Gloucestershire Local Economic Assessment: 2011

Report for GFirst, compiled by Inform Gloucestershire

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Gloucestershire Local Economic Assessment: 2011

Executive Summary

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Executive Summary

This summary presents a brief overview of each chapter comprising the assessment. The key issues section attempts to identify the strengths of the Gloucestershire economy, the inter-relationships that may exist and potential threats that are brought out through the use of SWOT analyses. Areas of future research have been identified where gaps in the data have precluded sufficient analysis.

Overview

2: Geography

Gloucestershire is the northernmost County in the South West region and is divided into six districts all with quite different characteristics. It has been a significant location for commerce since Roman times and located at a cross roads between Wales and London and the West Midlands and the South West it continues to be advantageous as a business location.

Gloucestershire can be described as a vibrant functional economic area. Although the County is strong in Advanced engineering and Financial services sectors, these are balanced by Tourism, the Creative industries and the increasingly important Environmental technologies sector.

Gloucestershire is primarily a rural County. Cheltenham and Gloucester are the key urban settlements and as such act as the main business, commercial, educational, service and cultural centres. They are complemented by a number of market towns which act as employment hubs and as providers of services to resident communities and outlying rural areas.

3: People and Communities

The population of the County has been increasing, largely due to net in-migration which accounted for over 80% of growth. Gloucester district was the only district where the majority of growth has been the result of natural change.

Looking at the movements of various age groups, over the last fifteen years there has been a net inflow of people aged between 30 and 44 yrs and children under 15 yrs, however, during that time the County has also experienced a net outflow of people aged between 15-29 yrs particularly men.

In addition, during this period the population of those older than 65 yrs has seen the greatest increase and this is projected to increase for another twenty five years. In contrast the number of children and young people is expected to decline steadily while the number of working age people will remain fairly static. This picture of an ageing population which is accentuated in the rural districts, is likely to ultimately place increasing pressure on those of working age to support it.

Gloucestershire has an employment base of 272,000 people, some 14% of this number are self-employed which is higher than the national average and male full-time employees comprise 46% of the total employed amounting to 125,000, a number that has been declining over the last four years.

Some 88% of residents in Gloucestershire also work in the County, a situation that has hardly changed since 2001. Nearly twice as many people travel from Gloucestershire to Bristol than make the reverse journey and the picture is the same for Swindon. The County is also an important employer of workers from Worcestershire, half of whom travel to Tewkesbury Borough to work.

There is considerable commuting within Gloucestershire, highlighted by over a third of Tewkesbury's working residents travelling to Cheltenham and Gloucester to work and a comparatively high proportion of Forest of Dean residents travelling to Gloucester to work.

The education system is undergoing massive reform and one of the early outcomes is the conversion of schools to academies. Over half the number of Gloucestershire secondary schools have already become or are about to convert to academy status.

Participation rates in full time education although still lower than the regional and national averages have increased at a faster rate between 2005 and 2007. With higher than national average results at GCSE and A/AS levels and just over a third of working age residents qualified to degree level, the County has a well qualified and highly skilled workforce. However, there is the issue of attracting young qualified people to remain in the County. Also apparent is the number of residents going on to Higher Education has decreased, a situation also reflected in the South West and England.

The occupational structure in the County reflects its high level of qualification and skill base with a higher than average proportion of professional occupations than shown at the regional and national level. Over the last five years employment in the Professional and Skilled occupations has increased while the Sales and Customer service occupations showed the largest decline.

Gloucestershire businesses account for 11% of the total number of skill shortage vacancies in the South West in 2009. Comparison with the rest of the South West sub regions places it at the fourth highest after Devon and Cornwall with similar levels to Swindon and Somerset and just above the regional average of 10%.

The proportion of employers reporting skill gaps in the County increased from 19% to 21% between 2007 and 2009 and the number of staff considered by those employers as not fully proficient also increased by 7,800 over the same period.

In 2009, Gloucestershire compared to the other South West sub regions had at 13%, the highest proportion of staff considered not fully proficient by their employer amounting to 26,800, out of a South West total of 213,000.

Despite being a relatively affluent area there are still pockets of deprivation. These are mainly located in the inner urban areas of Cheltenham and Gloucester and have remained consistent over the last five years.

4: Business and Enterprise

The total number of employees in employment in Gloucestershire amounting to 254,300, decreased by nearly 5% between 2004 and 2008 a situation that has not been reflected in the South West or nationally. Of the three districts with the largest proportion of employees in the County, Gloucester has remained fairly static over the last few years, while Cheltenham experienced decline before starting to recover in 2008 and Stroud has shown an increase.

Employment in the County is predicted to grow by about 2.8% over the next ten years with not unsurprisingly Cheltenham and Gloucester sharing the majority of this growth while the Forest of Dean will experience decline.

Structurally, growth experienced by the Construction and Banking, finance and insurance sectors has been offset by decline in the Manufacturing, Public sector and Distribution sectors

Those core activities or parts of core activities that appear to offer significant growth opportunities for the future, relate to either present good performance or the inevitable demand from burgeoning new technologies. They include the looming nuclear demand and those high-tech manufacturing activities both in aerospace and precision and medical instruments that despite a projected decline in the number of employees in the Advanced engineering sector as a whole, are however, locally strong and have been performing well.

Other growth sectors are the Creative industries in terms of digital media supported by an improved Broadband capability in the County, Environmental technologies relating to the low carbon sector demand and Care activities in response to the needs of an ageing population.

Gloucestershire has a well developed knowledge economy comprising over a fifth of the total number of employees in the County. The knowledge intense services sub sector accounts for the majority of employees mainly in the Other business activities and Hospital activities.

Other business activities comprise a diverse range of services provided by architects, accountants, lawyers, engineers, IT specialists, consultants, technical and Research and Development services etc that function through the sale of expertise and advice and/or information. In order to remain competitive in this aspect of the knowledge economy the potential to further develop, sell and export expertise and/or information will need to be maintained.

The performance of the Gloucestershire economy amounted to £11,500 million in 2007 which contributed some 12% of the South West GVA. Almost a third of the Gloucestershire output was provided by the Business service and finance sector. In terms of productivity Gloucestershire performs well above the regional average.

In 2008 with the addition of 450 new businesses the stock of businesses amounted to about 26,000 in the County. The majority of these businesses employ up to nine people. The County has a comparatively good business survival rate with 94% businesses surviving after one year and 50% after five years. Gloucestershire's entrepreneurial strength is also evident from the level of small business creation and growth.

Both entrepreneurial and innovative business strengths are well represented in Gloucestershire by a number of companies including GE Aviation, Messier-Bugatti-Dowty, Renishaw, Ageas Insurance, Bottlegreen Drinks Co, Watts Group, Supergroup and Green Fuels to name a few.

5: Functional Economic Market Areas

Gloucestershire is a functional economic market area with two urban centres that despite their proximity to each other have developed their own unique characteristics. The County has been influenced by the route of the M5 which has enabled easy access to work, amenities and leisure which is reflected in the associated commuter belt extending beyond the County border. However, Gloucestershire, is self-contained in terms of travel to work with some 88% of the resident population living and working in the County.

Gloucestershire can be described in terms of four characteristics based on a multivariate analysis of the County. A rural aspect with associated pockets of retirement areas and attractive rural settlements, two urban clusters, namely Cheltenham and Gloucester with the associated inner city deprivation and low skills neighbourhoods. The north east south west commuter belt following the path of the M5 and an area in the west of the County with a mix of deprivation and low skill neighbourhoods alongside commuter belt and retirement and resort areas.

Gloucestershire is one of thirty eight areas in England to have fulfilled the economic and travel to work criteria to attain Local Enterprise Partnership (LEP) status. LEPs have replaced the Regional Development Agencies and aim to act as joint local authority-business bodies working to promote local economic development and growth.

In Gloucestershire the strategic transport corridors, the M5 and the M4 along with the sector activities; advanced engineering, finance and business services, defence, tourism, food and drink and rural issues has created the opportunity for developing existing and building new links with other LEPs that are sited in the West Midlands and Birmingham to the north, Bristol to the south and the Thames valley and London and the South East.

6: Sustainable Economic Growth

Gloucestershire has a well-developed strategic road network with the M5 running north-south through the County providing good links to Birmingham and the North, Bristol and the South West and links to the M4 corridor to London and South Wales.

As a rural County there is a high dependency on road transport and high levels of car ownership particularly in the four rural districts. The main form of public transport across the County is the bus and sustaining frequent services particularly across the rural areas of the County is challenging and expensive. The consequences of the budget cuts on the council-run bus services (which are currently under review) are not yet known.

There are nine rail stations in the County and four different train operating companies offering services. The recent news that the DfT will fund the redoubling of the line between Swindon and Kemble will increase the capacity of the railway linking Gloucestershire with Swindon, London and the South East in the future.

Several major airports are within easy reach for Gloucestershire residents and businesses including Bristol, Cardiff, Birmingham and London Heathrow which is approx 2 hours by car from the centre of Gloucester.

Apart from Gloucester all the parliamentary constituencies in Gloucestershire have a higher proportion of the population living in areas with low internet speeds than nationally. The problem is particularly pronounced in the Forest of Dean. To that end the County has successfully bid in conjunction with Herefordshire to become one of four pilots developing a new technological solution to the provision of next generation access broadband across the rural areas of southern Herefordshire and the Forest of Dean. This will form the first phase of the wider roll out of superfast broadband infrastructure to Gloucestershire and Herefordshire.

In January 2011 there were 388 renewable electricity projects and 670 renewable heat projects in Gloucestershire accounting for 8.5% and 16% of the South West's electricity and heat capacity respectively. The majority of renewable energy capacity is generated by landfill gas projects and heat capacity by biomass.

In 2009/10 some 61% of Gloucestershire's municipal waste was sent to landfill which although significantly higher than the regional and national averages has improved from 66% in 2006/07. There has been a corresponding improvement in the proportion of waste being recycled, reused or composted across all districts with Gloucester and Cotswold districts showing the greatest increase.

Gloucestershire has a high quality natural and historic environment which attracts people to the area to both live and work and is attractive for leisure and tourism. The floods of 2007 had a devastating impact on the County in terms of disruption to households, business, utilities, and services and left a legacy of substantial cost in terms of clean up costs and damage to infrastructure.

The drive towards reducing the amount of greenhouse gases produced and moving towards a Low Carbon economy offers opportunities for using technology which has a lower impact on the environment and provides cost saving or other efficiencies.

In 2010 there were an estimated 268,680 dwellings in Gloucestershire. Some 66% of the housing stock is made up of detached and semi-detached properties. Between 2006 and 2010 around 2,500 additional affordable homes were provided in the County. Household numbers are projected to increase by 9% to 282,800 by 2020.
In 2008 the total floor space relating to retail, office, factory and warehouse premises in Gloucestershire was about 6.5 million square metres accounting for around 16,000 premises. Some 65% of this floor space was taken up by factory and warehouse premises.

Key Issues

The Gloucestershire economy has many key strengths including a good infrastructure and outstanding environment that has attracted both international and innovative business creating a diverse range of industrial activities utilising a relatively highly skilled workforce that is able to live and work in prosperous and beautiful surroundings.

However, in order to retain these assets the County will need to not only maintain its competitiveness but also prepare for future change and possible threats to its economy especially in light of the recent change of government and the ensuing massive legislative changes.

One inevitable challenge is the issue of an ageing population, although a national problem, it is exacerbated in Gloucestershire not only by the attraction of a pleasant environment that brings older people back to the County to work and retire, but also the continuing trend of young people leaving the County.

In terms of the workforce, this loss of a potentially well educated resource reflected by the higher than average success rates at GCSE and A level will, in time create a dearth in the supply of young people. This may be partly offset by older workers staying in work longer as a result of legislative changes in relation to working age and pensions but ultimately, an increasingly top heavy structure that may inevitably lead to an increase in those skills shortages/gaps that are being identified now.

Part of the exodus of young people from the County may be the result of it's own success in that the young qualified can't work and live here while there is no suitable housing or transport available at a price they can afford. This is accentuated in the rural areas where the number of people of child-bearing age are declining.

The decline in the number of Gloucestershire residents entering Higher Education may reflect the affect of rising costs of Higher Education, however, the growth in the availability of accredited training in the workplace through Apprenticeships could influence young people to not only stay in the County but lead to enhancement of the skills set of the workforce.

The polarity effect of an increase in the working age population residing in the urban districts of Cheltenham and Gloucester while the surrounding rural districts experienced a decline has resulted in a complex commuting pattern between the rural and urban districts of the County that possibly reflects the evidence supporting an increase in the number of employees in rural areas and associated decline in urban areas.

Although evidence points to a relatively highly skilled workforce in the County there are still skill shortage/gap issues. With areas of the private sector expanding after the recession, the effects of the welfare reforms and the public sector cuts, a balance between retaining a supply of knowledge workers to evolving high tech industries and knowledge intense services as well as supporting existing industries will need to be maintained and may involve a considerable degree of re-skilling/training to meet demand.

The fact that the majority of Gloucestershire's working residents commute to work within the County reflects the extent to which the demands of a skilled workforce are being met by companies/agencies within the County. This situation however, could be influenced by in-commuting from large urban areas outside the County where there may be more working age people than available/suitable jobs in those areas.

Relatively short commuting distances within the County may not only have contributed to its resilience during the recession but may also reduce the effect of rising petrol price increases and subsequent transport cuts. However, maintaining an efficient infrastructure could be threatened by congestion issues, the ensuing funding cuts on transport and the outcome of the bus review.

The Manufacturing, Banking, finance and insurance and Distribution including hotels and restaurants sectors offer a diverse range of industrial activity that accounts for over half of Gloucestershire's employees. Manufacturing, although a strong sector in Gloucestershire, particularly in relation to Advanced engineering, has experienced decline which is predicted to continue. This reflects a vulnerability that is inevitably partly influenced by supply and partly by export markets that react to changes in global economies.

The Finance banking and insurance sector is also well represented in Gloucestershire, however, the siting of a number of head offices and high street offices in the County although reflecting this favourable location also creates a vulnerability that was exposed in relation to the recession when the sector was affected by large scale restructuring and associated job loss.

The Public sector accounts for nearly a third of employees whose numbers have decreased over the last few years in Gloucestershire. With the ensuing cuts and changes in legislation the sector faces radical change. With shifting responsibilities and refocusing of activities there will inevitably be a transition phase whereby private and voluntary sector business/agencies may fulfil many of the services previously undertaken by the Public sector. How long this will take, the degree of disruption and the shift in workforce skills requirement provides perhaps an opportunity for the County's businesses/agencies to respond favourably.

Growth sectors can be described as those core activities or parts of core activities that appear to offer significant growth opportunities for the future and based on either present good performance or the inevitable demand from burgeoning new technologies. They include the looming nuclear demand and those high-tech manufacturing activities both in aerospace and precision and medical instruments that despite a projected decline in the number of employees in the Advanced engineering sector as a whole, are however, locally strong and have been performing well.

Other growth sectors include the Creative industries in terms of digital media supported by an improved Broadband capability in the County, Environmental technologies with potential relating to aspects of the renewable, waste management and low carbon sectors of the economy and Care activities in response to the needs of an ageing population and also the predicted health issues facing the future working population.

There is also pressure to remain competitive in the Business service aspect of the knowledge economy that will create the potential to further develop, sell and export expertise and/or information.

With an increasing number of households, the rising costs of recycling, composting and disposing of waste, the reducing landfill space and limited facilities to divert waste away from landfill, provide a number of challenges to Gloucestershire's future waste disposal. However, it is hoped that the proposed residual waste project at Javelin Park subject to planning permission may alleviate some of the pressure.

Gloucestershire has been awarded for its efforts towards reducing its carbon emissions which although exemplary may lead to some costly changes that could threaten businesses.

The Localism Bill has created a vacuum in the planning system with local authorities now having to make decisions on how they report on their housing requirements and similarly employment land availability. A positive move in Gloucestershire has been the co-operation between the County and district authorities in addressing the situation resulting in a consistent approach to this planning issue. This area of work is at an early stage and only time will tell if the associated parties are successful in producing consistent outcomes. Additionally, land/property assets that were owned by the South West Regional Development Agency have been made available to agencies within the County (e.g. areas of Gloucester docks).

A balance between maintaining an infrastructure to serve new housing and employment land expansion will need to be balanced against the protection of the green belt.

The Gloucestershire economy therefore, although possessing many strengths will inevitably need to address an array of future challenges as described. However, the effective strategy supported by relevant evidence, produced as a result of the long standing co-operation between the public and private sector through the Gloucestershire First partnership has now been strengthened with the recent creation of the Gloucestershire Local Enterprise Partnership (LEP) which now puts the County in a very strong position to address those economic challenges.

Future research

- What will be the characteristics of our future workforce
- Skills issues facing the County - utilising links with businesses to carry out primary research in the form of surveys, interviews with sector representatives
- Monitoring of global issues that may affect the economy
- Resilience - better understanding of how the Gloucestershire economy responds to shocks (eg floods, stock market collapses etc)
- How supply chains work within and across all sectors and beyond the County boundary
- Analysis of particular sectors: care, food and drink niche markets etc
- Better alignment on housing data and policy development. This can be an area of intense local scrutiny and there is a significant and complex suite of datasets provided by a range of different agencies national & local, with vested interests. It would be useful if this could be better marshalled to core output indicators more focused on *'identifying and meeting local need'*. Locally orientated data from district housing enabling and district local planning – *SHMA, SHLAA, Econometric Affordability Modelling etc..* might be useful to start with.
- HE provision within the County and changes in demand
- Consistent record of employment land present and future
- Development opportunities and social issues as a result of Big Community
- Monitoring/measuring the conversion to low carbon economy - possibly through a combination of data on progress with non-carbon energy infrastructure (such as new installations, energy (MW) outputs, % of local energy outputs and use) and other related activities such as progress on electric cars and associated infrastructure (annual car sales, % of local ownership and development of local charging point network) etc
- Effects of Public sector cuts

Executive Summary

Strengths	Weaknesses
• High economic activity rates • Low unemployment rates • High level of self-employment at 14% • Eighty eight percent of those that reside in the County also work in the County. • NVQ3 and NVQ4 levels higher than SW and national average • High value knowledge base • All GCSE success rates are above the national average. • General and Applied A/AS or equivalent level success rate in Gloucestershire is higher than the national average, ie not only more subjects but also better grades • Skilled labour force especially at managerial, professional and technical level • Manufacturing, Banking, finance and insurance services, Distribution and tourism sectors represent a diverse economic structure • Gloucestershire has a strong Manufacturing sector and is particularly strong in Advanced engineering • Presence of international and innovative companies • Relatively high productivity • Gloucestershire has a well developed road and rail network that provides good links to areas outside the County • Several major airports are easily accessible from Gloucestershire including Bristol, Birmingham, Cardiff and London Heathrow • Gloucestershire has a high quality landscape and a number of important cultural sites. These are important assets to the County's economy. • Gloucestershire became the first area to be awarded '10:10 County' status, as part of the international campaign to encourage organisations to reduce their carbon emissions (excluding schools) by at least 3% during 2010/11	• Ageing population • Young people (15-29 yrs olds) leaving the County • Number of people from Gloucestershire going into Higher Education decreased • Further Education success rate has declined while SW and GB success rates have increased • Gloucestershire businesses account for 11% of total number of skill shortage vacancies in the SW. It is placed 4th highest in the SW and above the regional average • Over a fifth of employers reported a skills gap in 2009 • In 2009, Gloucestershire compared to the other South West sub regions had at 13%, the highest proportion of staff considered not fully proficient by their employer amounting to 26,800, out of a South West total of 213,000. • High level of commuting between districts, Gloucester, Stroud and Tewkesbury. One way from Forest of Dean to Gloucester. • Same pockets of deprivation after 5yrs • The total number of employees has been declining • Employment in Tourism and the Public Sector has declined in Gloucestershire, whilst increasing in the South West and Great Britain • Agriculture has declined at a faster rate in Gloucestershire, than in the South West and England • Congestion is a problem in many parts of the County, including; A417/Birdlip/Nettleton Bottom/Air Balloon, Tewkesbury road to M5, A40 west of Severn and between Gloucester and Cheltenham, town and city centres of Cheltenham and Gloucester • Residents in rural areas may have difficulties accessing key services using public transport • High dependency on the car • Broadband speeds are currently inadequate in many areas • The County sends a high proportion of its municipal waste to landfill, conversely rates of recycling, incineration and other methods of waste disposal are low • House prices are relatively high which may make it difficult for first time buyers to get on the property market

Opportunities	Threats
• Gloucestershire is an important employer of workers from Worcestershire, half of whom travel to Tewkesbury Borough • Many of Gloucestershire's secondary and primary schools have converted or are awaiting conversion to academy status • The rate of growth of Apprenticeship achievements in Gloucestershire between 2005/06 and 2009/10 was 65% compared to 95% regionally • Gloucestershire's population structure means the Care sector is likely to experience considerable growth • Significant growth opportunities within: Nuclear; High tech manufacturing; Environmental technologies and Creative industries • Private and voluntary sector replacing some Public sector activities • Improvement in transport infrastructure including the approved Kemble - Swindon redoubling will further improve Gloucestershire's accessibility • Waterway network, Sharpness docks • Improvements in the broadband infrastructure may create new opportunities for businesses • Residual Waste Project (Javelin Park) • The transition to a low carbon economy may present considerable opportunities for business development within the Gloucestershire economy, particularly for the Manufacturing and Environmental technologies sectors • Projected household numbers for Gloucestershire are expected to increase by 9% from 258,900 in 2009 to 282,800 in 2020 • Joined up approach to employment and housing land and workspace planning and delivery	• Young people can work here but can't afford to live here • Polarisation of working age people to urban areas • The anticipated public sector cuts may result in substantial job losses within the sector and have knock on effects on other sectors • The Manufacturing sector has been declining, Gloucestershire's strength in this sector would make it particular vulnerable to further declines • Current economic climate may impact on levels of affordable homes • Oil prices • Funding for transport is likely to reduce over the coming years, which will effect future developments in Gloucestershire's transport infrastructure • The implications of the bus review • The impact of climate change on the County may be significant. Modelling suggests there will be drier hotter summers, wetter winters, more intense rainfall and increased risk of more extreme weather events • Need to reduce greenhouse gas emissions, resource consumption and the amount of waste sent to landfill • Projected household numbers for Gloucestershire are expected to increase by 9% from 258,900 in 2009 to 282,800 in 2020

Gloucestershire Local Economic Assessment: 2011

Chapter 1 Introduction

1.0 Introduction

The Local Democracy, Economic Development and Construction Act 2009 placed a duty on county and unitary councils to prepare a Local Economic Assessment as the means to establish a comprehensive evidence base about the economy of an area through analysis of the key local economic issues and trends that will inform the policy and interventions of local authorities and their partners.

The Gloucestershire Economic Assessment comprises a robust evidence base about the Gloucestershire economy, based on four key areas:

- An understanding of the economic conditions within the County and the effect these have on its residents and businesses
- Description of the local economic geography, including the economic linkages between the area being assessed and the wider economy
- Identification of local constraints to economic growth and employment in addition to the risks to delivering sustainable growth
- Identification of the comparative strengths and weaknesses of the County on a strategic basis against regional and national statistics and neighbouring counties and relate to the local economic challenges and opportunities

The Local Economic Assessment will underpin future economic strategies within the County, most specifically the Integrated Economic Strategy that will support GFirst the Gloucestershire Local Enterprise Partnership. This assessment has been guided by a Working Group representing Gloucestershire County Council, GFirst, the six Gloucestershire districts, Business Link and the South West Observatory.

The assessment is presented as six chapters accompanied by an Executive summary that provides an overview and presents key issues:

Executive summary

1 Introduction
2 Geography
3 People and Communities
4 Business and Enterprise
5 Functional Economic Market Areas
6 Sustainable Economic Growth

The Gloucestershire Economic Assessment has identified a number of key issues arising from the data analysis. The assessment, however, does not attempt to resolve these issues as that is the role of strategy and policy makers to present their recommendations using the evidence base provided.

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Chapter 2 Geography

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2.0 Geography

2.1 Location and background

Gloucestershire is the northern most County in the South West region. It shares its southern boundary with three regional neighbours - South Gloucestershire, Swindon and Wiltshire. The County borders Oxfordshire to the East, Warwickshire, Worcestershire and Herefordshire to the North and the Welsh County of Monmouthshire to the West.

The County is made up of six districts - Cheltenham, Cotswold, Forest of Dean, Gloucester, Stroud and Tewkesbury. The main administrative centre is the city of Gloucester, other principal towns include Cheltenham, Stroud, Cirencester, Tewkesbury, Coleford and Lydney. The County also comprises part of the Cotswolds Area of Outstanding Natural Beauty (AONB), part of the flat fertile valley of the River Severn and the Forest of Dean national forest park.

Gloucestershire has been a significant location for commerce since the Roman era, and its location at a crossroads of trade routes between Wales and London and the West Midlands and the South West, continues to be advantageous as a business location.

Historically dominated by defence and aerospace contractors, Gloucestershire continues to have a significant manufacturing presence, with particular strengths in advanced engineering. The County is home to companies such as Spirax Sarco, Messier Dowty and Renishaw.

The County is also a major centre for banking, finance and insurance and a number of national companies have headquarters located here including Cheltenham and Gloucester Plc and Ecclesiastical Insurance.

Gloucestershire is also home to a number of government departments and agencies including GCHQ (Government Communications Headquarters), the UK government intelligence centre and UCAS (University and Colleges Admission Service).

These companies and many others have been attracted here by Gloucestershire's advantages as a location for both business and residence, the quality of life and skills of a highly qualified workforce.

2.2 Size and Population Density

Table 2.1: Size in hectares, Gloucestershire and its districts

	Size in hectares	% of County
Cheltenham	4,663	1.8
Cotswold	116,452	43.9
Forest of Dean	52,653	19.8
Gloucester	4,054	1.5
Stroud	46,066	17.4
Tewkesbury	41,439	15.6
Gloucestershire	265,327	

Source: Standard Area Measurements, ONS Crown Copyright Reserved

The County of Gloucestershire covers an area of 265,327 hectares (1,024 square miles, 2,653 square kilometres), which is approximately 11% of the total area of the South West region. Table 2.1 shows that the districts vary considerably in terms of size, with Cotswold district amounting to 43.9% of the total area of the County, while Cheltenham and Gloucester districts account for 1.8% and 1.5% of the County area respectively.

Gloucestershire has a population of 582,581 which equates to a population density of around 2.2 persons per hectare. This was very similar to the regional and national figures of 2.2 and 2.6 respectively. Figure 2.1 shows that when compared to its statistical and adjoining neighbours[1], Gloucestershire sits around the middle in terms of population density.

Table 2.2: Population density, 2008

	Population Density
Cheltenham	24.2
Cotswold	0.7
Forest of Dean	1.6
Gloucester	28.7
Stroud	2.4
Tewkesbury	1.9
Gloucestershire	2.2
South West	2.2
Great Britain	2.6

Source: Standard Area Measurements, ONS Crown Copyright Reserved
2008 Mid Year Population Estimates, ONS Crown Copyright Reserved

Across the County, however, there is considerable variation in population density. The urban districts of Cheltenham and Gloucester have densities of 24.2 and 28.7 persons per hectare respectively. In contrast Cotswold district, which forms part of an AONB, has a density of 0.7 people per hectare.

1 Please see Definitions on Page 8

2.3 Rural and Urban Areas

The Office for National Statistics (ONS) has classified Gloucestershire as a significantly rural County. This means that between 26% and 50% of the County's population lives in rural settlements and large market towns.

However, as would be expected given the variation in population density, there are considerable differences between districts. This is illustrated in Figure 2.2 which shows that Gloucestershire's districts fall into:

- other urban: districts with less than 26% of their population in rural settlements and large market towns
- rural 50: districts with at least 50% but less than 80% of their population in rural settlements and large market towns
- rural 80: districts with at least 80% of their population in rural settlements and large market towns.

A more detailed view of variations within districts as illustrated in Figure 2.3 is based on the classification of the Lower Super Output Area (LSOA)[2] geography into an Urban or Rural category and further splitting the Rural category into Town and fringe and Village, hamlet and isolated dwelling.

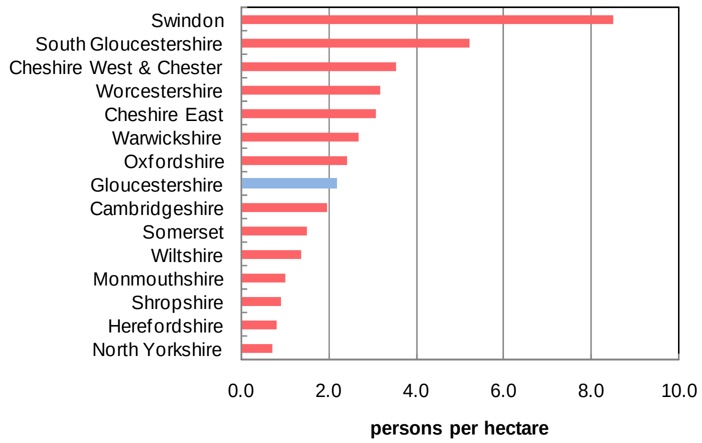
Figure 2.3 shows that the majority of the County (78% of the total area) comprises LSOAs that are classified as Village, hamlet and isolated dwellings. Not unsurprisingly, all the LSOAs in Cheltenham and Gloucester districts have been classified as Urban, leaving the remaining districts forming a combination of Urban, Town and fringe and Village, hamlet and isolated dwellings.

Despite the majority of Gloucestershire's total area falling into LSOAs that are classified as Village, hamlet and isolated dwellings, only 20% of the County's population reside in LSOAs that fall into this category.

Gloucestershire's Urban LSOAs accommodate the majority of (67%) of the County's total population, while the remaining 13.1% of that population reside in LSOAs categorised as Town and fringe.

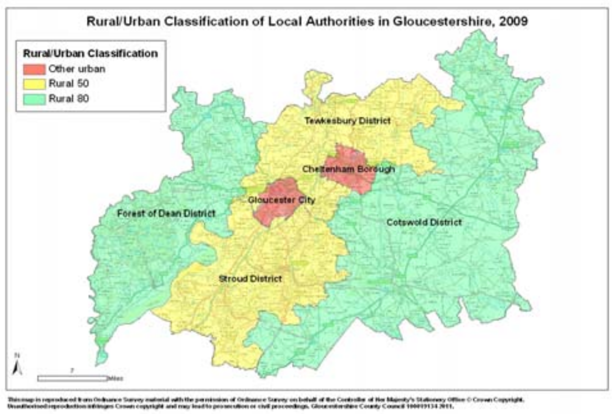
Gloucestershire's diverse geography and rural/urban mix provides an environment that is much valued as a place to live and work.

Figure 2.1: Population density, Gloucestershire and its neighbours, 2008



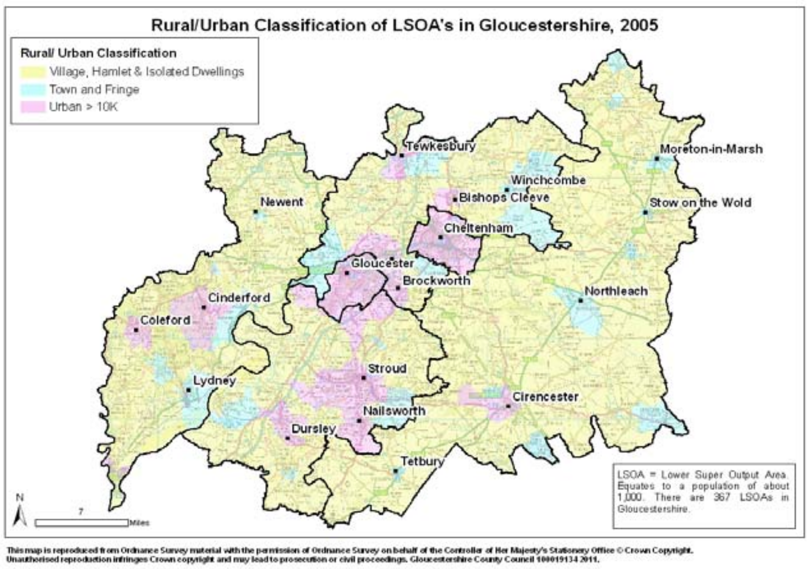
Source: Standard Area Measurements, ONS Crown Copyright Reserved, 2008 Mid Year Population Estimates, ONS Crown Copyright Reserved

Figure 2.2: Rural/Urban classification of Local Authorities in Gloucestershire, 2009



Source: Rural/ Urban Local Authority Classification, 2009, ONS Crown Copyright Reserved

Figure 2.3: Rural/Urban classification of LSOA's in Gloucestershire, 2005



Source: Rural Urban LSOA Classification, 2005, ONS Crown Copyright Reserved

2 Please see Definitions on Page 8

2.4 Main Towns and Market Towns

2.4.1 Main Towns

Gloucestershire has two main urban settlements Cheltenham and Gloucester, which are the main business, commercial, educational, service and cultural centres in the County as shown in Figure 2.3.

Gloucester
Gloucester, an historic cathedral city is situated in the central Severn Vale area of the County, adjacent to the River Severn. It is the only city and the main administrative centre in Gloucestershire, as such it provides a significant number of public sector jobs.

Historically, much of the city's success came from its position on the River Severn and the Gloucester and Sharpness canal, which meant it was a major port. Today the city is one of the main employment centres for the County with a diverse industrial base that is home to several engineering firms and a growing service sector including some large insurance companies.

The city is also an important retail centre, with work carried out by *DTZ (2006)* ranking the city as the 11th highest ranking retail centre in the South West and the 2nd highest ranked centre in Gloucestershire. Since this work was carried out, the opening of Gloucester Quays Designer Outlet, has increased the shopping facilities available to residents and visitors.

Cheltenham
Cheltenham is situated on the edge of the Cotswolds, it is one of the two major centres of employment in Gloucestershire.

The town gained prominence in the early 18th century, when the accidental discovery of a saline spring, led to Cheltenham becoming a popular spa town resort. Today the town is famous for its regency architecture which is said to make it "the most complete regency town in England" *(AA, 1997)*, its cultural events including festivals of literature and jazz and the Gold Cup the highlight of the National hunt racing calendar, which attracts hundreds of thousands of visitors to the town each year.

Cheltenham has a reputation for the quality of its shopping facilities, work carried out by *DTZ (2006)* ranked the town as the highest ranking retail centre in Gloucestershire and the South West. It also the main educational centre in the County, its schools have an excellent international reputation (including the famous Cheltenham Ladies' College and Cheltenham College) and Gloucestershire College and the University of Gloucestershire have campuses located in the town.

Notable employers in Cheltenham include GCHQ (Government Communications Headquarters), Spirax Sarco and Chelsea Building Society.

2.4.2 Market Towns

As well as Cheltenham and Gloucester, there are a number of market towns. These towns play a significant role in the local economy both as employment hubs and as providers of services to resident communities and out lying rural areas. The larger market towns in the County include Cirencester, Coleford, Lydney, Stroud and Tewkesbury.

Cirencester
Cirencester, also known as the 'Capital of the Cotswolds' is the main administrative and service centre in Cotswold district. It is located in the east of the County, close to the border with Wiltshire and on the edge of the Cotswolds AONB.

The town has been an important settlement since the Roman era, when Corinium as it was then known - was a major city second only in importance to London. Today Cirencester is a popular tourist, craft and retail centre, with work carried out by *DTZ (2006)* ranking the town as the 20th highest ranking retail centre in the South West and the 3rd highest ranking town in Gloucestershire. The town also fulfils important educational functions, it is home to a number of secondary schools, Cirencester College and the Royal Agricultural College which provides land-based foundation, undergraduate and postgraduate degree programmes to over 1000 students from over 45 countries.

2.0 Geography

Coleford
Coleford is the Forest of Dean's administrative centre. The town is located in the West of the County, 4 miles east of the Welsh border. It falls between the Wye Valley AONB on the west and the statutory boundary to the Royal Forest of Dean on the east.

The town has a strong industrial heritage, it was once a mining centre, it also had strong links with the steel and iron industries. Today Coleford is a leisure and tourism destination, it is also home to GlaxoSmithKline's production facility for Ribena and Lucozade, which is a major employer in the area.

Coleford has a relatively small population, however it also serves the communities of Mikwall, Mile End and Coalway, this enables it to support a wide range of services and shopping facilities, and makes it the second largest retail centre in the Forest of Dean.

Lydney
Lydney, the largest retail and service centre in the Forest of Dean, is located in the south west of the County on the banks of the River Severn. The town has good transport links, it is situated on the main rail route between the South West and the Midlands, and stands on the main Gloucester to Chepstow road (A48).

Historically, the town was a port for the Forest of Dean area. It also acted as an agricultural market town and developed manufacturing skills to serve the surrounding countryside. Today Lydney is a busy industrial centre, with a wide range of business activities made possible by its easy access to motorways and the Severn Bridge.

Lydney has a wide catchment area, which includes several large settlements such as Aylburton and Bream.

Stroud
Stroud is the largest market town and main administrative centre in Stroud district. It is situated to the south of Gloucester, below the western escarpment of the Cotswold hills at the meeting point of the five valleys. The town is easily accessible with the Gloucester-London main railway line running through it and junction 13 of the M5 lying five miles to the west of the town centre.

During the late 18th and early 19th centuries Stroud was a national centre for the cloth industry. The town now has a diverse industrial base and is home to a wide range of businesses including Stroud and Swindon building society and renewable energy provider Ecotricity.

Stroud serves as the main shopping centre for the surrounding villages and smaller market towns including Amberley, Dursley, Nailsworth, Painswick and Woodchester. It has a strong identity and presence, which enabled it to become one of the first fair-trade towns in the country and establish its own local currency, the Stroud Pound, which aims to encourage people to spend money with local retailers.

Tewkesbury
Tewkesbury is an historic market town with a population of 10,333 (Mid 2009 Estimate Parish). It is situated on the northern border of the County, between the Cotswolds and the Malvern Hills, at the confluence of the Rivers Avon and Severn. It lies on the A38, the main road between Gloucester and Worcester, and a short distance to the west of the M5 motorway's Junction 9.

The town has a wide range of shops; from small independents to national chains. It is also a popular tourist destination, particularly for those interested in historic buildings, who may wish to visit the 12th Century Abbey and the Town Museums. There is also a cluster of key employment sites located on the edges of the town by Junction 9 of the M5.

Gloucestershire's smaller market towns and key service centres include:

- Bourton on the Water, Chipping Camden, Fairford, Lechlade on Thames, Moreton in Marsh, Northleach, Stow-on-the-Wold and Tetbury in the Cotswolds
- Cinderford and Newent in the Forest of Dean
- Quedgeley in Gloucester
- Berkeley, Cam, Dursley, Minchinhampton , Nailsworth, Painswick, Stonehouse and Wotton-under-Edge in Stroud
- Bishops Cleeve, Churchdown and Winchcombe in Tewkesbury.

The recognition of the important role small and large market towns play in Gloucestershire's economy, led to the formation of Gloucestershire Market Towns Forum. Gloucestershire Market Towns Forum is an independent membership organisation that represents and supports sixteen of Gloucestershire's market towns, including Chipping Campden, Churchdown, Cinderford, Cirencester, Coleford, Fairford, Lechlade, Nailsworth, Newent, Northleach, Stonehouse, Stow-on-the-Wold, Tetbury, Tewkesbury, Winchcombe and Wotton-under-Edge.

Membership includes access to a Development Fund for community projects, free expert advice through the Forum's Technical Assistance programme, and opportunities to share good practice, source advice and expertise.

2.5 Areas of Outstanding Natural Beauty

Areas of Outstanding Natural Beauty (AONB), along with National Parks, are considered to be the most special landscapes in the country. The primary purpose of the AONB designation is to conserve and enhance the natural beauty of the area. However, a designation means that development in the area is only permitted in ways that enhance the landscape character of the AONB.

Just over half (51.4%) of the County is designated as an AONB. There are three AONBs in Gloucestershire, the Cotswolds AONB, Malvern Hills AONB and Wye Valley AONB, Figure 2.4 shows the largest of these is the Cotswolds AONB.

2.5.1 The Cotswold AONB

The Cotswolds were designated an AONB in 1966 in recognition of its rich, diverse and high quality landscape. It stretches from Bath and Wiltshire in the south through Gloucestershire and Oxfordshire to Warwickshire and Worcestershire in the north, covering an area of 204,609 hectares (790 sq miles). It is the largest AONB in England and Wales, and the third largest protected landscape after the Lake District and Snowdonia.

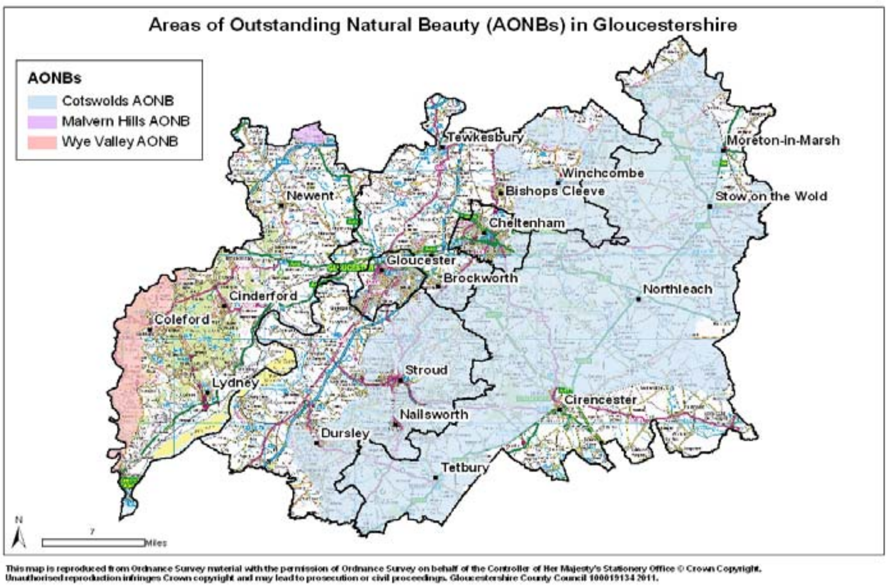
2.5.2 Malvern Hills AONB

The Malvern Hills were designated as an AONB in 1959. They cover an area of 27,195 hectares (105 square miles) including significant parts of Worcestershire and Herefordshire and a small area in northern Gloucestershire.

2.5.3 Wye Valley AONB

Designated in 1971, the Wye Valley AONB straddles the border between England and Wales, covering parts of Monmouthshire, Herefordshire and western Gloucestershire, covering an area of 844,33 hectares (326 square miles).

Figure 2.4: Areas of Outstanding Natural Beauty in Gloucestershire



2.5.4 The Royal Forest of Dean

In addition to the three AONBs, Gloucestershire is also home to the Royal Forest of Dean, which covers an area of 9,064 hectares (35 square miles) and is situated between the Rivers Wye, Leadon and Severn in West Gloucestershire. The Royal Forest of Dean, became Britain's first National Forest Park in 1938 and is England's largest oak forest owned by the public estate. This designation recognised the scenic value of the woodland landscape and its importance as a recreational location.

The Coalition government put forward proposals to transfer the ownership or management of heritage forests such as the Forest of Dean, to a charity or charities, via a trust arrangement or lease. However, strong public opposition, meant the plan was abandoned in February 2011. An independent panel is currently being established, this will consider forestry policy in England and advise on the future direction of forestry policy, the role of the Forestry Commission, and the role of the Public Forest Estate.

The presence of three AONBs and the Royal Forest of Dean, can be seen as a barrier to economic growth, as it places constraints on development in rural areas. However, this environmental quality makes Gloucestershire an attractive area for businesses and residents to locate and also attracts large numbers of visitors. Therefore management of development in rural areas and maintaining the sustainability of the natural environment is a fragile balance that places huge responsibility on the future planning outcomes in Gloucestershire.

2.6 Transport Infrastructure

Having an efficient transport infrastructure is essential, it enables residents to access employment and services and allows businesses to access a workforce with suitable skills and distribute products and services. Gloucestershire's transport infrastructure is dominated by the M5 motorway which runs North-South through the County. This provides good links to the Midlands and the North, Bristol and the South West and connects with the M4 corridor which provides access to London and South Wales.

Gloucestershire is also served by three main railway lines, these are:

- Birmingham to Bristol main line, which provides links to the Midlands and the North , Bristol and the South West
- Gloucester to Swindon, which links Gloucestershire to Swindon and from there, provides access to London and mainland Europe
- Newport to Gloucester, which provides access to Wales.

More detailed information about Gloucestershire transport infrastructure can be found in Chapter 6, section 6.1.

2.0 Geography

Key points:

- The County of Gloucestershire covers an area of 265,327 hectares and has a population of 582,580

- Cheltenham and Gloucester are the most densely populated districts in the County with densities of 24.2 and 28.7 persons per hectare. Cotswold district, has the lowest population density, with an average of 0.7 people per hectare

- Gloucestershire is a predominantly rural county, with 78% of Gloucestershire's total area, classified as Village, Hamlet or Isolated Dwellings. However, only 20% of the County's population reside in these areas

- Cheltenham and Gloucester are the primary urban settlements in the County, and as such act as the main business, commercial, educational, service and cultural centres. They are complemented by a number of market towns, which act as employment hubs and as providers of services to resident communities and out lying rural areas

- Gloucestershire benefits from a high quality natural environment. There are three Areas of Outstanding Natural Beauty (AONB) in Gloucestershire, the Cotswolds AONB, Malvern Hills AONB and Wye Valley AONB. These AONBs cover 51% of Gloucestershire's total area

2.0 Geography

Definitions

1. Gloucestershire's **statistical and adjoining neighbours** are based on the Chartered Institute of Public Financing and Accountancy (CIPFA) Nearest Neighbour model. They are: Cambridgeshire, Cheshire East, Cheshire West and Chester, Herefordshire, Monmouthshire, North Yorkshire, Oxfordshire, Shropshire, Somerset, South Gloucestershire, Swindon, Warwickshire, Wiltshire and Worcestershire.

2. **Lower Super Output Area** (LSOA) A geographic hierarchy designed to improve the reporting of small area statistics in England and Wales. The areas are built from aggregating the Output Areas used in the 2001 Census of Population and the most common level used is the 'lower layer' Super Output Area (SOA) with a minimum size of 1,000 people and an average of 1,500. There are between 1 and 7 SOAs per local authority ward.

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Gloucestershire Local Economic Assessment: 2011

Chapter 3 People and Communities

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3.0 People and Communities

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3.0 People and Communities

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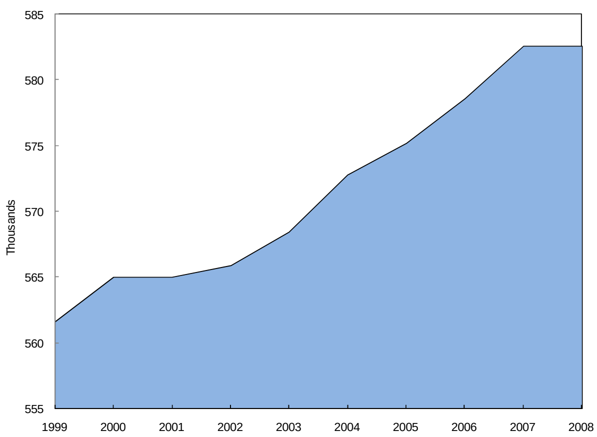
3.0 People and Communities

This chapter begins with a description of the characteristics of the population of Gloucestershire. The resulting labour supply is then examined in terms of economic activity, travel to work and earnings. An analysis of the nature of the labour supply as determined by the level of qualification, skills and occupations of its participants follows and the final section covers those members of the community that are not in education, employment or training (NEETS), aspects of worklessness and areas of deprivation within the County especially in terms of employment and income.

3.1 Population Characteristics

3.1.1 Population growth

Figure 3.1: Population change in Gloucestershire from 1999 to 2008



Source: Mid-year population estimates, 2008 ONS Crown Copyright Reserved

In 2008 the resident population (*ONS, 2008*) of Gloucestershire was estimated to be 582,581 people, an increase of 46,599 people or 8.7% since 1991. The growth was above the average of 5.8% for England and Wales.

Figure 3.1 shows that after a period of nearly ten years of growth, the rate of increase of the County population has started to slow from an average of around 0.5% a year. The Office for National Statistics (ONS) report that this is due to a change in the balance of migration. The opposite trend is apparent however, when considering the number of people living in the County in terms of those registering with a GP, which continues to rise as reflected in the Gloucestershire County Council in-house estimates.

Figure 3.2 compares the population trends among districts between 1999 and 2008. It shows that Tewkesbury and Gloucester districts had the largest rates of population growth, both increasing by about 5% each.

3.1.2 Components of change

The overall population growth in the County during the period 1991 to 2008 was largely due to net in-migration which accounted for over 80% of the population growth. This applies to all districts except Gloucester district where the majority of growth (77%) was the result of natural change.

By 2008 Gloucester was the most populous district in Gloucestershire, followed by Cheltenham; however, the smaller districts of Tewkesbury and Cotswolds had high proportional increases between 1991 and 2008, by 11.9% and 10.3% respectively.

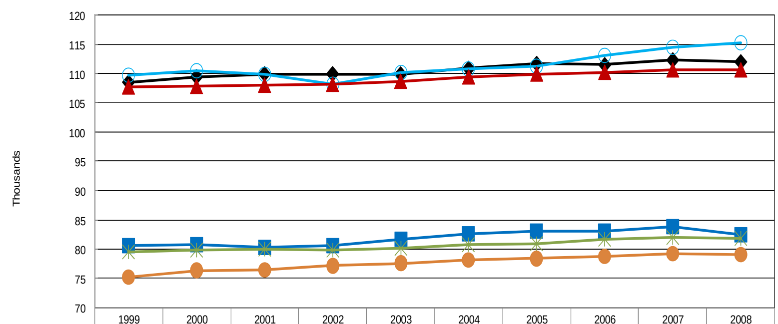
3.1.3 Migration by age

For a number of years, the majority of migrants have been of working age together with children under 15 years of age (moving with their parents).

On average the net inflow of people aged 30-44 yrs into the County each year since 1991, has been over 1,200 along with the more than 800 children aged under 15 years.

