groups are truly different.