In comparison, the County had an average net outflow per year of 363 young people aged between 15-29 yrs. Since 1991, the County has experienced the largest net outflow of this age group compared to all the other age groups, particularly amongst

Figure 3.2: Population trend in Gloucestershire by district 1999 to 2008



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Cheltenham	108.6	109.5	110.0	110.0	110.0	110.9	111.7	111.5	112.3	112.0
Cotswold	80.7	80.9	80.4	80.7	81.7	82.7	83.1	83.2	83.9	82.5
Forest of Dean	79.5	79.8	80.0	79.9	80.2	80.7	80.9	81.7	82.0	81.9
Gloucester	109.7	110.5	109.9	108.2	110.2	110.8	111.3	113.2	114.5	115.3
Stroud	107.8	107.9	108.1	108.2	108.8	109.5	110	110.3	110.7	110.7
Tewkesbury	75.3	76.4	76.5	77.2	77.6	78.2	78.4	78.8	79.2	79.1

Source: Mid-year population estimates, 2008, ONS Crown Copyright Reserved men who are traditionally the most mobile.

The largest net inflows have been from the South East, London and the East.

3.1.4 Age structure

Overall there has been an increase in actual numbers across all age bands at County level. Table 3.1 shows the changes in age structure of Gloucestershire and districts between 1991 and 2008 broken down into three broad age-bands as a proportion of the total population. In terms of proportions in the various age-groups, the 65+ age group was the only one to increase.

Table 3.1: Population of Gloucestershire and districts by age-band

Area	Age structure							
	1991				2008			
	Children 0 to 15 %	Working age 16-64M/59F %	Older people 65M/60F %	All ages %	Children 0 to 15 %	Working age 16-64M/59F %	Older people 65M/60F %	All ages %
Cheltenham	18.6	61.1	20.3	100	17.8	62.0	20.2	100
Cotswold	18.5	58.6	22.9	100	17.7	57.5	24.8	100
Forest of Dean	19.6	60.7	19.7	100	17.9	59.0	23.1	100
Gloucester	21.2	61.6	17.2	100	20.2	61.9	17.9	100
Stroud	20.1	60.0	19.9	100	19.0	58.7	22.3	100
Tewkesbury	19.7	60.8	19.5	100	18.0	58.8	23.3	100
Gloucestershire	19.7	60.5	19.8	100	18.5	59.9	21.6	100

Source: Mid year population estimates, 2008,ONS Crown Copyright Reserved

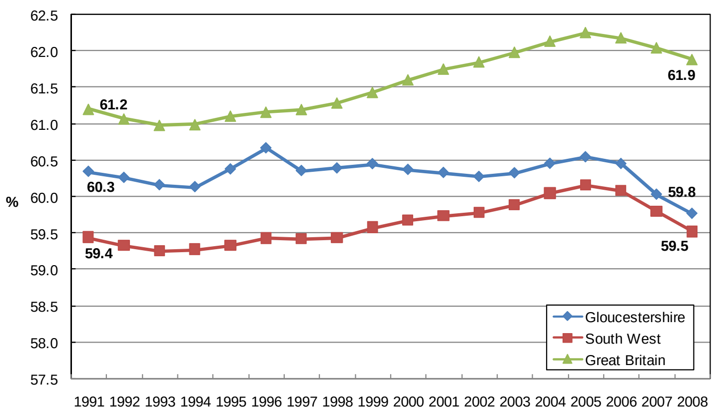
3.1.5 Children

Of all the districts as shown in Table 3.1, Gloucester had the youngest population with a high proportion of school age children and low proportion of retired population. This is in contrast to Cotswold district where elderly people accounted for 25% of the local population - the highest proportion in the County.

3.1.6 Working age

The total working age population of Gloucestershire amounted to some 351,800 people in 2008. Cheltenham and Gloucester districts continued to be the largest source of labour supply, accounting for 62% each of the total working age population whereas Cotswold district had the smallest proportion at 58%.

Figure 3.3: Comparison of working age population rates 1991 to 2008



Source: Mid year population estimates, 2008,ONS Crown Copyright Reserved

Since 1996 the working age rate in Gloucestershire has shown a slight decline in contrast to the South West which has gradually narrowed the gap and Great Britain which has widened the gap as illustrated in Figure 3.3. However, since 2005 all areas have shown a decline allowing Gloucestershire to close the gap further with the South West.

3.1.7 Population aged 75+

With an overall increase in life expectancy and death rates falling during the last fifteen years, Gloucestershire's population is ageing in line with the national trend.

The number of residents in the County who were aged 75+ has increased significantly since 1991. Between 1991 and 2008, the population aged 75+ in Gloucestershire increased by 12,060 people, equivalent to a 30% rise. This group now represents 9% of the total population, compared to 8% in 1991.

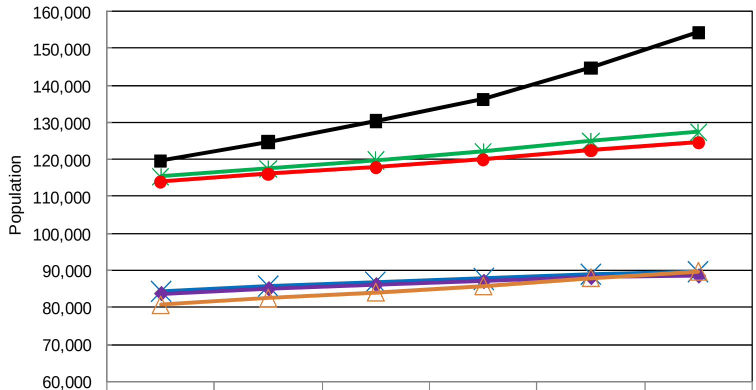
The increase occurred across all districts, with Tewkesbury experiencing the largest increase (2,427 people), closely followed by Gloucester (2,231 people). Of all the districts, Cotswold had the highest proportion of people aged 75+ yrs. One in ten people in Cotswold district were aged 75 or over.

Table 3.2: Local population projections for Gloucestershire and districts

Area	Change 2008-2033	% change 2008-2033
Gloucestershire	76,300	12.8
Cheltenham	12,000	10.4
Cotswold	5,200	6.2
Forest of Dean	4,800	5.7
Gloucester	34,600	28.9
Stroud	10,600	9.3
Tewkesbury	9,000	11.2

Source: Gloucestershire Local Projection 2010, Research Team, Chief Executive's Support Unit, Gloucestershire County Council

Figure 3.4: Local population projections for Gloucestershire districts to 2033



	2008	2012	2016	2020	2026	2033
Cheltenham	115,300	117,500	119,700	121,900	124,800	127300
Cotswold	84,400	85,700	86,700	87,700	88,900	89,600
Forest of Dean	83,700	85,000	86,100	87,000	88,100	88,500
Gloucester	119,700	124,800	130,400	136,200	144,900	154,300
Stroud	113,900	115,900	117,800	119,800	122,500	124,500
Tewkesbury	80,700	82,500	84,100	85,800	88,000	89,700

Source: Gloucestershire Local Projection 2010, Research Team, Chief Executive's Support Unit, Gloucestershire County Council

3.2 Population projections

The Gloucestershire County Council in-house estimates (*Research Team, 2010*) put the County population at 597,600 as at mid 2008. This is 11,400 above the ONS revised estimated figure for the same year. The in-house estimate for 2008 is used as the starting point in the current Local Projection as well as a denominator to calculate population rates.

On current trends, the Local Projection suggest that Gloucestershire's population will increase by 76,300 people, or an annual average of 3,100, from 597,600 to 674,000 between 2008 and 2033 as depicted in Table 3.2. This represents annual growth of 0.51%, continuing the trends as seen in the past fifteen years.

If the present trends of growth continue, the largest increase of population will be expected to continue to concentrate in the districts of Gloucester (34,600), followed by Cheltenham (12,000) and Stroud (10,600) between 2008 and 2033 as shown in Figure 3.4.

3.2.1 Drivers of change

In-migrants will continue to play a key role in driving population growth.

About two thirds of local population growth is projected to be the result of internal migration; the County is forecast to gain a net inward migration of around 2,100 people on average each year from other parts of the UK.

In the long run, net international migration is expected to contribute to another 700 people each year on average. Natural growth (births minus deaths) is forecast to account for the rest of the population growth in Gloucestershire, projected to be averaging 200 per year over the period 2008-2033. This however, masks wide differences between districts; only Gloucester and Cheltenham districts are expected to see a net gain in natural change.

All rural districts are forecast to experience a negative natural growth (i.e. more deaths than births) as the number of people of fertility age declines and the number of older people increases.

3.2.2 Projected change by age

Over the past fifteen years, the population of older people (aged 65+ yrs) in Gloucestershire has seen the greatest increase. Local projection results suggest that this trend will continue for at least another twenty five years as shown in Table 3.3.

For the County as a whole, the older population will increase by more than 79% between 2008 and 2033, or nearly 82,500 people, reaching a total of 187,600 by 2033. This will be equivalent to 28% of the population, compared to 18% at present.

In contrast, the number of children and young people (0-19 years) will fall steadily, by about 7,500 people or 5% over the period. The number of people of working age (20-64 years) is projected to increase only marginally, by 1,300 people or 0.4% during that time.

The effect of this is that the local population will shift further towards an ageing population, with wide ranging implications for local health, social care, housing and other infrastructure support services.

Table 3.3: Projected population change by broad age group 2008-2033 for Gloucestershire and districts

Area	2008			2033			Change 2008-2033			% Change 2008-2033		
	0-19	20-64	65+	0-19	20-64	65+	0-19	20-64	65+	0-19	20-64	65+
Gloucestershire	140,500	352,100	105,100	133,000	353,400	187,600	-7,500	1,300	82,500	-5.3	0.4	78.5
Cheltenham	26,300	70,200	18,700	25,200	72,300	29,900	-1,100	2,100	11,200	-4.2	3.0	59.9
Cotswold	18,500	48,700	17,200	14,900	43,400	31,400	-3,600	-5,300	14,200	-19.5	-10.9	82.6
Forest of Dean	19,400	48,500	15,800	16,000	43,300	29,200	-3,400	-5,200	13,400	-17.5	-10.7	84.8
Gloucester	31,000	71,600	17,100	36,000	87,400	30,900	5,000	15,800	13,800	16.1	22.1	80.7
Stroud	26,900	66,100	20,800	23,800	62,600	38,100	-3,100	-3,500	17,300	-11.5	-5.3	83.2
Tewkesbury	18,400	46,800	15,500	17,100	44,500	28,100	-1,300	-2,300	12,600	-7.1	-4.9	81.3

Source: Gloucestershire Local Projection 2010, Research Team, Chief Executive's Support Unit, Gloucestershire County Council

The relatively static supply, and the increasingly older profile of the workforce will also have an impact on the local labour market in future years.

The ageing population is expected to be replicated across districts, but the rural districts of the County will see a higher percentage increase in the older population and a steeper decline in the child population. Gloucester, as the district with the highest proportion of population of fertility age, is expected to be the only district to experience an increase in the number of children and young people between now and 2033.

3.3 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 the supply of labour to an economy include economic activity rates, indicating the level of the population engaging with the labour market, entrants and returners to the labour market, unemployment rate and travel to work patterns.

3.3.1 Economic activity

A high economic activity rate indicates a healthy labour market where a large proportion of the population (Working age i.e. 16-64 yrs) are available or potentially available to work in the economy.

Table 3.4 shows that economic activity rate during the period Apr'05-Mar'06 to Apr'09-Mar'10 for Gloucestershire at 79.5% and equating to 290,000 people was higher than both the regional and national rates. This high rate however, indicates an increasingly older population.

Table 3.4: Economic activity rates[1] and numbers from Apr'05-Mar'06 and Apr'09-Mar'10

Area	Apr 2005-Mar 2006	Apr 2006-Mar 2007	Apr 2007-Mar 2008	Apr 2008-Mar 2009	Apr 2009-Mar 2010	Apr 2009-Mar 2010
			%			Number
Cheltenham	80.9	79.2	86.5	79.5	83.0	59,300
Cotswold	85.5	83.2	83.5	82.7	78.7	39,900
Forest of Dean	72.6	77.5	73.3	74.0	74.8	36,800
Gloucester	80.4	81.8	82.6	79.5	78.0	58,100
Stroud	83.3	79.9	82.8	84.8	82.5	57,700
Tewkesbury	80.7	87.2	87.8	87.1	77.8	38,300
Gloucestershire	80.7	81.2	82.9	81.2	79.5	290,000
South West	78.2	78.7	79.3	79.3	78.7	2,573,100
Great Britain	76.4	76.6	76.7	76.8	76.5	29,598,400

Source: Annual Population Survey Apr'05-Mar'06 to Apr'09-Mar'10 ONS Crown Copyright Reserved (Nomis)

Over the last five years the economic activity rate has declined by 1.5% whereas regionally and nationally it has stayed about the same. Only Cheltenham and the Forest of Dean districts showed growth over this period.

Looking at the economically active in terms of age Table 3.5 shows that the 16-24 year age group comprises a smaller proportion of the working age population in Gloucestershire than regionally and nationally. The reverse is shown for the older age groups.

1 Please see Definitions on page 32

This is also evident in Figure 3.5 looking at the trend from 2005/06 to 2009/10. The decline in the 16-24 year age group is quite marked from 2008 and the corresponding increase in the 35-49 year and 65+ age groups.

Table 3.5: Economically active by age; Gloucestershire, South West and GB

	Apr 2009-Mar 2010		
Variable	Gloucestershire	South West	Great Britain
Aged 16-24	60.3	67.9	64.1
Aged 25-34	89.5	86.9	84.3
Aged 35-49	89.3	87.8	85.7
Aged 50-64	73.7	70.6	67.9
Aged 65+	13.2	9.4	7.9

Source: Annual Population Survey Apr'09-Mar'10 ONS Crown Copyright Reserved (Nomis)

3.3.2 Employment characteristics

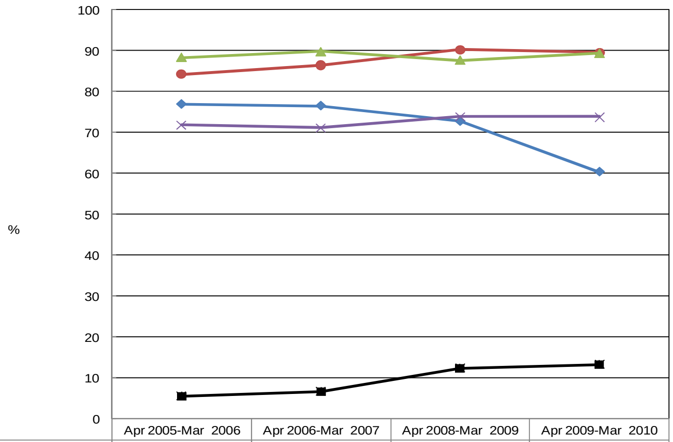
Gloucestershire has an employment base of some 272,900 people which is fairly evenly split in terms of gender as shown in Table 3.6.

Also shown is the high level of self-employment amounting to 39,000 people or 14% of the total employed in Gloucestershire. This is comparable with the South West and points to particular characteristics of the region relating to its rural nature, agricultural base and high level of entrepreneurism. The national average proportion of self-employed is lower at 13%.

Interestingly, there has been an increase in the female proportion of self-employed workers over the last five years in Gloucestershire, the South West and Great Britain as illustrated in Table 3.6 while the male proportion has declined slightly or remained static.

About 46% of the total number of people employed in Gloucestershire comprised male full-time workers in Apr'09-Mar'10, not unsurprisingly representing a decline from 49% since Apr'05-Mar'06. This trend is also shown but to a lesser extent both regionally (-2.4%) and nationally (-1.3%).

Figure 3.5: Trend in economically active by age; Gloucestershire from 2005/06 to 2009/10



	Apr 2005-Mar 2006	Apr 2006-Mar 2007	Apr 2008-Mar 2009	Apr 2009-Mar 2010
Economic activity rate - aged 16-24	76.9	76.5	72.7	60.3
Economic activity rate - aged 25-34	84.2	86.4	90.2	89.5
Economic activity rate - aged 35-49	88.3	89.7	87.6	89.3
Economic activity rate - aged 50-64	71.8	71.1	73.8	73.7
Economic activity rate - aged 65+	5.5	6.6	12.3	13.2

Source: Annual Population Survey Apr'05-Mar'06 to Apr'09-Mar'10 ONS Crown Copyright Reserved (Nomis)

3.4 Earnings

Figure 3.6 shows that the resident based earnings for both full-time males and females are slightly higher than the workplace based earnings. The resident based earnings are also higher than both the national and regional levels whereas the workplace based earnings are higher than the regional but lower than the national figure.

Apart from the female resident based earnings decreasing between 2007 and 2008, earnings have on the whole shown an increase from 2005 to 2009.

Table 3.6: Employment status between 2005/06 and 2009/10 in Gloucestershire, the South West and Great Britain

Employment status	Apr'05-Mar'06			Apr'09-Mar'10			
	Gloucestershire	South West	Great Britain	Gloucestershire		South West	Great Britain
Males aged 16-64	%	%	%	Number	%	%	%
Employees	43.5	43.7	44.5	117,300	42.7	42.8	43.9
Self-employed	9.5	9.5	9.0	24,300	8.9	9.4	9.0
Full-time	48.6	47.9	48.7	124,900	45.5	46.1	47.4
Part-time	4.4	5.5	5.0	17,600	6.4	6.4	5.7
Females aged 16-64	%	%	%	Number	%	%	%
Employees	41.9	42.1	42.5	116,400	42.4	42.4	42.7
Self-employed	5.0	4.1	3.4	14,900	5.4	4.7	3.7
Full-time	24.4	23.7	26.7	68,800	25.1	24.8	26.8
Part-time	22.6	22.9	19.6	63,100	23.0	22.6	19.9

Source: Annual Population Survey Apr'05-Mar'06 , Apr'09-Mar'10 ONS Crown Copyright Reserved (Nomis)

This points to a high standard of living in Gloucestershire. Resident based workers are earning slightly more than workplace based workers implying a relatively contained workforce with a small amount of out-commuting to higher skilled jobs.

3.5 Travel to Work

3.5.1 Outward commuting (where residents work)

In 2008 some 88% of Gloucestershire residents remained in the County to work as shown in Figure 3.7 This high level of containment especially when compared to its statistical neighbours[2] as shown in Figure 3.8 pointed to a generally healthy local economy.

Conversely, some 12% of residents amounting to about 32,900 people in 2008 were attracted away from the County. Figure 3.7 shows that the majority travelled to work in Bristol, South Gloucestershire and Oxfordshire.

There has been little change in outward commuting between 2001 and 2008 amounting to a reduction of 0.9% and mainly reflected by a decrease in outflow to Swindon and to a lesser extent to South Gloucestershire and Bristol.

3.5.2 Inward commuting (where people who have jobs in the County live)

Figure 3.7 also shows that in 2008 some 86% of Gloucestershire's workplace population were from within the County. Again this points to relative self containment in employment terms.

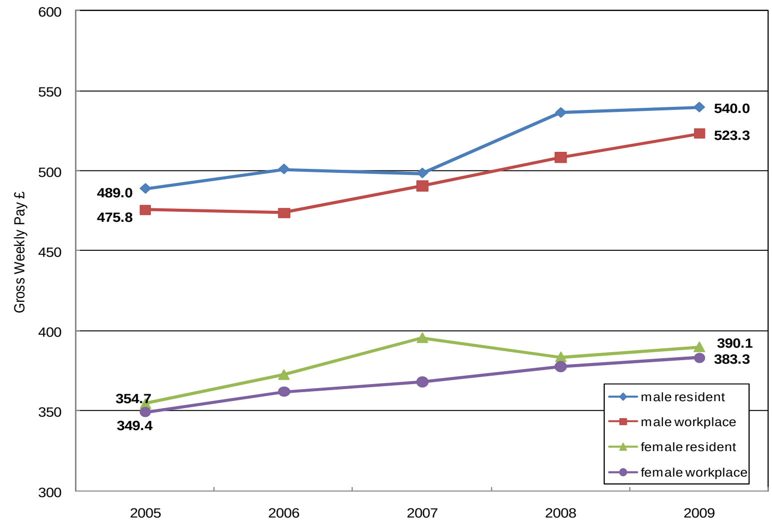
Conversely, some 15% or about 44,000 people representing an increase of 2.9% between 2001 and 2008 were travelling in to work from Worcestershire, Bristol, Swindon and South Gloucestershire.

3.5.3 Commuter interactions

The largest single commuter interaction was with Bristol and it can be seen in Figure 3.7 that nearly twice as many people travelled from Gloucestershire to this destination than made the reverse journey (reflecting the importance of Bristol as a regional employment centre).

2 Please see Definitions on page 32

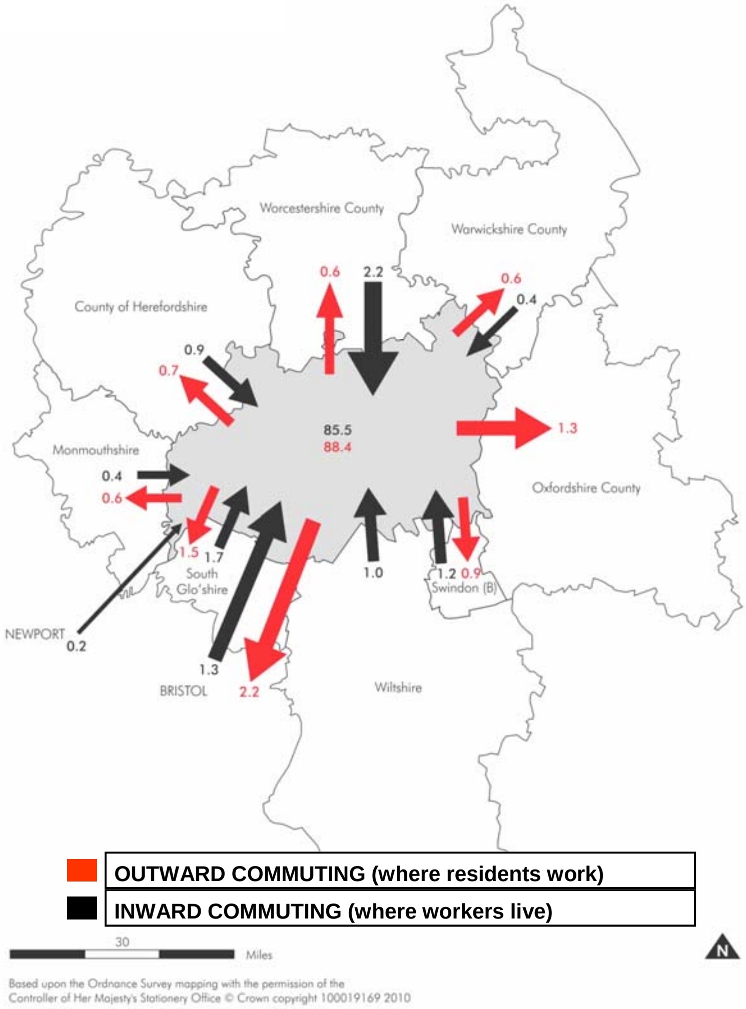
Figure 3.6: Resident-based and workplace-based full time (median) Weekly earnings



Source: Annual Survey of Hours and Earnings 2009 ONS Crown Copyright Reserved

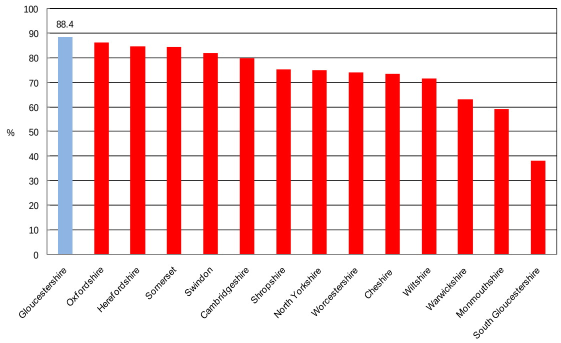
Figure 3.7: Travel to work patterns: Gloucestershire 2008

88.4% of residents in Gloucestershire work in Gloucestershire
85.5% of workers in Gloucestershire live in Gloucestershire



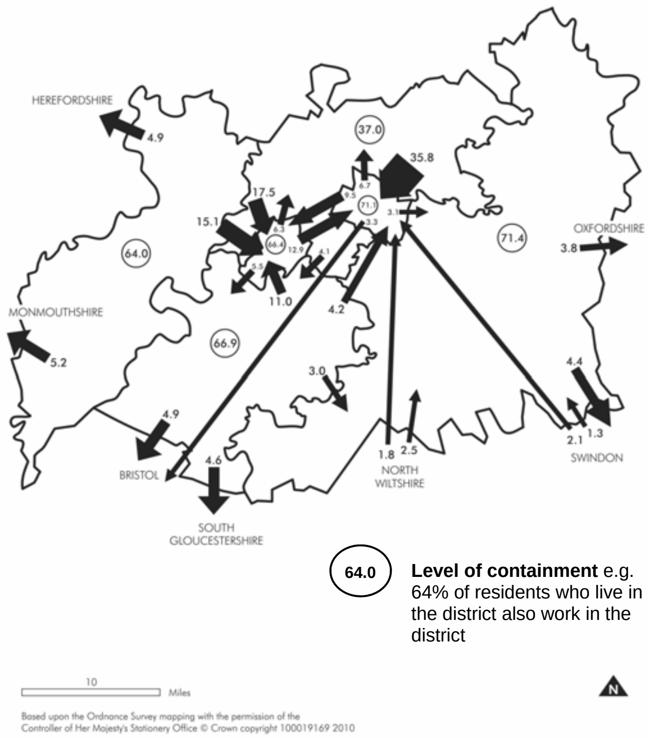
Source: Annual Population Survey 2008 ONS Crown Copyright Reserved

Figure 3.8: Comparison of containment levels Gloucestershire and nearest neighbours 2008



Source: Annual Population Survey ONS Crown Copyright Reserved (Nomis)

Figure 3.9: Outward commuting patterns (where residents work) : Gloucestershire districts 2008



Source: Annual Population Survey 2008 ONS Crown Copyright Reserved

The picture was similar for Swindon. Gloucestershire was also a large employer of workers from Worcestershire (half of whom travelled to Tewkesbury Borough).

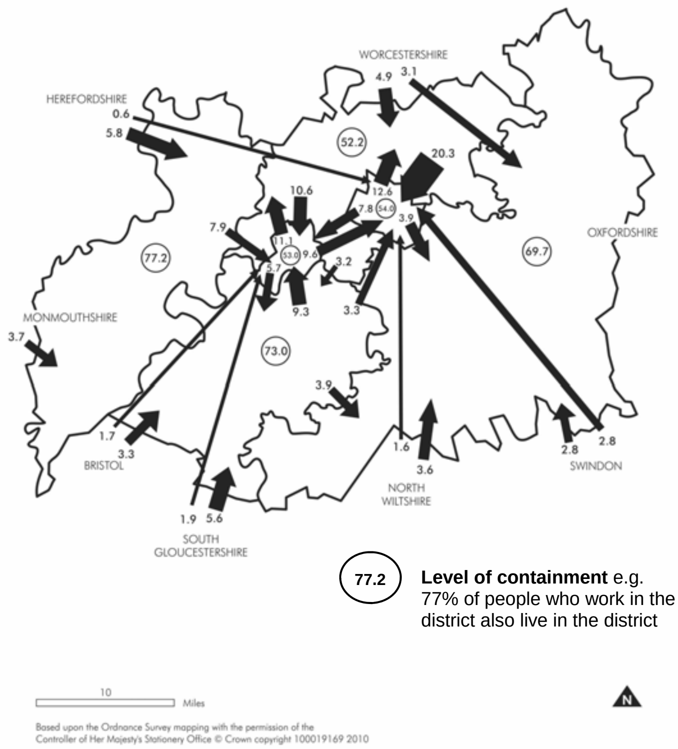
3.5.4 Travel to work within Gloucestershire

There is evidently considerable movement between the six districts of Gloucestershire as shown in Figures 3.9 and 3.10.

In terms of outward commuting, apart from Tewkesbury Borough, levels of containment are fairly high, however, there is much interaction mainly between Gloucester, Cheltenham and Tewkesbury districts. In addition some 15% of Forest of Dean residents travel to Gloucester to work. Tewkesbury district is different in that over half of its residents commute to Gloucester (18%) and Cheltenham (36%) to work as shown in Figure 3.9.

With regard to inward commuting, some half the number of workers in the districts of Gloucester (53%), Cheltenham (54%) and Tewkesbury (52%) also live there. The largest commute is again represented by about a third of workers in Gloucester and Cheltenham who live in Tewkesbury district as shown in Figure 3.10.

Figure 3.10: Inward commuting patters (where workers live): Gloucestershire districts 2008



Source: Annual Population Survey 2008 ONS Crown Copyright Reserved

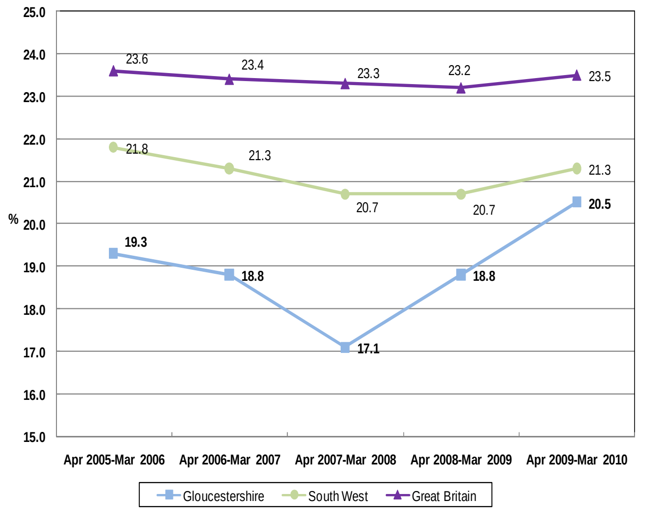
3.6 Worklessness

The term worklessness is now much in use but is however, difficult to define. It is broadly described in terms of the unemployed and the economically inactive.

There is no single source of data to measure worklessness and therefore it can be defined in terms of the best sources of information available that can be used as a proxy. The following information can provide a picture of the number of people who may be workless at a given time:

- those who are unemployed
- those who are economically inactive
- those who are claiming particular benefits
- job vacancies, new recruits, redundancies and dismissals
- transitions within the working population: ageing, maternities, paternities and changes in fortune.

Figure 3.11: Economic inactivity rates from Apr'05-Mar'06 and Apr'09-Mar'10



Source: Annual Population Survey Apr'05-Mar'06 to Apr'09-Mar'10 ONS Crown Copyright Reserved (Nomis)

3.6.1 Economically inactive[3]

The proportion of people who were economically inactive in Gloucestershire during the period Apr'09-Mar'10 were significantly below the South West and Great Britain values. However, as shown in Figure 3.11 what looked like a steady decline up to Apr'07-Mar'08 period then reversed into a rapid increase which was probably the result of the effects of the ensuing recession resulting in some 74,900 people becoming economically inactive and representing an overall 1.2% increase in the last five years.

Table 3.7: Those who want a job[4] and those who do not want a job

Aged 16-64	Males	Females	Total
Economically inactive	30,500	44,400	74,900
Economically inactive - want a job	6,700	8,800	15,500
Economically inactive - do not want a job	23,800	35,500	59,300

Source: Annual Population Survey Apr'09-Mar'10 ONS Crown Copyright Reserved (Nomis)

The greater proportion of the economically inactive amounting to some 44,400 people in Gloucestershire are not unsurprisingly female as shown in Table 3.7 which is comparable at the regional and national level.

The economically inactive can be divided into those who want a job and those who don't.

Table 3.7 also shows that the majority i.e. 79% or 59,300 of those who are economically inactive do not want a job. Over the last five years the gender split of those who are economically inactive and do not want a job has been roughly a third males to two thirds females.

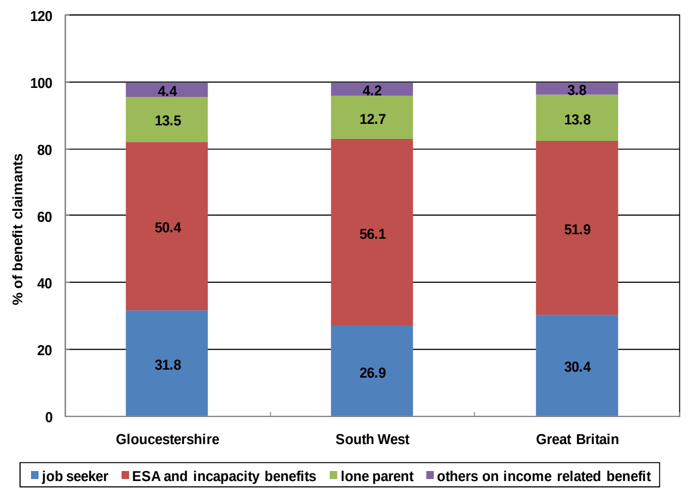
The 23,800 males who did not want a job according to the Apr'09-Mar'10 figures represents a 62% increase from the Apr'08-Mar'10 period which presumably is a reflection of the effects of the recession with more males taking early redundancy/retirement etc.

The 15,500 economically inactive people who do want a job comprise mainly those who are long term sick or looking after a family or home.

3.6.2 Key out-of-work benefits

The key out-of-work benefits comprise the groups: Job seekers allowance, Employment and Support allowance (ESA)[5] and incapacity benefits, lone parents and others on income-related benefit.

Figure 3.12: Proportion of key out-of-work benefits



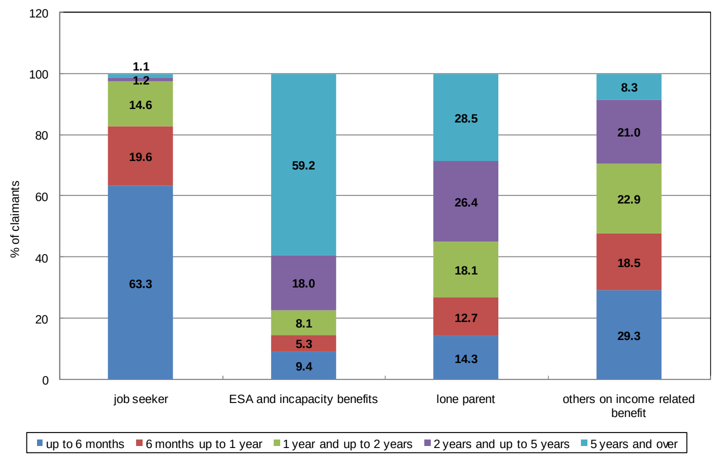
Source: Work and Pensions Longitudinal Study, 2010, DWP (Nomis)

3,4 & 5 Please see Definitions on page 32

They represent a count of all those benefit recipients who cannot be in full time employment as part of their condition of entitlement.

The number of people claiming these benefits amounts to 35,700 which represents a growth of 22% in the last five years. As shown in Figure 3.13 over half the number are claiming ESA and Incapacity benefits which is slightly less than the national average and much lower than the regional average. Job Seeker allowance claimants account for about a third of all the claimants which compares regionally and nationally.

Figure 3.13: Duration of key out-of-work benefits



Source: Work and Pensions Longitudinal Study, 2010, DWP (Nomis)

Job Seekers claimants

Figure 3.13 shows the duration of each of the key out-of-work benefits and of the job seekers allowance claimants. The majority of the job seekers allowance claimants are short term (up to 6 months) and account for about 7,000 people. The opposite is shown for the ESA and Incapacity benefits with nearly 60% of the 18,000 claimants claiming for five years or more.

The September 2010 claimant count for Gloucestershire was 2.5% which is comparable to the South West at 2.4% and 1% lower than the national figure.

Figure 3.14 indicates that Gloucester at 3.4% and Cheltenham at 2.9% not unsurprisingly lie above the County average. The number claiming Job Seekers allowance peaked in April 2008 in response to the recession, however, apart from a blip in December 2009 the trend since has been downward.

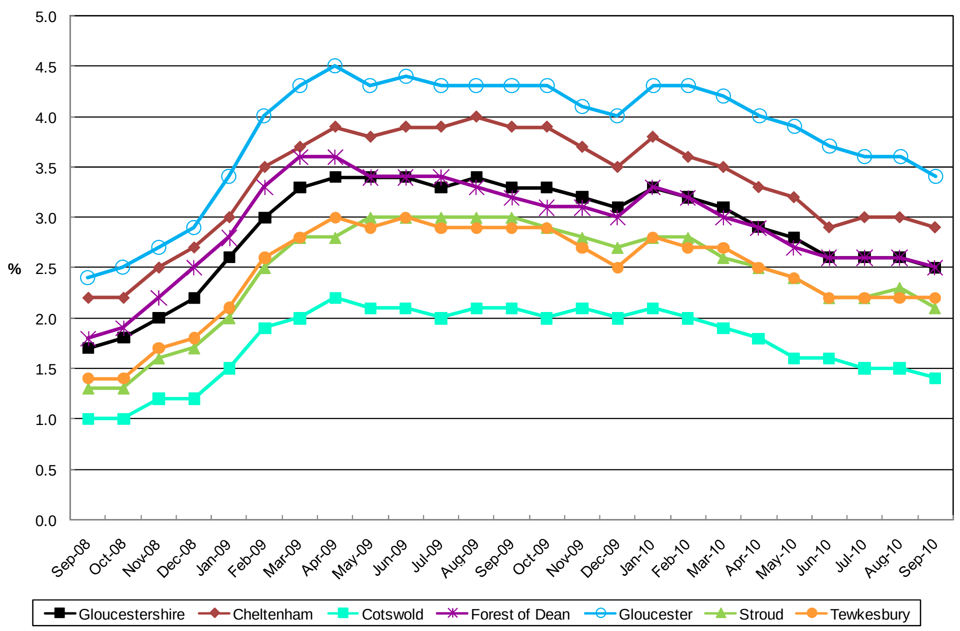
Figure 3.15 shows that the claimant count in terms of duration. The number of short term (up to six months) claimants rose at the beginning of the recession, however, as the recession peaked in April 2009 the number of short term unemployed claimants reduced at the expense of the longer term claimants whose numbers initially declined and then peaked in September 2009 before also starting to decline.

The long term claimants increased steadily from March 2009 through to June 2010 until they began to decrease, a trend which is continuing.

Looking at the claimant count in terms of what the claimants occupation was, the highest proportion were by far from Elementary occupations followed closely by Sales and Customer services occupations as shown in Table 3.8.

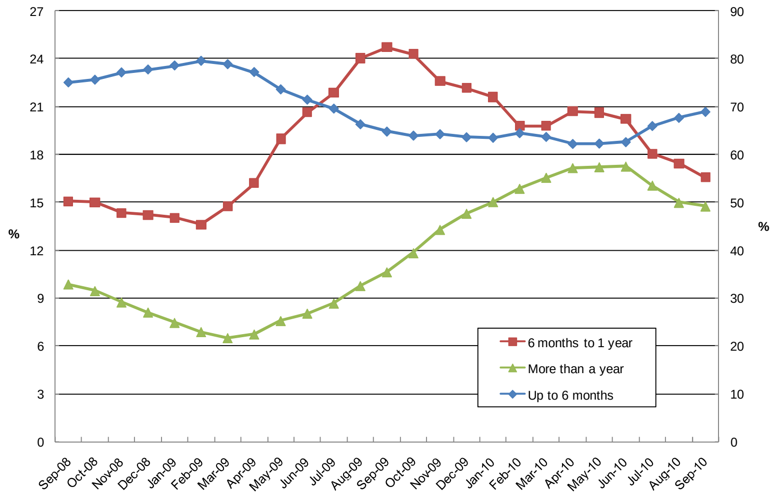
As pointed out in section 3.7.7 those occupations that have shown decline appear to have also been the hardest hit during the recession.

Figure 3.14: Unemployment claimant count for Gloucestershire and districts from Sep'08 to Sep'10



Source: JSA Claimant Count, 2010, ONS Crown Copyright Reserved (Nomis)

Figure 3.15: Duration of claims Sep'08 to Sep'10



Source: JSA Claimant Count , 2010, ONS Crown Copyright Reserved (Nomis)

Table 3.8: Occupational proportion of claimant count

Occupation	% of claimant count
Elementary	27.8
Sales and Customer Service	13.3
Skilled Trades	12.7
Process, Plant and Machine Operatives	10.7
Administrative and Secretarial	10.1
Personal Service	7.2
Associate Professional and Technical	7.0
Managers and Senior Officials	5.9
Professional	4.4
Occupation unknown	0.9

Source: JSA Claimant Count , 2010 ONS Crown Copyright Reserved (Nomis)

Table 3.9 provides an overview of claimant count unemployment rates and ranking of the 142 wards in Gloucestershire arranged by district. Gloucester and Cheltenham have the highest number of wards in the bottom 10% of the County with the highest value being Westgate with an unemployment rate of 7.2%.

Not unsurprisingly, Cotswold district has the greatest number of wards in the best 10% of the County, with the best performing wards Avening in Cotswold district and Hucclecote in Tewkesbury district.

3.7 Education and Skills

The coalition government has introduced widespread reform to the education system. A summary of the legislation that applies to the school education system, further education and skills follows.

The Schools White Paper The Importance of Teaching, (*Department for Education, 2010*) focuses on the whole - system reformation of education in England. The key aims of the government's plans are to:

- free teachers from constraint and improve their professional status and authority
- raise the standards set by our curriculum and qualifications to match the best in the world
- hold schools effectively to account for the results they achieve
- ensure that school funding is fair, with more money for the most disadvantaged support teachers to learn from one another and from proven best practice.

The following changes will apply to schools:

- Increase freedom and autonomy for all schools, removing unnecessary duties and burdens, and allowing all schools to choose for themselves how best to develop
- Restore for all academies the freedoms they originally had while continuing to ensure a level playing field on admissions particularly in relation to children with special educational needs
- Ensure that the lowest performing schools (attaining poorly in an Ofsted category or not improving) are considered for conversion to become academies to effect educational transformation
- Dramatically extend the academies programme, opening it up to all schools. All schools - primary and secondary - that wish to benefit from academy freedoms will be able to do so, providing that they work in partnership with a high performing school that will help support improvement, or another sponsor
- Every school judged by Ofsted to be outstanding or good with outstanding features which converts into an academy to commit to supporting at least one weaker school in return for academy status. In January 2011, special schools were invited to apply to become academies as well

3.0 People and Communities

Table 3.9: Claimant Count rate by ward and rank for each district in Gloucestershire

Cheltenham Wards	Rate	Rank*
Park	1.0	18
Leckhampton	1.2	29
Prestbury	1.2	29
Benhall and The Reddings	1.5	49
Battledown	1.6	58
Charlton Kings	1.6	58
Charlton Park	1.6	58
Up Hatherley	1.8	69
Warden Hill	2.0	81
College	2.4	93
Pittville	2.5	97
Lansdown	3.0	108
Swindon Village	3.0	108
St Paul's	3.7	123
All Saints	3.8	124
St Peter's	4.0	126
Springbank	4.1	128
St Mark's	4.9	134
Oakley	5.2	136
Hesters Way	6.3	141

Cotswold Wards	Rate	Rank*
Avening	0.4	1
Three Rivers	0.5	3
Chedworth	0.6	5
Churn Valley	0.8	9
Thames Head	0.8	9
Grumbolds Ash	0.9	11
Moreton-in-Marsh	0.9	11
Rissingtons	0.9	11
Sandywell	0.9	11
Beacon-Stow	1.0	18
Fairford	1.0	18
Campden-Vale	1.1	23
Cirencester Stratton-Whiteway	1.1	23
Ermin	1.1	23
Fosseridge	1.1	23
Ampney-Coln	1.2	29
Northleach	1.2	29
Riversmeet	1.2	29
Water Park	1.2	29
Bourton-on-the-Water	1.3	38
Hampton	1.5	49
Kempsford-Lechlade	1.7	67
Blockley	1.8	69
Tetbury	1.8	69
Cirencester Chesterton	2.0	81
Cirencester Park	2.1	85
Cirencester Beeches	2.5	97
Cirencester Watermoor	3.3	116

Forest of Dean Wards	Rate	Rank*
Churcham and Huntley	0.5	3
Hartpury	0.6	5
Tibberton	0.9	11
Hewelsfield and Woolaston	1.0	18
Newland and St Briavels	1.2	29
Redmarley	1.3	38
Bromesberrow and Dymock	1.4	42
Newnham and Westbury	1.5	49
Tidenham	1.5	49
Blaisdon and Longhope	1.6	58
Christchurch and English Bicknor	1.7	67
Awre	1.9	76
Lydney North	2.0	81
Pillowell	2.1	85
Berry Hill	2.2	88
Lydbrook and Ruardean	2.2	88
Oxenhall and Newent North East	2.2	88
Alvington, Aylburton and West Lydney	2.5	97
Bream	2.6	101
Coleford East	2.6	101
Mitcheldean and Drybrook	3.0	108
Newent Central	3.0	108
Coleford Central	3.5	120
Littledean and Ruspidge	3.6	121
Lydney East	4.0	126
Cinderford East	4.3	129
Cinderford West	5.3	137

Legend:
- bottom 10% of county
- first quartile of county
- second quartile of county
- third quartile of county
- fourth quartile of county
- highest 10% of county

* 1 = "best" and 142 = "worst"

Gloucester Wards	Rate	Rank*
Abbey	1.4	42
Hucclecote	1.4	42
Longlevens	1.4	42
Quedgeley Severn Vale	1.8	69
Elmbridge	1.9	76
Grange	2.4	93
Barnwood	2.8	106
Tuffley	2.9	107
Quedgeley Fieldcourt	3.3	116
Kingsholm and Wotton	4.5	130
Moreland	4.8	133
Podsmead	4.9	134
Matson and Robinswood	5.4	139
Barton and Tredworth	6.0	140
Westgate	7.3	142

Stroud Wards	Rate	Rank*
Bisley	0.7	7
Kingswood	0.7	7
Over Stroud	0.9	11
Painswick	1.0	18
Severn	1.1	23
Coaley and Uley	1.2	29
Eastington and Standish	1.2	29
Vale	1.3	38
Rodborough	1.4	42
Amberley and Woodchester	1.5	49
Berkeley	1.5	49
Cam East	1.5	49
Hardwicke	1.5	49
The Stanleys	1.6	58
Thrupp	1.6	58
Upton St Leonards	1.6	58
Chalford	1.9	76
Cam West	2.0	81
Wotton-under-Edge	2.1	85
Minchinhampton	2.2	88
Nailsworth	2.3	92
Stonehouse	2.4	93
Farmhill and Paganhill	2.6	101
Uplands	3.0	108
Trinity	3.1	113
Cainscross	3.2	115
Dursley	3.3	116
Slade	3.8	124
Valley	4.7	131
Central	5.3	137

Tewkesbury Wards	Rate	Rank*
Hucclecote	0.4	1
Isbourne	0.9	11
Ashchurch with Walton Cardiff	1.1	23
Churchdown Brookfield	1.3	38
Cleeve Hill	1.4	42
Oxenton Hill	1.4	42
Highnam with Haw Bridge	1.5	49
Cleeve West	1.6	58
Coombe Hill	1.6	58
Tewkesbury Newtown	1.8	69
Twyning	1.8	69
Winchcombe	1.8	69
Badgeworth	1.9	76
Cleeve Grange	1.9	76
Churchdown St John's	2.4	93
Cleeve St Michael's	2.5	97
Innsworth with Down Hatherley	2.6	101
Northway	2.7	105
Shurdington	3.1	113
Brockworth	3.3	116
Tewkesbury Town with Mitton	3.6	121
Tewkesbury Prior's Park	4.7	131

Source: JSA Claimant Count, 2010, ONS Crown Copyright Reserved (Nomis)

- Ensure that there is support for schools increasingly to collaborate through academy chains and multi-school trusts and federations
- Support teachers and parents to set up new free schools to meet parental demand, especially in areas of Deprivation
- Give local authorities a strong strategic role as champions for parents, families and vulnerable pupils
- Consult on a simplified and less prescriptive Admissions Code early in the new year so that a revised code is in place by July 2011
- As academy status becomes the norm, local authorities will increasingly move to a strategic commissioning and oversight role and will have the freedom to define what role they will play in supporting school improvement for local schools.

Academy conversion in Gloucestershire
Many of Gloucestershire's secondary and primary schools have converted or are awaiting conversion to academy status. This new arrangement for school management should provide greater local autonomy with locally nuanced decision making on matters such as curriculum, teaching hours and vocational training prospects.

Schools that have academy status:

Secondary: All Saints, Balcarras, Cheltenham Bournside, Chipping Campden, Chosen Hill, Cirencester Deer Park, Cirencester Kingshill, Cleeve, Dene Magna, Farmors, Gloucester Academy, High School for Girls, Katharine Lady Berkeley's, Marling, Pate's Grammar, Ribston, St Peters High School & Sixth Form, Sir Thomas Rich's, Sir William Romney's, Stroud High, The Cotswold, The Crypt, Thomas Keble, Winchcombe and Wyedean.

Primary: Arthur Dye (renamed Springbank), Bishops Cleeve, Charlton Kings Infants, Charlton Kings Junior, Churchdown Village Infants, Field Court Infants, Field Court Junior, Gotherington, Highnam C of E, Redmarley C of E, Robinswood, Rowanfield Junior St Dominics Catholic, St Mary's Catholic, Staunton & Corse C of E and The Rosary Catholic.

Schools awaiting conversion include:

Secondary: Brockworth Enterprise, Churchdown Secondary, Pittville and Tewkesbury.

Primary: Blockley C of E, Bourton on the Water, Gretton, Longlevens Junior, Powells C of E, St Davids, Stow on the Wold and Tewkesbury C of E.

3.7.1 Participation

The overall participation by 16-17 year olds rose from 78% to 81% in Gloucestershire between 2005 and 2007 (*Young People's Learning Agency, 2010*) as shown in Table 3.10. Whilst this represents a lower absolute rate than the regional and national averages, it is a faster rate of increase.

3.7.2 Participation by the Four Curriculum routes

The four routes to qualification are General Qualifications (A levels and GCSEs), Other qualifications including BTEC Diplomas and International Baccalaureate, Apprenticeships, Foundation Learning and Diplomas

General qualifications
As Figure 3.16 illustrates 16-18 learners that studied for general qualifications (GCSEs and A levels) represented 46% or 6,600 learners out of 14,200 total learners in Gloucestershire compared to 41% for the South West as a whole. Some 82% of Gloucestershire learners that studied general qualifications in 2009/10 did so in school sixth forms compared with 69% in the SW region.

Other qualifications
38% or 5,400 learners in Gloucestershire studied Other qualifications. This compared to 44% in the South West and nationally as shown in Figure 3.16. These included standalone qualifications like BTEC Diplomas, International Baccalaureate, specialist courses designed by schools and FE Colleges that are not on the Qualifications and Credit Framework or courses at levels 2 and 3 that contribute to full levels 2 and 3, but do not represent a full level qualification in themselves.

Table 3.10: Participation in Education and Work-based Learning; 16 and 17 year olds										
	16 & 17 year olds									
2007	Full-time education								Total	
	Maintained schools[6]	Academies & CTCs	Independent schools	Sixth form college	Other FE[7]	Total	WBL	Part-time education	Education and WBL[8]	Cohort
Gloucestershire	35	0	8	0	29	72	6	3	81	16,100
South West	28	0	7	2	34	71	7	4	82	135,700
England	27	1	6	10	29	72	7	4	83	1,344,300
2006										
Gloucestershire	36	0	8	0	27	71	5	3	79	16,000
South West	28	0	7	2	33	71	7	4	81	134,400
England	27	0	6	10	29	72	7	4	82	1,326,100
2005										
Gloucestershire	35	0	8	0	27	69	6	3	78	15,800
South West	27	0	7	2	32	69	7	5	81	134,100
England	26	0	6	10	27	69	7	5	81	1,329,300
Source:Statistical First Release, 2009, Department for Children, Schools and Families										

Some 88% of Gloucestershire learners studying 'Other' qualifications did so in FE colleges. In 2009/10, the most frequently studied-for qualifications for learners in the 'Other' category in order of popularity were:

- Key/Functional Skills Number/Maths GCSE/Numeracy Certificate
- Key/Functional Skills Communication/English GCSE/Literacy Certificate
- BTEC National Diploma
- ICT Functional/Key Skills
- BTEC First Diploma
- NVQs in Hair/Beauty.

Apprenticeships
Figure 3.16 shows that about 8% or 1,100 of 16-18 year old learners in Gloucestershire were on an Apprenticeship, compared with 10% regionally.

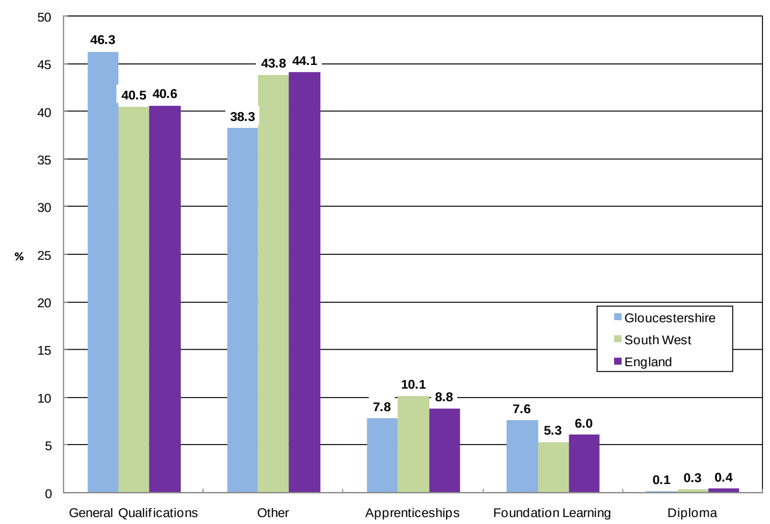
Figure 3.17 shows that there has been a sharp growth in the take up of Apprenticeships for all ages in the last four years (*SLIM, 2011*), albeit with Gloucestershire showing a similar pattern of growth to the South West as a whole. There were a total of 2,820 Apprenticeship starts in Gloucestershire in 2009/10, a rise of 1,180 (72%) from 2005/06, with an increase of 570 (25%) in the last year alone.

Foundation Learning[9]
The Foundation Learning suite of qualifications represents an area of rapid change and a learning route that has been growing in recent years. The definition of Foundation Learning has developed over time but using Entry Level and Level 1 qualifications as a proxy, Gloucestershire saw growth of around 300 (40%) 16-18 learners between 2007/08 and 2008/09 compared with a 19% increase in the in the South West.

According to Figure 3.16 the proportion of 16-18 year old learners on the Foundation learning route amounted to 8% or 1,000 compared to 5% regionally and 6% nationally.

The transition of learning provision towards a Foundation Learning qualification route,

Figure 3.16: Participation by the Four Curriculum Routes (Residents 2009/10)



Source: Autumn School Census, ILR, (L01)

6,7,8 & 9 Please see Definitions on Page 32 involves the integration of Entry to Employment in 2010/11, with consequent changes to the learner 'offer' and the arrangements for engagement activity.

Diplomas[10]
As a new qualification route, there were currently relatively few 16-18 Diploma learners and no real trend data. Two-thirds of South West local authorities had consortia offering at least one of these five lines in the first year of Diploma delivery in 2008/09. Bournemouth, Poole, Bath and North East Somerset, Gloucestershire, Devon, Bristol, Isles of Scilly did not offer any lines in the first Gateway.

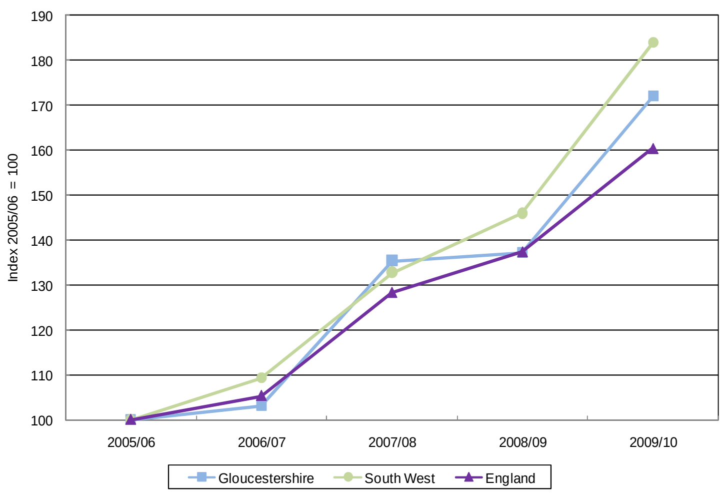
In 2009/10, there were 16 Diploma 16-18 learners from Gloucestershire but rapid growth has been projected from this small base. Existing 16-18 Diploma learners in Gloucestershire were concentrated in FE colleges.

3.7.3 Higher Education

An indicator of the health of the labour market is the extent to which people go into Higher Education (HE). Figure 3.18 shows that, since peaking in 2005/06, the number of people going into HE from Gloucestershire has decreased since 2004/05 by 1.9% to 16,800 students in 2007/08.

This is reflected in the South West and across England and appears to be the result of a decline in part-time and postgraduate students due to the effect of changes to national policy regarding HE funding. Nationally there has been consistent growth in full-time and undergraduate participation which cannot be measured at local authority level. However, the effect of the latest legislation regarding student fees may well change the pattern of participation in the coming years.

Figure 3.17: Total Apprenticeship Programme Starts, Gloucestershire, the SW and England 2005/06 to 2009/10 (Index 2005/06 =100)



Source: Skills and Learning Intelligence Module (SLIM) 2011

3.7.4 Travel to learn within Gloucestershire

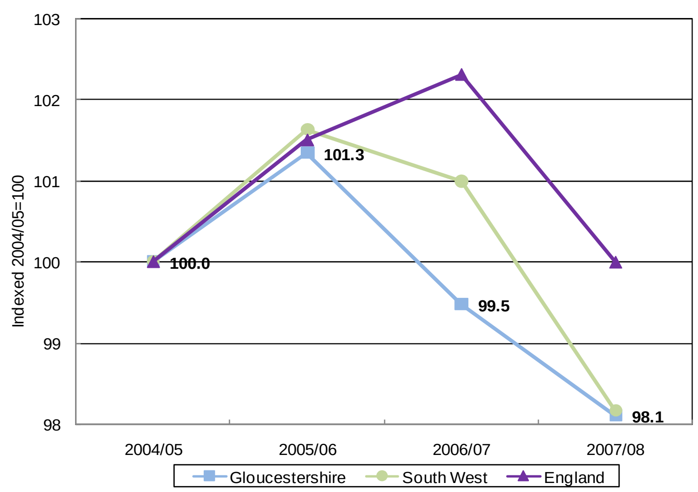
Travel to learn patterns for Further Education colleges within the Gloucestershire are dominated by flows of learners to Gloucestershire College. The college attracts around 200 learners from the Forest of Dean, 1,000 from Gloucester, 100 from Stroud and 400 from Tewkesbury.

Cirencester College attracts around 400 Stroud-resident learners. Whilst Hartpury does not attract more than 100 learners from any of Gloucestershire's districts or boroughs other than its home district, the large number of learners that it attracts from other parts of the South West accounting for about 400 is noteworthy, and is probably caused by its status as a specialist land-based college.

School Sixth Form Travel to learn patterns within Gloucestershire are relatively complex, and are dominated by travel to level 3 provision. Around 200 learners from Cheltenham travel to Cleeve School in Tewkesbury. Another 100 learners from the Forest of Dean travel to various schools in Gloucestershire.

About 300 learners travel from Gloucester to Churchdown School in Tewkesbury from

Figure 3.18: Participation in HE by students from Gloucestershire, 2004/05 to 2007/08 (Indexed 2004/05 = 100)



Source: Skills and Learning Intelligence Module (SLIM) 2010

10 Please see Definitions on Page 32

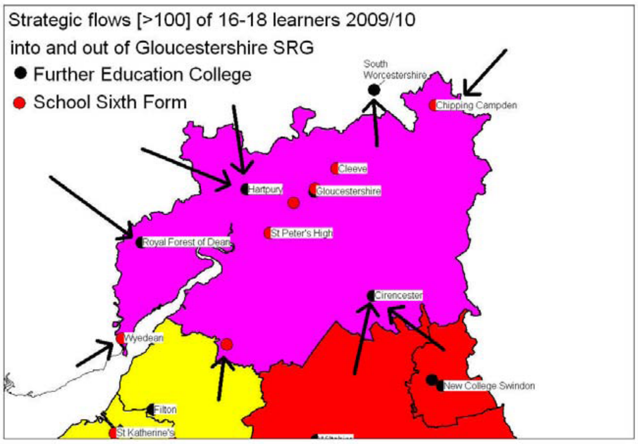
Stroud, approximately 100 learners travel to St. Peter's High School and Sixth Form Centre in Gloucester Around 200 Tewkesbury-resident learners travel to Pate's Grammar School in Cheltenham, with another 100 going to various schools in Gloucester.

3.7.5 Travel to learn outside Gloucestershire

Figure 3.19 shows the strategic flows of 16-18 year old learners into and out of Gloucestershire.

Gloucestershire is a net importer of learners. It imports around 2,000 learners and it exports around 400. Most learners who cross borders do so for Further Education, there being around 1,500 FE imports and 300 FE exports. The pattern of School Sixth Form imports and exports is similar, with around 500 imports and 100 exports.

Figure 3.19: Strategic flows of the 16-18 learners into and out of Gloucestershire



Source: Young People's Learning Agency (2010)

The area's FE imports are mostly from Swindon accounting for around 600 learners, Wiltshire with about 200, particularly North Wiltshire and from out of the South West region around 500 from Herefordshire and Worcestershire and South East Wales about 100.

School sixth form imports to Gloucestershire are largely from South Gloucestershire accounting for about 100 and from Oxfordshire and Monmouthshire around 300 combined.

Learners travelling in to Gloucestershire largely do so for level 3 provision, particularly at:

- Cirencester College (learners from Swindon and North Wiltshire)
- Hartpury College (learners from Herefordshire, Wychavon and Malvern Hills)
- Katherine Lady Berkeley's School (learners from South Gloucestershire)
- Chipping Camden School (learners from Stratford on Avon)
- Wyedean School, in Sedbury (learners from Monmouthshire).

A sizeable number of the order of 100 learners travel from parts of South East Wales to Royal Forest of Dean College for level 2 courses.

Gloucestershire residents who travel out of the area to learn mostly go to Worcestershire (South Worcestershire College, Evesham and Malvern). This group mostly travel for level 3 courses.

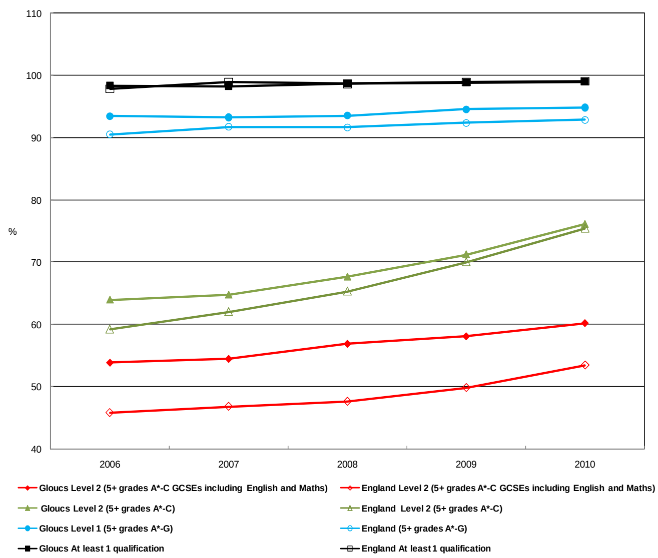
3.7.6 Performance

GCSEs

Gloucestershire performs above the national average for most of the GCSE levels as shown in Figure 3.20

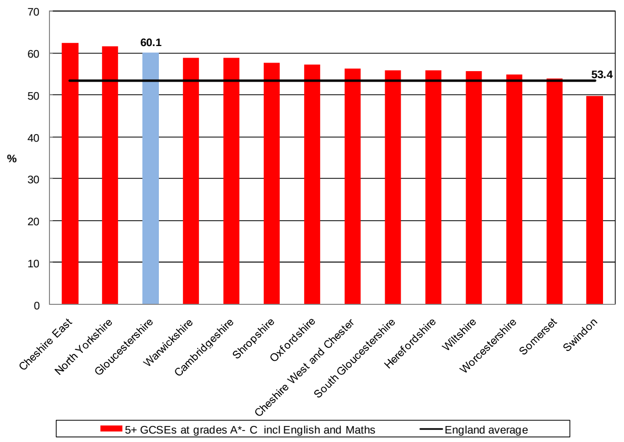
The proportion of pupils achieving five or more GCSEs at grades A* to C which is regarded a benchmark of employability, has shown a steady increase from 2007 to 2010 a trend also reflected across England. The gap between the Gloucestershire and England performance however, has narrowed from 4.7 percentage points above the England value in 2007 to a 0.7 percentage point difference in 2010 amounting to 76.1%.

Figure 3.20: GCSE performance: in Gloucestershire v England 2006 to 2010



Source: Performance Tables, 2006-2010,DfES

Figure 3.21: Proportion of pupils achieving 5+ GCSEs at A*-C including Maths and English; Gloucestershire compared to statistical neighbours



Source: Performance Tables, 2010, DfES

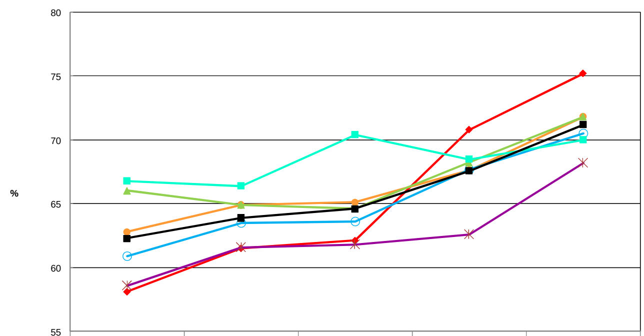
Within this group some 60% of pupils achieved five or more GCSEs at grades A* to C including English and Maths in Gloucestershire placing the County some 6.7 percentage points above England in 2010. Although this shows Gloucestershire in a good position the gap has closed in the last two years as England has improved at a faster rate.

In terms of its statistical and adjoining neighbours Gloucestershire has fared well lying in third best position as shown in Figure 3.21 with only Cheshire East and North Yorkshire performing better.

Conversely, the remaining 40% of pupils who did not achieve these grades at the end of their compulsory education are therefore a cause for concern in the context of basic employability skills.

Looking at the districts it is apparent from Figure 3.22 that Cheltenham district lies well above the County average with 75.2% compared to the Forest of Dean which lies well below at 68.2% of pupils achieving GCSE A* to C grades. However, these two districts have shown a marked improvement since 2008.

Figure 3.22: GCSE and equivalent results; % pupils achieving A* to C grades for Gloucestershire and districts 2005-2009



	2005	2006	2007	2008	2009
Cheltenham	58.1	61.5	62.1	70.8	75.2
Forest of Dean	58.6	61.6	61.8	62.6	68.2
Tewkesbury	62.8	64.9	65.1	67.6	71.8
Gloucester	60.9	63.5	63.6	67.7	70.5
Stroud	66	64.9	64.6	68.2	71.8
Cotswold	66.8	66.4	70.4	68.5	70
Gloucestershire LA	62.3	63.9	64.6	67.6	71.2

Source: Performance Tables, 2005-2009, DfES

General and Applied A/AS or equivalent level[11]

Gloucestershire's good performance is carried over into the General and Applied A/AS or equivalent level exam results as shown in Table 3.11. There are two measures of performance, one is the average point score per student and the other is the average point score per exam entry, both of which need to be taken into account.

The average point score per student in Gloucestershire is 32.5 higher than the national average. The average points score per exam entry in the County is 4.3 higher than the national average. This means students in Gloucestershire are doing more A levels than the national average and also gaining better grades in those A levels. This good performance is also borne by Gloucestershire outperforming all its statistical and neighbours as shown in Figure 3.23.

The Skills for Sustainable Growth strategy (*BIS, 2010*) presents the Government's vision of reform of the further education and the skills system. It emphasises an increasing need to create a joint enterprise between learning providers, employers and individuals and strengthen the relationships between colleges, local authorities, charities, voluntary organisations and social enterprises. Key points from the strategy include:

- The numbers of **adult apprenticeships** available will be expanded
- The apprenticeships package will be improved. Level 3 (A Level equivalent) will be signalled as the most desirable level of achievement, with clear progression pathways
- **Training for young adults aged 19 - 24** undertaking their first full level 2 (GCSE equivalent) or first level 3 (A Level equivalent) qualification when they do not already have one will be fully funded
- **Basic skills courses** for individuals who left school without basic reading, writing and mathematics will be fully funded
- Plans to invest £210 million in **adult and community learning** - to support personal development,

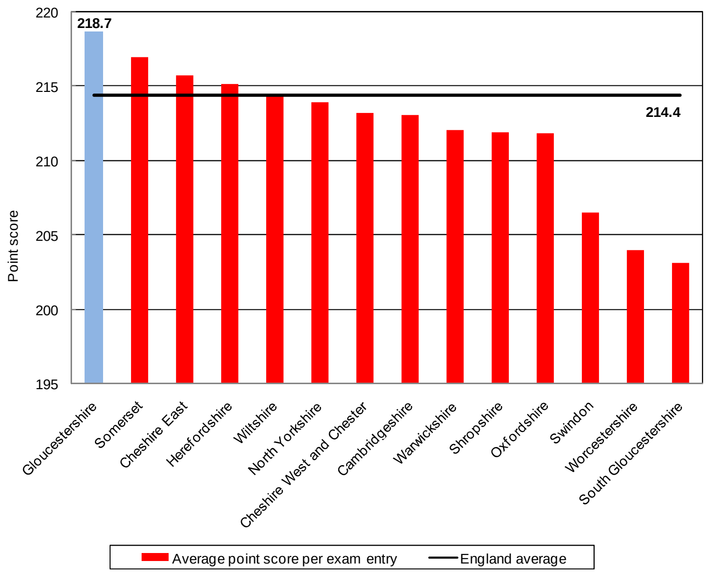
11 Please see Definitions on page 32

Table 3.11: A level performance 2010

	Average point score	
	Per student	Per exam entry
Gloucestershire	777.3	218.7
England	744.8	214.4

Source: Performance Tables, 2010, DfES

Figure 3.23: Average point score per exam entry for Gloucestershire and statistical and close neighbours 2010



Source: Performance Tables, 2010, DfES

inclusive communities and a route into formal learning for the disengaged-will be preserved

- Full funding for **English for Speakers of Other Languages (ESOL)** will only be available for those actively seeking work on Jobseeker's Allowance and Employment Support Allowance (work-related activity group) benefits. For others, ESOL will be co-funded
- From 2013-14, **government-backed loans for learners** aged 24 and over undertaking level 3 or higher qualifications will be introduced
- A demand-led **Growth and Innovation Fund** will be implemented, with government investment of up to £50 million of government a year. The Fund is intended to support employer-led initiatives within sectors, such as new professional standards, and to promote leadership and management in small and medium sized enterprises (SMEs)
- The Train to Gain programme will be replaced by an **SME-focused initiative**, to help small employers train low-skilled staff
- **Labour-market relevant training** will be provided to help people who are on active job-seeking benefits to secure work
- Bureaucracy in the sector will be reduced – colleges and training providers will be freed from red tape so they can respond more effectively to the needs of employers and learners. The complex FE funding system will also be simplified with the implementation of a single adult skills budget from the 201-12 academic year
- There will be a shift in the focus of the **UK Commission for Employment and Skills.** It will become a "vehicle for social partnership, bringing together employers, trade unions and others to identify measures that will support the growth of the sector".

The **Skills Funding Agency** will continue to operate but will have a more narrowly-focused role to play. Its remit will now involve dispensing funding, issuing grant agreements and monitoring information.

Further Education

Gloucestershire has four mainstream Further Education (FE) colleges:

- Cirencester College
- Gloucestershire College
- Hartpury College
- Stroud College.

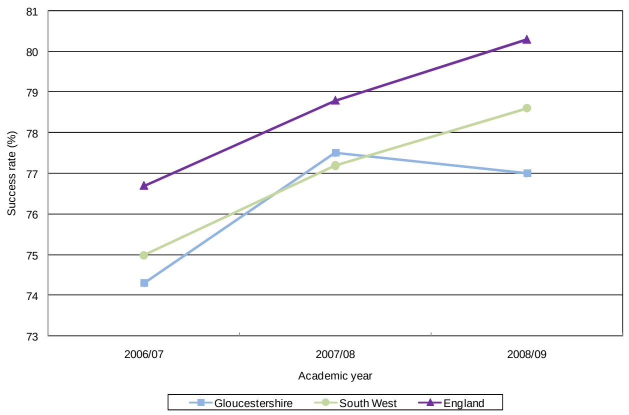
One element of assessing colleges' performance is through the use of success rates (retention rate multiplied by achievement rate). Figure 3.24 shows that Gloucestershire's overall success rate was set to close the gap with the regional and national growth up to 2007/08 but has since shown a 0.5% decline as opposed to a 1.4% and 1.5% growth experienced regionally and nationally respectively in 2008/09.

Apprenticeships

There has been a sharp rise in achievements (*SLIM, 2011*) (i.e. successful completion of all elements of the Apprenticeship framework)[12] in the last two years (this time lag would be expected as frameworks usually take at

12 Please see Definitions on page 32

Figure 3.24: Further Education Success rates 2006/07 to 2008/09



Source: Strategic Analysis Gloucestershire May 2010, Young People's Learning Agency

least 12 months to complete) as shown in Figure 3.25.

A total of 1,800 frameworks were achieved in Gloucestershire in 2009/10. Again, the rate of growth locally has been lower than the regional rate, with a 65% rise in the number of frameworks achieved between 2005/06 and 2009/10, compared to 92% for the wider region.

As well as the substantial increase in starts, the level of apprenticeship achievements has been further boosted by an increase in the proportion of starts that result in a successful framework completion. In Gloucestershire the sectors with the most Apprenticeship starts were as follows:

Adult Social Care/Healthcare	400 (14.1% of the total)
Retail	250 (8.8%)
Building Services Engineering	230 (8.1%)
Business, Administration & Governance	220 (7.7%)
Hospitality, Leisure, Travel & Tourism	220 (7.7%).

3.7.7 Workforce Skills

There are a numerous different measures to assess the quantity, level and content of skills possessed and deployed in the workplace. The easiest methods involve measurement in terms of either the qualifications people hold, or the jobs they do (i.e. their occupation).

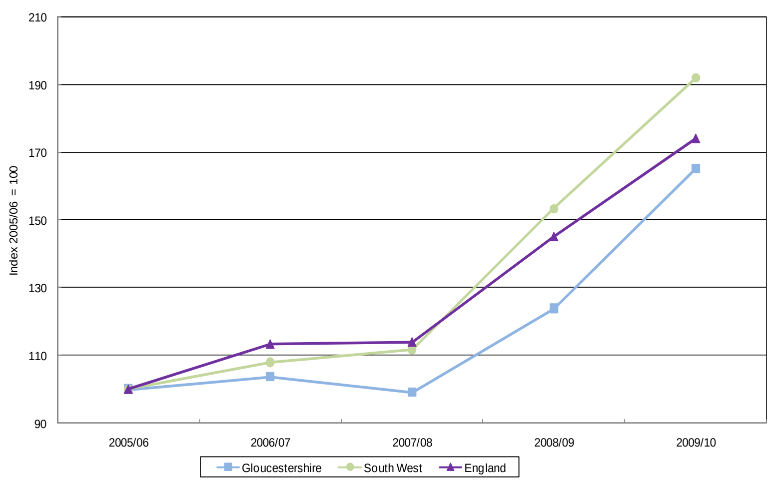
Qualification structure
Table 3.12 shows that Gloucestershire is in a good position with regard to higher level qualifications. In 2009 some 33% of the working age people were qualified to NVQ4 and above compared to 29% in the South West and 30% nationally and 53% qualified to NVQ3 and above compared to 51% in the South West and 49% nationally.

In terms of no qualifications, the County position improved in 2009 with a decrease of 1% to 8% of the working population without a qualification, which is well above the national average of 12%.

Gloucestershire's healthy position is also reflected when compared to it's statistical and adjoining neighbours where it lies fifth highest in relation to the proportion of people qualified to NVQ4 and above as shown in Figure 3.26 and fourth lowest in terms of the proportion of people without any qualifications as shown in Figure 3.27.

Occupational structure
The resident occupational structure in Gloucestershire reflects its high level of qualification and skill base as shown in Figure 3.28 with a higher than average proportion of professional occupations at 15% of the total employed compared to 13% and 14% in the South West and Great Britain respectively.

Figure 3.25: Total Apprenticeship Programme Achievements, Gloucestershire, the SW and England, 2005/06 - 2009/10 (Index 2005/06 =1)



Source: The Data Service (2011)

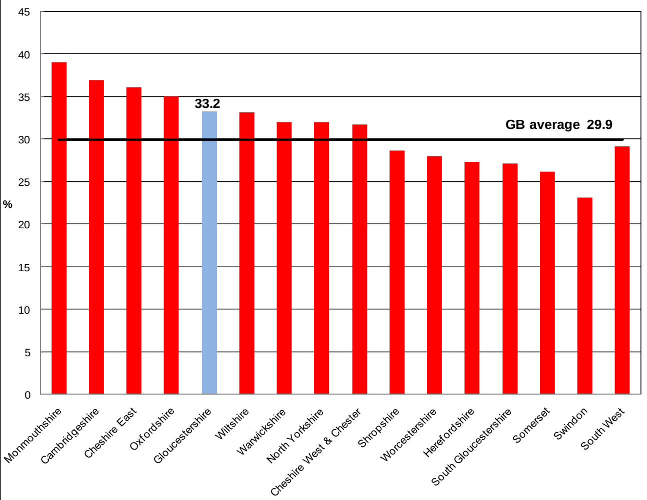
Table 3.12: Qualification* structure in Gloucestershire, the South West and Great Britain

Qualification level	Gloucestershire %				South West %			Great Britain %		
	2007	2008	2009		2007	2008	2009	2007	2008	2009
NVQ4 and above	33.6	31.5	33.2	121,000	29.0	27.9	29.1	28.5	28.6	29.9
NVQ3 and above	55.5	51.4	52.8	192,500	51.3	50.2	51.3	48.4	48.2	49.3
NVQ2 and above	72.0	70.8	71.2	259,800	67.9	67.0	68.8	64.3	63.9	65.4
NVQ1 and above	84.2	84.6	85.2	310,900	82.5	82.6	84.1	77.9	77.7	78.9
Other qualifications	7.4	6.8	7.2	26,300	8.0	7.5	7.2	8.8	8.9	8.8
No qualifications	8.4	8.5	7.6	27,700	9.5	9.9	8.7	13.3	13.5	12.3

Source: Annual Population Survey Jan-Dec'07, '08 * '09 ONS Crown Copyright Reserved (Nomis)

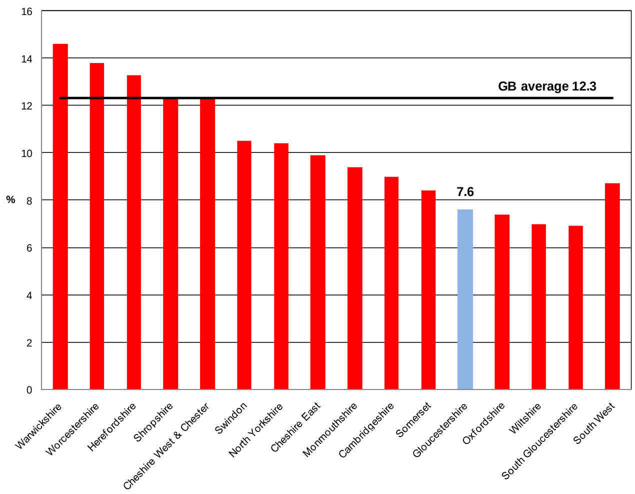
* No qualifications: No formal qualification held
Other qualifications: includes foreign qualifications and some professional qualifications
NVQ 1 equivalent: e.g. fewer than 5 GCSEs at grades A-C, foundation GNVQ, NVQ 1, intermediate 1 national qualification (Scotland) or equivalent)
NVQ 2 equivalent: e.g. 5 or more GCSEs at grades A-c, intermediate GNVQ, NVQ 2, intermediate 2 national qualification (Scotland) or equivalent
NVQ 3 equivalent: e.g. 2 or more A levels, advanced GNVQ, NVQ 3, 2 or more higher or advanced higher national qualification (Scotland) or equivalent
NVQ 4 equivalent and above: e.g. HND, Degree and |Higher Degree level qualification or equivalent

Figure 3.26: Proportion of working age people who were qualified to NVQ4 and above for Gloucestershire and statistical and adjoining neighbours in 2009



Source: Annual Population Survey Jan-Dec 2009 ONS Crown Copyright Reserved (Nomis)

Figure 3.27: Proportion of working age people who had no qualifications in Gloucestershire and statistical and adjoining neighbours in 2009



Source: Annual Population Survey Jan-Dec 2009 ONS Crown Copyright Reserved (Nomis)

The skilled trades occupations are also over-represented with 14% of Gloucestershire's total employed compared to 13% in the South West and 10% nationally.

In terms of change, over the last five years and despite the effects of the recession the Professional and Skilled trades including the Process, plant and machine operatives occupations have grown to a much greater degree in Gloucestershire than in the South West and nationally as Figure 3.29 shows.

However, hardest hit were the Sales and customer service and Elementary occupations with much greater decreases than shown regionally and nationally. The occupational structure of the claimant unemployment count covered in section 3.6.2 reflects the decline in these particular occupations.

Skills surveys

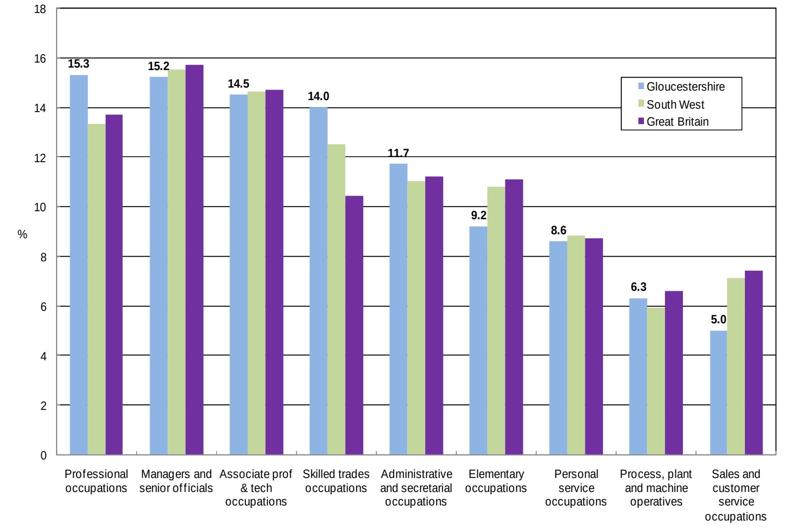
More difficult methods of measuring skills in the workforce include identifying the degree of match/mismatch between the supply and demand for skills by employers.

There are two forms of measurement, one addresses 'skill shortages', where employers are unable to, or have difficulty in, recruiting/filling their vacancies which represents an 'excess demand' for these skills.

The other involves 'skills gaps' where employers identify workers who may not be fully proficient in their job and do not meet all of their employers' needs. This is also damaging as it reduces the organisation's capability and restricts its opportunity to fulfil its potential.

Such measurement of skills is undertaken through the use of employers surveys. The National Employer Skills Survey (NESS) for England is the largest survey of English employers' training and recruitment practices and skills needs. Continuing a biennial time series established by the Learning and Skills Council (LSC) in 2003, the NESS2009 surveyed 79,152 employers.

Figure 3.28: Occupational structure in 2009/10 in Gloucestershire, the South West and Great Britain

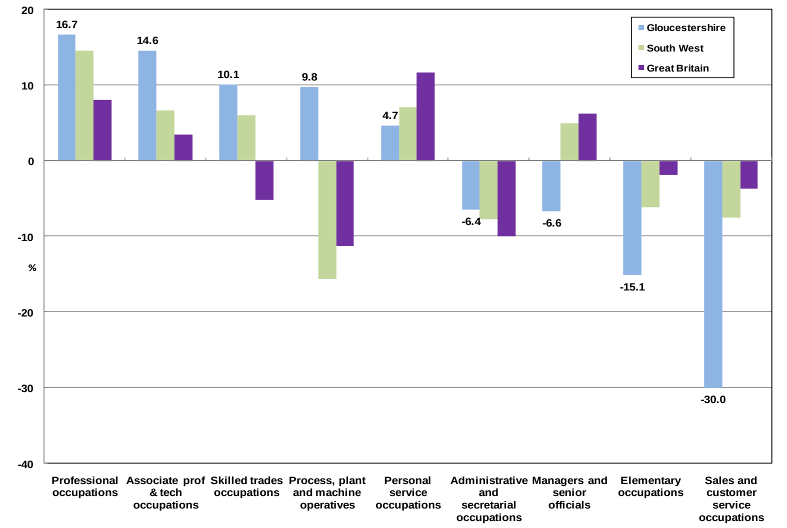


Source: Annual Population Survey Apr'09-Mar'10 ONS Crown Copyright Reserved (Nomis)

It asked establishments about (i) recruitment problems, (ii) skills gaps, (iii) training practices and training expenditure, as in previous years, but also about skill updating needs in their workforce, the recession, and their product market strategies. The results relating to Gloucestershire follow.

The overall vacancy situation in Gloucestershire in 2009 is summarised in Table 3.13. Gloucestershire businesses account for 11% of the total number of skill shortage vacancies in the South West. Comparison with the rest of the South West sub regions as shown in Figure 3.30 puts it at the fourth highest after Devon and Cornwall with similar levels to Swindon and Somerset and just above the regional average of 10%.

Figure 3.29: Change in occupational structure between 2005/06 and 2009/10 in Gloucestershire, the South West and GB



Source: Annual Population Survey Apr'05-Mar'06, Apr'09-Mar'10 ONS Crown Copyright Reserved (Nomis)

In terms of skill gaps, as depicted in Table 3.14, the proportion of employers reporting skill gaps in the County increased from 19% to 21% between 2007 and 2009 and the number of staff considered by those employers as not fully proficient also increased by 7,800 over the same period.

Figure 3.31 shows that in 2009, Gloucestershire compared to the other South West sub regions had at 13%, the highest proportion of staff considered not fully proficient by their employer amounting to 26,800, out of a South West total of 213,000.

In 2009 almost a quarter of employees in Gloucestershire had recruited at least one person under 24 years old to their first job which is comparable to the England average and slightly below the regional average. Compared to the rest of the sub regions Gloucestershire lies at the lower end as shown in Figure 3.32 with Bournemouth, South Gloucestershire and Plymouth representing about a third of their employers.

Within this age group recruitment has been split into a further three age groups.

Some 5% of Gloucestershire employers recruit 16 year olds which is below the regional and national average of 7% and 6%

Table 3.13: Vacancy position in Gloucestershire 2009

	Number	% of SW total
Vacancies	4,411	12
Hard-to-fill vacancies	971	11
Skills shortage vacancies	698	11

Source: Derived from National Employer Skills Survey 2009 by LSC SW Research Team respectively, the highest proportion of employers recruiting this age is South Gloucestershire, Plymouth and Torbay.

Some 11% employers in Gloucestershire recruit 17-18 year olds which is the same as the national average but below the regional average with Bournemouth representing the highest proportion of employers recruiting this age group at 14%.

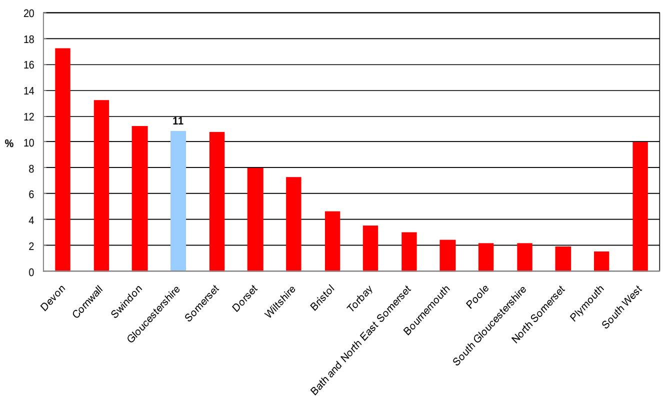
Finally, recruitment from Higher Education puts Gloucestershire in an above average position with 11% of employers however, in middle place in terms of the sub regions with Bournemouth sub region reaching 18%.

Table 3.14: Summary of skills gaps in Gloucestershire 2007, 2009

	Year	% employers with skills gaps	Number of staff NOT fully proficient
Gloucestershire	2007	19.0	18,940
SW		20.1	130,341
England		15.0	1,359,780
Gloucestershire	2009	20.9	26,787
SW		21.4	212,970
England		19.0	1,704,554

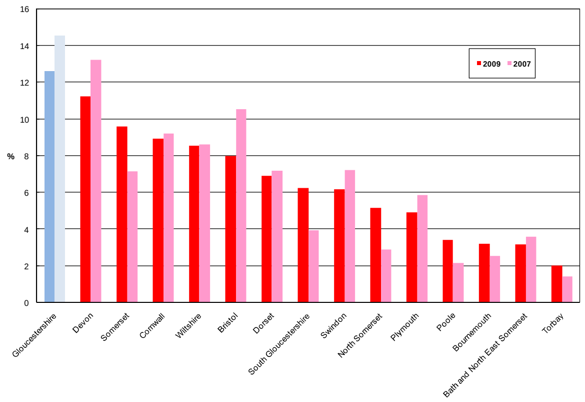
Source: Derived from National Employer Skills Survey 2009 by LSC SW Research Team

Figure 3.30: Skill shortage vacancies as a proportion of SW total: Gloucestershire and SW sub region 2009



Source: Derived from National Employer Skills Survey 2009 by LSC SW Research Team

Figure 3.31: Number of staff not fully proficient as a proportion of the SW total: Gloucestershire and SW sub regions 2007 and 2009

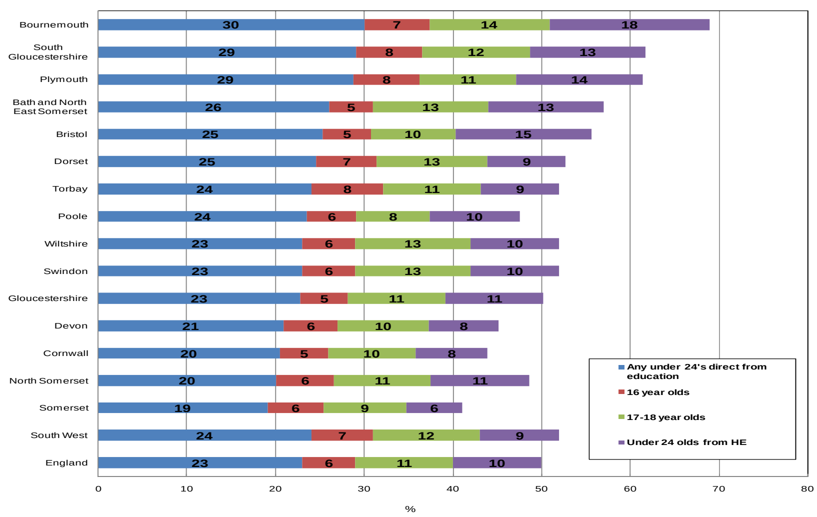


Source: Derived from National Employer Skills Survey 2009 by LSC SW Research Team

The 2009 NESS survey showed along with its regional and national counterparts, the proportion of employers with training budgets is very low. However, the proportion of employers offering training amounts to almost three quarters of employers as shown in Table 3.15.

A very small percentage (8%) use universities to provide training which is below the national average. However, some 26% of employers use FE colleges to provide training and most of them are satisfied with the service.

Figure 3.32: Recruitment of young people directly from education, 2009 Gloucestershire, SW, England and sub regions of the SW



Source: Derived from National Employer Skills Survey 2009 by LSC SW Research Team

Future skills needs

As there is not an equivalent study for Gloucestershire The 'National Strategic Skills Audit for England 2010: Skills for Jobs: Today and Tomorrow' has been used as a guide to future skills requirements. The aim of the audit was to provide a greater insight into England's existing and future skill needs. It identifies the sectors, occupations and skills on which a particular focus is necessary in order to be able to effectively meet the changing needs of the economy and labour market.

The audit identifies that there is a significant demand for highly-skilled workers in the labour market, with the largest number of people employed now and in the future as managers, professionals, associate professionals and in technical roles, with associated requirements for higher-level skills. This relates well to Gloucestershire's occupational structure and growth as shown in Figures 3.25 and 3.26.

Table 3.15: Employers propensity to train 2009

	Gloucestershire	South West	England
Employer has a training plan	40	41	43
Employer has a training budget	35	34	36
Employer propensity to train			
Provide any training	70	70	68
Provide neither off-the-job nor on-the-job training	30	30	32
Employer has used universities to provide teaching or training in past 12 months	8	8	11
Employer has used FE colleges to provide teaching or training in past 12 months	26	27	28

Source: Derived from National Employer Skills Survey 2009 by LSC SW Research Team

In particular, at national level important skills areas identified include:

- management and leadership skills, and especially corporate managers across a wide range of sectors;
- professional skills in the computing and software sector, in parts of health and social care, in pharmaceutical and medical technology, in manufacturing (i.e. traditional and advanced), especially for Science, Technology, Engineering and Mathematics (STEM) skills and in teaching and research
- technician and equivalent skills across many sectors, such as health and social care, utilities, chemicals, life sciences and pharmaceuticals, automotive engineering and broadcasting
- intermediate vocational skills within sectors such as manufacturing, engineering, processing and construction associated with skilled trades as the current ageing workforce retires and emerging opportunities develop in some sectors and to support future demand at technician level
- the ageing population will lead to increased demand for care services with particularly significant volumes of staff in care assistant roles, that will need greater understanding of ICT to support care users with assisted living technologies
- customer service and employability skills will be of growing importance to the service sector, including retailing, as well as with after-service and maintenance roles in manufacturing and the digital economy.

Despite the continued growth of highly-skilled work within the labour market, and a substantial overall decline in recent years in lower-skilled jobs, in the future significant employment is expected to remain in sectors traditionally requiring low-skilled jobs. These jobs are important as a labour market entry point for many groups, such as those seeking to move out of unemployment for example. However, many of these jobs will be in need of up-skilling in order to make improvements in service/product quality and to meet changes in consumer demand.

3.7.8 Young people Not in Education, Employment or Training (NEET)

Young people who are not in education, employment or training are vulnerable and risk not achieving their potential, economically or socially. High levels of need, sometimes multiple and complex needs, requiring multi agency action are often experienced by:

- Care leavers
- Young parents
- BME groups
- Young people with learning difficulties and/or disabilities
- Young offenders
- Refugees and asylum seekers.

One NEET client could be part of more than one vulnerable group. The largest group comprises teenage mothers followed by young people with learning difficulties and/or disabilities.

Table 3.16 shows the number of NEET in each district over the past thirteen months. The overall number was highest in October 2009 when 902 young people aged between 16 and 18 were classified as NEET. NEET num

Table 3.16: Number of 16-18 Not in Education, Employment or Training May 2009 to May 2010													
	May'09	Jun'09	Jul'09	Aug'09	Sep'09	Oct'09	Nov'09	Dec'09	Jan'10	Feb'10	Mar'10	Apr'10	May'10
Cheltenham	158	131	132	157	137	190	167	153	134	135	135	137	137
Cotswold	60	57	52	59	62	87	70	56	65	48	42	38	38
Forest of Dean	77	78	78	81	77	115	90	85	81	85	76	77	75
Gloucester	177	162	165	186	218	262	221	200	165	164	163	174	186
Stroud	100	109	120	126	147	155	131	121	106	109	104	102	115
Tewkesbury	54	53	52	49	63	93	80	69	52	69	65	61	65
Gloucestershire	626	590	599	658	704	902	759	684	603	610	585	589	615

Source: NEETs, 2010, Prospects, Gloucestershire

bers are subject to seasonal variation with October being the peak month, following the start of the new school year and identification of those young people who have actually left school. From the October 2009 peak, numbers fell to around 600 in January with small fluctuations in subsequent months.

Figure 3.33 shows the proportion of NEET by district. With the proportion of NEET in Gloucestershire at 4.0% in April 2010, the County continued to compare favourably with the South West average of 5.7% and UK figure of 6.5%.

3.8 Economic Exclusion

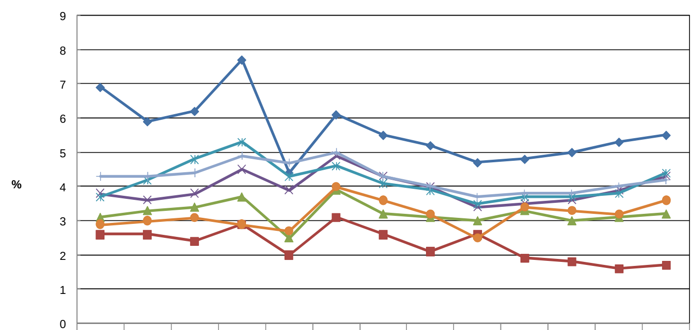
Gloucestershire benefits from a thriving economy however, this wealth is not evenly distributed throughout the population. Pockets of deprivation do exist, particularly in city or remote areas.

3.8.1 Indices of Deprivation 2010

The Index of Multiple Deprivation 2010 combines some thirty eight indicators, chosen to cover a range of economic, social and housing issues, into a single deprivation score for each small area in England. This allows each area to be ranked relative to one another according to their level of deprivation.

The indices are a key measure used by the Central Government to help target policies and funding to improve the quality of life in disadvantaged communities. As with the 2007 and 2004 the Indices of Deprivation 2010 have been produced at Lower Super Output Area (LSOA) level of which there are 32,482 in England.

Figure 3.33: Proportion of 16-18 Not in Education, Employment or Training May'09 to May'10



	May'09	Jun'09	Jul'09	Aug'09	Sep'09	Oct'09	Nov'09	Dec'09	Jan'10	Feb'10	Mar'10	Apr'10	May'10
Cheltenham	6.9	5.9	6.2	7.7	4.4	6.1	5.5	5.2	4.7	4.8	5	5.3	5.5
Cotswold	2.6	2.6	2.4	2.9	2	3.1	2.6	2.1	2.6	1.9	1.8	1.6	1.7
Forest of Dean	3.1	3.3	3.4	3.7	2.5	3.9	3.2	3.1	3	3.3	3	3.1	3.2
Gloucester	3.8	3.6	3.8	4.5	3.9	4.9	4.3	4	3.4	3.5	3.6	3.9	4.3
Stroud	3.7	4.2	4.8	5.3	4.3	4.6	4.1	3.9	3.5	3.7	3.7	3.8	4.4
Tewkesbury	2.9	3	3.1	2.9	2.7	4	3.6	3.2	2.5	3.4	3.3	3.2	3.6
Gloucestershire	4.3	4.3	4.4	4.9	4.7	5	4.3	4	3.7	3.8	3.8	4	4.2

Source: NEETs, 2010, Prospects, Gloucestershire

The indicators are grouped into seven domains that are combined to produce the overall Index of Multiple deprivation

- Income Deprivation
- Employment Deprivation
- Health Deprivation and Disability
- Education, Skills and Training Deprivation
- Barriers to Housing and Services
- Crime
- Living Environment Deprivation.

There are also two supplementary indices:

- Income Deprivation Affecting Children Index (IDACI)
- Income Deprivation Affecting Older People Index (IDAOP).

Comparison of ID2010 to ID2007

Gloucestershire now has eight LSOAs amongst the most deprived 10% of LSOAs in England as shown in Table 3.17 compared to seven at the time of the 2007 Indices of Deprivation. The extra LSOA is Hesters Way1. They are all located in Cheltenham and Gloucester districts as illustrated in Figure 3.34.

These eight LSOAs account for 12,700 residents amounting to 2% of the total population compared to 10,700 people or 1.8% of the total population in 2007.

It is evident from Table 3.18 that the 2010 Indices of Deprivation highlight the differences between Gloucestershire's districts. Out of 326 districts in England, Gloucester is the 125th most deprived district and Tewkesbury is the 271st.

Table 3.17: The eight most deprived Lower Super Output Areas in Gloucestershire

Lower Super Output Area	District	Rank
Podsmead (1)	Gloucester	809
Matson and Robinswood (1)	Gloucester	1,243
St Paul`s (2)	Cheltenham	1,990
St Mark`s (1)	Cheltenham	2,185
Kingsholm and Wotton (3)	Gloucester	2,332
Westgate (1)	Gloucester	2,434
Westgate (3)	Gloucester	2,642
Hesters Way (1)	Cheltenham	3,054

Source: Indices of Deprivation, 2010, Department for Communities and Local Government

Note: Out of 32,482 English SOAs,1=most deprived

At the other end of the scale there are **fifty six** LSOAs in Gloucestershire that fall within the top 10% of least deprived LSOAs in the country. These occur across all districts except the Forest of Dean.

Employment deprivation

Some 12,700 Gloucestershire residents live in LSOAs which have been classified as being amongst the 10% most employment deprived neighbourhoods in England, they are located within Cheltenham and Gloucester districts as shown in Figure 3.35.

There are now eight LSOAs in this top bracket, whereas there were nine at the time of the 2007 Indices of Deprivation. About 40,000 people equating to 7% of the total population of the County live in the 20% most deprived areas nationally for employment and about 14% of the total population, amounting to 83,000 County residents live in the least employment deprived 10% areas nationally.

Table 3.18: Index of Multiple Deprivation- District Ranks[13]

District	Rank of Average Score
Gloucester	125
Forest of Dean	186
Cheltenham	195
Stroud	256
Cotswold	266
Tewkesbury	271

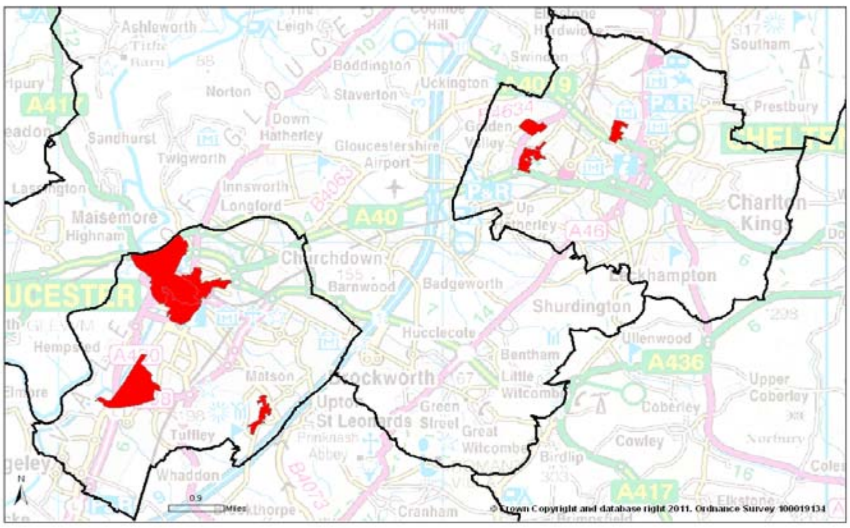
Source: Indices of Deprivation, 2010, Department for Communities and Local Government
Note: Out of 326 English districts, 1=most deprived

Income deprivation

Some 15,000 of Gloucestershire residents representing 3% of the total population live in LSOAs which have been classified as being amongst the 10% most income deprived LSOAs in England, they are all located within Cheltenham and Gloucester districts as illustrated in Figure 3.36.

There are now ten LSOAs in this top bracket, whereas there were nine at the time of the 2007 Indices of Deprivation. Over 44,000 Gloucestershire residents or 8% of the total population are living in the most income deprived 20% of neighbourhoods in the country and some 51,000 of County residents accounting for 9% of the total population live in the least deprived 10% areas nationally.

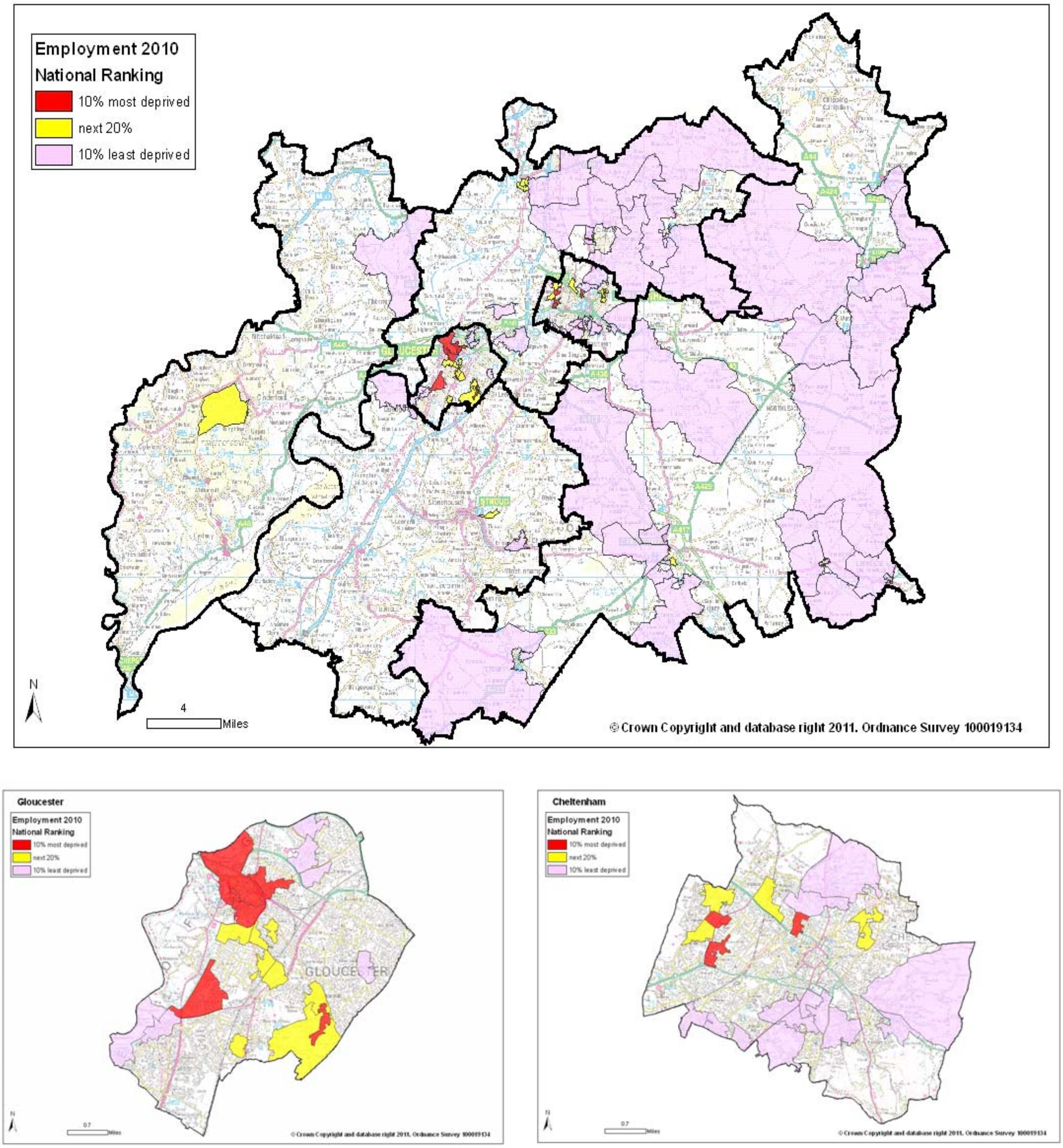
Figure 3.34: The eight Gloucestershire Lower Super Output Areas amongst the top 10% of most deprived LSOAS in England 2010



Source: Indices of Deprivation, 2010, Department for Communities and Local Government

13 Please see Definitions on page 32

Figure 3.35: Employment deprivation in Gloucestershire, Gloucester and Cheltenham 2010



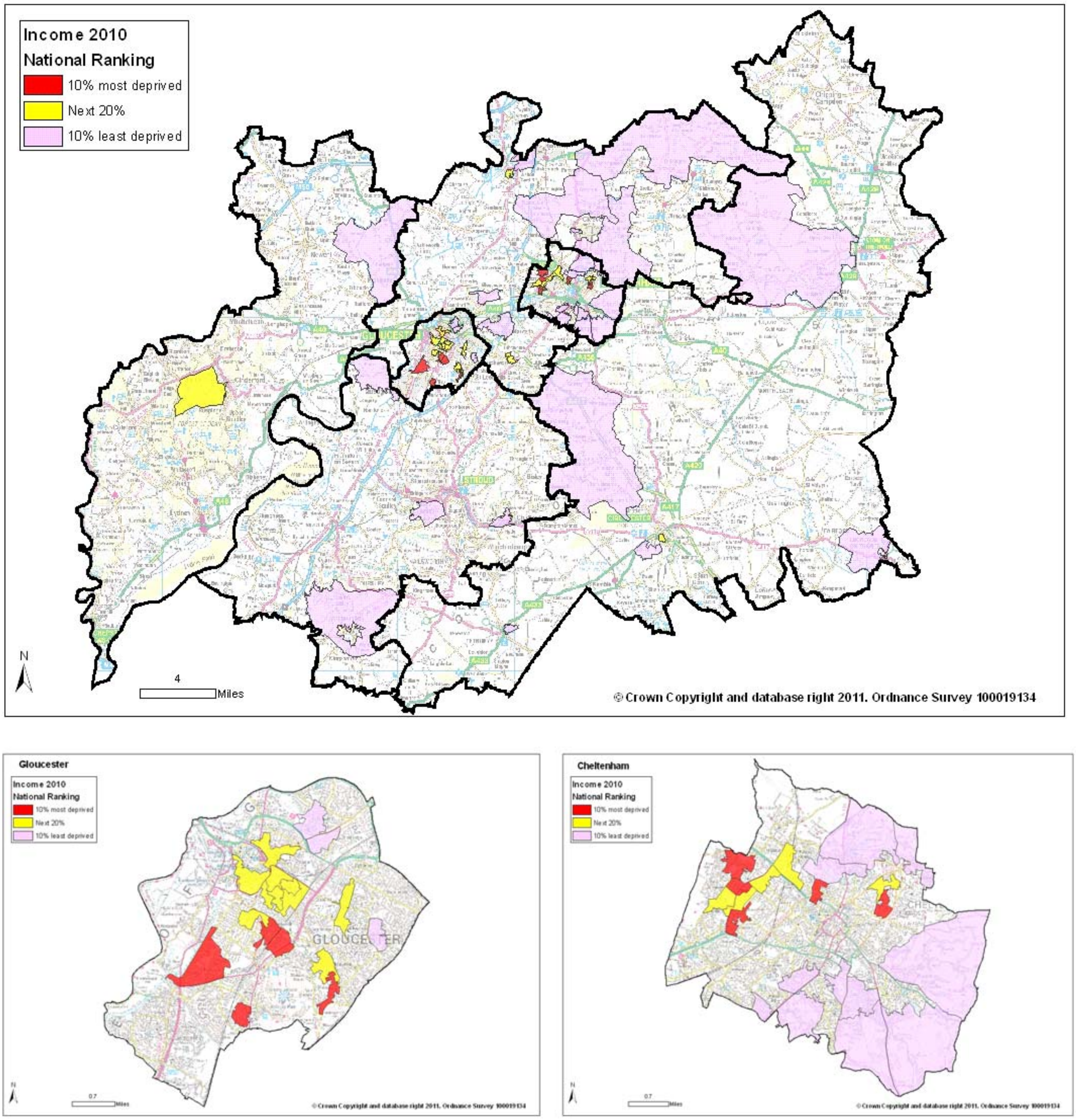
Source: Indices of Deprivation, 2010, Department for Communities and Local Government

3.8.2 Accessibility

As shown in Chapter 2 much of Gloucestershire is classified as rural (78%), however, only 20% of the County's population reside in this area. Figure 3.37 not unsurprisingly, shows that accessibility to services in the rural areas of Gloucestershire is poor and therefore likely to create problems for those 117,000 residents wanting to use centrally based services and for agencies providing services to people in their own homes.

That part of the County with the poorest access as shown in Figure 3.37 relates to areas identified in the multivariate analysis in Chapter 5, they are 1) the rural community cluster, characterised by agriculture, small busi-

Figure 3.36: Income deprivation in Gloucestershire, Gloucester and Cheltenham 2010

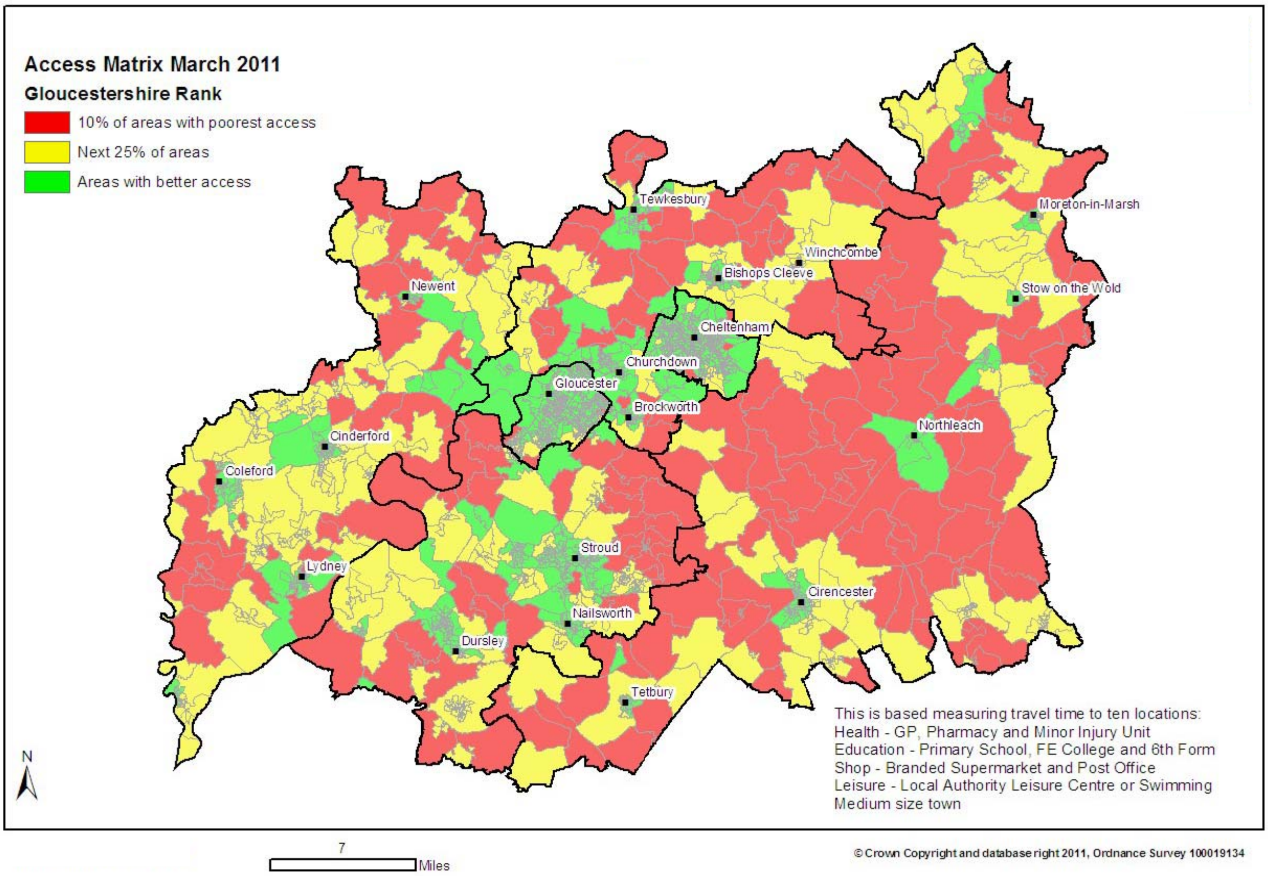


Source: Indices of Deprivation, 2010, Department for Communities and Local Government

nesses, home working, high car ownership and longer distance commuting, 2) the urban fringe cluster, characterised by high car ownership, well qualified residents and the prevalence of small businesses and 3) second home owners and retired residents.

These areas also coincide with the areas of lowest deprivation according to the employment and income indices of deprivation described in the previous section, however, there are still vulnerable pockets that exist around Cirencester, Tewkesbury, Cinderford and Brockworth as shown in Figures 3.35 and 3.36.

Figure: 3.37 Accessibility in Gloucestershire, 2011



Source: Gloucestershire County Council Research Team (GIS and Accessibility)

3.0 People and Communities

Key Points

- **Gloucestershire's population is ageing in line with the national trend**
- **Gloucestershire has experienced the largest net outflow of people aged between 15-29 yrs compared to the other age groups per year since 1991**
- **The number of people of working age will remain relatively static**
- **A higher percentage increase of older people and steeper decline in child population will be experienced in rural districts**
- **There is a relatively high level of self-employment amounting to 39,000 people or 14% of the total employed in Gloucestershire compared to the national average of 13%**
- **Resident based earnings are slightly higher than workplace based earnings for full-time workers, implying a relatively high standard of living with a low level of commuting to higher skilled jobs**
- **Earnings have increased between 2005 and 2009**
- **Gloucestershire has the least amount of out-commuting compared to its statistical and adjoining neighbours. In 2008 some 88% of Gloucestershire residents remained in the County to work. The majority of those residents that do commute, travel to Bristol, South Gloucestershire and Oxfordshire**
- **There has been little change in outward commuting since 2001**
- **About 86% of the workplace population reside in the County. It is also in a favourable position compared to its statistical neighbours regarding inward commuting**
- **Of those that did commute, nearly twice as many people travelled from Gloucestershire to Bristol than made the reverse journey. The picture is similar for Swindon**
- **Gloucestershire is an important employer of workers from Worcestershire half of whom travelled to Tewkesbury Borough**
- **There is considerable commuting between districts. Over a third of Tewkesbury's working residents travel to Cheltenham and Gloucester to work**
- **A fairly high proportion (15%) of Forest of Dean residents travelled to work in Gloucester**
- **The proportion of people who were economically inactive in Gloucestershire (20.5%) during April'09-March'10 were significantly below the SW (21.3%) and GB (23.5%) values**
- **The number of people claiming key out of work benefits is around 35,700 representing a 22% growth in the last five years. Over half are claiming Employment and Support Allowance and Incapacity benefits which is slightly less than the GB average and much lower than the regional average**
- **The latest (Sep 2010) claimant count rate for Gloucestershire is 2.5% which is comparable to the SW at 2.4% and 1% lower than the national figure**
- **Many of Gloucestershire's secondary and primary schools have converted or are awaiting conversion to academy status. This new arrangement for school management should provide greater autonomy with locally nuanced decision making on matters such as curriculum, teaching hours and vocational training prospects.**
- **Overall participation by 16-17 year olds rose from 78% to 81% in the Gloucestershire between 2005 and 2007 Although this was below the national and regional average, it was faster**
- **Those 16-18 learners that studied for general qualifications (GCSEs and A/AS levels) represented 46% or 6,600 learners out of a total of 14,200 learners in Gloucestershire compared to 41% in the SW**
- **Some 82% of Gloucestershire learners that studied General qualifications in 2009/10 did so in school sixth forms compared to 69% in the SW**

3.0 People and Communities

- **The number of people going into HE from Gloucestershire has decreased since 2004/05 by 1.9% to 16,800 students in 2007/08. Also reflected in the SW and England**
- **Gloucestershire is a net importer of learners. It imports around 2,000 learners and exports around 400**
- **60% of pupils achieved 5 or more GCSEs at grades A* to C including English and Maths placing the County some 6.7 percentage points above England in 2010**
- **Gloucestershire's average point score per student at A Level is 32.5 points higher than the national average and the average points score per exam entry is 4.3 points higher**
- **Gloucestershire's overall FE success rate has shown a 0.5% decline as opposed to 1.4% and 1.5% growth experienced regionally and nationally respectively**
- **About 1,100 or 8% of the total of 16-18 learners in Gloucestershire were on Apprenticeships, compared to 10% regionally**
- **Since 2005/06 there has been a sharp growth in the take up of Apprenticeships for all ages with a 25% increase in the last year alone**
- **The rate of growth of Apprenticeship achievements in Gloucestershire between 2005/06 and 2009/10 was 65% compared to 95% in the region**
- **The sector with the most Apprenticeship starts was Adult Social Care/Healthcare**
- **In 2009 some 33% of working age people were qualified to NVQ4 and above compared to 29% in the SW and 30% nationally**
- **In 2009 some 53% qualified to NVQ3 and above compared to 51% in the SW and 49% nationally**
- **Gloucestershire has improved in 2009 with a decrease to 8% of the working population having no qualification which is well above the national average of 12%**
- **Gloucestershire has a higher than average proportion of professional occupations i.e. 15% of total employed compared to 13% and 14% in the SW and GB**
- **Skilled trades are also over-represented comprising 14% of Gloucestershire's total employed compared to 13% and 10% in the SW and GB respectively**
- **Over the last five years and despite the effects of the recession the Professional and Skilled trades and also the Process, plant and machine operatives have increased at a faster rate than the SW and GB**
- **Sales and customer services and Elementary occupations declined at a faster rate than regionally and nationally**
- **Gloucestershire businesses account for 11% of the total number of vacancies due to skill shortage in the SW. Comparison with the rest of the SW puts it in third highest position after Devon and Cornwall with similar levels to Swindon and Somerset**
- **The proportion of Gloucestershire employers reporting skills gaps has increased from 19% to 21% between 2007 and 2009, also reflected in the SW and nationally**
- **In 2009 Gloucestershire compared to the other SW sub regions had at 13%, the highest proportion of staff considered not fully proficient by their employer amounting to 26,800 people out of a SW total of 213,000**
- **Despite the continued growth of highly skilled jobs and overall decline in lower skilled jobs, much of future employment is expected to remain in sectors traditionally requiring low skills**
- **With the proportion of those Not in Education, Employment or Training (NEETs) in Gloucestershire at 4% in April 2010, the County continued to compare favourably with the SW average of 5.7% and UK figure of 6.5%**
- **The 2010 Indices of Deprivation showed marked differences between Gloucestershire's districts with Gloucester ranking 125th and Cotswold 266th out of 336 English districts (1= most deprived)**

- **Gloucestershire now has 8 Lower Super Output Areas (LSOAs) amongst the most deprived 10% of LSOAs in England, they are located in Cheltenham and Gloucester districts and account for 2% (12,700 residents) of the County's population**

- **Some 12,700 Gloucestershire residents live in LSOAs classed as the 10% most employment deprived neighbourhoods in England. They are located in Cheltenham and Gloucester districts**

- **About 14% of the total population amounting to 83,000 residents live in the 10% least employment deprived neighbourhoods in England**

- **15,000 Gloucestershire residents or 3% of the County population are within LSOAs classified as amongst the 10% most income deprived LSOAs in England. They are located in Cheltenham and Gloucester districts**

3.0 People and Communities

Strengths	Weaknesses
• High economic activity rates • Low unemployment rates • High level of self-employment at 14% compared to 12% nationally • Eighty eight percent of those that reside in the County also work in the County • NVQ3 and NVQ4 levels higher than the SW and national average • High value knowledge base • All GCSE success rates above the national average • General and Applied A/AS or equivalent level success rates are higher than the national average, i.e. not only more subjects but also better grades • Skilled labour force especially at managerial, professional and technical level	• Ageing population • Young people (15-29 yr olds) leaving the County • Number of people from Gloucestershire going onto Higher Education has decreased • Further Education success rate has declined while SW and GB success rates have increase • Gloucestershire businesses account for 11% of total number of skill shortage vacancies in the SW. It is placed 4th highest in the SW and above the regional average • Over a fifth of employers reported a skills gap in 2009 • In 2009, Gloucestershire compared to the other South West sub regions had at 13%, the highest proportion of staff considered not fully proficient by their employer amounting to 26,800, out of a South West total of 213,000 • High level of commuting between districts, Gloucester, Stroud and Tewkesbury. One way from Forest of Dean to Gloucester • Same pockets of deprivation after 5yrs
Opportunities	**Threats**
• Gloucestershire is an important employer of workers from Worcestershire, half of whom travel to Tewkesbury Borough • Many of Gloucestershire's secondary and primary schools have converted or are awaiting conversion to academies • The rate of growth of Apprenticeship achievements in Gloucestershire between 2005/06 and 2009/10 was 65% compared to 95% regionally	• Young people can work here but cannot afford to live here • Polarisation of working age people to urban areas

Definitions

1 **Economic activity rates** are proportions of the population of working age who are economically active i.e. employed or unemployed in a particular period.

2 Gloucestershire's **statistical and adjoining neighbours** are based on the Chartered Institute of Public Financing and Accountancy (CIPFA) Nearest Neighbour model. They are: Cambridgeshire, Cheshire East, Cheshire West and Chester, Herefordshire, Monmouthshire, North Yorkshire, Oxfordshire, Shropshire, Somerset, South Gloucestershire, Swindon, Warwickshire, Wiltshire and Worcestershire.

3 **Economically inactive**: Economic inactivity rates are proportions of the population of working age who are neither in employment or unemployed. This includes, for example all those who were looking after a home or retired.

4 **Want a job**: People not in employment who want a job but are classed as unemployed because they have either not sought work in the last four weeks or are not available to start work.

5 From 27th October 2010 **Employment and Support Allowance** replaced Incapacity Benefit and Income Support paid on incapacity grounds for new customers.

6 Includes all pupils in maintained schools, maintained & non-maintained special schools and pupil referral units

7 Includes all learners in General FE, tertiary and specialist colleges (e.g. agriculture colleges).

8 Total of all full-time and part-time education and Work Based Learning (WBL), less WBL provision in edu cation institutions.

9 **Foundation Learning** refers to combinations of units and qualifications at Entry Level and Level 1 of the Qualifications and Credit Framework (QCF). It is personalised to the needs of learners with its flexible con tent and duration-based learning being designed to support individual progression to one of the other qualifications routes or, in some cases, to supported employment or independent living.

10 The **Diploma** is a new qualification that combines theoretical study with practical experience. 2008/09 was the first year of Diploma delivery and Diplomas will be available to young people in all areas across the country by 2011.

11 The **average point score per student** provides a measure of the average number of A level equivalent studied and the grades achieved. The more qualifications undertaken by a student and the higher the grades achieved, the higher the average point score per student. However, the **average point score per examination** gives an indication of the average A level grade achieved by students at an institution. The higher the grade, the higher the points score per examination entry. Neither performance indicator should be considered in isolation.

12 An **Apprenticeship** is essentially a set of qualifications called a 'framework'. These are developed by Sector Skills Councils. Sector Skills Councils are licensed by government to work with employers to develop National Occupational Standards and design Apprenticeship frameworks for the industries they represent.

13 This measure is calculated by averaging the LSOA scores in each local authority district after they have been population weighted. This measure retains the fact that more deprived LSOAs may have more 'extreme' scores which is not revealed to the same extent if the ranks are used.

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Gloucestershire Local Economic Assessment: 2011

Chapter 4 Business and Enterprise

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4.0 Business and Enterprise

This chapter starts by examining the labour demand in terms of the distribution of employees by industrial activity. Three scenarios are considered, the first is based on broad industrial activity, the second on more detailed core industrial activities and the last relates to knowledge based activities. The rest of the chapter deals with output and productivity, inward investment and the business characteristics of the County in regard to the number and size of businesses, their survival rates and includes a measure of entrepreneurism. The final section presents the rural and urban aspects of business and employment in the County.

4.1 Labour Demand

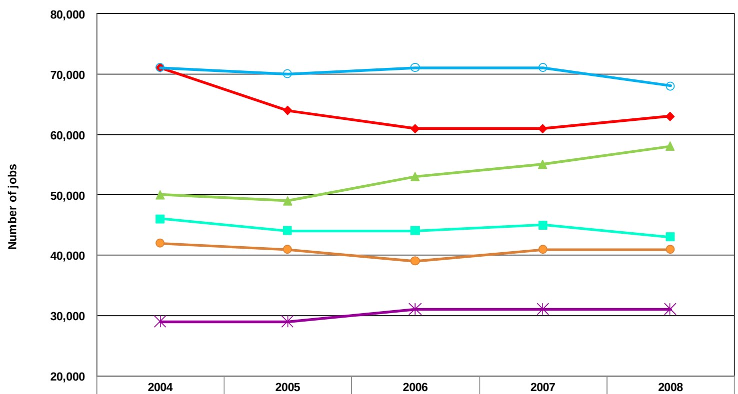
The demand for labour relates to the job opportunities within the economy and will be affected by industrial change and the location and performance of companies. Key indicators relating to the demand for labour include identifying the number of jobs by industrial sector, job density and job vacancies.

The total number of jobs in Gloucestershire amounted to 303,000 in 2008. This figure is a workplace-based measure and comprises employees, self-employed, government-supported trainees and HM Forces.

Figure 4.1 provides the number of jobs at district level from 2004 to 2008. Not unsurprisingly the largest number of jobs were located in Gloucester (68,000) and Cheltenham (63,000) districts and the lowest in the Forest of Dean district (31,000) in 2008.

It's interesting to note that in 2004 Cheltenham and Gloucester districts had similar job numbers, however, over the next few years while Gloucester remained fairly static, Cheltenham experienced a 14% decline in job numbers that only started to recover in 2008. Stroud district on the other hand underwent an 18% rise in job numbers since 2005.

Figure 4.1: Total number of jobs in the districts of Gloucestershire, 2004-2008



	2004	2005	2006	2007	2008
Cheltenham	71,000	64,000	61,000	61,000	63,000
Cotswold	46,000	44,000	44,000	45,000	43,000
Forest of Dean	29,000	29,000	31,000	31,000	31,000
Gloucester	71,000	70,000	71,000	71,000	68,000
Stroud	50,000	49,000	53,000	55,000	58,000
Tewkesbury	42,000	41,000	39,000	41,000	41,000

Source: Total Jobs, 2004-2008, ONS Crown Copyright Reserved (Nomis)

At present the total number of jobs figures can only be analysed further in terms of employee jobs.

A specific dataset namely the Annual Business Inquiry 2008 (ABI)[1] that relates to employees only, enables detailed analysis of employment status and employment by industrial sector. This dataset has been superseded by the Business Register and Employment Survey (BRES). Although the BRES data is more recent no time series is available, for this reason the ABI has continued to be used.

The ABI estimates that there were 254,300 employees in Gloucestershire in 2008. This was a decline of 13,000 employees or -4.9% since 2004. In contrast the number of employees in the South West and Great Britain increased by 2.3% during this period. Gloucestershire also fared badly in comparison to its statistical and adjoining neighbours[2]. Of Gloucestershire's 14 statistical and adjoining neighbours only two (Monmouthshire and Worcestershire), experienced a decline in the number of employees and to a lesser extent than Gloucestershire.

Table 4.1 shows the decline in the number of employees in Gloucestershire, affected full time, part time, male and female employment, with full time and female employment experiencing the greatest decline. In the South West and Great Britain, part time employment declined, while the number of male, female, and full time employees all increased.

Table 4.1: Change in employee status, 2004-2008

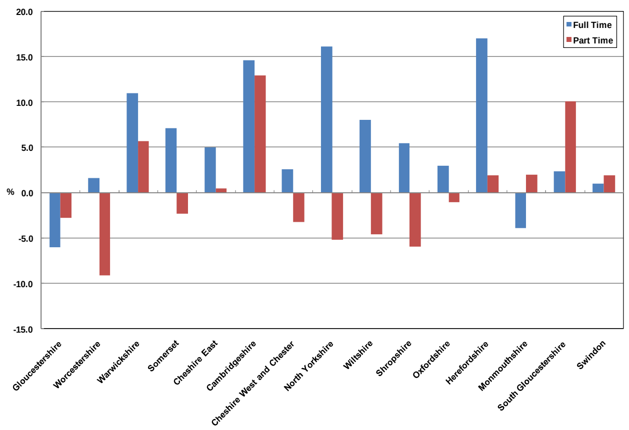
	Full time	Part time	Male	Female
Gloucestershire	-6	-2.8	-2.5	-7.1
South West	3.8	-0.5	3.7	0.9
Great Britain	3.8	-0.7	3.0	1.7

Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.2 and 4.3 illustrates how the changes in Gloucestershire's full time, part time and male and female employees, compare with those experienced by its statistical and adjoining neighbours. It is clear

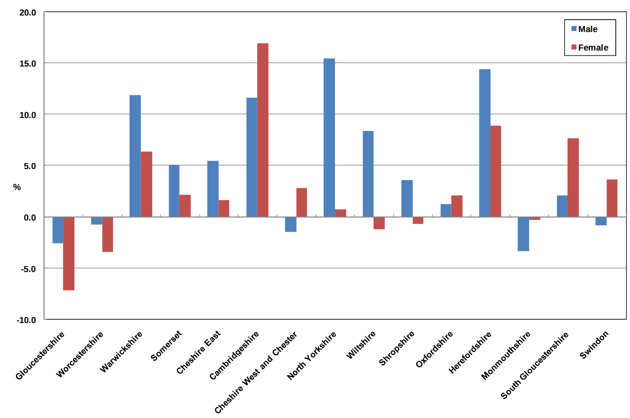
1,2 Please see Definitions on page 33

Figure 4.2: Change in the number of full- & part-time employees, Gloucestershire and its neighbours, 2004-2008



Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.3: Change in the number of male and female employ ees, Gloucestershire and its neighbours, 2004-2008



Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

from Figure 4.2 that Gloucestershire is the only area to experience a decline in both full time and part time employees, it also experienced the largest decline in full time employees. Figure 4.3 shows Gloucestershire, Monmouthshire and Worcestershire were the only areas to experience a decline in both male and female employees. The following sections will explore what impact Gloucestershire's declining number of employees, has had on individual sectors.

The next three sub-sections cover industrial structure in terms of employment. The only way to monitor employment changes in industry is to identify and classify industrial activity on a consistent basis.

The 2003 Standard Industrial Classification (SIC)[3] was used to identify employment characteristics across a **Broad** arrangement of industrial sectors.

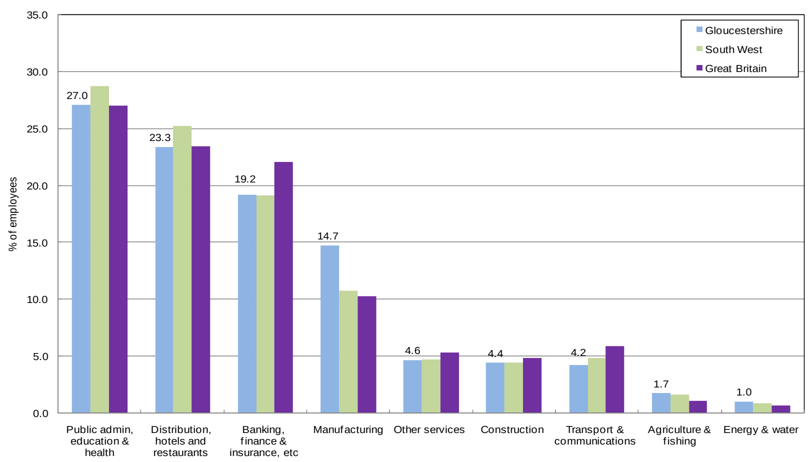
Core activities were selected from within or across the broad sectors and analysed.

Lastly, those activities relating to the high technology and knowledge intensive services described as the '**knowledge economy'** are examined.

4.1.1 Structure by Broad[4] Sector

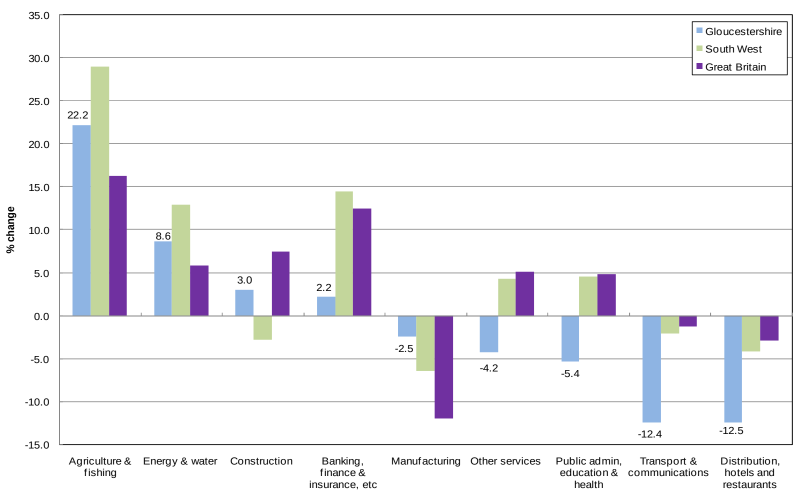
Figure 4.4 illustrates the distribution of employees by broad industrial sector. The largest sector is the Public administration, education and health sector,

Figure 4.4: Breakdown of employees, Gloucestershire, South West and Great Britain, 2008



Source:: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.5: Change in the number of employees between 2004 and 2008 in Gloucestershire, South West and Great Britain



Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

3 and 4 Please see Definitions on page 33

which accounts for more than a quarter of Gloucestershire's employees. This is comparable to the national and regional average.

The Distribution, hotels and restaurants is also another major sector, representing just under 25% of total employees, also reflected in the South West and Great Britain.

The greatest differences between Gloucestershire and the regional and national averages were in Manufacturing and Banking, finance and insurance.

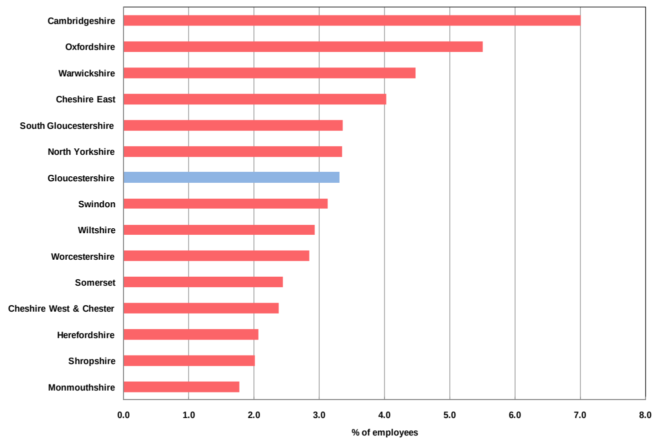
Table 4.2 : Employees in the Creative Industries					
Area	**Number of Employees 2004**	**% of Employees 2004**	**Number of Employees 2008**	**% of Employees 2008**	**% change 2004-2008**
Cheltenham	3,000	4.9	2,600	4.9	-14.3
Cotswold	1,200	3.2	1,400	3.8	13.3
Forest of Dean	400	2.0	500	2.0	1.4
Gloucester	1,100	1.7	1,300	2.1	13.4
Stroud	1,100	2.5	1,600	3.5	45.4
Tewkesbury	800	2.2	1,100	3.1	40.6
Gloucestershire	7,700	2.9	8,400	3.3	9.0
South West	60,200	2.7	61,900	2.8	2.8
Great Britain	930,200	3.6	1,003,300	3.8	7.9

Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

The Banking, finance and insurance sector accounts for a comparatively lower proportion of employees in Gloucestershire and the South West than it does at a national level. In contrast Gloucestershire is considerably more dependent on the Manufacturing sector than the South West and Great Britain.

Figure 4.5 shows that the number of employees by broad industrial sector has changed considerably over the last five years to 2008. A number of sectors, most noticeably Public administration, education and health, Distribution, hotels and restaurants and Transport and communications have declined.

Figure 4.6: Proportion of employees in the Creative industries, Gloucestershire and its neighbours, 2008



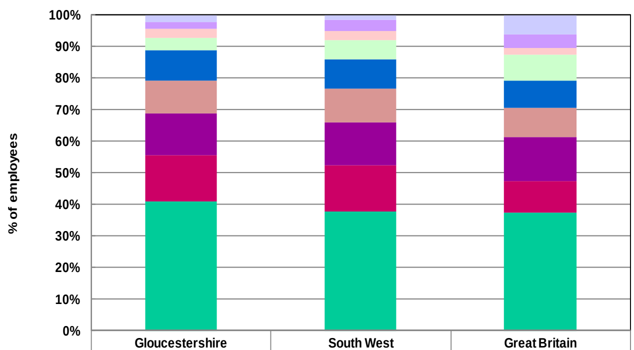
Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Several sectors have however, experienced some growth, including Construction and Banking, finance and insurance, with the greatest change occurring in the Agriculture and fishing sector and the Energy and water sector. The latter sectors are however, small in terms of the number of employees and therefore changes will be magnified.

The pattern of change experienced by the broad industrial sectors in Gloucestershire do not compare favourably with the regional and national pictures. With the exception of Manufacturing, all of Gloucestershire's industrial sectors experienced a greater decline or smaller increase, than the South West or Great Britain.

However, the Distribution, hotels and restaurants, Banking, finance and Manufacturing broad sectors account for some 57% of Gloucestershire's employees and represent a strong and diverse economy.

Figure 4.7: Breakdown of employees in Creative industries, Gloucestershire, South West and Great Britain, 2008



	Gloucestershire	South West	Great Britain
Radio and TV	2.1	1.4	6.1
Film	2.2	3.4	4.4
Art/antiques trade	2.7	3.1	2.0
Advertising	3.9	6.0	8.2
Designer fashion	9.9	9.3	8.5
Music and visual performing arts	10.2	10.6	9.3
Publishing	13.2	13.5	14.2
Architecture	14.5	14.7	9.9
Computer games, software, electronic publishing	41.2	37.8	37.4

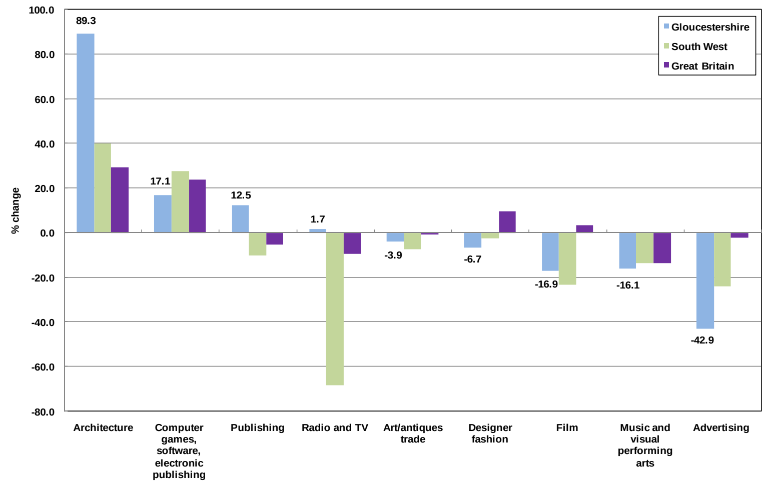
Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved, (Nomis)

4.1.2 Gloucestershire's Core activities

Gloucestershire's core activities are identified as major sources of employment or productivity, are special to the area, or offer significant growth opportunities for the future. They include:

- Creative Industries
- Public Sector
- Care
- Environmental technologies
- Manufacturing
- Banking, finance and insurance
- Tourism
- Agriculture

Figure 4.8: Change in employees in the Creative industries, Gloucestershire, South West and Great Britain, 2004-2008



Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright (Nomis)

Creative industries

The Creative industries sector is defined by the Department for Culture, Media and Sport (DCMS) as "those industries which have their origin in individual creativity, skill and talent", they comprise the following sub-sectors; Advertising, Architecture, Art/antiques trade, Computer games, software and electronic publishing, Designer fashion, Film, Music and the visual and performing arts, Publishing, Radio and TV.

These descriptions, are not easy to measure using the current Standard Industrial Classification system and a best fit application has been used.

The Coalition government has suggested the Creative industries will have a key role in securing future economic growth and rebalancing the economy (*Prime Ministers Office, 2010*).

Table 4.2 shows that in 2008, around 8,400 employees were accounted for by the Creative industries in Gloucestershire, representing 3.3% of the total number of employees. In the South West the Creative industries accounts for a slightly lower proportion of 2.8% and Great Britain a higher proportion of 3.8%. Figure 4.6 shows that when compared to its statistical and adjoining neighbours, Gloucestershire sits somewhat in the middle in terms of the proportion of its employees represented in the Creative industries.

Although the Creative industries is represented in all six districts, the sector is particularly strong in Cheltenham, where the number of employees exceeds the national average.

The Creative industries workforce status differs somewhat to the average. Some 76% of employees are full-time compared to an average of 65% of employees. This compares with the South West, however, nationally there is a higher proportion of full-time workers.

The gender breakdown of Creative industries employees also differs from the average. At a national, regional and local level the sector employs a higher proportion of males than the economy as a whole. This gap appears to be widening, with the number of female employees employed in the sector declining between 2004 and 2008, while the number of males employed increased.

Table 4.3 : Employees in the Public sector

Area	Number of Employees 2004	% of Employees 2004	Number of Employees 2008	% of Employees 2008	% change 2004 - 2008
Cheltenham	12,000	19.1	7,700	14.4	-36.1
Cotswold	4,700	12.6	4,800	13.4	1.3
Forest of Dean	3,800	16.4	3,600	16.1	-2.9
Gloucester	10,500	16.3	10,700	17.2	1.3
Stroud	6,000	14.2	5,800	13.0	-3.4
Tewkesbury	4,300	11.7	3,000	8.3	-30.7
Gloucestershire	41,400	15.5	35,600	14.0	-14.0
South West	342,900	15.7	345,100	15.4	0.7
Great Britain	3,807,900	14.6	3,926,200	14.7	3.1

Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

Table 4.4: Distribution of employees in the Public sector in Gloucestershire, 2004-2008

Area	2004		2008		% change in number of employees 2004-2008	
	% of Public sector employees employed in public administration	% of Public sector employees employed in education	% of Public sector employees employed in public administration	% of Public sector employees employed in education	Public Administration	Education
Cheltenham	55.3	44.7	17.2	82.8	-80.1	18.2
Cotswold	18.2	81.8	16.0	84.0	-11.4	4.1
Forest of Dean	14.7	85.3	14.6	85.4	-3.6	-2.8
Gloucester	40.5	59.5	46.4	53.6	16.0	-8.7
Stroud	17.9	82.1	16.0	84.0	-13.4	-1.2
Tewkesbury	46.7	53.3	36.8	63.2	-45.4	-17.9
Gloucestershire	37.3	62.7	27.0	73.0	-37.8	0.1
South West	39.0	61.0	36.0	64.0	-6.9	5.5
Great Britain	37.8	62.2	36.7	63.3	0.0	5.0

Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

The composition of the sector at County, regional and national level is illustrated in Figure 4.7. The Computer games, software and electronic publishing sub sector accounts for the majority of employees in the Creative industries sector at all geographic levels.

The greatest differences between Gloucestershire's figures and the national average were in the Computer games, software and electronic publishing and Architecture sub-sectors where the proportion of employees was larger than the national average. In contrast the Advertising, Film and Radio and TV sub sectors were under-represented compared to the national average.

With the exception of a blip in 2005, the number of employees in the Creative industries in Gloucestershire has been increasing since 2004, with an overall growth of 9%. Growth on a regional and national scale has been less at 3% and 8% respectively. When compared to its statistical and adjoining neighbours, Gloucestershire's growth sat in the middle.

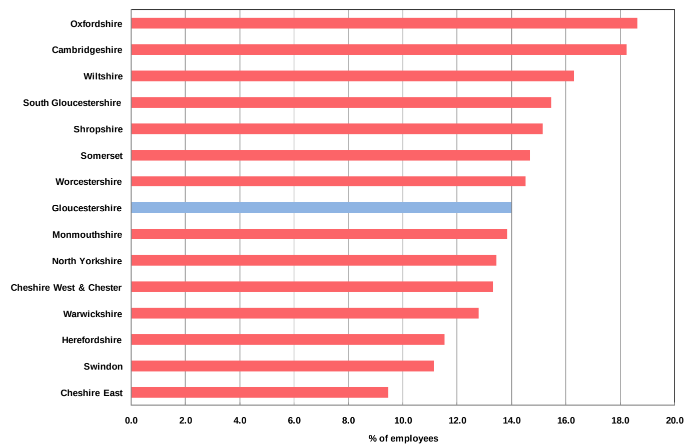
Within Gloucestershire growth of over 40% has been experienced in Stroud and Tewkesbury. In contrast the number of employees in the Creative industries in Cheltenham declined by 14%.

Figure 4.8 shows that over the last five years there has been considerable variation in the performance of the different sub sectors. Architecture, Computer games, software and electronic publishing, and Publishing have undergone significant growth in Gloucestershire, while Advertising, Film and Music and visual performing arts have experienced decline. It is interesting to note that generally the growing sectors are those that are stronger in Gloucestershire than at national level, while the declining sectors are those where Gloucestershire is underperforming compared to Great Britain.

Public sector

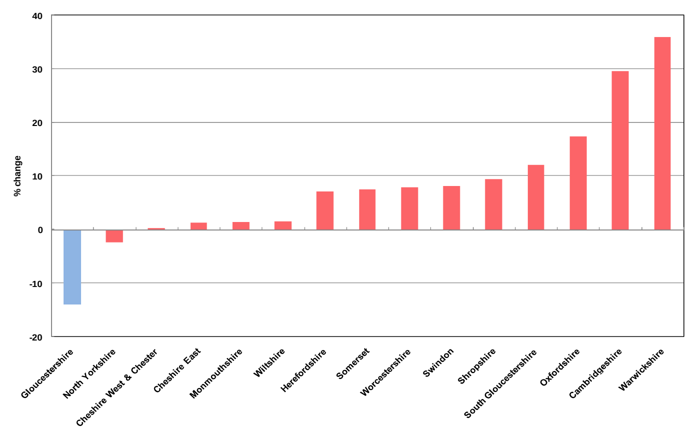
Analysis of the broad industrial sectors showed that Public administration, education and health has been a major sector at local, national and regional level in terms of employees and this along with the anticipated cuts in public sector spending, necessitates further analysis.

Figure 4.9: Proportion of employees in the Public sector, Gloucestershire and its neighbours, 2008



Source: Annual Business Inquiry,2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.10: Change in the number of Public sector employees, Gloucestershire and its neighbours, 2004-2008



Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

4.0 Business and Enterprise

The broad sector of Public administration, education and health, is made up of several separate elements, which face different challenges and circumstances. They have therefore been split into two sectors the Public sector (comprising public administration, defence and compulsory social security) and the Care sector.

Table 4.5: Full-time and part-time employees in the Public sector

Area	% of Public sector employees 2004		% of Public sector employees 2008		% change in number of employees 2004-2008	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Cheltenham	65.9	34.1	51.6	48.4	-49.9	-9.4
Cotswold	55.3	44.7	45.8	54.2	-16.1	22.7
Forest of Dean	48.1	51.9	40.7	59.3	-18.0	11.0
Gloucester	62.8	37.2	49.6	50.4	-19.9	37.1
Stroud	52.6	47.4	40.4	59.6	-25.8	21.6
Tewkesbury	69.6	30.4	48.5	51.5	-51.7	17.4
Gloucestershire	60.7	39.3	47.0	53.0	-33.4	16.1
South West	58.6	41.4	56.5	43.5	-2.9	5.7
Great Britain	61.6	38.4	60.2	39.8	0.9	6.7

Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

Table 4.3 shows that in 2008 there were around 35,600 people employed in the Public sector in Gloucestershire, representing 14% of the total number of employees. In the South West and Great Britain the Public sector accounts for a slightly higher proportion of employees at 15% each. Figure 4.9 shows that when compared to its statistical and adjoining neighbours, Gloucestershire sits in the middle in terms of the proportion of its employees, employed in the Public sector.

In 2008 the highest proportion of employees in the Public sector and exceeding the County, regional and national average were in the Forest of Dean and Gloucester districts.

The Public sector has already undergone significant decline in Gloucestershire, with the exception of 2007, the number of employees in the sector has steadily decreased since between 2004 and 2008, with an overall decline of 14%. However, growth has occurred in Gloucester and Cotswold districts. In contrast to the decline experienced in Gloucestershire, the Public sector has grown both regionally and nationally, with the number of employees in the sector increasing by 0.7% and 3.1% respectively. Figure 4.10, shows that the number of employees in the Public sector also increased in the majority of Gloucestershire's statistical and adjoining neighbours, with the only exception being North Yorkshire which experienced a considerably smaller decline.

Table 4.4 divides the Public sector employment into Public administration and Education. In 2004, the Gloucestershire picture was fairly similar to the South West and Great Britain, with just under 40% of Public sector employees in Public administration and around 60% of employees in Education.

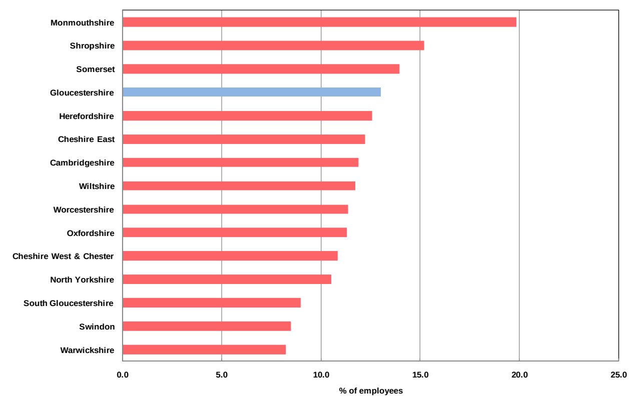
Table 4.6: Employees in the Care sector

Area	Number of Employees 2004	% of Employees 2004	Number of Employees 2008	% of Employees 2008	% change 2004 - 2008
Cheltenham	7,900	12.6	7,700	14.3	-3.6
Cotswold	3,000	8.0	2,800	7.9	-5.7
Forest of Dean	2,900	12.7	2,900	13.0	1.1
Gloucester	10,300	15.9	11,500	18.5	10.9
Stroud	4,800	11.3	4,700	10.7	-0.4
Tewkesbury	2,300	6.3	3,500	9.7	50.6
Gloucestershire	31,200	11.7	33,100	13.0	5.9
South West	273,500	12.5	299,000	13.3	9.3
Great Britain	3,067,700	11.8	3,282,300	12.3	7.0

Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

By 2008 the number of employees, employed in Public administration in Gloucestershire had declined by 38%, with employees in the sub sector accounting for 27% of employment in the Public sector. In contrast the proportion of Public sector employees in Public administration in the South West and Great Britain, remained very similar to the 2004 level. This shows the Public administration sub sector has not fared as well in Gloucestershire, as it has in the South West and Great Britain.

Figure 4.11: Proportion of employees in Care, Gloucestershire and its neighbours, 2008



Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Part-time working is common in the public sector, with the proportion of part-time Public sector employees exceeding the average at national, regional and local level. Changes in Gloucestershire's Public sector appear to have exacerbated this trend. Table 4.5 shows that between 2004 and 2008 the number of people employed full-time in the Public sector in Gloucestershire declined by 33%.

During the same period the number of part-time jobs in the Public sector increased by 16%. These changes meant that by 2008 over 50% of people employed in Gloucestershire's Public sector were employed on a part-time basis. The situation in the South West and Great Britain is somewhat different, although part-time employment is higher than average, the majority of employees are employed on a full-time basis.

The decline in the number of full time employees was accompanied by changes in the gender split of the Public sector workforce in Gloucestershire. In 2004 around two thirds of employees employed in Gloucestershire's Public sector were female, this was inline with national and regional figures. However, between 2004 and 2008 the number of males employed in the Public sector in Gloucestershire declined by 23% and the number of female employees by a lesser amount of 10%.

By 2008, 72% of Gloucestershire's Public sector employees were female which exceeded the national and regional figure of 66%. This may be linked to the shift towards part-time working, as part-time working is generally more popular amongst female employees.

Care

The Care sector is also likely to be affected not only by the anticipated public sector cuts but also the needs of an ageing population.

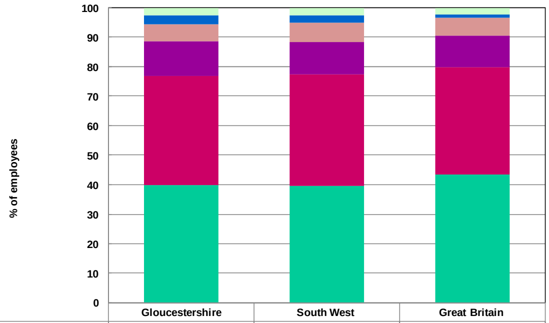
Table 4.6 shows that in 2008, the Care sector was substantial accounting for 33,100 employees in Gloucestershire, representing 13% of total employees. This is very similar to the regional and national average of 13% and 12% respectively. However, Figure 4.11 shows that the Care sector is a more significant employer in Gloucestershire, than in the majority of its statistical and adjoining neighbours.

The sector employs a higher than average proportion of part-time and female employees at County, regional and national level

Figure 4.12 illustrates the structure of the Care sector. The situation is very similar at County, regional and national level, with the majority of employees split between the Hospital and Social work activities sub sectors.

Between 2004 and 2005, Gloucestershire's Care sector grew by 6%, with much of this growth was concentrated in Tewkesbury district, which saw the number of employees increase by 51%. Growth at a regional and national level, was slightly higher than in Gloucestershire, with an increase of 9% and 7% respectively. When compared to its statistical and adjoining neighbours, Gloucestershire's sat somewhere in the middle in terms of growth.

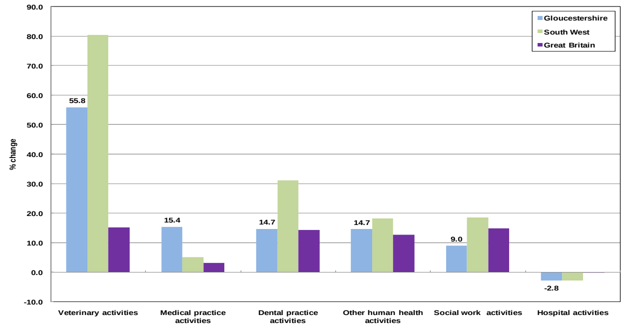
Figure 4.12: Structure of the Care sector, Gloucestershire, South West and Great Britain, 2008



	Gloucestershire	South West	Great Britain
Dental practice activities	2	2	2
Veterinary activities	3	3	1
Medical practice activities	6	7	6
Other human health activities	12	11	11
Social work activities	37	38	37
Hospital activities	40	39	43

Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.13: Change in employees in the Care sector, Gloucestershire, South West and Great Britain, 2004-2008



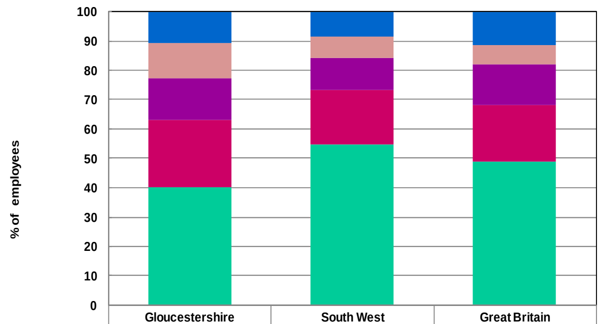
Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

Table 4.7: Employees in Environmental technologies

Area	Number of Employees 2004	% of Employees 2004	Number of Employees 2008	% of Employees 2008	% change 2004-2008
Gloucestershire	2,400	0.9	2,900	1.1	16.9
South West	19,100	0.9	24,500	1.1	28.7
Great Britain	272,500	1.0	298,600	1.1	9.6

Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.14: Breakdown of employees in Environmental technologies, Gloucestershire, South West and Great Britain, 2008



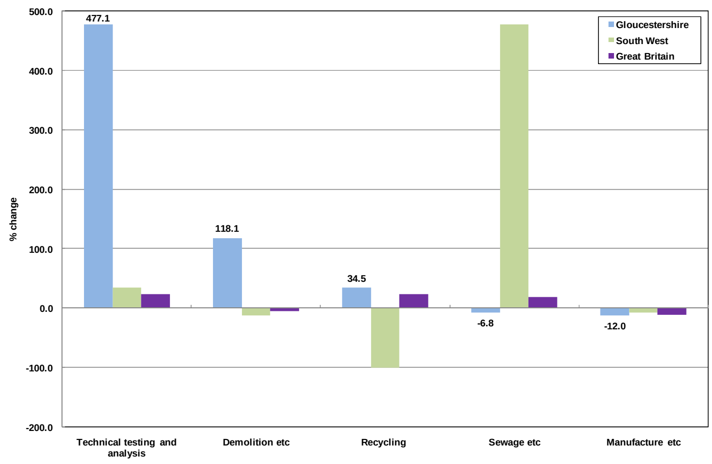
	Gloucestershire	South West	Great Britain
Demolition etc	11	8	11
Recycling	12	8	7
Technical testing and analysis	14	11	14
Manufacture etc	23	18	19
Sewage etc	40	55	49

Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.13 shows this growth occurred across all sub sectors with the exception of hospital activities, which declined slightly.

In Gloucestershire and the South West, the relatively small Veterinary activities sub sector experienced the greatest growth. Gloucestershire's Medical practice activities sub sector stands out, because growth was significantly higher in Gloucestershire than in the South West and Great Britain.

Figure 4.15: Change in employees in the Environmental technologies sector, Gloucestershire, South West and Great Britain, 2004-2008



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Environmental technologies

The Environmental technologies sector has been defined by the Department for Business, Innovation and Skills as "all technologies whose use is less environmentally harmful than relevant alternatives, or end of pipe technologies that clean up pollution" (*BIS, 2006*).

However, this is a very broad definition and includes types of activities that cut across a variety of different sectors, making it impossible to measure using the Standard Industrial Classification. The following limited sub sectors have been used as a proxy and comprise:

- Demolition and wrecking of buildings, earth moving; Construction of water projects; Insulation work activities
- Manufacture of non-domestic cooling and ventilation equipment; Electricity distribution and control apparatus
- Recycling
- Sewage and refuse disposal etc; Collection, purification and distribution of water
- Technical testing and analysis.

Table 4.8: Employees in Manufacturing

Area	Number of Employees 2004	% of Employees 2004	Number of Employees 2008	% of Employees 2008	% change 2004 - 2008
Cheltenham	7,700	12.2	6,400	12.0	-16.1
Cotswold	3,800	10.3	3,000	8.5	-21.0
Forest of Dean	3,900	16.9	4,000	17.8	4.3
Gloucester	5,600	8.7	5,300	8.5	-6.8
Stroud	8,400	19.8	9,400	21.1	12.1
Tewkesbury	8,800	23.8	9,100	25.3	3.3
Gloucestershire	38,200	14.3	37,300	14.7	-2.5
South West	255,800	11.7	239,200	10.7	-6.5
Great Britain	3,078,400	11.8	2,709,100	10.2	-12.0

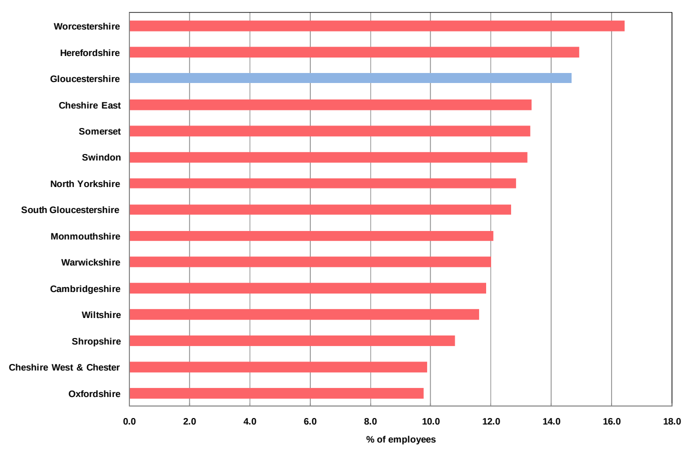
Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

Table 4.7 shows that in 2008, there was around 2,900 employees in the Environmental technologies sector in Gloucestershire. This represents 1% of total employees, which was reflected regionally and nationally.

When compared to its statistical and adjoining neighbours, Gloucestershire sits somewhere in the middle, with the proportion of employees, employed in the private sector exceeding the lowest value of 0.6% recorded in South Gloucestershire, but not meeting the highest figure of 1.7% recorded in Swindon. Employment in the sector is predominantly full-time and male, which is over-represented compared to the average for the economy as a whole.

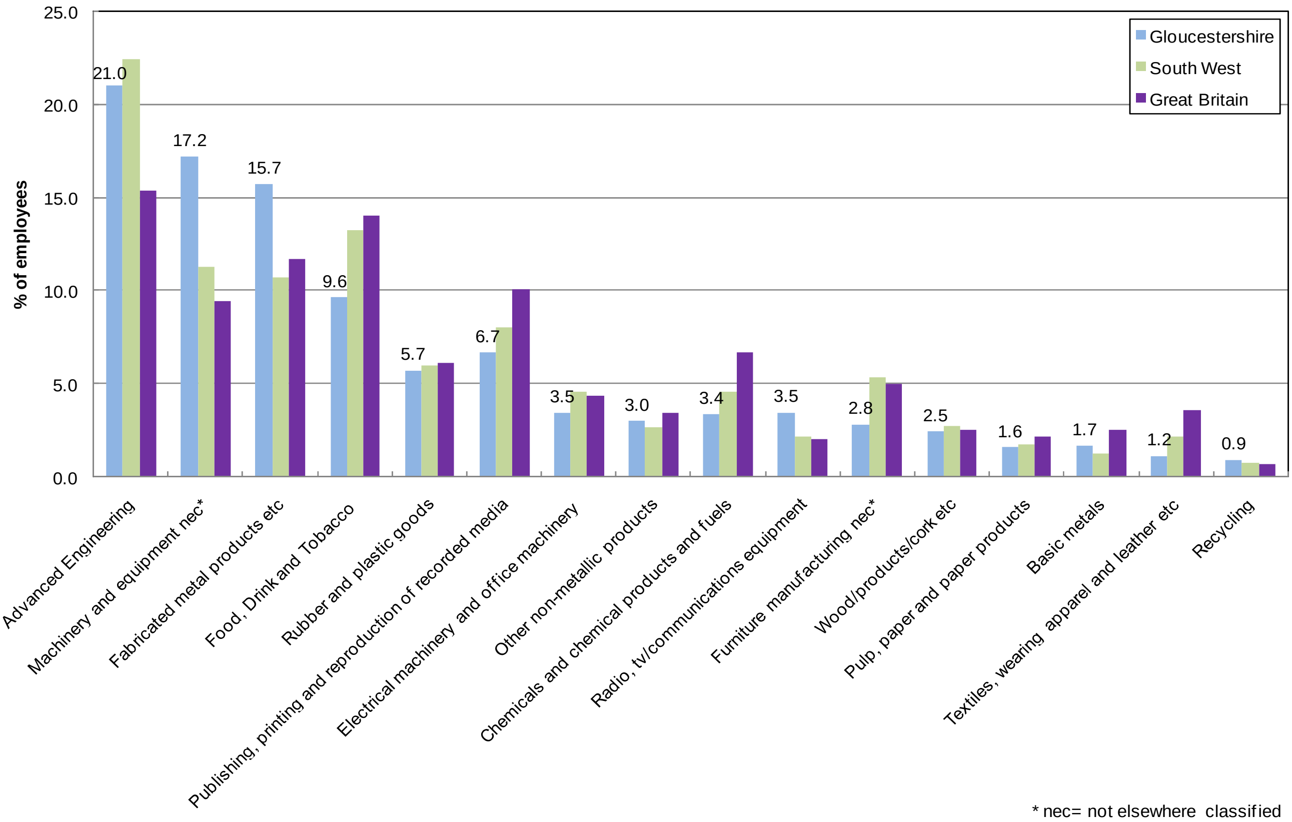
The composition of the sector is illustrated in Figure 4.14. The Sewage and refuse disposal etc; Collection, purification and distribution of water sub sector is the largest in Gloucestershire, the South West and Great Britain. However, the sub sector is under-represented in Gloucestershire accounting for 40% of employees, compared to 55% of employees in the South West and 49% in Great Britain.

Figure 4.16: Proportion of employees in Manufacturing, Gloucestershire and its neighbours, 2008



Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.17: Breakdown of employees in Manufacturing, Gloucestershire, South West and Great Britain, 2008



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In contrast the Recycling and Manufacture of non domestic cooling, ventilation equipment; electricity distribution and control apparatus sub sectors, are stronger in Gloucestershire than in the South West and Great Britain.

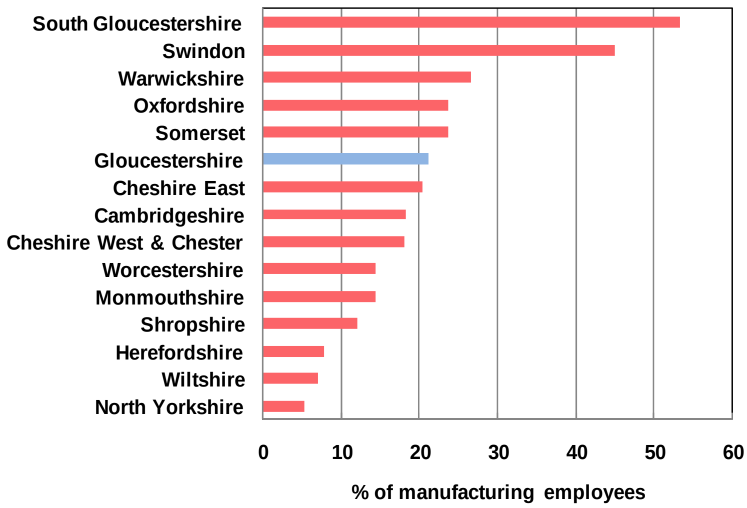
Between 2004 and 2005 the Environmental technologies sector grew significantly, with the number of employees increasing by 17%. Growth at a regional level was considerably higher at 29%, while at a national level the sector grew by only 10%.

When compared to its statistical and adjoining neighbours, Gloucestershire's was somewhere in the middle in terms of its growth.

Figure 4.15 shows growth within each of the sub sectors. The Technical testing and analysis, Recycling and Demolition and wrecking of buildings; earth moving; construction of water projects; insulation work activities sub sectors, have grown considerably in Gloucestershire at a rate that far exceeds that experienced in the South West and Great Britain.

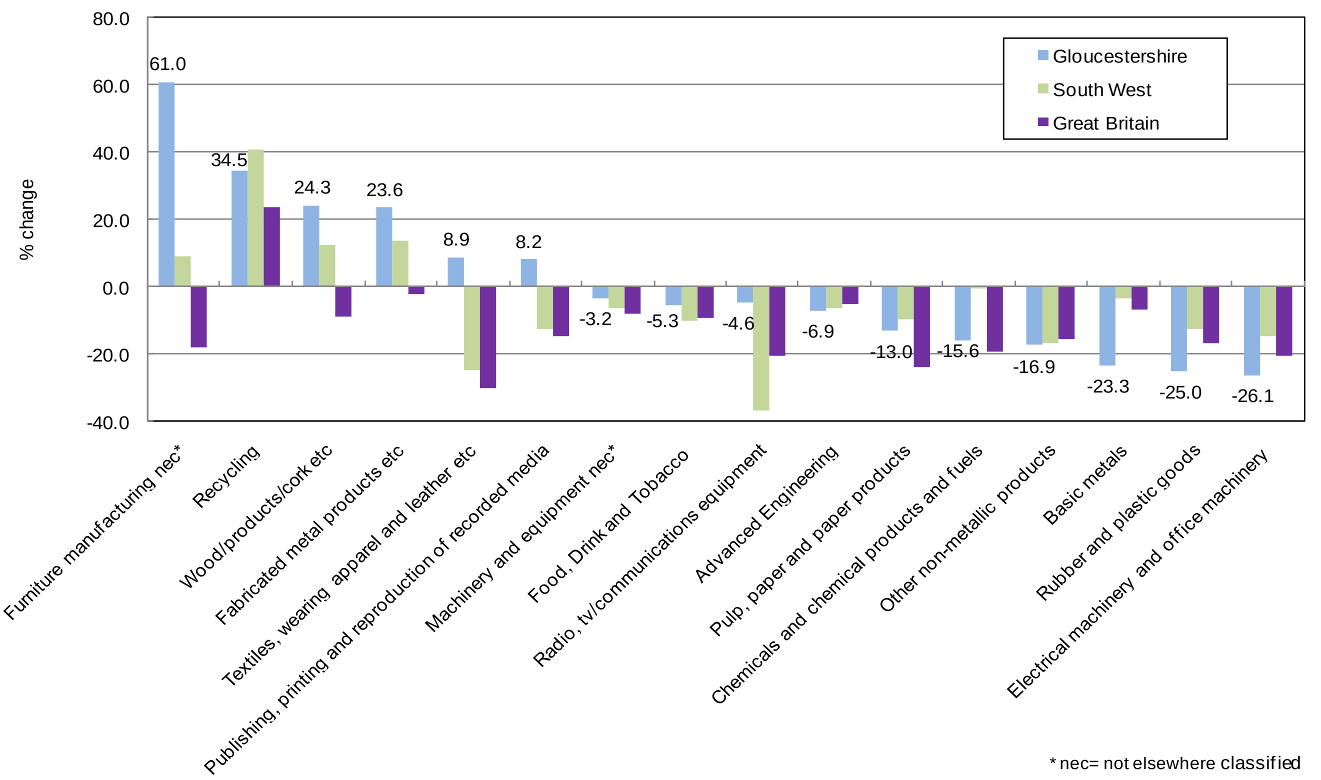
However, the Sewage and refuse disposal etc; Collection and purification and distribution of water sub sector, declined in Gloucestershire, but grew in the South West and Great Britain, while the Manufacture of non domestic cooling, ventilation

Figure 4.18: Proportion of manufacturing employees in Advanced engineering, Gloucestershire and its neighbours, 2008



Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.19: Change in employees in Manufacturing, Gloucestershire, South West and Great Britain, 2004-2008



* nec= not elsewhere classified

Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

equipment; electricity distribution and control apparatus sub sector declined in all areas.

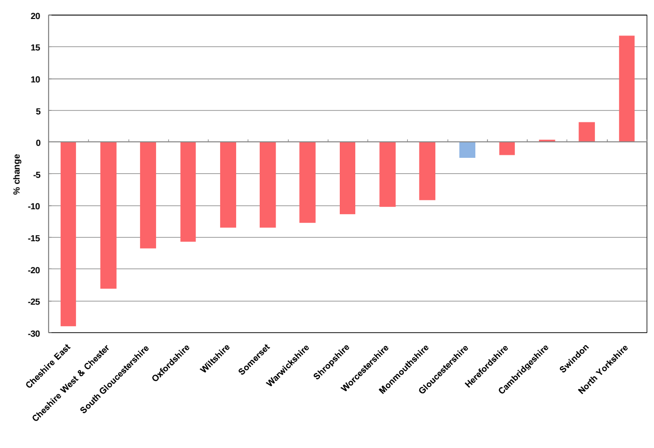
Manufacturing

The Manufacturing sector is better represented in Gloucestershire, than in the South West and Great Britain. Table 4.8 shows that in 2008 the sector employed 37,300 employees in Gloucestershire representing 15% of total employees, this compares to 11% in the South West and 10% in Great Britain. Figure 4.16 shows that when compared to its statistical and adjoining neighbours, Gloucestershire's manufacturing sector is strong, employing the third highest proportion of employees.

The Manufacturing sector was strongest in Stroud and Tewkesbury districts, accounting for more than 20% of total employees. In all areas the proportion of male and full- time employment greatly exceeded the levels recorded for the economy as a whole.

Figure 4.17 illustrates the composition of the Manufacturing sector. The Advanced engineering sub sector is the largest in Gloucestershire, employing 21% of total employees. This is considerably higher than the national average of 15%, but slightly lower than the regional average of 22%. Figure 4.18, shows Advanced engineering is also an important sub sector in many of Gloucestershire's statistical and adjoining

Figure 4.20: Change in the number of Manufacturing employees, Gloucestershire and its neighbours, 2004-2008



Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

Table 4.9: Employees in the Banking, finance and insurance sector

Area	Number of Employees 2004	% of Employees 2004	Number of Employees 2008	% of Employees 2008	% change 2004 - 2008
Cheltenham	12,000	19.1	12,400	23.2	3.5
Cotswold	7,100	18.9	7,500	21.1	6.2
Forest of Dean	2,500	10.8	2,600	11.6	6.2
Gloucester	12,700	19.7	12,000	19.3	-5.9
Stroud	5,600	13.0	7,500	16.7	34.6
Tewkesbury	7,800	21.2	6,700	18.6	-14.7
Gloucestershire	47,700	17.8	48,700	19.2	2.2
South West	373,800	17.1	427,600	19.1	14.4
Great Britain	5,218,800	20.0	5,870,800	22.0	12.5

Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

neighbours, with four of Gloucestershire's adjoining neighbours and one statistical neighbour exceeding Gloucestershire in terms of the proportion of its manufacturing employees, employed in Advanced engineering.

These results are not surprising considering Advanced engineering is a specialism of Gloucestershire and the surrounding area. Within the Advanced engineering sub sector, Gloucestershire is particularly strong in the manufacture of Medical devices and precision engineering instruments, accounting for 50% of employees in the Advanced engineering sub sector, this exceeds all of the figures recorded by Gloucestershire's statistical and adjoining neighbours.

Gloucestershire's remaining employees within the sub sector are fairly evenly split between the Automotive and Aerospace activities. The picture differs in the South West with Aerospace activities accounting for 56% of the sectors' employees. Nationally the Aerospace and Automotive industries are more dominant involving 37% and 36% of employees respectively.

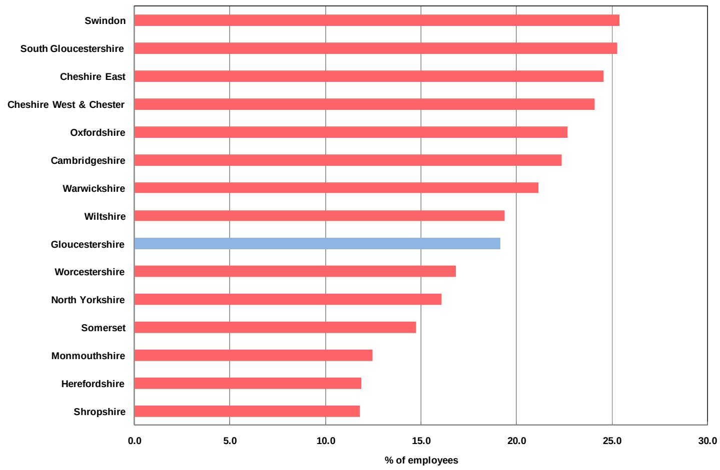
The manufacture of Machinery and equipment not elsewhere classified sub sector and the Manufacture of fabricated metal products etc sub sectors are also important to Gloucestershire. Both of these sub sectors employ a large proportion of the manufacturing sectors' employees and are stronger in Gloucestershire than in the South West, Great Britain and the majority of Gloucestershire's statistical and adjoining neighbours.

However, Gloucestershire does have a number of weaknesses relating to some sub sectors: the Food, drink and tobacco; Textiles, wearing apparel and leather etc; Furniture manufacture etc sub sectors are under-represented in Gloucestershire when compared to the South West, Great Britain and the majority of Gloucestershire's statistical and adjoining neighbours.

The Publishing, printing and reproduction of recorded media; Chemicals and chemical products and fuels; are under-represented compared to the South West and Great Britain, but compare fairly well to Gloucestershire's statistical and adjoining neighbours.

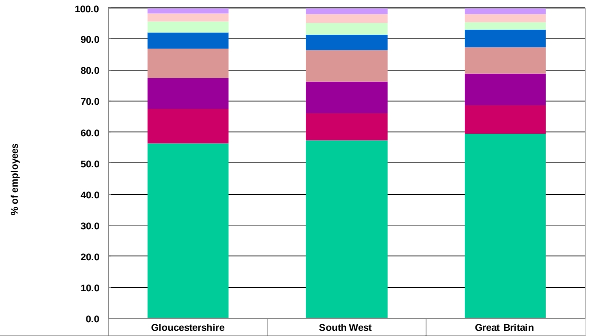
Table 4.8 shows that between 2004 and 2008 the number of employees in the Manufacturing sector in Gloucestershire declined by 3%. However, this decline was considerably less than the 7% decline in the South West and the 12%

Figure 4.21: Proportion of employees in Banking, finance and insurance, Gloucestershire and its neighbours, 2008



Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

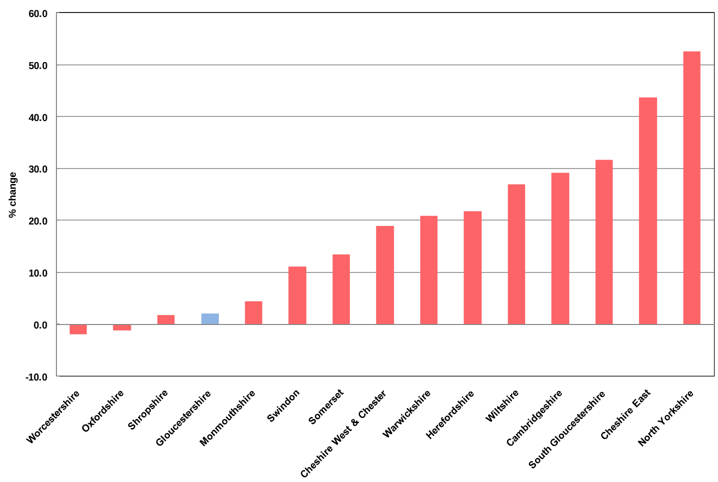
Figure 4.22: Composition of the Banking, finance and insurance sector, Gloucestershire, South West and Great Britain, 2008



	Gloucestershire	South West	Great Britain
Research and development	1.7	1.9	1.9
Renting of machinery and equipment	2.5	2.9	2.5
Insurance and pension funding	3.6	3.8	2.5
Activities auxiliary to financial intermediation	5.1	5.0	5.5
Real estate activities	9.5	10.2	8.7
Financial intermediation	10.0	10.1	10.0
Computer and related activites	11.1	8.9	9.3
Other business activities	56.4	57.3	59.4

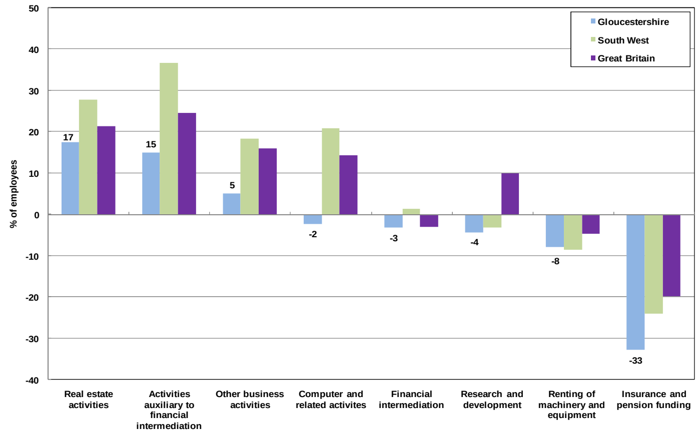
Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.23: Change in the number of Banking, finance and insurance employees, Gloucestershire and its neighbours, 2004-2008



Source: Annual Business Inquiry, 2004 - 2008, ONS Crown Copyright Reserved (Nomis) decline nationally. This suggests that parts of the Manufacturing sector have fared better in Gloucestershire than in the South West and nationally as reflected in Figure 4.19 which illustrates change in the individual sub sectors and Figure 4.20 which compares the change in Gloucestershire to the change undergone by its statistical and adjoining neighbours.

Figure 4.24: Change in employees in the Banking, finance and insurance sector, Gloucestershire, South West and Great Britain, 2004-2008.



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Banking, finance and insurance

The analysis of the broad industrial sectors suggested the Banking, finance and insurance sector as a whole was under represented in Gloucestershire and the South West when compared to Great Britain (Figure 4.4 page 2). This is also illustrated in Table 4.9 which shows that in 2008, there were some 48,700 employees in the sector in Gloucestershire representing 19% of total employees. The proportion is the same in the South West but greater at 22% in Great Britain. Figure 4.21 shows that when compared to its statistical and adjoining neighbours, Gloucestershire sits in the lower middle area in terms of the proportion of its employees, employed in Banking, finance and insurance.

Within Gloucestershire, the highest proportion of employees in this sector amounting to 20% were located in Cheltenham and Cotswold districts.

Figure 4.22 shows the composition of the sector for Gloucestershire, the South West and Great Britain.

Table 4.10: Employees in Tourism

Area	Number of Employees 2004	% of Employees 2004	Number of Employees 2008	% of Employees 2008	% change 2004 - 2008
Cheltenham	4,700	7.5	4,200	7.9	-10.3
Cotswold	6,000	16.0	4,200	11.8	-29.4
Forest of Dean	1,800	8.0	1,700	7.5	-7.6
Gloucester	4,000	6.2	3,500	5.6	-13.6
Stroud	4,100	9.6	3,500	7.7	-15.3
Tewkesbury	2,700	7.2	2,400	6.7	-9.7
Gloucestershire	23,200	8.7	19,400	7.6	-16.4
South West	199,500	9.1	200,900	9.0	0.7
Great Britain	2,141,500	8.2	2,181,100	8.2	1.8

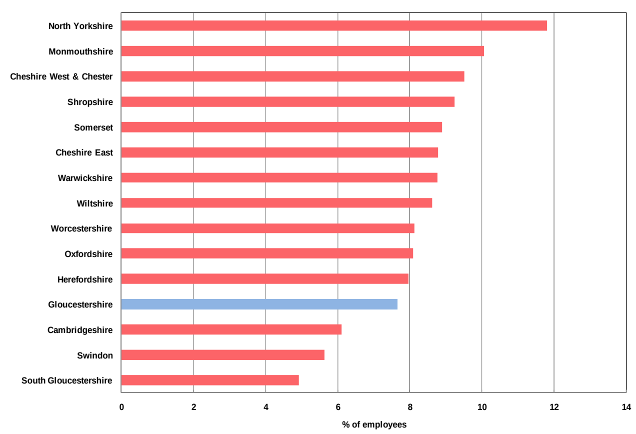
Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

The Other business activities[5] sub sector accounts for the largest proportion of employees with Gloucestershire and the South West comprising some 56% and 57% respectively of the sectors total employees. At the national level the proportion is somewhat higher standing at 59%. In terms of Computer and related activities it is clear from Figure 4.22 that Gloucestershire accounts for a higher proportion of employees at 11% compared to 9% regionally and nationally.

Within the Other business activities sub sector the most significant activities are Legal, accounting, bookkeeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy; holdings activities, all of which account for just under 30% of other business activities employees at County, regional and national level. The Architectural and engineering activities and related technical consultancy comprises 18% of Other business activities employees in Gloucestershire compared to 15% in the South West and 11% in Great Britain.

In comparison to its statistical and adjoining neighbours, Gloucestershire stands out in Financial intermediation; Insurance and pension funding; Activities auxiliary to financial intermediation, which are stronger in Gloucestershire than in the majority of its neighbours and the Renting of machinery and equip-

Figure 4.25: Proportion of employees in Tourism, Gloucestershire and its neighbours, 2008



Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

5 Please see Definitions on page 33

ment sub sector, which employs a smaller proportion of Banking, finance and insurance employees in Gloucestershire than in many of the statistical and adjoining neighbours.

Table 4.9 shows that between 2004 and 2008 the number of employees in Gloucestershire's Finance, banking and insurance sector increased by 2%. Growth has been considerably higher at a regional and national level amounting to 14% in the South West and 13% in Great Britain. Figure 4.23 shows that Gloucestershire's growth has also been weaker than many of its statistical and adjoining neighbours.

Figure 4.24 illustrates how this growth has affected the composite sub sectors of the Banking, finance and insurance sector. The Real estate activities, Activities auxiliary to financial intermediation and Other business activities sub sectors all experienced some growth in Gloucestershire but to a lesser extent than that experienced in the South West and Great Britain.

The remaining sectors all declined in Gloucestershire and at a higher rate than that experienced nationally and/or regionally. This points to the Banking, finance and insurance sector despite being an important sector in the County not faring as well in Gloucestershire as it has in the South West and Great Britain.

Tourism

Tourism activities are divided between the Distribution, hotels and restaurants sector and the Other services sector. However, Tourism is a key sector with a significant role in Gloucestershire's economy.

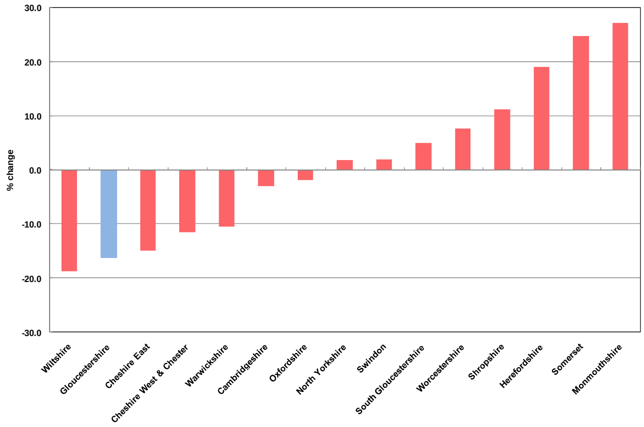
The sector is fragmented and covers a number of activities, many of which are very difficult to define in terms of the Standard Industrial Classification.

However, the following activities have been adopted to give an estimate of the number of employees within the sector:

- Hotels
- Camping sites etc
- Restaurants
- Bars
- Activities of travel agencies etc
- Libraries, archives museums etc
- Sporting activities
- Other recreational activities.

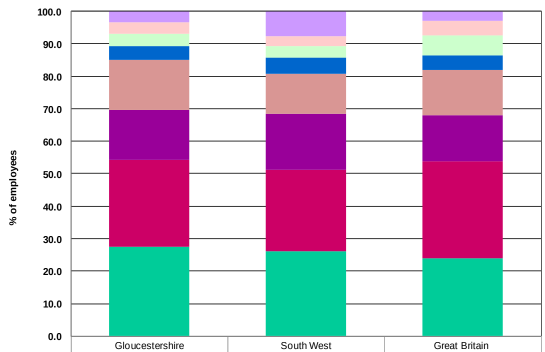
Table 4.10 shows that in 2008, 19,400 employees were involved in Tourism in Gloucestershire, representing 8% of total employees in the County. This was marginally less than the

Figure 4.26: Change in the number of Tourism employees, Gloucestershire and its neighbours, 2004-2008



Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

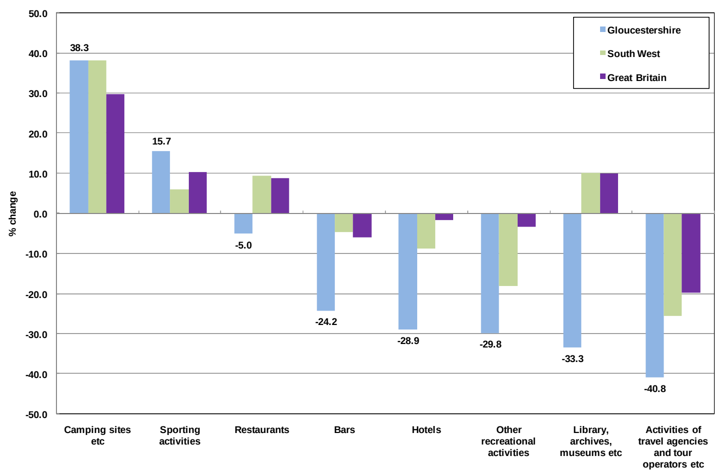
Figure 4.27: Composition of the Tourism sector, Gloucestershire, South West and Great Britain, 2008



	Gloucestershire	South West	Great Britain
Camping sites etc	3.4	7.6	2.9
Activities of travel agencies and tour operators etc	3.6	3.0	4.5
Other recreational activities	3.6	3.6	6.1
Library, archives, museums etc	4.3	4.9	4.5
Sporting activities	15.4	12.4	14.0
Hotels	15.4	17.3	14.1
Restaurants	26.8	25.2	30.0
Bars	27.4	26.0	23.9

Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.28: Change in employees in the Tourism sector, Gloucester shire, South West and Great Britain, 2004-2008.



Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

regional and national figures of 9% and 8% respectively. These figures differ somewhat, from those recorded in 2004, which showed tourism was stronger in Gloucestershire than it was in Great Britain.

This difference is a result of a 16% decline in the number of employees in Tourism in Gloucestershire, which occurred during a period of slight growth for the regional and national Tourism sector.

Figure 4.25 shows that when compared to its statistical and adjoining neighbours, Gloucestershire's tourism sector is relatively weak, employing the fourth lowest proportion of employees. It also fares badly in terms of change over time, with Figure 4.26 showing its decline between 2004 and 2008, was only exceeded by Wiltshire.

Figure 4.27 illustrates the composition of the Tourism sector. The picture in Gloucestershire is very similar to the South West and Great Britain, with Bars and Restaurants sub sectors accounting for the largest proportion of employees at all levels..

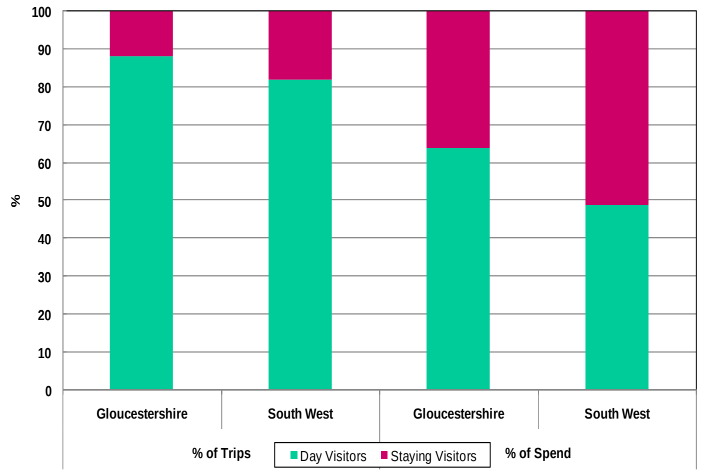
Figure 4.28 shows how the 16% decline in the number of employees employed in the tourism sector has affected the different sub sectors. With the exception of the Camping sites etc and Sporting activities sub sectors, all of the sub sectors have declined in Gloucestershire and at a higher rate than that experienced nationally and/or regionally.

This reinforces the idea that Gloucestershire's tourism sector has not fared as well as its regional or national counterparts.

Although employee figures have given some insight into the Tourism sector, the difficulties in defining the sector using SIC codes, means they only tell part of the story. Research carried out by (*South West Tourism, 2008*) has looked at the tourism sector using different measures, which helps to provide a more complete picture of the sector.

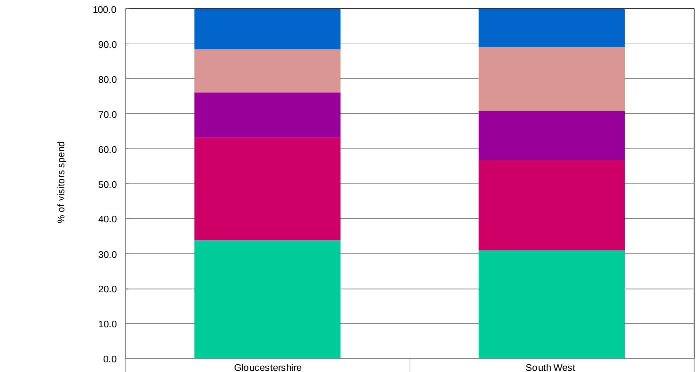
Figure 4.29 illustrates the breakdown of the Tourism market in Gloucestershire and the South West. In Gloucestershire, 88% of trips are made by day visitors, this compares to the slightly lower figure of 82% for the South West. The day visitor market is generally lower value than staying visits. This is highlighted by the fact that despite making up only 12% of total visits in Gloucestershire staying visitors make up 36% of total visitor spend.

Figure 4.29: Breakdown of the Tourism market by type of visitor, Gloucestershire and the South West, 2008



Source; Value of Tourism, 2008a, Gloucestershire & Value of Tourism 2008b, South West, South West Tourism.

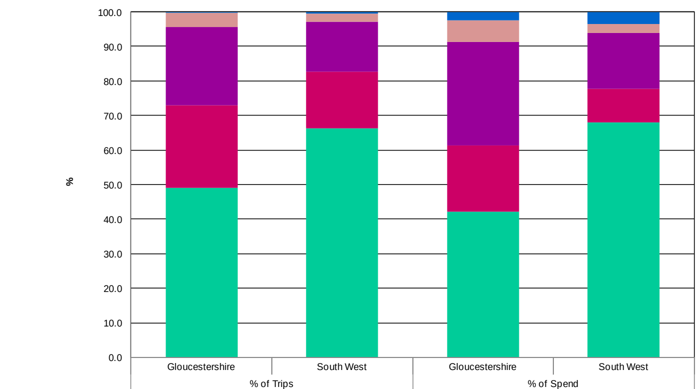
Figure 4.30: Breakdown of Visitor Spend, Gloucestershire and the South West, 2008



	Gloucestershire	South West
Attractions/entertainment	11.5	10.8
Accommodation	12.3	18.4
Travel	12.9	14.0
Shopping	29.6	25.8
Food and Drink	33.7	30.9

Source: Value of Tourism, 2008a, Gloucestershire & Value of Tourism 200b8, South West, South West Tourism.

Figure 4.31: Purpose of visits made by staying visitors, Gloucester shire and the South West, 2008



	Gloucestershire (% of Trips)	South West (% of Trips)	Gloucestershire (% of Spend)	South West (% of Spend)
Study	0.3	0.4	2.3	3.5
Other	4.1	2.5	6.4	2.5
Business	22.7	14.5	30.0	16.3
Visiting friends or relatives	23.8	16.3	19.1	9.6
Holiday	49.1	66.4	42.2	68.0

Source: Value of Tourism, 2008a, Gloucestershire & Value of Tourism, 2008b, South West, South West Tourism

Visitor spend is broken down in Fig 4.30. The picture is very similar in Gloucestershire and the South West, with the majority of visitors spend, concentrated on food and drink and retail. This corresponds with the analysis of employment which showed Bars and Restaurants were the main employers in the Tourism sector.

The only noticeable difference between the South West and Gloucestershire is accommodation, which accounts for a larger proportion of visitors spend in the South West than it does in Gloucestershire.

Figure 4.31 illustrates the purpose of visits made by staying visitors. The most common reason for visits to Gloucestershire and the South West, was for a holiday, however, holidays account for a lower proportion of visits in Gloucestershire than in the South West.

In contrast business trips and visits to friends and family account for a higher proportion of total visits in Gloucestershire than in the South West. This breakdown may be beneficial to Gloucestershire's economy, because business trips are often higher value than other types of visits. This is highlighted by the fact that despite making up 22.7% of total visits in Gloucestershire, trips for business reasons account for 30% of total spend.

The breakdown of the tourism market within Gloucestershire is illustrated in Figure 4.32. The Cotswolds account for the largest proportion of visits and spend, this corresponds with the employment data which showed employment in tourism was highest in the Cotswolds. Cotswolds, Gloucester and Stroud districts account for a larger proportion of visitors spend than total visits. This suggests visits to these areas may generate a higher value of spend than those made to Cheltenham, Tewkesbury and the Forest of Dean.

Agriculture

The analysis of the broad industrial sectors showed that in 2008, around 4,300 people or 2% of total employees were employed in Agriculture and fishing. However, these figures are not truly representative of the Agriculture sector.

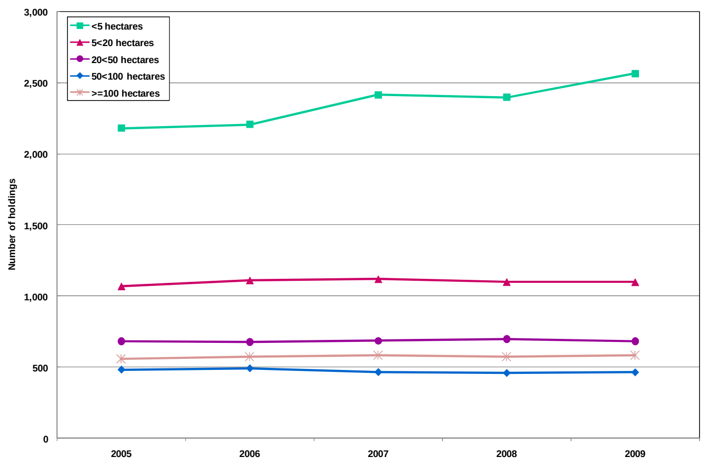
The Department for Environment, Food and Rural Affairs (Defra) Agricultural Survey, found that in 2009, some 215,100 hectares or around three quarters of the total area of the County was farmed. This area was split into 5,400 separate holdings, a figure which has risen by 8.4 % since 2005. The number of holdings in the

Figure 4.32: Breakdown of the Tourism market within Gloucestershire, 2008

	% of Trips	% of Spend
Tewkesbury	14.6	11.0
Stroud	12.4	16.6
Gloucester	12.6	14.3
Forest of Dean	16.4	13.4
Cotswold	26.0	31.5
Cheltenham	18.0	13.2

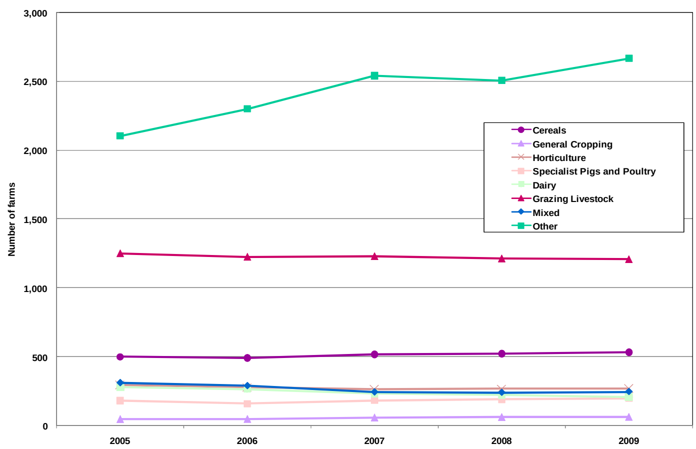
Source: Value of Tourism, 2008a, Gloucestershire, South West Tourism

Figure 4.33: Change in the number of farms by size in Gloucestershire 2005-2009



Source: Agricultural Survey 2005-2009,DEFRA

Figure 4.34: Change in the number of farms by type in Gloucestershire, 2005 –2009.



Source: Agricultural Survey 2005-2009,DEFRA

South West and England both grew at the higher rate of 11%.

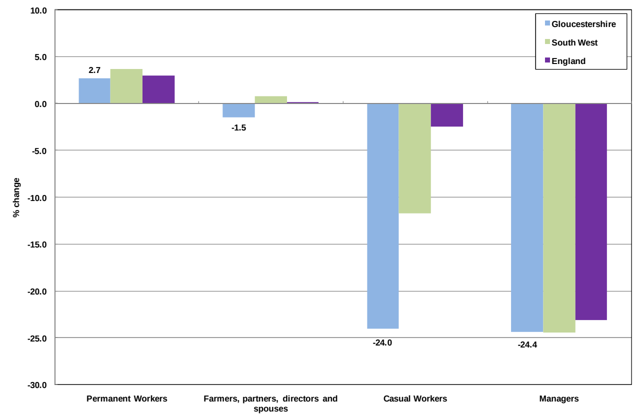
Figure 4.33 shows that, of the 5,400 holdings within the County, the largest proportion (47%) were small holdings, farming less than 5 hectares. The number of holdings farming less than 5 hectares, increased between 2005 and 2009, farms between 50 and 100 hectares declined slightly during the same period, while the others remained largely stable. This situation is mirrored in the South West and England.

Gloucestershire's Agriculture sector also reflects the South West and England in terms of the type of farms it has. Other farms, which includes holdings with only horses, with only grass or fodder crops or with only fallow land or buildings, account for almost half of all farms in Gloucestershire, the South West and England. Figure 4.34 also shows that this type of farm is the only type that has experienced significant growth between 2005 and 2009.

Gloucestershire's total agricultural labour force amounted to 7,800 people in 2009, which represents a 4% decline on the 2005 figure. This decline was greater than the 0.5% decline experienced in the South West and England. Employment within the agriculture sector is dominated by Farmers, partners, directors and spouses, who account for around two thirds of the workforce in Gloucestershire, the South West and England.

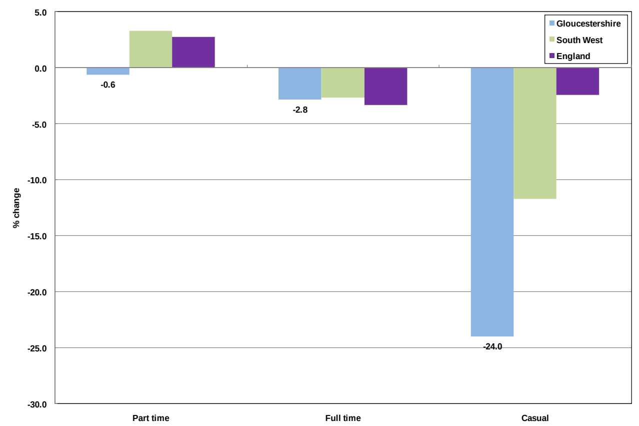
Figure 4.35, illustrates how the composition of the agricultural workforce, has changed since 2005. The greatest losses have been in managers and casual workers. The number of farmers, partners, directors and spouses employed in agriculture have also declined in Gloucestershire, despite increasing slightly in the South West and Gloucestershire.

Figure 4.35: Change in employees in Agriculture, Gloucestershire, South West and England, 2005-2009



Source: Agricultural Survey 2005 to 2009, DEFRA

Figure 4.36: Change in the nature of Agricultural employment, Gloucestershire, South West and England, 2005-2009



Source: Agricultural Survey 2005 to 2009, DEFRA

The number of permanent workers employed in the sector increased at all levels. Alongside this shift from casual to permanent work, has been changes in the split between full-time and part- time working. Figure 4.36 shows that all types of employment has declined in Gloucestershire, however, the decline in part time working was considerably smaller than the decline in casual and full time workers.

The changes experienced by the agricultural labour force may be linked to the growth in farms classified as other. These type of farmers are often less labour intensive than traditional types of farms, which may explain the decline in employees employed in agriculture. They are also less seasonal in nature which may be why the number of casual workers employed in the sector has declined.

4.1.3 Knowledge economy

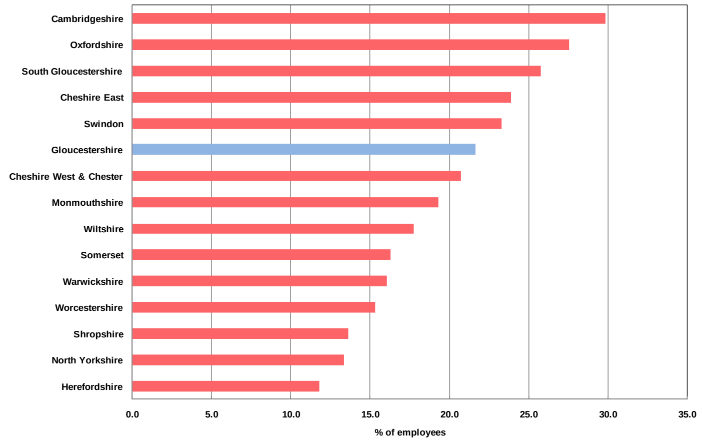
The analysis of the broad industrial sectors and core sectors, has shown that the structure of the

Table 4.11: Employees in the Knowledge economy

Area	Number of Employees 2004	% of Employees 2004	Number of Employees 2008	% of Employees 2008	% change 2004 - 2008
Cheltenham	14,200	22.6	13,200	24.6	-7.1
Cotswold	6,200	16.6	6,800	19.0	9.1
Forest of Dean	2,900	12.6	2,400	10.7	-15.3
Gloucester	13,900	21.4	15,000	24.3	8.4
Stroud	7,400	17.4	7,400	16.7	0.2
Tewkesbury	8,800	23.8	10,100	28.3	15.2
Gloucestershire	53,400	20.0	55,000	21.6	3.1
South West	441,500	20.2	447,600	20.0	1.4
Great Britain	5,617,900	21.6	5,828,900	21.8	3.8

Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.37: Proportion of employees in the Knowledge economy, Gloucestershire and its neighbours, 2008



Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

economy has been changing, with a number of traditional sectors experiencing decline alongside emerging and developing new sectors. These changes are encapsulated in the growth of the Knowledge economy.

The Knowledge economy is a term coined to describe an emerging economic structure that relates economic success to the effective utilisation of intangible assets such as knowledge, skills and innovative potential as the key resources of competitive advantage (*Boddy, 2005*).

In recent years, economic strategy has focused on enhancing the Knowledge economy and this looks set to continue, with the coalition government stressing that the Knowledge economy will have a fundamental role in securing economic recovery (*Prime Ministers Office, 2010*).

Although the Knowledge economy has been a priority in recent years, the broad nature of its definition makes it difficult to quantify. This report has followed the South West Regional Development Agency definition, which is based on the OCED (2003) classification, and uses the number of employees in certain industrial sectors[6].

Table 4.11 shows that in 2008 the Knowledge economy accounted for about 55,000 employees or 22% of the total employees in Gloucestershire. In the South West the proportion is slightly lower at 20% and Great Britain the same.

Figure 4.37 shows that when compared to its statistical and adjoining neighbours Gloucestershire sits slightly above the middle, in terms of the proportion of its employees in the Knowledge economy.

The Knowledge economy is significant in all six districts, however, the sector is particularly strong in Tewkesbury, Cheltenham and Gloucester, where the number of employees exceeds the national average.

Table 4.12: Composition of the Knowledge economy, 2004 and 2008

Area	2004		2008		% change in number of employees 2004-2008	
	% of knowledge based employees employed in high technology industries	% of knowledge based employees employed in knowledge intensive services	% of knowledge based employees employed in high technology industries	% of knowledge based employees employed in knowledge intensive services	High technology industries	Knowledge intensive services
Cheltenham	5.4	94.6	4.9	95.1	-16.4	-6.6
Cotswold	9.0	91.1	6.5	93.6	-21.4	12.0
Forest of Dean	3.7	96.5	4.8	95.1	10.4	-16.4
Gloucester	6.7	93.3	4.6	95.4	-25.9	10.8
Stroud	29.2	70.8	18.6	81.4	-36.2	15.3
Tewkesbury	44.7	55.3	40.2	59.8	3.6	24.6
Gloucestershire	15.8	84.2	13.3	86.7	-13.2	6.1
South West	10.7	89.3	9.0	91.0	-14.4	3.3
Great Britain	6.5	93.5	5.7	94.3	-8.5	4.6

Source: Annual Business Inquiry, 2008-2008, ONS Crown Copyright Reserved (Nomis)

Table 4.12 splits the Knowledge economy into those employed in High technology industries and those employed in the Knowledge intensive service sector. The Knowledge intensive service sector employs the majority of employees in all geographic areas. However, a larger proportion of employees are represented in the High technology industries in Gloucestershire and some of its districts, namely Stroud and Tewkesbury, compared to the South West, Great Britain and 12 of its 14 statistical and adjoining neighbours. Gloucestershire's strength in this sub sector is not surprising given the High technology industries associated with the Advanced engineering sub sector.

Just over 40% of the Knowledge intensive service sub sector comprises Other business activities which as outlined in Section 4.1.2 Gloucestershire’s Core activities under Banking, Finance and Insurance, encompasses a diverse range of services provided by architects, accountants, lawyers, engineers, IT specialists, consultants,

6 Please see Definitions on page 33

technical and Research and Development services etc that function through the sale of expertise and advice and/or information.

Hospital activities account for nearly a third of Gloucestershire's employees in the Knowledge intensive services. This is higher than the proportion employed in the majority of Gloucestershire's statistical and adjoining neighbours, and similar to the regional and national picture. However, the affects of the anticipated public sector cuts may impact on this aspect of the economy.

Table 4.12 shows that between 2004 and 2008 the number of employees in the Knowledge intensive services grew by 6% in Gloucestershire, this compares to the lower rates of growth of 3% in the South West and 5% in Great Britain. During the same period the number of Gloucestershire employees in the high tech industries declined by 13%. In the South West, the sub sector declined at the slightly higher rate of 14%, nationally the decline was slightly lower at 9%.

The expansion experienced by the Knowledge intensive services sub sector reflects Britain's success but to maintain its worldwide competitive edge, businesses will need to continue investing in knowledge and innovation and be provided with incentives to invest in knowledge as well as having the freedom to export more of their knowledge overseas (*Sissons, 2011*)

4.1.4 Voluntary and Community Sector (VCS)

According to the Office for Civil Society (OCS) formerly the Office of the Third sector until 2010, Voluntary and Community Organisations are "non-governmental organisations which are driven by their values and which principally reinvest any financial surpluses to further social, environmental or cultural objectives. They encompass voluntary and community organisations, charities, social enterprises, cooperatives and mutuals, both large and small.'

A national survey undertaken by the Office of the Third Sector in 2009 identified 2,593 registered charities, over half of whom employed some paid staff in Gloucestershire with their main activity in health and social care, followed by education and training.

Concomitant with the recent growth of the sector is the changing policy context in which the sector operates driven by the coalition government's vision of he Big Society. A crucial feature of this is the emergence of a growing 'partnership' between the state and the VCS which is reflected in the renewed Compact with the coalition government, which seeks to define the features of this relationship.

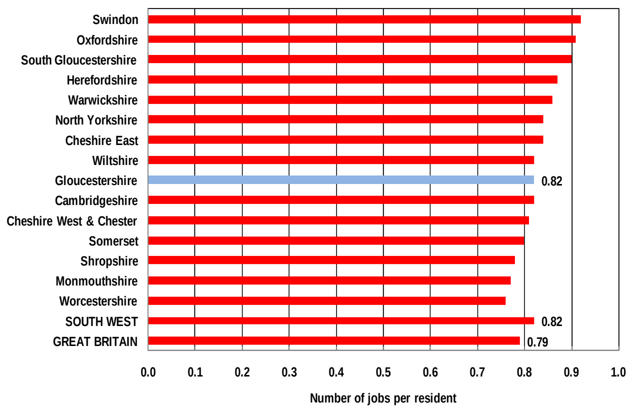
As the VCS has become involved in the delivery of more and more services that were once the domain of the public sector, there have been huge developments in areas such as job creation, training, local community development, reorganisation of the care and NHS sector and more significantly, in the way many voluntary organisations are now funded. Many of these changes reflect how government policy has been shaping the role of the third sector and its relationships with various stakeholders (*K. Venter and J Sung, 2010*).

In Gloucestershire the VCS is a key net contributor to the local economy, with a significant financial contribution through access to resources that are *not* available to public and private bodies as well as a wealth of skills and an army of volunteers will be able to provide vital support to the Local Economic Partnership priorities (*S. Pickering, 2011*).

4.1.5 Job Density

Job density is basically a measure of the mismatch between labour supply and labour demand. Job density is defined as the number of filled jobs in an area divided by the residents of working age in that area. A job density value of one indicates one job per resident.

Figure 4.38: Job Density in Gloucestershire and its Neighbours, 2008



Source: Job Density, 2008, ONS Crown Copyright Reserved (Nomis)

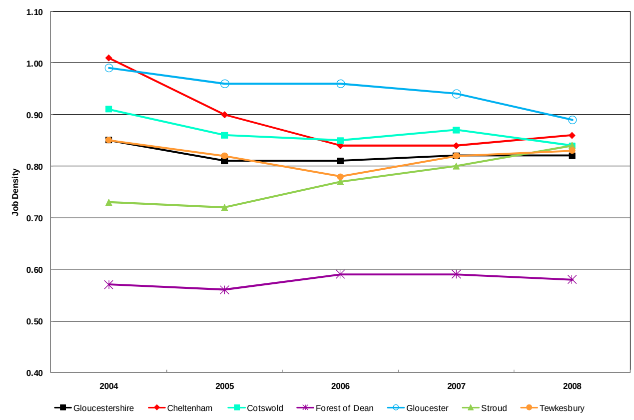
A low job density implies that residents are not employed locally or the area has comparatively high unemployment or inactivity. A high job density implies that people commute to the area for work or there is a high demand for employees.

With a job density value of 0.82, which has remained almost static since 2005, Gloucestershire matches the South West and is above the national average of 0.79.

However, as shown in Figure 4.38 it lies in the middle of the field in terms of its statistical and adjoining neighbours, with Swindon the highest at 0.92 and Worcestershire at 0.76.

In Figure 4.39 Gloucester, Cheltenham and Cotswold districts all lie above the County average and the Forest well below. Stroud district shows the greatest increase.

Figure 4.39: Job Density: Gloucestershire and districts, 2004-2008



Source: Job Density, 2004-2008, ONS Crown Copyright Reserved (Nomis)

4.1.6 Employment Projections

Table 4.13: Employment forecasts for Gloucestershire and districts, 2009-2020

All Sectors	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Total Employment	3,100	1,000	-500	2,900	1,000	1,000	8,500

Source: Local Economic Forecasting Model, 2010, Cambridge Econometrics and The Institute for Employment Research

Economic projections generated by the Local Economic Forecasting Model (LEFM)[7], 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.

Table 4.14: Employment forecasts for selected core activities Gloucestershire and districts, 2009-2020

	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Agriculture	-200	-1,900	-1,200	-100	-1,000	-800	-5,000
Banking, finance and insurance	2,300	1,800	500	1,900	1,400	1,300	9,300
Care	300	100	100	400	200	100	1,100
Manufacturing	-500	-300	-500	-300	-600	-800	-3,000
Public sector	-500	-300	-300	-500	-400	-200	-2,100
Tourism *	1,000	1,000	300	700	700	500	4,300

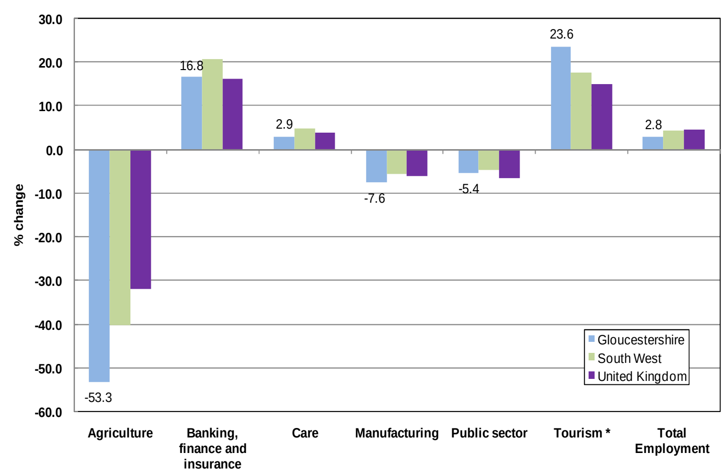
Source: Local Economic Forecasting Model, 2010, Cambridge Econometrics and The Institute for Employment Research
* Only includes hotels, restaurants, bars and catering

Between 2009 and 2020, total employment in Gloucestershire is expected to increase by 2.8% (around 8,500 jobs). This compares to an increase of 4.3% in the South West and 4.6% in the United Kingdom as shown in Table 4.12).

Table 4.13 shows that within Gloucestershire, the Forest of Dean is predicted to experience a decline in the number of total employees, while all other districts are expected to experience an increase.

The projections generated by LEFM provide a breakdown of employment by industry. The breakdown is not detailed enough to provide projections for complex sectors such as environmental technologies and the creative industries.

Figure 4.40: Employment forecasts, Gloucestershire, South West and the United Kingdom, 2009-2020



Source: Local Economic Forecasting Model, 2010, Cambridge Econometrics and The Institute for Employment Research) *Only includes hotels, restaurants, bars and catering

7 Please see Definitions on page 34

Figure 4.40 and Table 4.14 show that between 2009 and 2020 there is likely to be increases in the number employed in the Banking, finance and insurance, Care and Tourism sector, while the Agriculture, Manufacturing and Public Sector look set to decline. This picture is reflected locally, regionally and nationally.

Table 4.15: Employment forecasts for the Manufacturing sector, Gloucestershire 2009-2020

	Employment	% change
Advanced Engineering	-1,400	-16.5
Fabricated metal products etc	-1,400	-26.4
Wood and paper	-500	-28.3
Mechanical engineering and electronics	-400	-5.6
Chemicals and chemical products and fuels	-400	-30.4
Basic metals	-200	-29.1
Other non-metallic products	-100	-10.4
Textiles, wearing apparel and leather etc	-100	-12.5
Publishing, printing and reproduction of recorded media	100	3.1
Rubber and plastic goods	300	15.7
Manufacturing nec	400	25.2
Food and drink	700	18.7

Source: Local Economic Forecasting Model, 2010, Cambridge Econometrics and The Institute for Employment Research

Agriculture

The Agriculture sector is predicted to experience the greatest decline of all the sectors between 2009 and 2020 amounting to -55.3% in Gloucestershire, equating to 5,000 jobs. Not unsurprisingly Cotswold, the Forest of Dean and Stroud share the brunt of the decline. This is significantly higher than the regional and national declines of -40.4% and -32.1%.

The forecasted decline in the Agriculture sector, may not be entirely accurate due to the difficulties in measuring employment in this sector, mentioned in the previous section.

Manufacturing

The manufacturing sector is forecast to lose around 3,000 employees in Gloucestershire, this represents a decrease of –7.6% between 2009 and 2020. At a regional and national level sector, the sector is expected to experience smaller declines of –5.7% and -6.1% respectively, this difference is probably due to the strength of the manufacturing sector in Gloucestershire.

Table 4.15 shows that within the manufacturing sector, the majority of sub sectors are expected to decline between 2009 to 2020, with the greatest job losses occurring in the traditionally strong sub sectors; Advanced engineering and Fabricated metal products sub sectors,

Four of Gloucestershire's manufacturing sub sectors however, are forecast to experience employment growth, with the greatest job gains occurring in the Food and drink sub sector, which has traditionally been under-represented in Gloucestershire.

Public Sector

Figure 4.40 shows that between 2009 and 2020, the employment in the Public sector in Gloucestershire is expected to drop by 5.4% or 2,100 employees. This compares to a -4.7% decline in the South West and a -6.5% decline in the United Kingdom. This decrease is not surprising given the anticipated cuts in public spending. However, the employment projections were produced before the Comprehensive Spending Review, so may underestimate the extent of the decline.

Banking, finance and insurance

The Banking, finance and insurance sector is expected to experience growth between 2009 and 2020, with Figure 4.40 showing employment in the sector is likely to increase by around 16.8%, representing around 9,300 workers. This compares to a 20.7% increase in the South West and 16.1% nationally.

Care

The Care sector is forecast to gain around 1,100 jobs in Gloucestershire, representing an increase of 2.9% between 2009 and 2020. At a regional and national level sector, the sector is expected to experience a slightly larger increase of 4.8% and 3.8% respectively. This growth is not surprising, considering the pressure, the needs of an ageing population, will place on the sector in future years.

Tourism

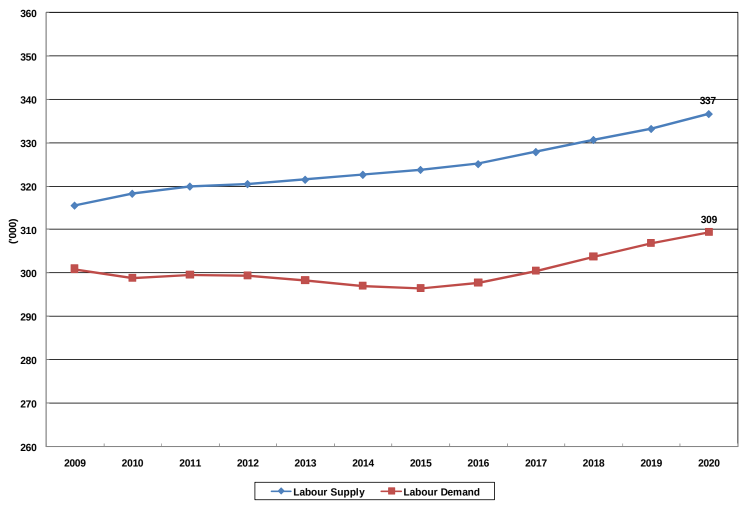
The projections provided by LEFM only cover the Hotels, restaurants, bars and catering sub sector and therefore only give a partial estimate of employment in the Tourism sector. The Tourism sector is predicted to experience the greatest increase of all the sectors, with as shown in Figure 4.40, between 2009 and 2020 an increase of 23.6% in Gloucestershire, amounting to 4,300 jobs. This is higher than the regional and national growth of 17.6% and 14.9%.

Within Gloucestershire, Cheltenham and Cotswold districts, are forecast to experience the greatest employment growth in Tourism, not surprising given that the Tourism sector, is stronger in these areas than elsewhere.

Future labour supply

The labour force (i.e. the economically active population) is projected to increase over the next twelve years. According to the Local Economic Forecasting Model (LEFM) the labour force is set to increase by 21,000 people at a rate of 7% to 337,000 people in 2020 as depicted in Figure 4.41.

Figure 4.41: Future labour supply and demand 2009-2020



Source: Local Economic Forecasting Model, 2010, Cambridge Econometrics and The Institute for Employment Research

Future labour demand

The demand for labour (i.e. jobs) in Gloucestershire over the next twelve years is predicted to increase according to LEFM. Figure 4.41 shows that in 2009 there were 301,000 jobs in the County, however, this number is set to slowly decline until 2016 when it increases gradually up to 2020. The overall increase amounts to 8,000 jobs or 2.8% growth.

4.1.7 Comparison of future labour supply and demand

It is clear from Figure 4.41 that labour supply outstrips demand. In 2009 the disparity amounted to 15,000 more people than jobs, the difference is expected to grow to 27,000 more people than jobs in 2015 and then stabilise until 2020.

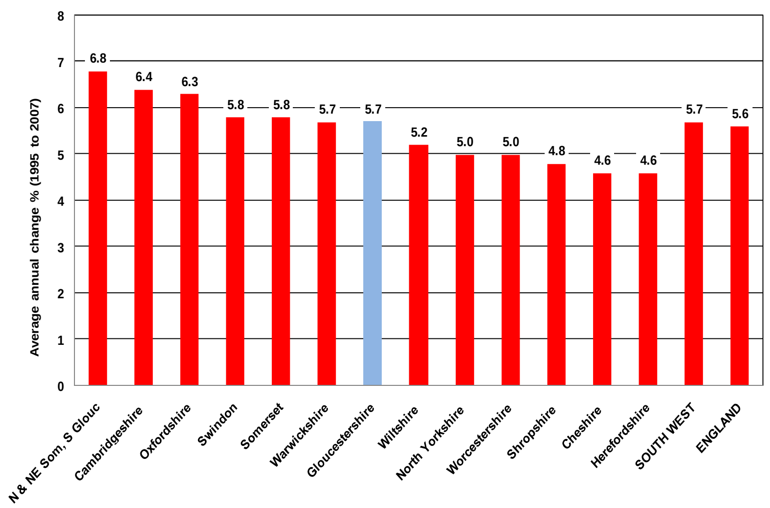
4.1.8 Growth sectors

Growth sectors can be described as those core activities or parts of core activities that appear to offer significant growth opportunities for the future. This is based on either present good performance or the inevitable demand from burgeoning new technologies. They include the looming nuclear demand and those high-tech manufacturing activities both in aerospace and precision and medical instruments that despite a projected decline in the number employees in the Advanced engineering sector as a whole, are however, locally strong and have been performing well.

Other growth sectors are the Creative industries in terms of digital media supported by an improved Broadband capability in the County, Environmental technologies relating to the low carbon sector demand and Care activities in response to the needs of an ageing population.

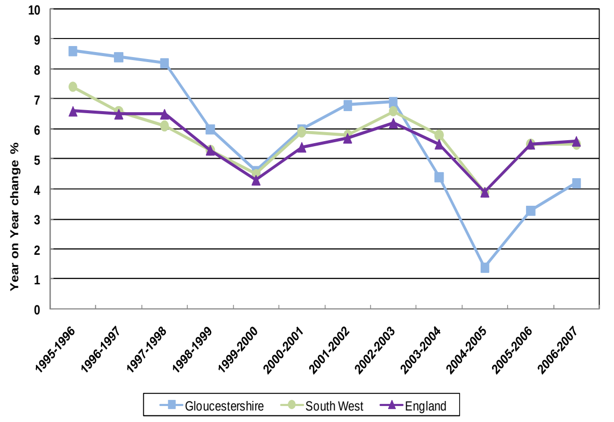
There is also pressure to remain competitive in the Business service aspect of the knowledge economy that will create the potential to further develop, sell and export expertise and/or information.

Figure 4.42: Average annual change of GVA at current basic prices, 1995-2007



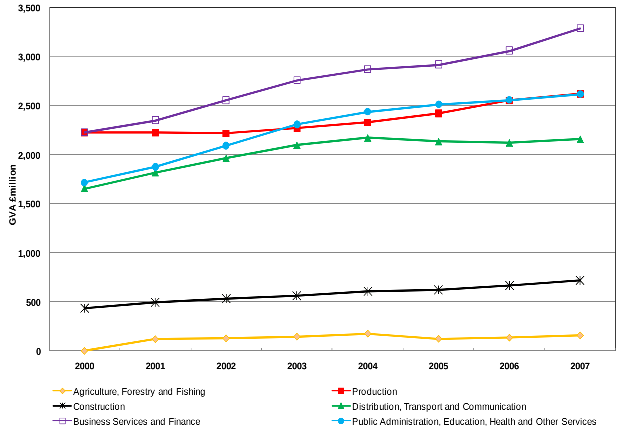
Source: Regional Accounts,1995-2007, ONS Crown Copyright Reserved

Figure 4.43: GVA at current basic prices, Year-on-year change, 1995-2007



Source: Regional Accounts, 1995-2007, ONS Crown Copyright Reserved

Figure 4.44: GVA at current basic prices, by industry group for Gloucestershire, 2001-2007



Source: Regional Accounts, 2001-2007, ONS Crown Copyright Reserved

4.2 Economic Competitiveness

4.2.1 Economic output

Gross Value Added (GVA) is a measure of the contribution to the economy of each individual producer, industry or sector within that economy. It is used as a measure of the total output of an economy and to compare levels of productivity in the economy.

GVA

In 2007 the headline GVA at current basic prices[8] in Gloucestershire amounted to £11,500 million placing it fifth highest among its statistical and adjoining neighbours and contributing 12% to the South West GVA and 1% to the national GVA.

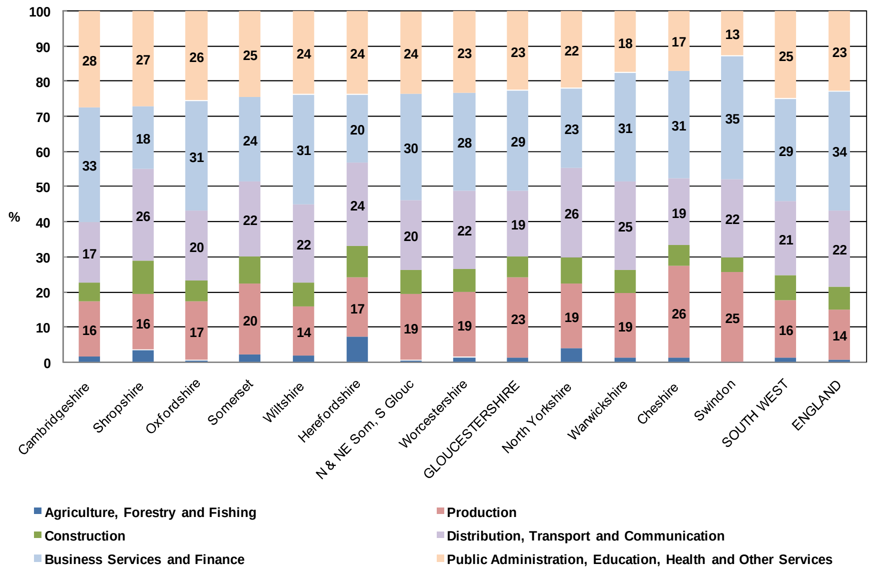
Figure 4.42 shows that between 1995 and 2007 Gloucestershire's productivity experienced a similar rate of growth to the regional and national average with only three of its statistical and adjoining neighbours namely N & NE Somerset and South Gloucestershire; Cambridgeshire and Oxfordshire maintaining a higher rate of growth.

Looking at the year-on-year change as shown in Figure 4.43, the South West has closely followed the national trend. Gloucestershire, however, outstripped the regional and national growth between 2001 and 2003 where its contribution to the regional output peaked at 13% before following the declining trend albeit at a faster rate, resulting in a reduction in contribution to the regional output to 12%.

GVA by Industry group

Figure 4.44 shows that the greatest contribution to Gloucestershire's economic output in 2007 was the Business Services and Finance sector accounting for almost a third of GVA. The Pro-

Figure 4.45: Share of GVA by industry as a percentage of total GVA, 2007, Gloucestershire and neighbours



Source: Regional Accounts, 2007, ONS Crown Copyright Reserved

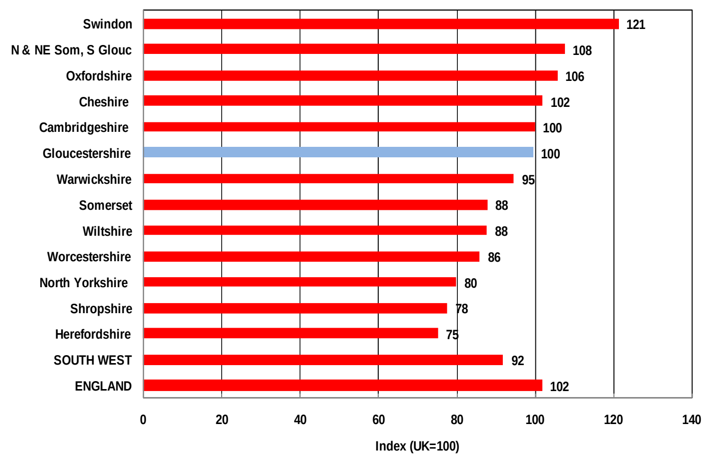
8 Please see Definitions on page 34

duction sector and Public Administration, Education, Health and Other sector also featured strongly each contributing 20% to GVA. At the other end of the scale at 1%, Agriculture had the lowest contribution.

All sectors experienced growth in output between 2000 and 2007. The highest growth was in the Construction sector which itself is more dependent on economic conditions at a more regional and national level and reflected the buoyancy in this sector over the period. However, the effects of the recession may well be shown in 2008 and 2009 followed by possible recovery in subsequent years.

Both the Public sector etc and Business Services and Finance sectors outputs also increased by about half between 2000 and 2007 and again with shocks to the Finance world and subsequent Public sector cuts there is likely to be an impact on these sectors which won't be evident in terms of data until the 2009/2010 figures are available.

Figure 4.46: GVA per filled job at current prices (Index)



Source: Regional Accounts, 2007,ONS Crown Copyright Reserved

The Production sector experienced the lowest growth between 2000 and 2007 reflecting the general downturn in Manufacturing during this period. Again the vulnerability of this sector needs to be countered with ensuring a high tech and innovative business growth aspect whilst maintaining a sustainable economic future.

Gloucestershire as shown in Figure 4.45 sits around the middle of the field in relation to its statistical and adjoining neighbours in terms of the share Business Service and Finance and Public Administration etc has of GVA. The picture is different for Production where, Gloucestershire lies in third place with Swindon and Cambridgeshire lying above. This along with the fact that the County value is also well above the regional and national average indicates the importance of Production in the County's economic output.

Productivity

To compare areas in terms of their productivity, GVA per filled job which is GVA divided by the number of jobs, is considered the most favoured method offering the least disparity compared to other methods.

As shown in Figure 4.46 Gloucestershire is well placed in terms of GVA per filled job compared to its statistic and geographic neighbours, lying sixth out of thirteen, it lies well above the regional average and slightly under the national average.

4.3 Enterprise and Entrepreneurship

A strong performance in enterprising activities and high levels of entrepreneurship appear to be the necessary requisites for the maintenance of a healthy and competitive economy.

4.3.1 Active businesses

In 2008 there were 25,840 active businesses in Gloucestershire representing a 6% increase in stock since 2004.

It is evident from Table 4.16 that 77% of businesses employ up to four people and almost 90% of businesses employ nine or less people.

Stroud, Cotswold and Cheltenham districts account for about a fifth each of the County's total number of businesses employing up to four people and Gloucester the lowest. While Cheltenham, Stroud and Gloucester districts also account for about a fifth each of businesses that employ more than twenty people.

4.3.2 Enterprise Births, Deaths and Survival rates[9]

Table 4.16: Count of active businesses by size in 2008*					
	0 - 4	**5 - 9**	**10 - 19**	**20 +**	**Total**
Cheltenham	3,855	610	265	245	4,975
Cotswold	4,080	615	310	195	5,200
Forest of Dean	2,735	390	180	120	3,425
Gloucester	2,415	500	260	235	3,410
Stroud	4,245	665	295	245	5,450
Tewkesbury	2,590	425	190	175	3,380
Gloucestershire	19,920	3,205	1,500	1,215	25,840

Source: Business demography, 2008, ONS Crown Copyright Reserved

In 2009 there were 2,245 business births in Gloucestershire, a birth rate of 8.6%. This compared with 2,540 births in 2008, a birth rate of 9.8% represents a 12% decrease in the number of business births in 2009.

The number of provisional business closures in Gloucestershire in 2009 amounted to 2,630, a closure rate of 10.1%. This compares to 2,130 closures in 2008 and a closure rate of 8.2%. In 2009 there was a 23% increase in the number of business closures.

The number of business closures is the highest since 2004 when 2,480 businesses closed, a closure rate of 10.2%. It is also the first time since 2004 that business closures outnumbered business births.

This picture is reflected regionally and nationally and is presumably the result of the effects of the recession. In terms of industrial sectors that have been most affected, the data although only available at national level will be reflected locally to a certain extent.

Across the United Kingdom the highest number of business closures occurred in Construction followed by Professional, scientific and technical activities and the highest closure rate occurred in Business administration and Support services activities.

Enterprise Births
Business birth rates for Gloucestershire and its districts over the last five years are depicted in Figure 4.47. Apart from a slight increase in 2007, the overall trend has been one of decline with the County average dropping from 11.7% in 2004 to 8.6% in 2009.

Gloucester district however, bucked the trend with growth from 2005 to 2007 before following the general decline to 2009. The Forest of Dean district showed the largest decline in business births over the last five years and Stroud district since 2008.

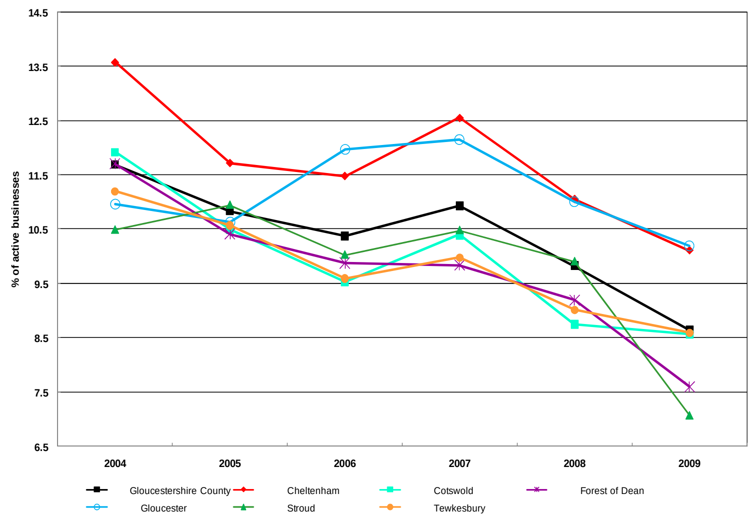
Enterprise deaths
In terms of business closure rates, according to Figure 4.48 the overall picture is one of initial decline followed by growth with the County average dropping from 10.2% in 2004 to 8.2% in 2008 before rising steeply to 10.1% in 2009. The Forest of Dean district experienced the largest increase in business closures since 2004 and Cheltenham the largest since 2008.

Enterprise survival
Gloucestershire with 94% of businesses surviving after one year matches the national average, falls slightly below the regional figure and lies in tenth place among the fourteen of its statistical neighbours as depicted in Figure 4.49.

In terms of survival after five years at 51% Gloucestershire fares better in that it is well above the national average, above the regional figure and lies in sixth position.

Figure 4.50 provides a comparison of survival rates from one year to five years for Gloucestershire and its districts with a regional and national comparison.

Figure 4.47: Trends in Business birth rates in Gloucestershire and districts, 2004-2009



Source: Business demography, 2009, ONS Crown Copyright Reserved

* The count of active businesses by sizeband is not available for 2009
9 Please see definitions on page 34

For each year of survival the Gloucestershire average is above or close to the regional average and considerably higher than the national average especially as the period of survival lengthens.

Tewkesbury and Stroud districts show a better five year survival rate than the County average while Gloucester district presents a below average survival rate that worsens with time compared to the County figure.

4.3.3 Entrepreneurism

Healthy numbers of enterprise births create competitiveness resulting in enhanced performance and variety in the market place. The national indicator NI171 provides a base for measuring this, comprising the proportion of enterprise births per 10,000 adults.

Figure 4.51 shows Gloucestershire in a good position in terms of enterprise births per 10,000 adults lying sixth out of fifteen statistical and adjoining neighbours.

National indicator NI 172 identifies with the strength of the small business sector in that it provides a measure of employment growth within surviving small businesses.

Gloucestershire performs well as shown in Figure 4.52 where it lies in fourth place out of fifteen statistical and adjoining neighbours with a value of 14.9% which is well above the national average of 14.4% and a little below the regional average of 15.0%.

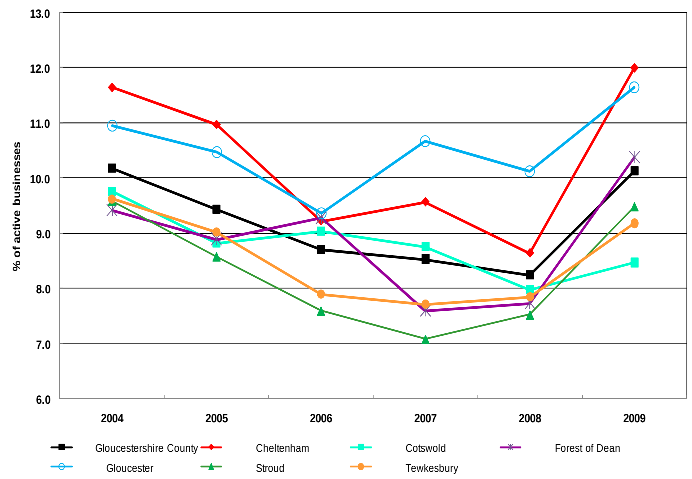
In 2006-07 as depicted in Figure 4.53 Gloucester stood out with the highest proportion of small businesses showing growth which amounted to 16.8%, well above the County average. At the other end of the scale the Forest of Dean district experienced the least growth of 12.7% well below the County average.

4.3.4 Innovation

To maintain competitiveness the economic development of an area will require a level of innovative activity. Such activities will include high engineering technology, information technology and services and product design which will involve more development of the knowledge based industry and service sectors and their associated skilled workforce.

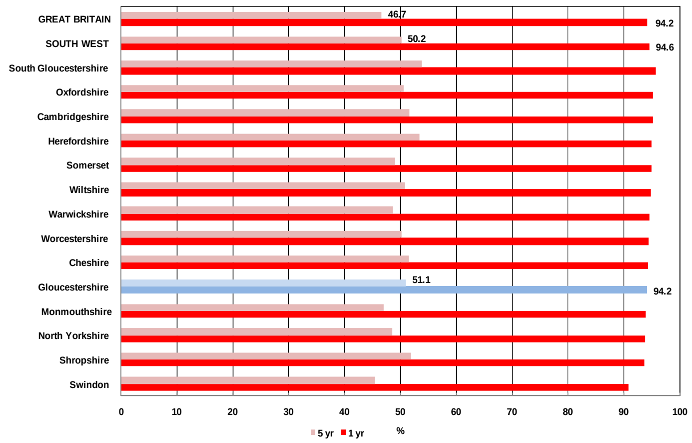
Measurement of the level of contribution of innovation to an economy is however, difficult. One measure of innovation is the amount a company may invest in Research and Development (R&D).

Figure 4.48: Trends in Business closures in Gloucestershire and districts, 2004-2009



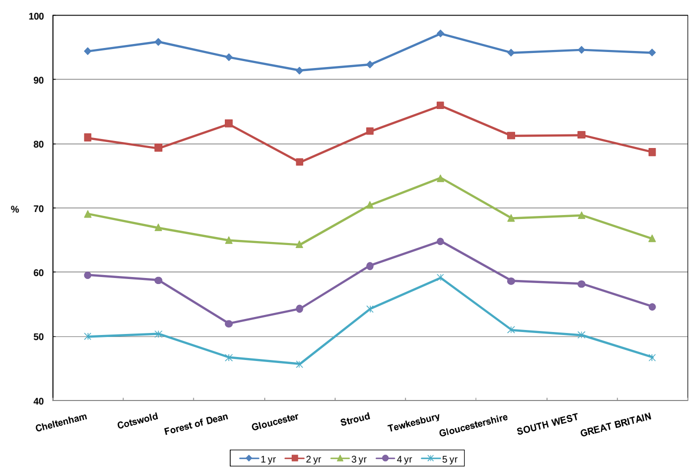
Source: Business demography, 2009, ONS Crown Copyright Reserved

Figure 4.49: Proportion of businesses born in 2004 surviving after 1 yr and 5yrs



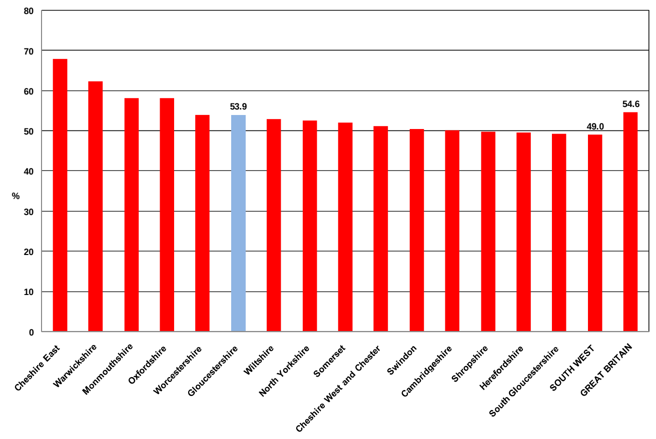
Source: Business demography, 2009, ONS Crown Copyright Reserved

Figure 4.50: Comparison of survival rates from 1yr to 5yrs for Gloucestershire, districts, SW and GB born in 2004



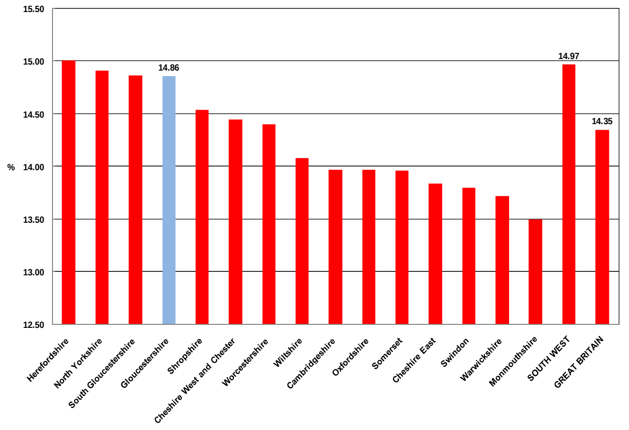
Source: Business demography, 2009, ONS Crown Copyright Reserved

Figure 4.51: Proportion of enterprise births per 10,000 adults 2008 (NI 171) Gloucestershire and neighbours



Source: NI 171, 2008a, BIS

Figure 4.52: Proportion of small businesses, Gloucestershire and neighbours, employment growth 2007-08 (NI 172)



Source: NI 172, 2008b, BIS

The Research and Development Scoreboard published by the Department for Business, Innovation & Skills (BIS) is an annual international league table of companies investing in R&D. Table 4.17 comprises a list of those companies based in Gloucestershire who form part of the top 1,000 investing companies. These companies contribute nearly a fifth of the South West's investment in R&D.

The range of companies featured in Table 4.17 reflects Gloucestershire's strong high-tech precision and engineering manufacturing base.

Both entrepreneurial and innovative business strengths are well represented in Gloucestershire by a number of companies including GE Aviation, Messier-Bugatti-Dowty, Renishaw, Ageas Insurance, Bottlegreen Drinks Co, Watts Group, Supergroup and Green Fuels to name a few.

4.4 Inward Investment

Foreign Direct Investment (FDI) – The National Context

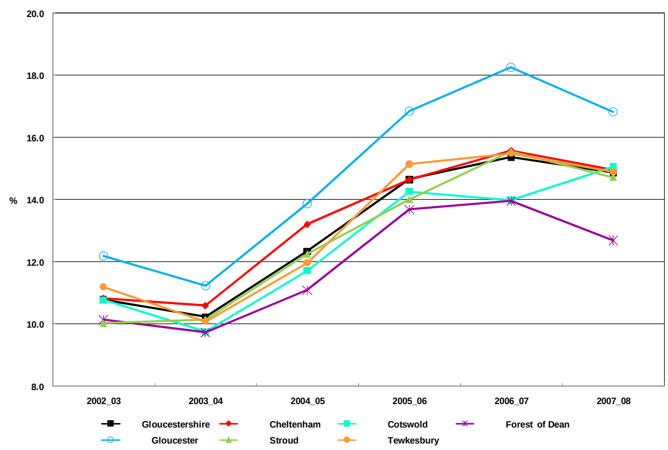
According to UK Trade & Investment (UKTI) figures, in 2009/10, 1,619 foreign companies invested in the UK, creating 53,358 new jobs. 53% of these projects were new investments and 14% were mergers and acquisitions, with the remainder created by expanding foreign-owned companies already based in the UK. The USA continued to dominate FDI activity with 30% of investments originating from the North American market. Japan held the next biggest share with 7% of investments, closely followed by France, India, Germany and China.

The changing political context over 2010-11 began to demonstrate an impact upon the regional involvement with FDI activity, as overseas promotional campaigns by both UKTI and the Regional Development Agencies were subject to budget cuts, resulting in a slowdown of marketing activity for the English regions. From March 2011 onwards, regional overseas teams will effectively be dissolved, with UKTI and the Government intending to transfer responsibility for generating overseas leads to a new national outsourced delivery team. This will be carried out in conjunction with increased foreign embassy support and diplomatic resources aimed at encouraging business investment and growth.

Gloucestershire Investment

Gloucestershire First received 832 investment location enquiries in total during 2010/11, with 90% of

Figure 4.53: Proportion of small businesses in Gloucestershire and districts, employment growth 2007-08 (NI172)



Source: NI 172, 2008b, BIS

these registering via www.investinglos.co.uk. This number registered the first drop in volume enquiries for nearly 10 years, and was a decrease of almost 29% from the 2009/10. However, these volume figures did not provide the entire picture, and by removing multiple registrations, council research and non-property related overseas joint ventures, in real terms, the enquiries decreased by 17% from the previous year, which had been a record year.

Table 4.17: Gloucestershire based companies ranked in top 1,000 UK companies by investment in Research and Development in 2009

Company	Location	Product	2009 R&D investment £M
GE Aviation Systems	Tewkesbury	Actuation, Avionics and Landing Gear	77.07
Renishaw	Wotton-under-Edge	High Performance measuring systems	30.25
Messier-Bugatti-Dowty	Tewkesbury	Landing gear	24.28
MessageLabs	Tewkesbury	Electronic communications security	8.48
Spirax-Sarco Engineering	Cheltenham	Steam systems and engineering	8.02
Kohler	Cheltenham	Bathroom design and manufacture	6.23
TRL Technology	Tewkesbury	Electronic communications security	5.68
Vero Software	Cheltenham	Advanced CADCAM softwarew solutions	3.14
Corin	Cirencester	Orthopaedic implants	2.97
Kraft Foods	Cheltenham	Cheese and dairy, chocolate, biscuits and coffee manufacture	2.17
Innovision Research & Technology	Cirencester	Integrated circuits	1.57
EMS Satcom	Tewkesbury	Electronic engineers	1.27
Satamatics Global	Tewkesbury	Telecommunications	1.09
Moog Controls	Tewkesbury	Design, manufacturer, and integrator of precision motion control products and systems	1.02
Mears Group plc	Berkeley	Social housing repairs and maintenance provider	0.79
SOUTH WEST TOTAL			979.6

Source: R & D Scoreboard, 2010, BIS

This corresponds to anecdotal reports on the market from local, regional and national agents, with enquiries for land and property slowing significantly, with the office market substantially weaker, and further analysis suggests that the apparent buoyancy of the 2009/10 figures may have been artificially inflated by tenants, landlords and agents undertaking research to renegotiate terms on existing leases.

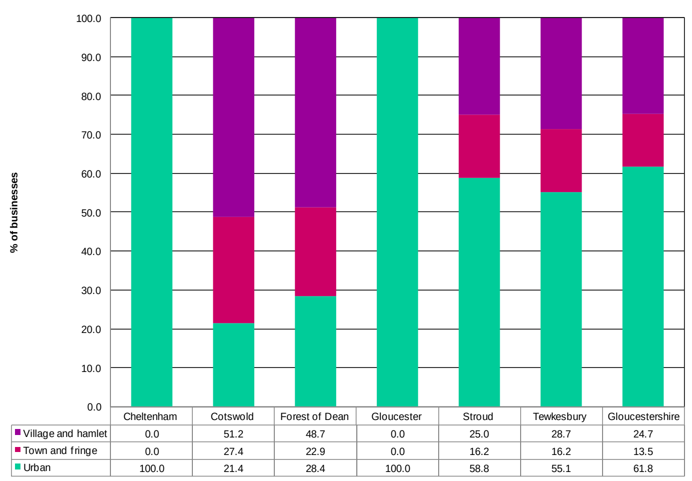
Enquiries from the rest of the UK, excluding Gloucestershire, rose by nearly 20% compared to the previous year, apparently bolstered by an increase in the use of social media networks to promote Gloucestershire's commercial sites and good news stories, driving traffic back to the Invest in Gloucestershire website.

New business start-ups accounted for 25% of enquiries in 2010-11, in real terms, a slight increase in number and a 6 percentage point increase from the previous year.

4.5 Rural and Urban Economy

The analysis of Gloucestershire's geography (see Chapter 2), showed that 78% of the County's total area falls within LSOAs[10] that are classified as Village, hamlet and isolated dwellings. In contrast only 20% of the County's population reside in LSOAs that fall into this category. Gloucestershire's Urban LSOAs accommodate the majority (67%) of the County's total population, while the remaining 13.1% of the population reside in LSOAs categorised as Town and fringe.

Figure 4.54: Location of Gloucestershire's businesses, 2008



Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

4.5.1 Businesses

Given the distribution of the population, it is not surprising that the majority of Gloucestershire's businesses (61%) are located in LSOAs that are classified as Urban. However, Figure 4.54 shows that rural areas (which includes LSOAs that are classified as Village, hamlet and isolated dwellings and Town and fringe) play a significant role in the County's economy, particularly in the rural districts of Cotswold and Forest of Dean, where the largest proportion of businesses are located in LSOAs that are classified as Village, hamlet and isolated dwellings.

Figure 4.55 shows that in rural and urban areas, the majority of business stock is made up of small businesses employing 10 or less people. However, large businesses are more common in urban LSOAs with businesses

10 Please see Definitions on page 34

employing 25 or more people accounting for 7.8% of total business stock in these areas. This compares to 3.9% of total business stock, in LSOAs that are classified as Village, hamlet and isolated dwellings.

The broad sectoral breakdown of businesses is illustrated in Figure 4.56, it shows that at a County level the business structure is largely similar in urban and rural areas. Urban parts of the County have a higher proportion of businesses in the Public administration, education and health and the Distribution, hotels and restaurants sectors. In contrast LSOAs classified as Village, hamlet and isolated dwellings have a higher proportion of businesses in the Agriculture and fishing, Energy and water and Transport and communication sector*.

Figure 4.57 shows that between 2004 and 2008, the total number of businesses, grew at a similar rate in Urban and rural areas. However, there were some differences in terms of sectors. LSOAs classified as Village, hamlet and isolated dwellings, experienced significantly higher growth in businesses involved in Agriculture and fishing, Energy and water and Transport and communication activities, than their Urban and Town and fringe counterparts.

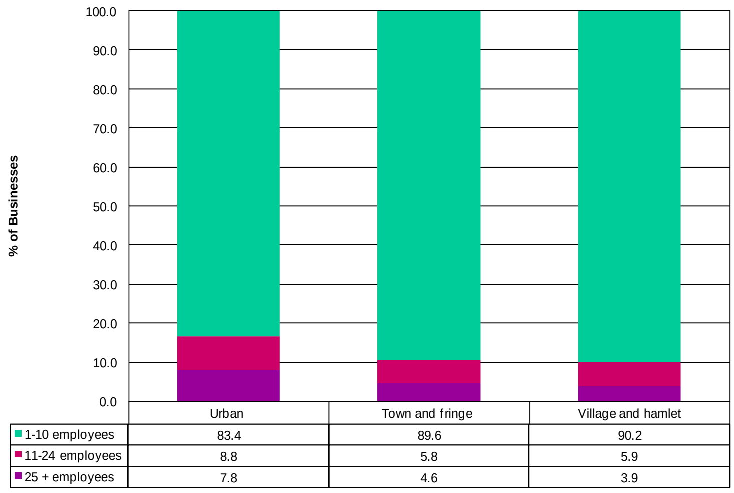
Conversely the decline in the number of manufacturing businesses was primarily located in urban areas, with Urban LSOAs experiencing a 8.4% decline in the number of manufacturing businesses, in comparison LSOAs classified as Town and fringe and Village, hamlet and isolated dwellings experienced smaller declines of 1.1% and 0.7% respectively.

In addition, the number of businesses in the Other services sector grew in Urban LSOAs, while declining in LSOAs classified as Town and fringe and Village, hamlet and isolated dwellings.

4.5.2 Employees

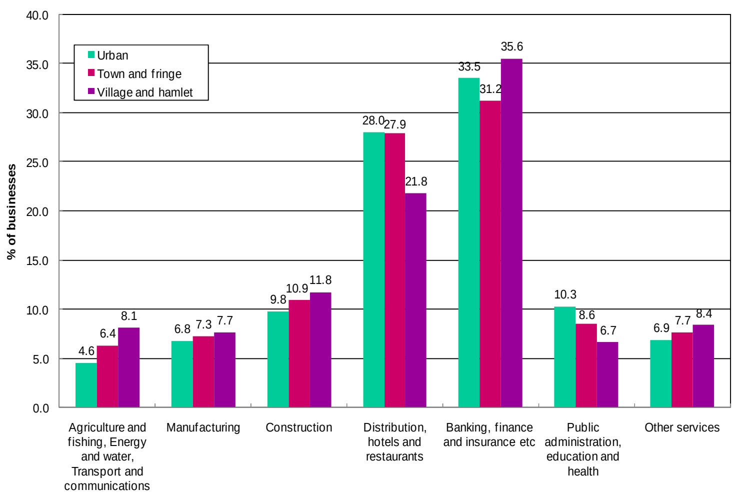
The distribution of Gloucestershire's employees, mirrors the distribution of businesses, with the majority of employees (74%) working in urban LSOAs. There are considerable differences between the districts, with Urban LSOAs accounting for around 30% of employment in the Cotswolds and Forest of Dean compared to around 70% of employment in Stroud and Tewkesbury.

Figure 4.55: Businesses by size and location , 2008



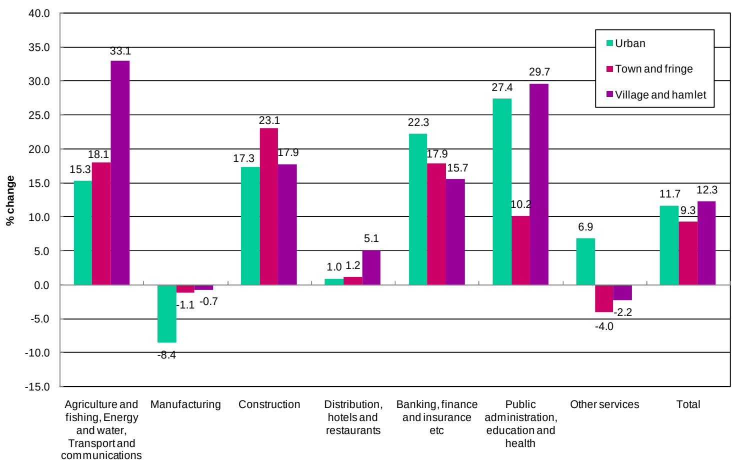
Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.56: Business by sector and location, 2008



Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.57: Change in businesses by sector and location, 2004-2008



Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

* These sectors have been aggregated due to disclosure issues. The number of businesses involved in agriculture may also be underrepresented due to limitations in the ABI data.

4.0 Business and Enterprise

The sectoral breakdown of employment is illustrated in Figure 4.59. It shows that in general terms, employment in rural and urban areas is largely similar.

The main differences reflect those observed in the business data, the combined sector of Agriculture and fishing, Energy and water and Transport and communications account for a larger proportion of employment in LSOAs classified as Village, hamlet and isolated dwellings, while the Public administration, education and health sector, accounts for a larger proportion of employment in Urban LSOAs.

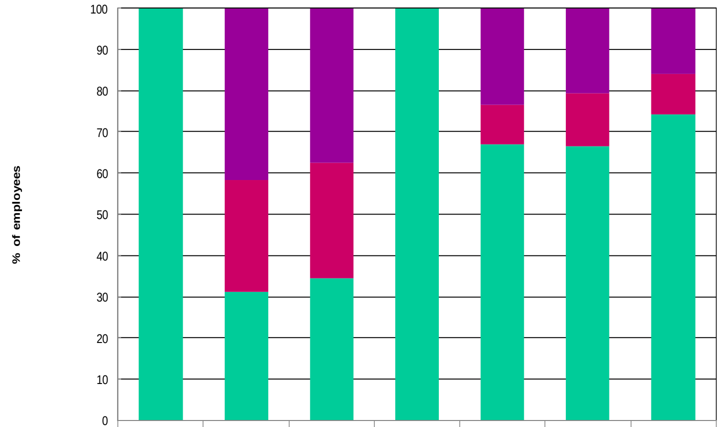
Unlike the business data, the employment data, shows LSOAs classified as Town and fringe have higher levels of employment in the Distribution, hotels and restaurants sector, while LSOAs classified as Village, hamlet and isolated dwellings have higher levels of employment in the Construction sector.

Fig 4.60 shows that between 2004 and 2008, there has been a clear shift in the location of employment, with the total number of employees growing in LSOAs classified as Village, hamlet and isolated dwellings, whilst declining in Town and fringe and Urban areas.

This shift was reflected at a sectoral level, with employment in LSOAs classified as Village, hamlet and isolated dwellings increasing in all sectors, with the exception of the Other services sector which declined by 10.7%. In contrast, Urban LSOAs saw employment decline across all sectors.

The urban rural shift in employment is interesting given that the business data showed businesses were growing at a similar rate in urban and rural areas. This suggests, the changes in employment may be a results of existing businesses, taking on or losing staff, rather than births and deaths of businesses.

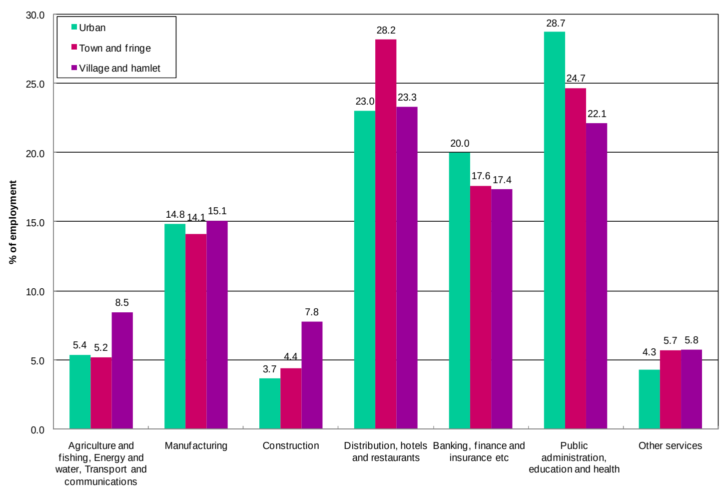
Figure 4.58: Location of Gloucestershire's employees, 2008



	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	Gloucestershire
Village and hamlet	0	41.7	37.6	0	23.3	20.6	16.0
Town and fringe	0	27.2	28.1	0	9.7	12.9	9.7
Urban	100	31.1	34.3	100	66.9	66.4	74.3

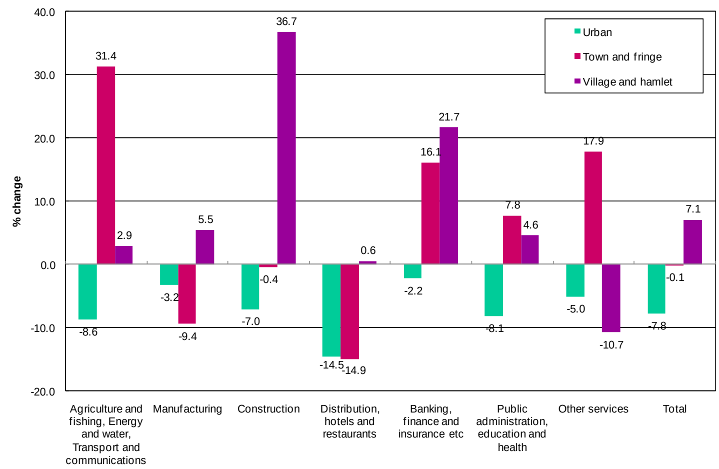
Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Figure: 4.59: Employment by sector and location



Source: Annual Business Inquiry, 2008, ONS Crown Copyright Reserved (Nomis)

Figure 4.60: Change in the number of employees by sector and location, 2004-2008



Source: Annual Business Inquiry, 2004-2008, ONS Crown Copyright Reserved (Nomis)

4.0 Business and Enterprise

Key points:

- **In 2008 the total number of employees in employment in Gloucestershire totalling 254,300 has decreased by 4.9% since 2004**
- **The Distribution, hotels and restaurants, Banking, finance and insurance and Manufacturing broad sectors account for some 57% of Gloucestershire's employees and represent a strong and diverse economy**
- **Just over 40% of the Knowledge intensive service sub sector comprises Other business activities, a diverse range of services provided by architects, accountants, lawyers, engineers, IT specialists, consultants, technical and Research and Development services etc that function through the sale of expertise and advice and/or information**
- **Employment in Gloucestershire is projected to increase by 2.8% or 8,500 jobs between 2009 and 2020**
- **Cheltenham and Gloucester share the majority of predicted employment growth**
- **Forest of Dean is the only district that is forecast to experience a decline in employment of the order 500 jobs**
- **Sectors projected to grow include Banking, Finance and Insurance and Tourism and to a lesser extent Care**
- **Decline is forecast for the Agriculture, Manufacturing and Public sectors**
- **Despite an overall projected decline in the Manufacturing sector, some Manufacturing sub sectors are forecast to grow, namely Publishing, printing, rubber and plastics, General manufacturing and Food and drink**
- **Gloucestershire's GVA in 2007 amounted to £11,500million, contributing 12% to regional GVA**
- **Gloucestershire's position in terms of GVA placed it fifth out of thirteen in terms of its statistical and adjoining neighbours**
- **Gloucestershire outstripped the regional and national year-on-year growth in GVA between 2001 and 2003 but declined at a faster rate from 2004 onwards**
- **The greatest contribution to Gloucestershire's economic output in 2007 was the Business Services and Finance sector accounting for almost a third of GVA**
- **In 2009/10 some 1,619 foreign companies invested in the UK, creating 53,358 jobs**
- **In 2010/11 Gloucestershire investment enquiries decreased by 17% since the previous year**
- **In 2008 there were 2,560 new businesses born and 2,115 business deaths providing a net 445 new businesses to the existing stock of 25,840 active businesses in Gloucestershire**
- **Almost 90% of businesses employ nine or less people**
- **Stroud, Cotswold and Cheltenham districts account for about a fifth each of the County's total number of businesses employing up to four people and Gloucester the lowest**
- **Apart from a slight increase in 2007, the overall trend for enterprise births has been one of decline with the County average dropping from 11.7% in 2004 to 8.6% in 2008**
- **The Forest of Dean showed the largest decline in terms of business births over the last five years**

4.0 Business and Enterprise

- **The overall picture for enterprise deaths is after initial decline with the County average dropping from 10.2% in 2004 to 8.2% in 2008 before rising steeply to 10% in 2009**
- **Gloucestershire with 94% of businesses surviving after one year was in tenth position and 50% surviving after five years in sixth position compares well with its thirteen statistical and adjoining neighbours**
- **Stroud and Tewkesbury districts experienced a better five year survival rate than the County average and Gloucester was below average**
- **Gloucestershire in a relatively good position in terms of enterprise births per 10,000 adults lying sixth out of fourteenth statistical and adjoining neighbours**
- **The strength of the small business sector in Gloucestershire has shown growth up until 2006-07 after which apart from Cotswold district all districts showed decline**
- **A number of Gloucestershire based companies contribute nearly a fifth of the South West's investment in Research and Development**
- **Some 78% of the County's area is classified as Village, hamlet and isolated dwellings representing 20% of the total population**
- **Within the rural area of the County, Cotswold and the Forest of Dean have the highest proportion of businesses**
- **Between 2004 and 2008 there was a clear shift in the location of employment with the total number of employees growing in LSOAs classified as Village and hamlet and isolated dwellings whilst declining in Town and fringe and Urban areas**

4.0 Business and Enterprise

Strengths	Weaknesses
• Manufacturing, Banking, financial and insurance services and Distribution including tourism sectors represent a diverse economic structure • Gloucestershire has a strong Manufacturing sector and is particularly strong in Advanced engineering • Presence of international and innovative companies • Relatively high productivity	• The total number of employees has been declining • Employment in Tourism and the Public Sector has declined in Gloucestershire, whilst increasing in the South West and Great Britain • Agriculture has declined at a faster rate in Gloucestershire, than in the South West and England
Opportunities	**Threats**
• Gloucestershire's population structure means the Care sector is likely to experience considerable growth • Significant growth opportunities within: Nuclear; High tech manufacturing; Environmental technologies and Creative industries • Private and voluntary sector replacing some Public sector activities • The transition to a low carbon economy may present considerable opportunities for business development within the Gloucestershire economy, particularly for the Manufacturing and Environmental technologies sectors	• The anticipated public sector cuts may result in substantial job losses within the sector and have knock on effects on other sectors • The Manufacturing sector has been declining, Gloucestershire's strength in this sector would make it particular vulnerable to further declines

4.0 Business and Enterprise

Definitions

1 The **Annual Business Inquiry** is an employer survey carried out on an annual basis. It is a workplace-based measure of the number of employees.

2 Gloucestershire's **statistical and adjoining neighbours** are based on the Chartered Institute of Public Financing and Accountancy (CIPFA) Nearest Neighbour model. They are: Cambridgeshire, Cheshire East, Cheshire West and Chester, Herefordshire, Monmouthshire, North Yorkshire, Oxfordshire, Shropshire, Somerset, South Gloucestershire, Swindon, Warwickshire, Wiltshire and Worcestershire.

3 **Standard Industrial Classification** 2003 (SIC) is a classification system used to provide consistent industrial breakdown, it describes some five hundred and fifteen industrial activities.

4 Industrial activity can be divided into nine **broad** sectors based on the (SIC 2003): They are:

1: Agriculture and fishing
2: Energy and water
3: Manufacturing
4: Construction
5: Distribution, hotels and restaurants
6: Transport and communications
7: Banking, finance and insurance, etc
8: Public administration, education & health
9: Other services

5 **Other business activities** include: Legal, accounting, book-keeping and auditing activities, tax consultancy, market research and public opinion polling, business management consultancy holdings; Architectural and engineering activities and related technical consultancy; Technical testing and analysis; Advertising; Labour recruitment and provision of personnel; Investigation and security activities; Industrial cleaning; Miscellaneous business activities not elsewhere classified.

6 **High-technology industries**

SIC Code Description

2441 : Manufacture of pharmaceutical products
2442 : Manufacture: pharmaceutical preparations
3001 : Manufacture of office machinery
3002 : Manufacture of computers etc
3210 : Manufacture of electronic valves etc
3220 : Manufacture of TV/radio transmitters etc
3230 : Manufacture of TV/radio receivers etc
3310 : Manufacture medical/surgical equipment etc
3320 : Manufacture instruments for measuring etc
3330 : Manufacture industrial process control equip.
3340 : Manufacture of optical instruments etc
3350 : Manufacture of watches and clocks
3530 : Manufacture of aircraft and spacecraft

Knowledge-intensive services

SIC Code Description

6420 : Telecommunications
6511 : Central banking
6512 : Other monetary intermediation
6521 : Financial leasing
6522 : Other credit granting
6523 : Other financial intermediation nec
6601 : Life insurance
6602 : Pension funding
6603 : Non-life insurance

6711 : Administration of financial markets
6712 : Security broking and fund management
6713 : Activities auxiliary to fin. intermediation nec
6720 : Activities auxiliary to insurance./pension funding
7210 : Hardware consultancy
7220 : Software consultancy and supply
7230 : Data processing
7240 : Data base activities
7250 : Maintenance/repair: office machinery etc
7260 : Other computer related activities
7310 : Research: natural sciences/engineering
7320 : Research: social sciences/humanities
7411 : Legal activities
7412 : Accounting/book-keeping activities etc
7413 : Market research/public opinion polling
7414 : Business/management consultancy activities
7415 : Management activities: holding companies
7420 : Architectural/engineering activities
7430 : Technical testing and analysis
7440 : Advertising
7481 : Photographic activities
8030 : Higher education
8511 : Hospital activities
9211 : Motion picture and video production
9220 : Radio and television activities
9231 : Artistic and literary creation etc

7 **Local Economic Forecasting Model** (LEFM)
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 as a simulation model rather than an accurate econometric representation of a local economy.

8 **Current basic prices** are the actual or estimated recorded monetary value over a defined period for a group of industries or products. Prices exclude taxes and subsidies on products.

9 **Business birth and closure rates** are the number of births/closures as a proportion of the number of active enterprises.

10 **Lower Super Output Area** (LSOA) A geographic hierarchy designed to improve the reporting of small area statistics in England and Wales. The areas are built from aggregating the Output Areas used in the 2001 Census of Population and the most common level used is the 'lower layer' Super Output Area (SOA) with a minimum size of 1,000 people and an average of 1,500. There are between 1 and 7 SOAs per local authority ward.

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Gloucestershire Local Economic Assessment: 2011

Chapter 5 Functional Economic Market Areas

5.0 Functional Economic Market Areas

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5.1 What are Functional Economic Market Areas (FEMAs)?

The geography of economic activity is increasingly complicated. People often live, work and undertake leisure activities in different administrative areas and links for business and people can be truly global. There is a strong argument that economic analysis is best undertaken at the spatial level at which the market operates. This can support better policy making, by allowing consideration of the full costs and benefits of policies and ensuring that wider barriers and opportunities are considered. It can also help to reduce co-ordination failures and ensure that policies support wider interests.

Understanding FEMAs helps to understand the roles of different places and can provide a common evidence base and shared understanding of the nature, extent and distribution of economic activity.

There is no universally agreed approach to defining FEMAs and no definitive map of FEMAs. They vary in size and boundary, depending on the issue under consideration (e.g. labour market, retail catchments) and the criteria used to define them.

Department for Communities and Local Government (CLG) defined FEMAs as, "*the area over which the local economy and its key markets operate*" . The LEA guidance also states that, "*functional economic market areas are spatial areas that can be mapped by a combination of the key indicators of economic activity and across areas".* FEMAs reflect the real world in which the economy operates, extending beyond the administrative area level (districts, unitary authorities, county or regional boundaries) at which economic development policy is generally made relatively recent (*SQW consulting, 2010).*

5.2 Approaches to assessing Functional Economic Market Areas

The table below presents a list of themes that can be used to identify FEMAs. A number of these have been applied to Gloucestershire and illustrate a relatively simple picture in the context of the region and at County level. However, more refinement in terms of a supply chain detail and workforce movements would provide a much more enlightened appreciation of the dynamics of the Gloucestershire economy. Frustratingly, this data is not easy to obtain and therefore that facet of the analysis will be missing in this work.

Table 5.1: FEMA analysis themes in previous research

Theme
Travel to Work Areas (TTWAs) - usually defined as at least 75% of the economic active residents working in the area and at least 75% of the people working in the area also living in the area
Self-containment – the proportion of people living and working in the same area
Housing Market Areas (HMAs) – often defined as containing 70% of local housing moves
Supply chains/ industrial structure – e.g. market and supply links of businesses and business services
Service markets – the spatial area of users of goods and services (including higher order goods and services such as museums)
Administrative areas – they are not always defined by political boundaries and have been established to respond to issues of interest to FEMA analysis e.g. regeneration areas
Historical relationships
Retail markets
Transport catchment areas.
Source: Functional Economic Market Areas and Economic Linkages in the South West, 2010, SQW Consulting

5.3 Increasing complexity of economic activity

Implicit within the CLG guidance on Local Economic Assessments and regional strategies is a recognition that the geography of economic activity is increasingly complicated:

- people often live in one administrative area, work in a second, and they may travel to a third to do their weekly shopping or go to the cinema
- at the same time, there is a distinctive functional geography which exists *within* administrative boundaries: smaller town centres or market towns have their own catchments, while highly localised patterns of service provision may be important for the well-being of individual neighbourhoods
- for the business community, functional geographies can be genuinely global; flows of knowledge and capital typically pay scant regard to international boundaries, let alone those associated with local government
- looking to the future, there are many examples of planned housing growth sited in one administrative area while the employment growth – which the new housing is intended to service – is substantively located in another.

5.4 Functional economic zones

The Regional Economic Strategy (*South West Regional Development Agency, 2006*) identified seven overlapping functional economic zones in the South West which each display consistent economic and social functions. The zones are depicted in Figure 5.1. The boundaries of the zones overlap and are not intended to be fixed. The seven functional zones are:

- North East Triangle – this is the largest and most powerful of the zones, containing three sub-zones: West of England; Swindon and the adjacent M4 corridor; and Gloucester, Cheltenham and the adjacent M5 corridor
- A303 Corridor – the least coherent zone defined by the road link and including the towns of Salisbury and Yeovil
- South East Coastal – centred around the prosperous Bournemouth-Poole-Christchurch conurbation but also including less affluent rural Dorset
- M5 Corridor – a bridging zone between the North East Triangle in the more prosperous north and the zones in the less affluent south. It includes Exeter, Weston-super-Mare and Taunton
- South Central – containing the key settlements of Exeter, Plymouth and Torbay, the southern part of the zone has performed relatively slowly and parts of the zone are remote
- North Peninsula – a predominantly rural zone with no major urban centres
- Western Peninsula – the most peripheral of the zones, containing three major towns (Truro, Falmouth-Penryn and Camborne-Pool-Redruth), smaller local centres and rural areas.

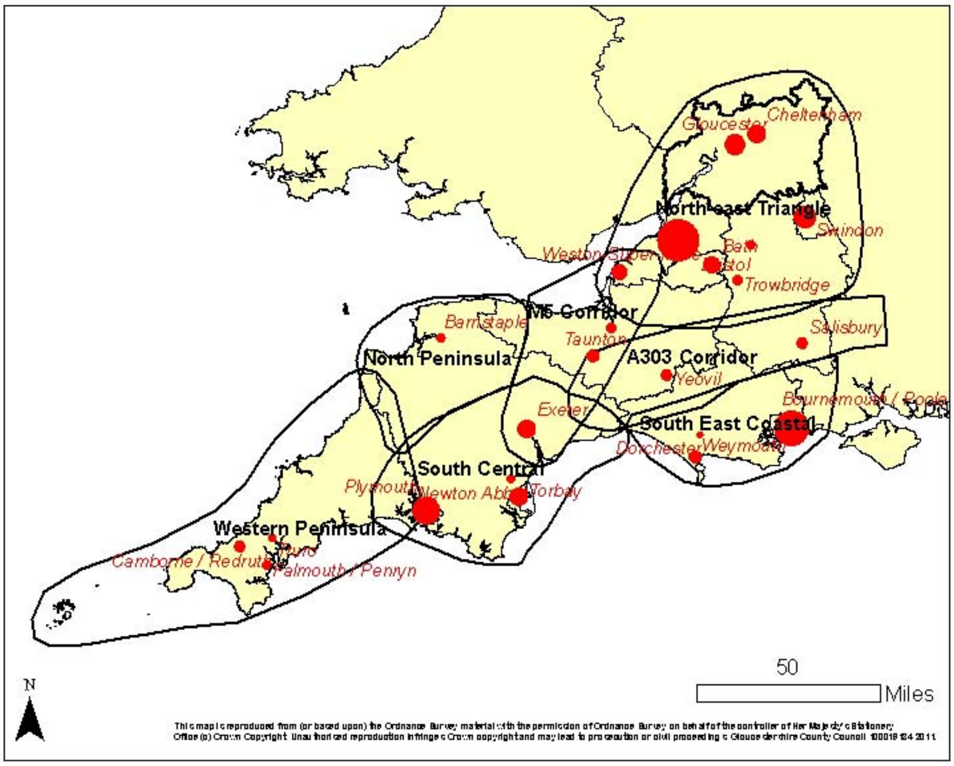
The Strategically Significant Cities and Towns (SSSTs) identified in the draft Regional Spatial Strategy (*South West Regional Assembly, 2006*) for the South West as sites of development and growth are also shown in Figure 5.1.

Figure 5.2 shows the North East Triangle in more detail, it is the largest zone in the region and contains 44% of the population. It also has a relatively young population. It is the most prosperous, economically diverse and accessible zone with a high proportion of large companies compared to the other zones, a strong small business sector served by a skilled workforce that has grown in recent years.

Strong links to Wales, the West Midlands, London and the South East are represented by the dashed line around much of its border as well as the M5 corridor and A303 Corridor zones.

Gloucestershire is very well placed within the North East Triangle dominating the northern half of the zone, and containing two SSCTs.

Figure 5.1: Functional economic zones in the South West



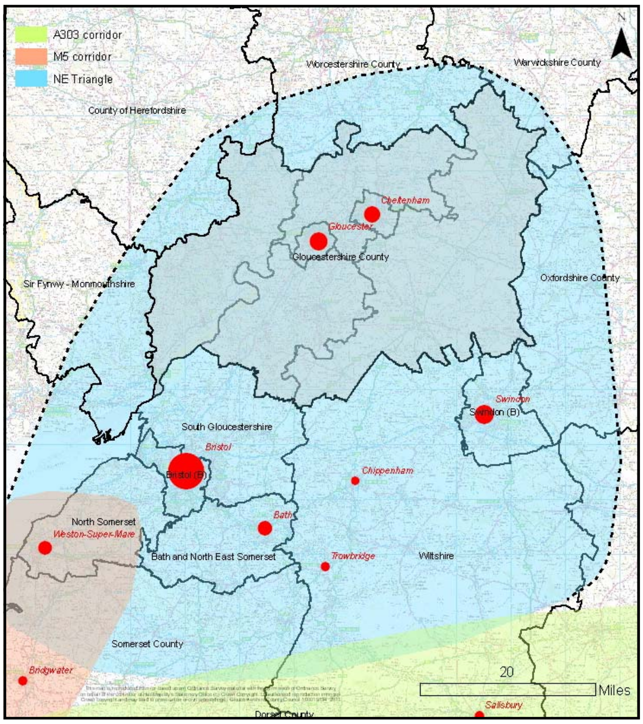
Source: Regional Economic Strategy for South West England 2006-2015, 2006,South West Regional Development Agency

5.5 Housing Market Areas (HMAs)

In 2010 CLG published work undertaken by the *(now defunct)* National Housing & Planning Advisory Unit (NHPAU), which sought to define a suite of new Housing Market Areas across the UK and based on a theoretically robust and consistent national methodology, with the purpose of supporting equitable comparisons of housing market condition. The research drew together evidence on community patterns, migration and housing price patterns and defined multiple 'tiers' of HMAs. At the local level, four single-tier HMAs have been identified over the administrative area of Gloucestershire:

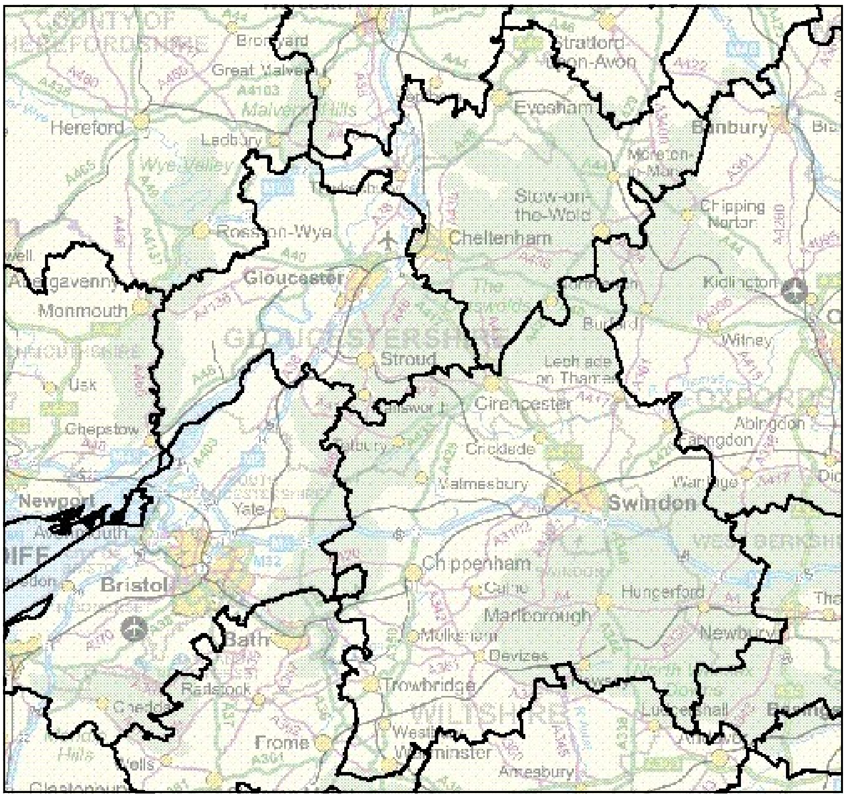
- **Gloucester -** Gloucester City, parts of Tewkesbury, most of Stroud and Forest of Dean
- **Cheltenham -** Cheltenham Borough, parts of Tewkesbury, and parts of central and northern Cotswold
- **Swindon-Cotswold-Downland -** southern Cotswold and a very small area of south eastern Stroud (the wider HMA covers Swindon, central and northern Wiltshire, and small parts of West Berkshire and West Oxfordshire)
- **Bristol -** South western Stroud (the wider HMA primarily covers the area known as the West-of-England partnership (Greater Bristol)).

Figure 5.2: Functional economic zones in the South West - North East Triangle



Source: Regional Economic Strategy for South West England 2006-2015, 2006 South West Regional Development Agency

Figure 5.3: Gloucestershire Single-Tier Housing Market Areas



Source: http://www.ncl.ac.uk/curds/assets/documents/6.pdf

Current housing evidence review work to support Gloucestershire's district Local Development Plans (LDFs) is based upon the new single-tier HMAs. This revised approach is in step with advice set out in CLGs economic guidance note on defining Functional Economic Market Areas (FEMAs).

5.6 Retail Catchment Areas

Retail catchment areas for Gloucestershire are depicted in Figures 5.4 and 5.5. They are classified according to the Acxiom system outlined in Table 5.2.

The 'score' indicates how attractive a retail centre is in terms of number and quality of retail outlets. A centre with a large number of retailers and high numbers of quality retailers will have a big attraction and therefore a higher score.

Table 5.2: Acxiom retail centre classification

Location Grade	Score Range
Major City	280+
Major Regional	200-279
Regional	130-199
Sub-Regional	95-129
Major District	65-94
District	40-64
Minor District	25-39
Local	10-24

Source: Acxiom 2010

5.6.1 Higher Order Retail Catchments

Looking at the higher order retail catchment areas it is evident from Figure 5.4 that Gloucestershire is home to a Major regional centre, namely, Cheltenham and a Regional centre, Gloucester. These extensive catchment areas overlap across the middle of the County and extend across its northern boundary.

The M5 and M50 have presumably influenced the range of the Gloucestershire catchment areas which are separated by areas of relatively low population density from the adjacent Bristol, Bath and Swindon catchment areas.

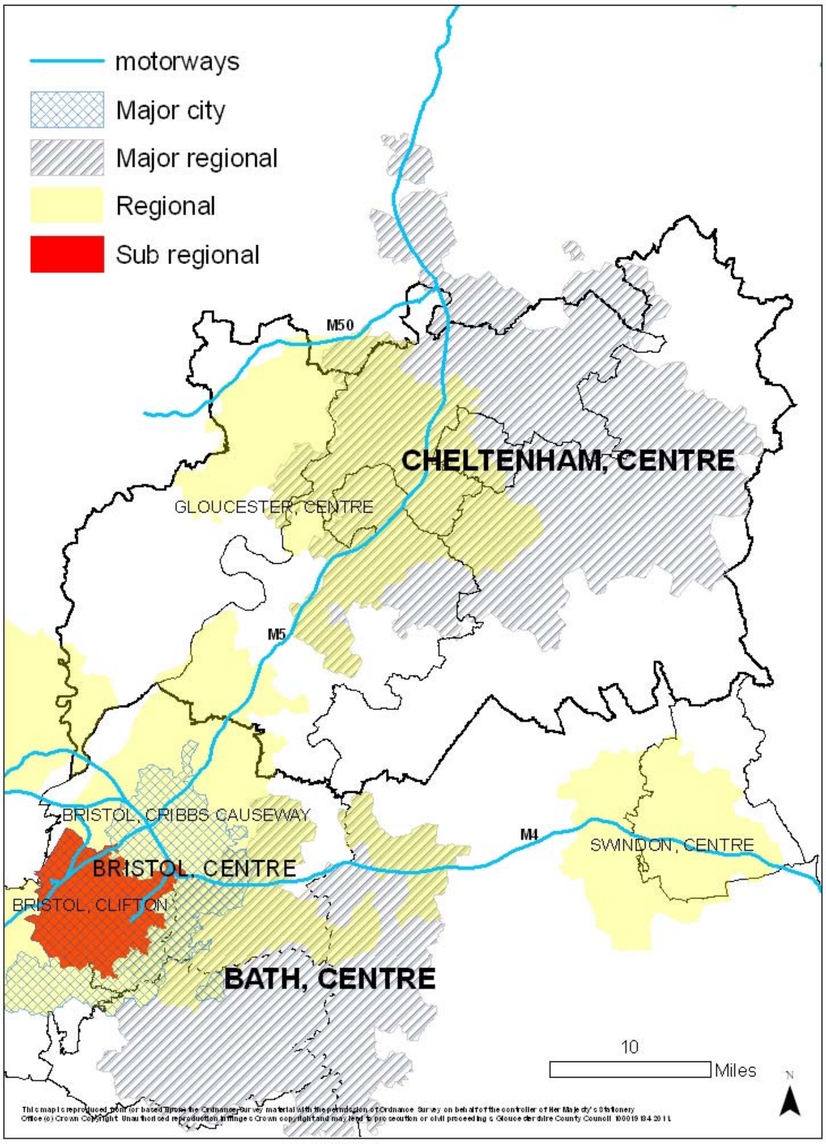
However, the location of Gloucester and Cheltenham on the motorway network means that they compete with numerous other centres including Worcester to the north and Bristol City Centre and The Mall at Cribbs Causeway in the south whose catchment area does extend into the southern part of Gloucestershire as shown in Figure 5.4.

Gloucester Centre
Gloucester has a relatively compact central shopping area with retail provision focused around The Cross and the four 'gate' streets leading from it. With a drive-time of around 20 minutes, Cheltenham is Gloucester's nearest competitor.

In May 2009, Gloucester Quays Designer Outlet Centre opened at Bakers Quay, closely linked to Gloucester City Centre. The development includes factory outlet shopping, a large supermarket, a hotel, bars, restaurants and waterfront apartments. A multi-million pound development of Kings Square in Gloucester city centre is planned and strong retail interest has been shown by a number of High Street stores.

Cheltenham Centre
Despite the close proximity to Gloucester, Regency Cheltenham benefits from high visual amenity and is highly regarded for its retail and leisure provision, with many quality independent stores catering for the upper end of the market. Other town centre uses are also renowned in Cheltenham, including its restaurant provision which includes 'Le Champignon Sauvage', a Michelin two star restaurant.

Figure 5.4: The higher order retail catchment areas relating to Gloucestershire

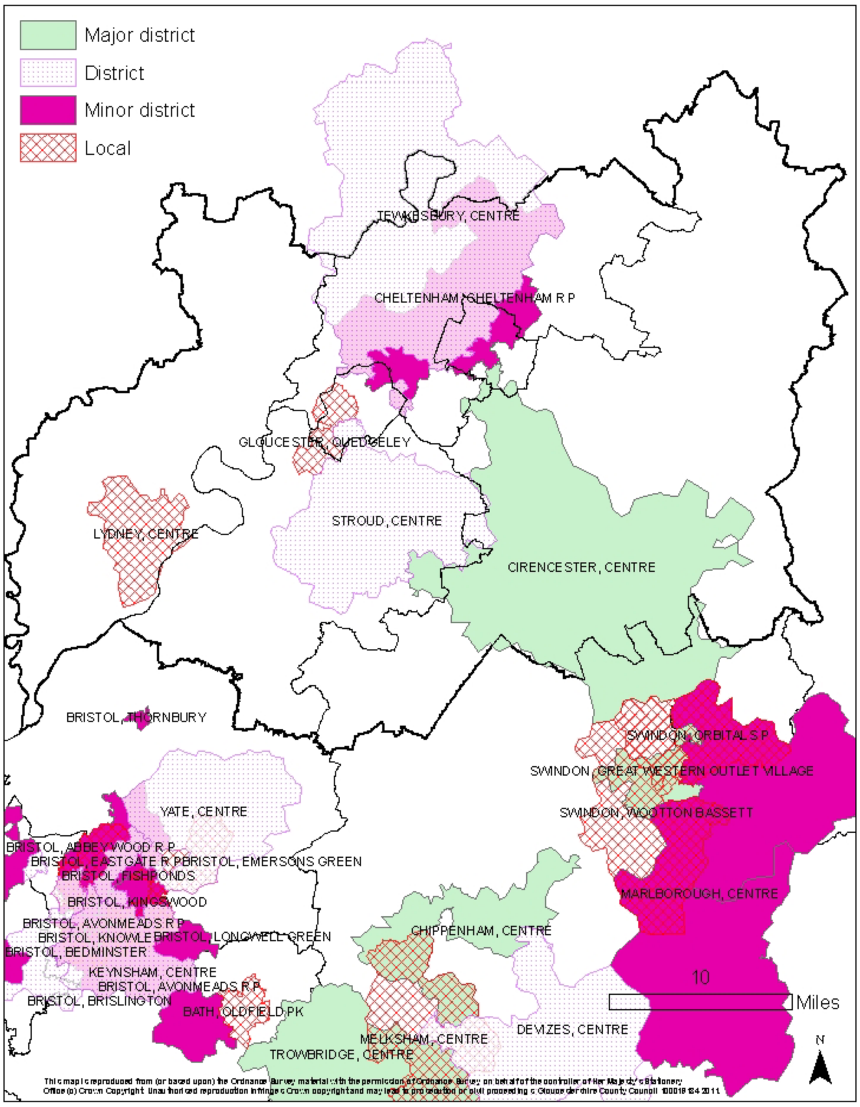


Source: The Spatial Economic Analysis Tool, 2010,SQW consulting and Acxiom,

5.6.2 Lower Order Retail Catchments

The lower order catchment areas are depicted in Figure 5.5, and again Gloucestershire is well represented by the Major district area of Cirencester and the Districts of Stroud, Cheltenham and Tewkesbury the latter of which extends northwards outside the County. There is little overlap between the areas apart from the Tewkesbury and Cheltenham catchments.

Figure 5.5: The lower order retail catchment areas relating to Gloucestershire



Source: The Spatial Economic Analysis Tool, 2010,SQW consulting and Acxiom,

5.7 Multivariate Analysis

The results produced from a multi-variate analysis undertaken by SQW Consulting (*SQW Consulting 2010*) are shown in Figures 5.6 And 5.7.

Multivariate analysis is a process of distilling a large number of variables into a much smaller set of 'summary variables'. This process reveals the main underlying relationships and patterns contained in a much larger dataset. The technique used in this instance was 'cluster analysis' - a grouping of data units with the greatest similarities together.

This method provides robust way of grouping the Lower Super Output Areas (LSOAs) (There are 367 LSOAs in Gloucestershire) according to the strongest features they have in common. The analysis therefore provides an incisive geographical summary of the socio-economic characteristics of the County.

Seven clusters based on 34 variables were identified. A description of each cluster was produced based on variables most strongly defining a cluster.

The seven clusters that emerge from this analysis can be divided into four primarily urban clusters and three rural and suburban clusters.

Four primarily urban clusters:

1. (Badly housed mixed neighbourhoods)
These areas are characterised by poor housing, ethnic diversity, higher proportions of students and high population density. They form parts of the centres of most cities and larger towns

2. (Deprived, poor neighbourhoods)
These areas are characterised by low incomes, skills and educational attainment, single parent households and high claimant rates. These are also found in most cities and large towns, but are not confined to the centre of settlements.

3. (Low skill working neighbourhoods)
These areas are characterised by public sector housing, low skills, and routine and semi-routine occupations. These are also found in most cities and larger towns, and also in some more rural locations.

4. (Middle-aged, diverse neighbourhoods)
These areas are characterised by relatively high proportions of middle aged people, ethnic minorities, high car ownership and high population density. Again these are mainly urban neighbourhoods, but also appear on the outskirts of some cities and towns.

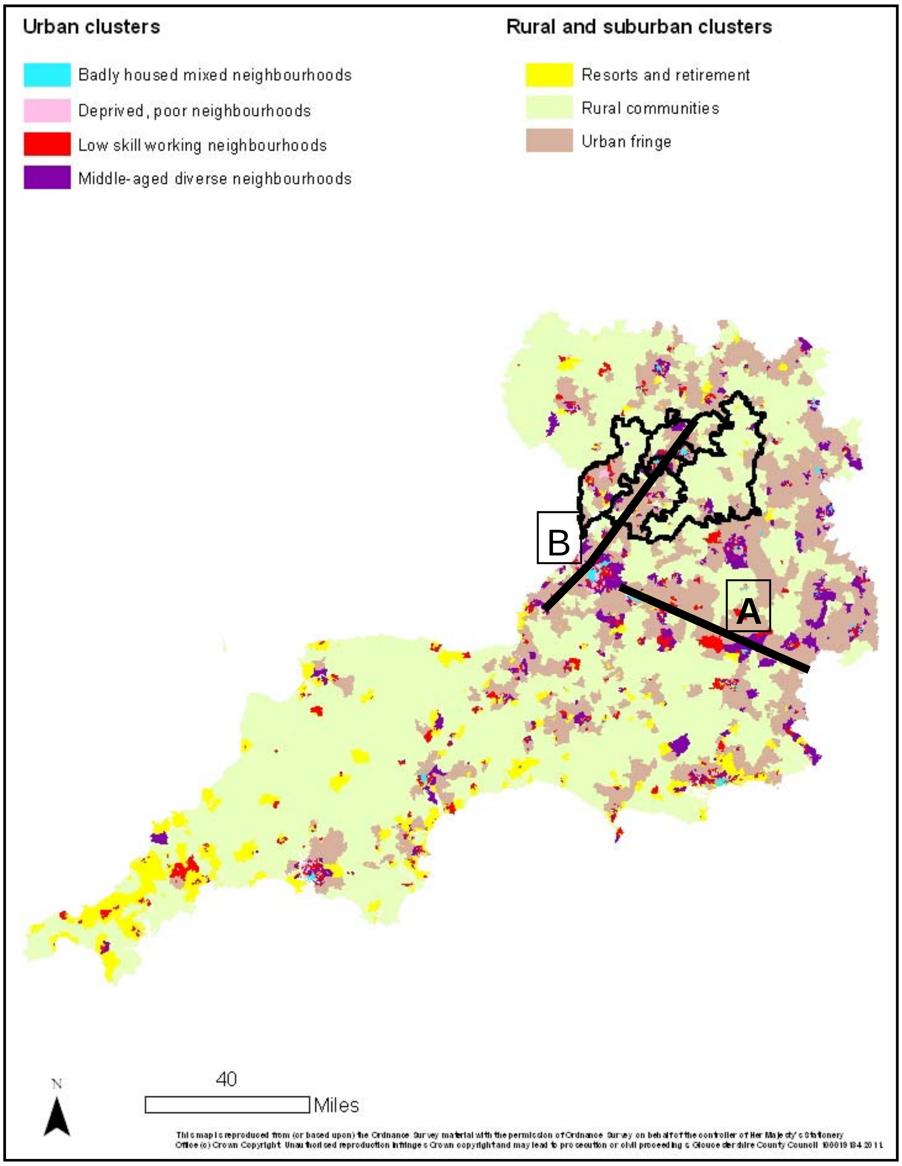
Three rural and suburban clusters:

5. (Resorts & retirement)
These areas are characterised by a high proportion of public sector employment, second homes, and residents of retirement age. There are also higher proportions of houses in multiple occupation. There is a strong coastal distribution of these areas, though they also appear in attractive, rural inland areas.

6. (Rural communities)
These areas are characterised by high proportions of employment in agriculture and fishing, poor access to services, small businesses (both size and turnover), home-working and high car ownership and longer distance commuting. They make up the 'rest of' the countryside which is not commuter belt or a resort or retirement area.

7. (Urban fringe)
These areas are characterised by high car ownership, well-qualified residents and also by prevalence of small businesses. They clearly define the areas of attractive countryside close to cities and larger towns which are the locations of choice for commuters.

Figure 5.6: Cluster map of the South West



Source: The Spatial Economic Analysis Tool, 2010, SQW consulting.

5.7.1 Regional characteristics

Figure 5.6 illustrates the distinct characteristics of the South West region which emerge from the multivariate analysis. The south western half of the region is clearly dominated by rural communities with a fringe of resorts and retirement patterns along the coast while the north eastern half of the region where Gloucestershire is located, features more of the larger towns and commuter belt and better infrastructure. There is belt of urban fringe which tracks south eastward from Bristol through Bath, Trowbridge, Devizes and Andover and a distinct southwest to north east arrangement that identifies with the route of the M5 as shown by lines (A) and (B) respectively in Figure 5.6.

5.7.2 Gloucestershire characteristics

Figure 5.7 depicts four main features in Gloucestershire. To begin with, it is a predominantly rural County with associated pockets of retirement areas and attractive rural settlements (1).

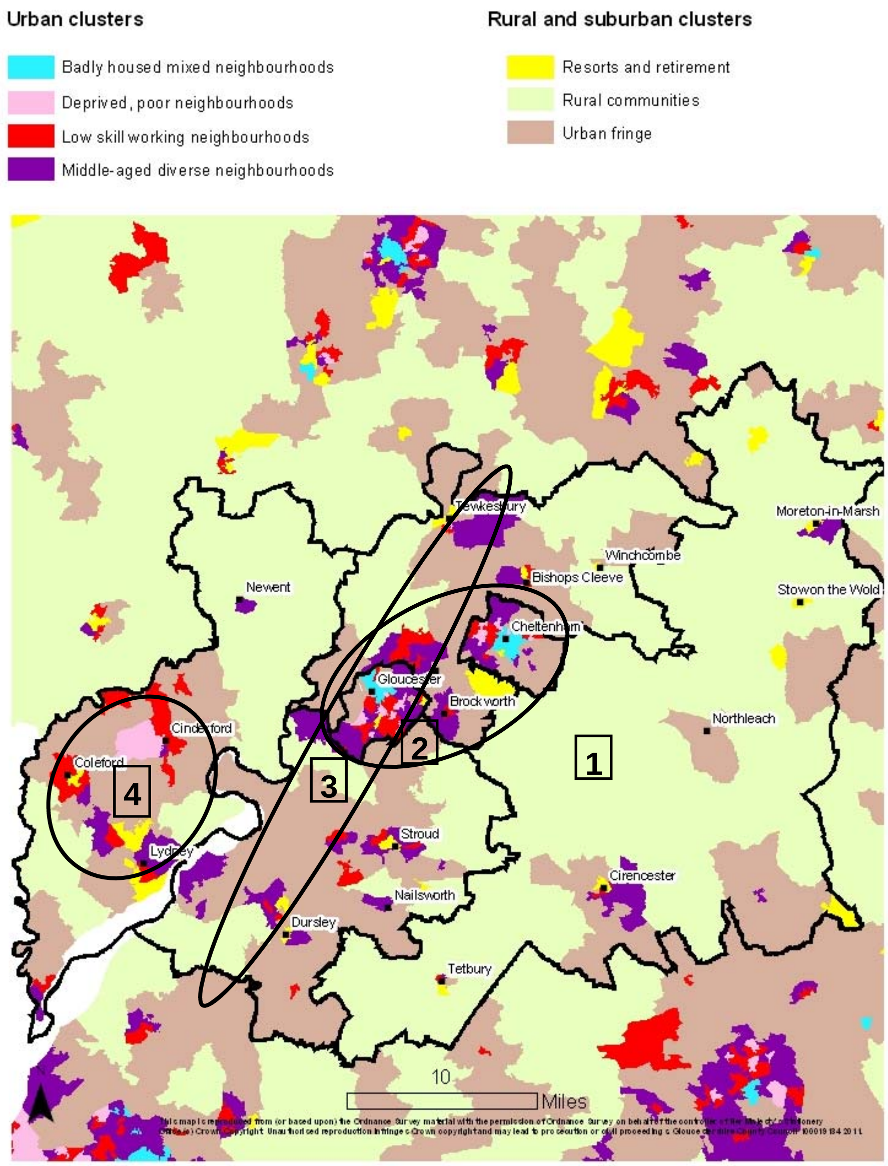
There are two urban clusters, namely Gloucester and Cheltenham with the associated inner city characteristics of deprived and low skilled neighbourhoods (2).

There is the distinctive north east south west commuter belt following the path of the M5 which lies in the Severn Vale (3).

Finally, an area identified in the west of the County with deprived and low skill neighbourhoods alongside commuter belt and retirement and resort clusters (4).

This characteristic may be the result of the effects of the decline of traditional manufacturing and mining activities in the area and consequent need to commute out to work mixed with the attractiveness of the area to tourism and retirees.

Figure 5.7: Cluster map of Gloucestershire



Source: The Spatial Economic Analysis Tool, 2010, SQW consulting

5.8 Gloucestershire FEMA

The various themes addressed in this chapter have all indicated that the County is itself a FEMA with two thriving urban centres that despite their close proximity to each other have developed their own unique characteristics as described in Chapter 2.

In terms of commuting, Gloucestershire has been influenced by the presence of the M5 and a number of major road connections enabling easy access to work, amenities and leisure which is reflected in its associated commuter belt that extends beyond the County boundary. However, Gloucestershire, is self-contained in terms of travel to work with some 88% of the working resident population living and working in the County (see Chapter 3 section 3.5).

Local Enterprise Partnerships (LEPs)

Following the 2010 General Election, the Government announced the creation of LEPs to replace Regional Development Agencies (RDAs). Through a combination of strong business leadership with local authorities whose planning, regulatory and public realm roles are critical to growth, LEPs are intended to be able to bring an integrated approach across real economic geographies providing a way forward in fostering a strong environment for business growth.

LEPs are based on functional economic areas and to date there are thirty eight areas including Gloucestershire that have fulfilled the real economic and travel to work criteria to become a LEP as shown in Figure 5.8.

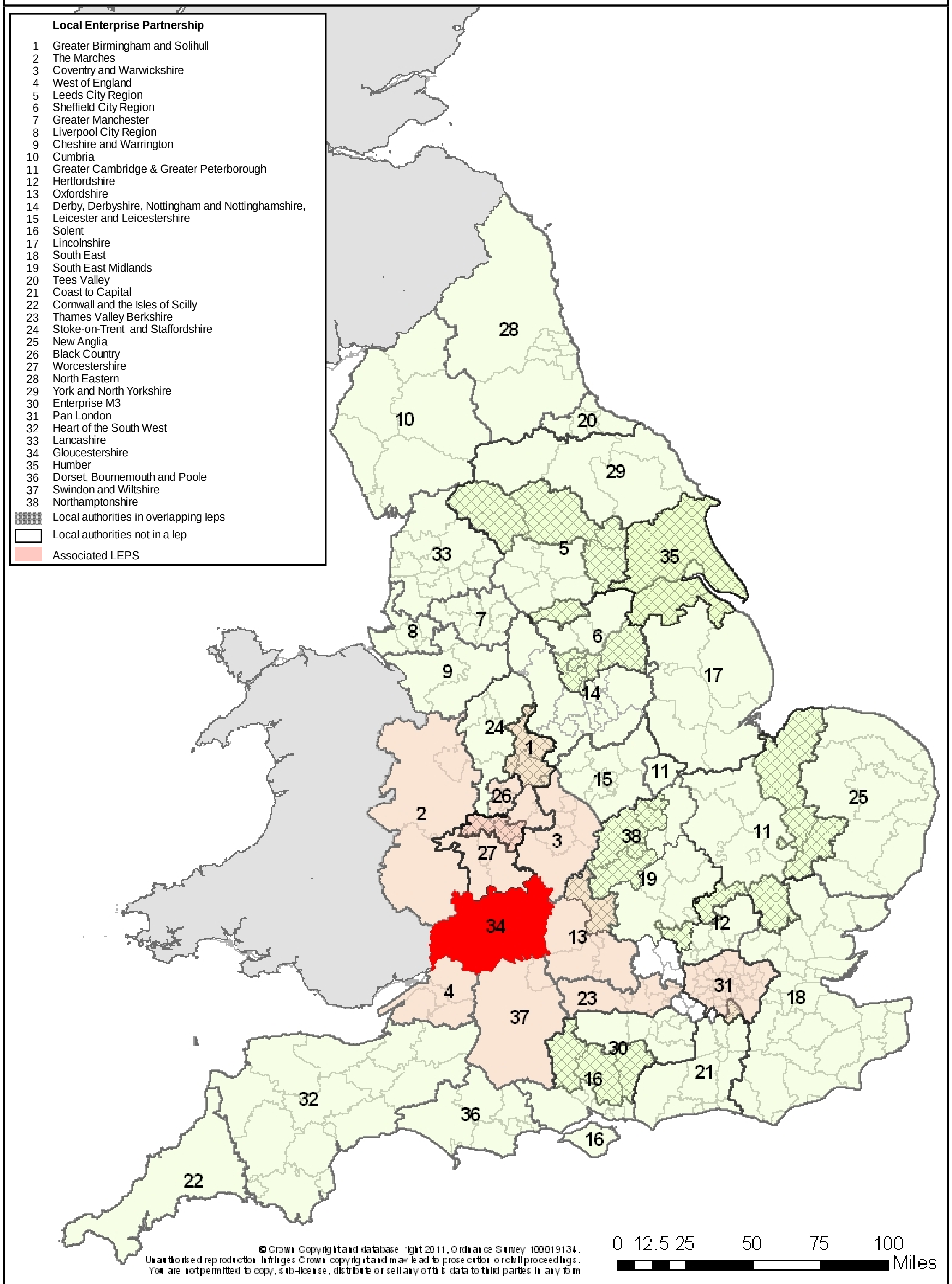
Links with other LEPs

In Gloucestershire the strategic transport corridors, the M5 and the M4 along with the sector activities; advanced engineering, finance and business services, defence, tourism, food and drink and rural issues has created the opportunity for developing existing and building new links with other LEPs that are sited in the West Midlands and

Birmingham to the north, Bristol to the south and the Thames valley and London and the South East. These associated LEPs are highlighted in Figure 5.8.

In order to appreciate the relationship between small and larger scale economies along with their possible associated links, a better understanding of industry supply chains, industrial sector balance, labour force movements, housing and infrastructure will be required.

Figure 5.8: Gloucestershire and associated Local Economic Partnerships



Source: Gloucestershire County Council Research Team (Economics Section)

5.0 Functional Economic Market Areas

Key Points

- Department for Communities and Local Government (CLG) Local Economic Assessment guidance states that, "*functional economic market areas are spatial areas that can be mapped by a combination of the key indicators of economic activity and across areas".*

- The Regional Economic Strategy identified seven overlapping functional economic zones in the South West which each display consistent economic and social functions. North East Triangle is the largest and most powerful of the zones, containing three sub-zones: West of England; Swindon and the adjacent M4 corridor; and Gloucester, Cheltenham and the adjacent M5 corridor

- Four single-tier Housing Market Areas (HMAs) have been identified over the administrative area of Gloucestershire

- Gloucestershire is home to a Major regional centre namely Cheltenham and a Regional centre, Gloucester. These extensive catchment areas not unsurprisingly, extend across much of the County and also beyond the northern boundary

- The location of Gloucester and Cheltenham on the motorway network means that they compete with numerous other centres including Worcester to the north and Bristol City Centre and The Mall at Cribbs Causeway in the south whose catchment area does extend into the southern part of Gloucestershire

- Gloucestershire can be described in terms of four characteristics based on a multivariate analysis of the County. 1) A rural aspect with associated pockets of retirement areas and attractive rural settlements 2) two urban clusters, namely Cheltenham and Gloucestershire with the associated inner city deprivation and low skills neighbourhoods 3) The north east south west commuter belt following the path of the M5 and 4) an area in the west of the County associated with on the one hand deprivation and low skill neighbourhoods and on the other commuter belt and retirement and resort areas

- Gloucestershire is well represented by the lower order catchments; the Major district area of Cirencester and the Districts of Stroud, Cheltenham and Tewkesbury the latter of which extends northwards outside the County. There is little overlap between the areas apart from the Tewkesbury and Cheltenham catchments

- Gloucestershire is a functional economic market area with two thriving urban centres that despite the proximity to each other have developed their own unique characteristics

- Gloucestershire is one of thirty eight areas in England that fulfilled the economic and travel to work criteria to become a Local Enterprise Partnership (LEP)

- In Gloucestershire the strategic transport corridors, the M5 and the M4 along with the sector activities; advanced engineering, finance and business services, defence, tourism, food and drink and rural issues has created the opportunity for developing existing and building new links with other LEPs that are sited in the West Midlands and Birmingham to the north, Bristol to the south and the Thames valley and London and the South East

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Gloucestershire Local Economic Assessment: 2011

Chapter 6 Sustainable Economic Growth

6.0 Sustainable Economic Growth

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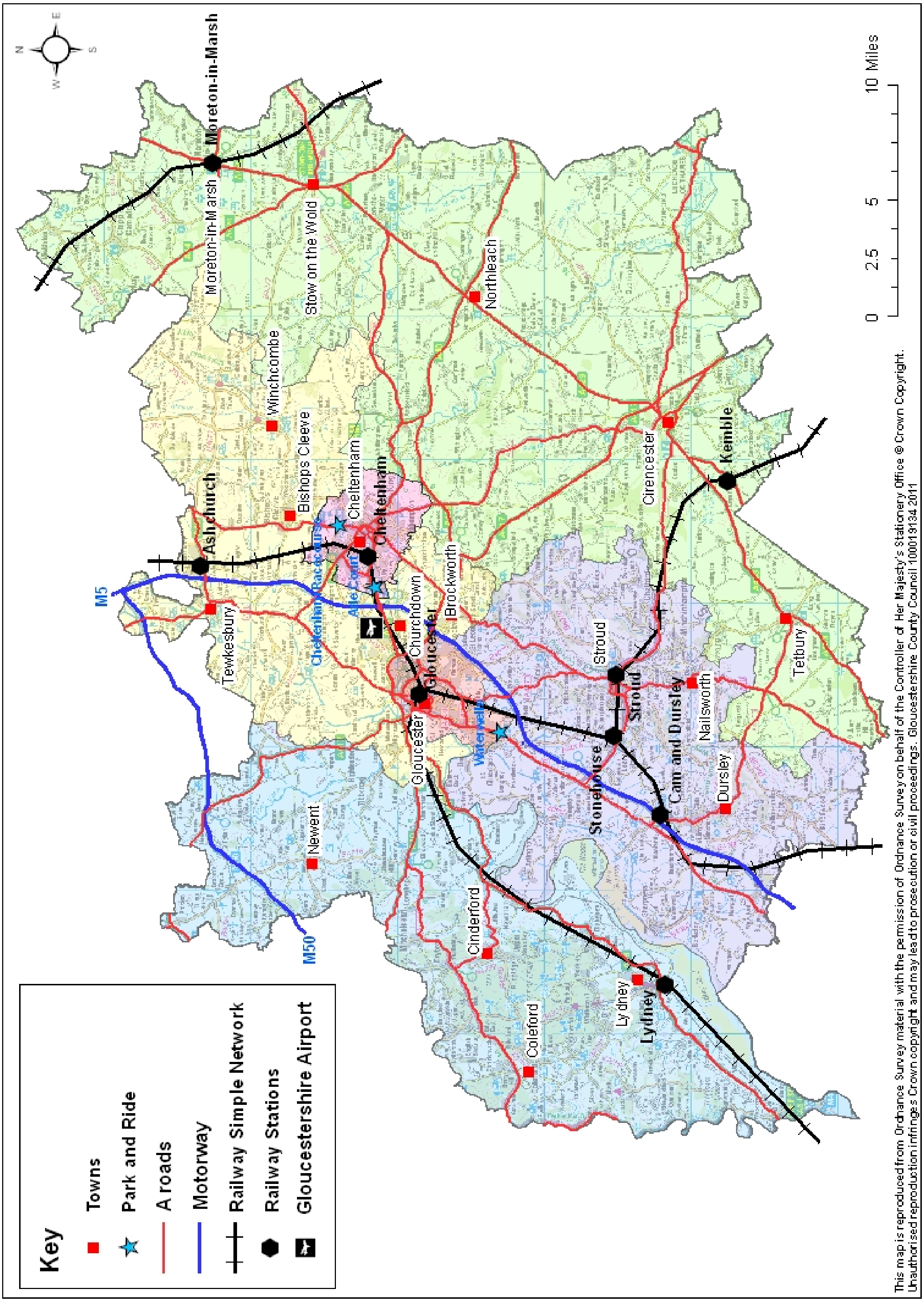
Figure 6.1: Transport Infrastructure in Gloucestershire



6.0 Sustainable Economic Growth

In considering Gloucestershire and the sustainability of its economy this chapter has concentrated on three main areas; Infrastructure, Environmental sustainability and Housing and Employment land.

6.1 Infrastructure

6.1.1 Transport Provision and Funding

The provision of an efficient transport infrastructure plus accessible transport services is extremely important to Gloucestershire, but a challenge, given the County's size and population distribution. This is a particular issue across the rural areas of the County which show a strong dependency on car transport.

Gloucestershire Local Transport Plan 2011-2026 *(Gloucestershire County Council, 2011a)*, known as LTP3 addresses the future provision of transport infrastructure and services. The LTP3 vision is "Providing a safe and sustainable transport network within Gloucestershire". This will be achieved by working towards the following main aims:

- A Greener Healthier Gloucestershire
- Delivering Sustainable Economic Growth
- A Safer Securer Transport System
- Good Access to Services

Finance for transport schemes comes from three main sources, the Department for Transport, Gloucestershire County Council (raised through Council Tax) and contributions from developers and other third parties.

Table 6.1: Funding allocated to Gloucestershire County Council by the Department for Transport, 2011-2015

	2011/2012 (£000s)	2012/2013 (£000s)	2013/2014* (£000s)	2014/2015* (£000s)
Maintenance	£15,459	£15,200	£14,974	£13,952
Integrated Transport	£3,414	£3,642	£3,642	£5,121
Total	£18,873	£18,842	£18,616	£19,073

Source: Local Transport Capital Block Funding, DfT, 2011
* allocations for 2013/14 and 2014/15 are indicative and subject to change

Money from the Department for Transport is allocated through three funds; The Local Transport Block Funding Allocation, Major Scheme Funding and the Local Sustainable Transport Fund.

The Local Transport Block Funding Allocation is used for transport schemes that cost under £5 million. It is split between the Integrated Transport block for schemes that improve the network and the Structural Maintenance block, for maintenance of the existing network. Table 6.1 shows Gloucestershire's Local Transport Block Funding Allocation between 2011 and 2015.

Major Scheme Funding is used for large scale transport schemes that cost more than £5 million. In order to gain funding from this source, projects need to progress through a bid process and meet regional and national priorities. Gloucestershire County Council has submitted a major scheme bid, seeking around £20 million in grant support to deliver a £23 million programme of substantial transport improvements on the eastern outskirts of Gloucester. This scheme is currently known as 'Elmbridge Transport' and is a planned package of individual transport infrastructure and service improvements including:

- A 1,000 space Park and Ride facility located next to the Elmbridge Court Business Park and accessed from the A40 Golden Valley Bypass
- The re-modelling of the A40 / A417 / B4063 Elmbridge Court Roundabout to provide improved capacity and safety benefits
- Provision of a frequent Express Bus Service linking Cheltenham and Gloucester via the Elmbridge Court Park and Ride site
- Provision of Bus Priority measures along the A40 Corridor into Cheltenham.

These measures would address increasing traffic levels, as a result of general long term economic growth and expected additional housing/employment development and the predicted increases in harmful emissions from traffic including nitrogen dioxide and carbon dioxide. The Department for Transport will confirm if funding is available for the scheme in December 2011. If approved, the scheme is planned to be completed by 2017.

The Local Sustainable Transport Fund is a match funded bidding pot used for sustainable transport projects that support the economy and help reduce CO2 emissions. The County bid to the Local Sustainable Transport Fund to support economic growth and reduce carbon emissions in Cheltenham and Gloucester through a package of measures designed to reduce traffic congestion by encouraging people travelling short distances to walk or cycle and also encouraging the use of electric vehicles and car clubs has been unsuccessful. However, the County has been invited to re-submit the Bid for Tranche 2 funding in February 2012.

Funding from all of these sources is likely to reduce over the coming years, which will affect future developments in Gloucestershire's transport infrastructure.

6.1.2 Road Network

Gloucestershire has a well-developed strategic road network as depicted in Figure 6.1 with high capacity inter-urban roads, particularly within the central Severn Vale. The dominant feature is the M5 motorway, which runs north-south through the County, providing good links to Birmingham and the North, Bristol and the South West and links to the M4 corridor to London and South Wales. This route is the busiest in Gloucestershire, carrying up to 90,000 vehicles a day. Other important routes to areas outside the County, include the A417/A419 linking the M5 at Gloucester to the M4 at Swindon, and the A46 connecting the M5 at Tewkesbury with the M40 at Warwick.

Within the County a network of A roads, link the urban centres of Cheltenham and Gloucester and market towns such as Cirencester, Stow on the Wold, Stroud, Coleford, Cinderford and Tewkesbury. These routes all show high levels of traffic flow and particular problem areas include the A417, A38, A40 and A48. Across rural areas a network of minor routes, provide connections between smaller settlements and the market towns, which act as local service providers. Between 2000 and 2006, Gloucestershire's average daily traffic flow increased by 6.1%. However, with the exception of the A40, A417 and A38 traffic flows on most routes have increased at a slower rate than this.

Recent improvements to the strategic road network have included the installation of traffic signal control at Junctions 9 and 12 on the M5 to alleviate congestion and improve safety at these junctions that provide access to Tewkesbury and Gloucester respectively. In the local network, the completion of the Gloucester Inner Ring Road with the opening of the St Ann Way bridge is the most recent major improvement, whilst the enhancement scheme to improve linkages between Gloucester Quays and the city centre was completed in Spring 2011.

Road Use and Congestion:
The results of a business survey (over 200 responses), carried out as part of a recent consultation exercise relating to the LTP3, showed that congestion was a key concern. 40% of these businesses felt that congestion had an impact on their business and 79% were concerned about increasing congestion in the future. Main congestion hotspots were cited as A417/Birdlip/Nettleton Bottom/Air Balloon, Tewkesbury road to M5, A40 west of the Severn and the town and city centres of Cheltenham and Gloucester. This issue may affect inward investment opportunities as well as the retention and efficient operation of existing resident businesses.

This concern was recognised by Gloucestershire Local Transport Plan 2011-26 (LTP3) which suggested the main issues related to the road network, were:

- Traffic congestion at peak times in the Central Severn Vale and on particular roads such as the A417 between the Cotswolds and Gloucester and A40 between Highnam and Over roundabouts
- Highway maintenance and resilience of the transport network, especially in winter.

In order to address these issues, LTP3 proposed a number of actions to improve roads and traffic flow, these include:

- Improvements to M5 Junction 10
- New Park and Ride sites to service Cheltenham and Gloucester - Shurdington and or/Brockworth, Uck-

ington (NW Cheltenham) and West of Severn, and expanded Park & Ride at Arle Court (Cheltenham) Cheltenham Racecourse, and Waterwells (Gloucester)

- Car Clubs in Gloucester and Cheltenham
- Address capacity, safety and air quality issues on the A417 between Gloucester and Cirencester
- Manage traffic demand on the A38/M5 corridor, given the projected growth in population in this area
- Identify means to reduce the level and impact of HGVs in Stroud District, in a way which is not detrimental to the local economy
- Undertake promotional activities to encourage use of walking and cycling facilities, linking to the Tewksbury 'Healthy Towns' demonstration project
- Various junction and signal improvements within Gloucester.

Freight Transport:
Efficient freight transport is essential for Gloucestershire. The industry enables businesses to obtain and distribute goods and products, and delivers food and domestic goods to residents. Within Gloucestershire the majority of freight is delivered by road.

Table 6.2 shows that in 2009, 7.8% of vehicles recorded on key rural routes within the County were goods vehicles[1], 1.2% of these were large goods vehicles[2]. The Cotswolds had the greatest proportion of goods vehicles, while the area with the greatest proportion of large goods vehicles was West of the Severn.

Although these figures are low, large goods vehicles can have a particularly negative effect on communities, that can be intensified by lorries using unsuitable routes. This concern led Gloucestershire Local Transport Plan 2006-2011 (*Gloucestershire County Council, 2006*) to set a target of reducing the percentage of large goods vehicles along these routes to less than 1% of all traffic.

This target has not yet been met. However, Figure 6.2 shows the number of large goods vehicles and total goods vehicles, declined at a faster rate at sites in Gloucestershire than nationally. This suggests that the actions Gloucestershire has been taking to address large goods vehicles have had some success.

The first edition of the Advisory Freight Route Map was published in 2005, since then it has undergone several revisions. Its purpose was to help hauliers plan the most appropriate routes to destinations within the County and when travelling through it. The map also illustrates the location of industrial and trading estates, lorry lay bys and roadside facilities. By encouraging drivers to use the routes identified, lorry operators are assisting in avoiding environmentally sensitive areas and conflicts with residents.

In addition to the Advisory Freight Route Map, a Lorry Management Zone is also being trialled in the County. The Cotswold Lorry Management Zone came into force in 2009, it covers an area bounded by the M5 to the west, the A429 to the east, the A40/ A436/A417 to the north and across Minchinhampton Common, running largely parallel with the A419 to the south.

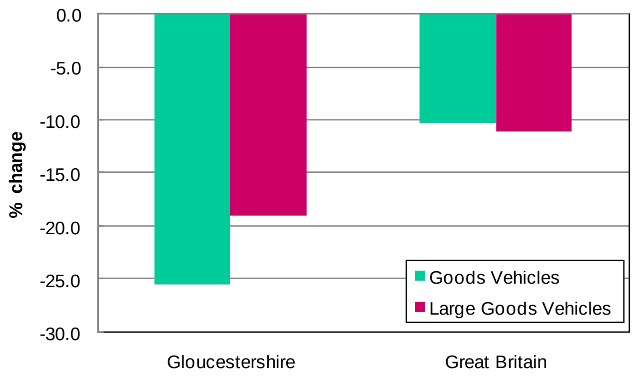
The purpose of the zone is to help reduce the environmental impacts of road freight movement in this area. It only allows access to the narrow lanes and villages of the Cotswolds if the origin or destination

Table 6.2: Goods vehicles recorded on key rural routes as a pro portion of all vehicles, 2009

	Goods Vehicles	Large Goods Vehicles
West of the Severn	7.9	1.6
Severn Vale	7.7	0.4
Costwolds	8.3	1.3
Gloucestershire	7.8	1.2

Source: County Lorry Monitoring Report 2007-2009, Gloucestershire Highways, 2007

Figure 6.2: Change in the number of goods vehicles recorded between 2007 and 2009, Gloucestershire and Great Britain



Source: County Lorry Monitoring Report 2007-2009, Gloucestershire Highways, 2007

1 & 2 Please see Definitions on Page 30

of the journey lies within the zone, other journeys should be routed around the zone. Therefore freight operators can continue to go about their role of supporting the local economy, through deliveries to shops, pubs, post offices, farms and businesses within the zone, while unnecessary journeys through the zone are prevented.

Coastal shipping plays a role in Gloucestershire. The County is home to Sharpness Docks, a commercial port situated on the River Severn between Gloucester and Bristol. The dock handles mainly bulk trade (aggregates, scrap metal and other bulk products) with routes to France, Spain and Portugal. Entrance to the port is restricted by tides and there is currently only road access to the port.

There are no dedicated rail freight terminals in Gloucestershire, consequently, all rail freight passes through the County. The Ministry of Defence do run trains to their base in Ashchurch, but this is not available for general use. However, there are proposals to reinstate rail access to Sharpness docks, should third party funding become available.

The current LTP3 suggests the key issues for freight transport in Gloucestershire are:

- The capacity of the highway network, especially A417 and M5 junctions 10, 11A and 12
- Whether the Cotswolds Lorry Management Zone (LMZ) should be continued and/or extended to other parts of the County and how to provide more appropriate lorry parking facilities
- Whether a freight consolidation centre be developed to serve Cheltenham and Gloucester, with smaller electric vehicles coming into the town and city centres
- The opportunities for Sharpness Docks and rail routes to play more of a role.

6.1.3 Rail and Bus Network

Rail

Having an efficient rail infrastructure, with good links to London and other major cities is essential for Gloucestershire. It influences the County's attractiveness as a location for business and as a destination for tourists, whilst also impacting on the movement of residents.

Table 6.3 shows that there are four train operators in Gloucestershire. These operators serve Gloucestershire's nine stations; Cheltenham, Gloucester, Moreton-in-Marsh, Lydney, Ashchurch, Cam & Dursley, Stroud, Stonehouse, and Kemble. Network Rail is not proposing any new rail stations at this stage.

The rail services that connect these stations with the rest of the country are summarised in Figure 6.3. While there are rail links between certain stations for example Cheltenham, Gloucester, Stroud, Stonehouse and Kemble, they are all situated on the London Paddington line. It is much more difficult to 'cross the County' by rail. For example to travel from Moreton-in-Marsh to Gloucester is not possible on one line.

The LTP3 identifies that with the exception of Ashchurch almost all station car parks are at or near capacity by 0900 in the morning. Unsurprisingly, Cheltenham and Gloucester stations are well served by taxis and bus services while the rural stations offer more limited facilities.

The LTP3 identifies the main issues about rail transport, and details actions to address these. Many of the policies in the LTP are countywide but others will have a specific local impact.

The headline issues include:

- Redoubling of the line between Kemble and Swindon to enable more frequent and reliable connections between Gloucester, Cheltenham and London
- Access to rail services in the Central Severn Vale area
- Capacity issues at Lydney Station

Table 6.3: Gloucestershire Train Operations, 2011

Operating Company	Service
First Great Western	• Cheltenham - Gloucester - Stroud - Swindon - London • Great Malvern - Worcester - Gloucester - Bristol and beyond • Worcester - Moreton- in- Marsh - Oxford - London
London Midland	• Gloucester - Worcester
Cross Country	•Penzance - Plymouth - Bristol - Cheltenham - Ashchurch (Tewkesbury) - Birmingham - Manchester /Newcastle and beyond • Cardiff - Gloucester - Cheltenham - Birmingham - Nottingham
Arrivia Trains Wales	• Cheltenham - Gloucester - Lydney - Cardiff

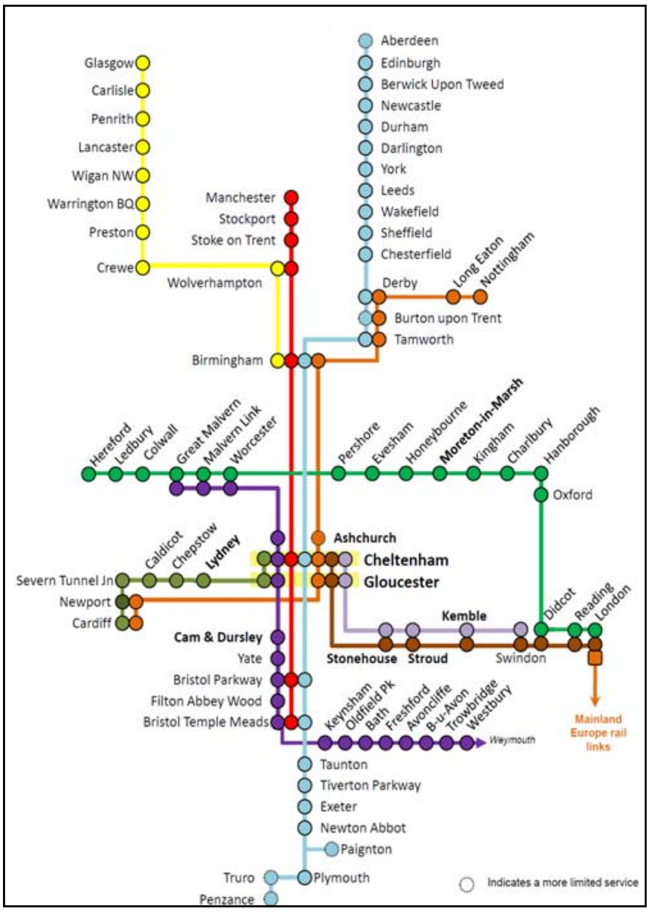
car park and the need to improve rail services

- Poor frequency and reliability of rail services between Stroud, Stonehouse and the rest of the rail network
- Frequency and reliability of services at Cam & Dursley station
- Poor reliability and frequency of trains stopping at Ashchurch Station for Tewkesbury.

There are many proposed actions to improve rail services including the following:

- Lobby for the future improvement of rail services using the additional capacity created by the completion of re-doubling schemes on the North Cotswold and Swindon -Kemble lines
- Safeguard and improve services at Gloucester and Cheltenham stations
- Railway station interchange improvements - Cheltenham Spa, Gloucester, Ashchurch for Tewkesbury, Stroud and Stonehouse
- Proposed new Railway Station south of Gloucester
- Improve rail services from Forest of Dean to Gloucester, Cheltenham and stations to Cardiff by engaging with Network Rail and train operating companies

Figure 6.3: Principal Rail Services



Source: Gloucestershire Local Transport Plan 2011-2016, Gloucestershire County Council

- Improve car parking and interchange facilities at Lydney Station
- Work with local train and bus operators to improve access to the rail services at Ashchurch station and to improve station facilities including information and car parking. Also promote public transport services in Tewkesbury area to improve information for residents and employees.

In March 2011, the latest projects being undertaken to improve the railway service in Gloucestershire, include:

- Cotswolds Line Redoubling – the first phase of the project has now been completed. Network Rail is now undertaking work to redouble the Cotswolds Line between Charlbury and Evesham (in Worcestershire north of Gloucestershire). This work will help improve reliability and allow opportunities for service enhancement and is anticipated to be completed by September 2011. Moreton-in-Marsh is expected to have three more trains a day to Oxford as a result of these changes
- Kemble – Swindon Redoubling – Network Rail has confirmed that the Swindon-Kemble scheme is programmed for completion in 2013
- Lydney Station will be served by additional train services from May 2011 with Arriva Cross Country trains now calling at the station thus giving a wider range of direct destinations that can be reached from Lydney as well as a larger number of services linking the town to Gloucester and Cheltenham.

Bus Network
The bus network fulfils an important role in Gloucestershire, providing residents with access to education, employment, health services and shopping facilities. However, sustaining an efficient and frequent service particularly across the rural areas of the County is challenging and expensive and therefore many services are only able to operate with a public subsidy.

According to LTP3, 21 million trips were made on local buses in Gloucestershire in 2009, on a network of over 150 services. Of these trips 18 million trips were made on the commercial bus network, 2 million trips on the subsidised bus network, and the remainder were made on other types of services[3]. Bus use is increasing, aided by the introduction of free concessionary travel for people with disabilities and those aged over 60.

Gloucestershire has three main levels of bus services:

- Urban services - services operate in the main urban areas of Gloucester and Cheltenham
- Inter-urban services - services link surrounding market towns to Gloucester and Cheltenham
- Hub and spoke services - services link rural communities with market towns.

The urban and inter-urban services generally operate regularly and at peak times. However, in the more remote rural areas the hub and spoke services are often infrequent. They are therefore not viable as commuter bus services and residents may have difficulty accessing key services using this type of public transport.

In order to improve the existing bus network LTP3 proposes a variety of actions, including:

- Promote public transport services and improve information about services for residents and employees in Gloucester and Cheltenham and Tewkesbury Borough area
- Rebuild Gloucester bus station at the current site (funded by development)
- Minor relocation of Cheltenham bus station (funded through the Civic Pride Project)
- Introduction of Smart cards (which will work on a similar basis to the Oyster Cards in London) for bus services in Gloucester and Cheltenham
- Work with bus operators to improve access to the rail services at Ashchurch station

Public sector budget cuts, have resulted in Gloucestershire County Council needing to save £2 million from their £5 million transport budget, which may affect improvements to the bus network. In addition to this, existing Council run bus services are currently being reviewed, with a consultation exercise undertaken during the winter 2010 and spring 2011. The three main options under consideration are:

- Ask bus companies to run services commercially, without subsidy. Currently some of the less well used services, are subsidised by up to £16 per person
- Change reduce or remove some services
- Look for alternatives to buses, such as demand responsive services.

It is anticipated that following the review, there will be fewer Sunday and evening services and increased co-operation with the community transport and voluntary sector. Services that provide access to employment, education and vital services, will be prioritised, to minimise disruption to people's essential travel. However, the changes will obviously have a significant impact on accessibility, particularly in rural areas, where buses are heavily subsidised (*Gloucestershire County Council, 2011b*).

6.1.4 Air Travel

Gloucestershire is served by Gloucestershire Airport, located between Cheltenham and Gloucester and adjacent to the M5 and A40 intersection as shown in Figure 6.1. The airport is regularly used for private chartered flights. Its commercial flights are operated by Manx2.com, and are limited. Daily flights are available to the Isle of Man and between June and September passengers can fly to Jersey.

Figure 6.4 shows that in 2010 there were 67,000 movements (a movement is a take off or landing) at Gloucestershire Airport. The number of movements have undergone significant decline since peaking in 2005 with a recorded 90,000 movements. This suggests that while still significant, the role of Gloucestershire Airport is declining. This is perhaps not surprising given that the Airport is unlikely to significantly expand operations during the next few years due to constraints formed by surrounding development.

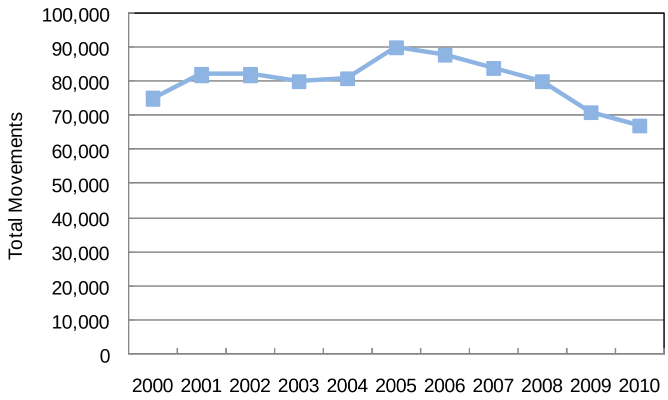
3 Please see Definitions on Page 30

Despite the fact that there are no plans for expansion, planning approval has recently been obtained for the upgrading of runway facilities to ensure that the Airport keeps up with current operational requirements set by the Civil Aviation Authority.

Several major airports are easily accessible from Gloucestershire. They include; Bristol (44 miles/74km, approx 1 hour), Cardiff (66 miles/106km, approx 1 hour 25 minutes) Birmingham (53 miles/85km, approx 1 hour 15 minutes) and Heathrow Airport (99 miles/159km, approx 2 hours from the centre of Gloucester by road).

In addition to Gloucestershire Airport, the County contains one major military air base (RAF Fairford) and one smaller military facility (Upper Rissington).

Figure 6.4: Total movements at Gloucestershire Airport, 2000-2011



Source: Annual Statistics, Gloucestershire Airport (2011a)

6.1.5 Car Ownership

The rural nature of Gloucestershire, means that the use of public transport is often not practical, as a result car ownership is high. Table 6.4 shows that at the time of the 2001 Census of Population, car ownership in Gloucestershire was higher than the regional or national average. However, Figure 6.5 shows that dependence on the car is similar or higher in the statistical and adjoining neighbours[4].

Within Gloucestershire car ownership rates are higher in the four rural districts; Cotswold, Forest of Dean, Stroud and Tewkesbury. Conversely, Gloucestershire's largest urban districts Gloucester and Cheltenham have the highest number of households without a car.

Information about commuting patterns can be found in Chapter 3 section 3.6.

Table 6.4: Car ownership, 2001

	Households with access to a car or van	Households without access to a car or van
Cheltenham	76.8	23.2
Cotswold	85.9	14.1
Forest of Dean	83.8	16.2
Gloucester	75.8	24.2
Stroud	83.8	16.2
Tewkesbury	85.0	15.0
Gloucestershire	81.3	18.7
South West	79.8	20.2
England and Wales	73.2	26.8

Source: 2001, Census of Population, ONS, Crown Copyright Reserved

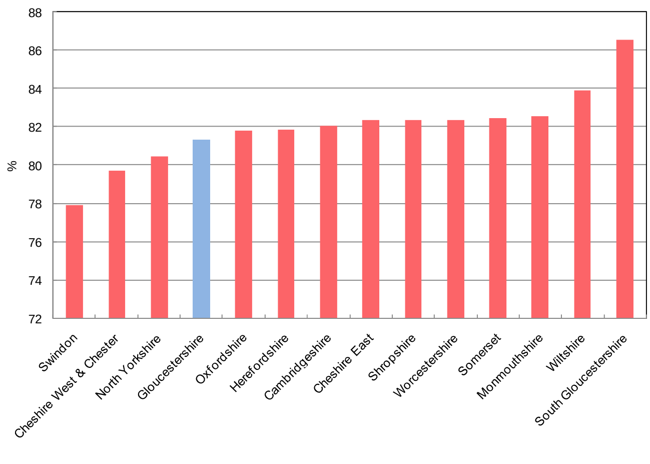
6.1.6 Parking and Park and Ride

The high levels of car ownership in Gloucestershire, relate to the availability and cost of car parking being an important element of transport provision. Towns require adequate parking facilities in order to attract the visitors required to sustain economic growth. However, this has to be balanced with concerns about pedestrian safety and the environmental impacts of car parks.

Park and Ride services help reduce the need for parking in town centres.

There are currently three park and ride services in Gloucestershire. The Arle Court and Cheltenham Racecourse services, both travel to Cheltenham town centre every 10 minutes. The Waterwells service, runs every 13 minutes, stopping in Gloucester city centre and Gloucester Quays Designer Outlet. In 2009, 1 million journeys were made on these services, this was an increase on the number of journeys recorded in 2008.

Figure 6.5: Households with access to a car or van, Gloucestershire and its neighbours, 2001



Source: 2001, Census of Population, ONS Crown Copyright Reserved

4 Please see Definitions on Page 30

In order to further enhance the role of the park and ride in Gloucestershire, LTP3 has proposed a review of the Arle Court, Cheltenham Racecourse and Waterwells Park and Ride sites with a view to making them transport interchange hubs that can be fed by taxi, community transport and local bus services serving the more rural areas. In the long term there are also aspirations to develop further sites at North West Cheltenham (serving Cheltenham), Elmbridge (serving Gloucester and Cheltenham) Brockworth (serving Gloucester and Cheltenham) and West of Severn (serving Gloucester).

6.1.7 Walking and Cycling

The need to reduce congestion, improve local environments and encourage healthier lifestyles, has led local and national government to promote walking and cycling as a means to travel to work (Department for Transport, 2011).

In 2001, 11.0% of workers in Gloucestershire travelled to work on foot, while 4.2% cycled. These figures are comparable with the regional and national averages and Gloucestershire's statistical and adjoining neighbours. Within Gloucestershire, there are considerable differences between the districts. Not unsurprisingly, levels of cycling and walking are higher in the urban districts of Cheltenham and Gloucester, than their rural counterparts.

Table 6.5: People who walk and cycle to work, 2001

	Travel to work by bicycle	Travel to work on foot
Cheltenham	6.9	16.7
Cotswold	2.8	12.0
Forest of Dean	1.3	8.9
Gloucester	6.1	10.5
Stroud	2.0	9.0
Tewkesbury	5.0	7.7
Gloucestershire	4.2	11.0
South West	3.3	12.2
England and Wales	2.8	10.0

Source: 2001 Census of Population, ONS, Crown Copyright Reserved

In 2008 a household study, carried out in the Central Severn Vale area as part of LTP3, found 13% of workers walked to work, while 8.4% cycled. These figures suggest levels of cycling and walking have increased. However, there is still potential for further increase, given that the 2001 Census found 43% of residents in Gloucestershire lived less than 5 km (3.1 miles) away from work.

A number of initiatives have been and will continue to be introduced in a bid to increase the levels of cycling and walking in Gloucestershire. One example is the Count Me In project in Tewkesbury, which has seen a partnership of County Council, Borough Council and Primary Care Trust working together to promote healthy and active travel in the town.

Cycle facilities have been completed in the town, linking employment, education, retail and leisure centres with residential areas, and the success of the project in encouraging more sustainable travel is currently being evaluated. The project was funded by the Department of Health, and the successful elements of the scheme will be rolled out elsewhere in the County through LTP3 as and when resources become available.

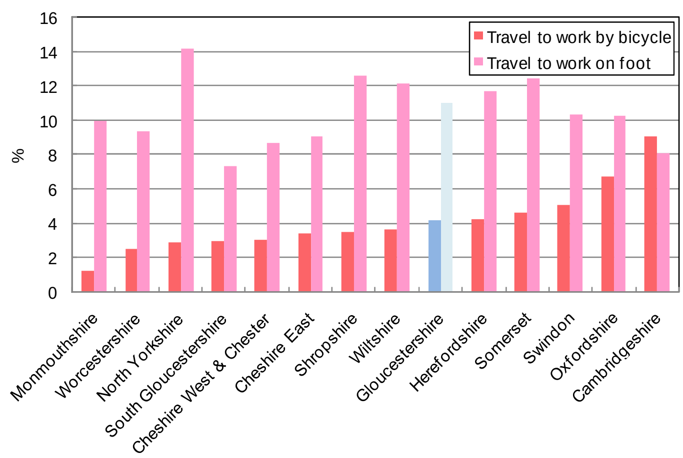
6.1.8 Travel Plans

Within the LTP3 for Gloucestershire proposed actions for travel plans are targeted at three main areas, all directed at reducing both the number of car journeys and reducing carbon dioxide emissions.

- Controlling the impact of new development with a travel plan
- Working with existing employers to help them develop travel plans
- School travel plans.

With moves toward localism and the 'big society' it will in future be up to businesses and schools to take forward their own travel plans. Developer funding has helped to 'kickstart' the introduction of a Car Club in Gloucester which has now commenced operation. Moves towards extending this to Cheltenham are being promoted through LTP3.

Figure 6.6: Walking and cycling to work, Gloucestershire and its neighbours, 2001



Source: 2001, Census of Population, ONS Crown Copyright Reserved

6.1.9 Other Infrastructure and Utilities

Broadband

Digital Britain a report by the *Department for Business Innovation and Skills (2009a)* recognises that information and communication technology (ICT) through the medium of broadband has become central to our society and economy, influencing the competitiveness of our businesses and changing the way we lead our lives. It is particularly important in rural areas, where access and communications may be problematic.

Despite the importance placed on broadband, figures released by the *OECD (2010)*, showed that in 2010, the UK was ranked 14th out of the 31 member countries in terms of average advertised internet speeds. This means that the UK as a whole lags behind a number of its counterparts including, France, Portugal, Japan and the Netherlands. Within the UK, inadequate broadband services and low speeds are a particular problem in rural areas such as Gloucestershire.

A report entitled 'Britain's Superfast Broadband Future', (*Department for Business, Innovation and Skills, 2010*) outlined the Coalition Governments plans to improve broadband services and address low speeds. The report, pledged that by 2015 the UK will have the best superfast broadband in Europe and virtually all homes will have access to a minimum speed of 2 Mbps. In order to meet these targets Broadband Delivery UK (BDUK) is investing £530 million of public funds to help deliver superfast broadband in rural and hard to reach areas.

Considerable work will be required in order for Gloucestershire to meet these targets. Recent research shows that over 150,000 Gloucestershire residents are estimated to live in low speed areas, these are areas where the expected internet speed fails to meet the 2Mbps standard.

Table 6.6, shows that with the exception of Gloucester, all of the Parliamentary constituencies within Gloucestershire, have a higher proportion of the population living in areas with low internet speeds, than nationally. The problem is particularly pronounced in the Forest of Dean, where 42% of the population live in areas, with speeds less than 2Mbps. When compared to the other 650 parliamentary constituencies in the UK, the Forest of Dean has the 53rd largest proportion of residents living in low speed areas.

The need to address broadband in Gloucestershire was recognised in the Gloucestershire Local Enterprise Partnership (GFirst) proposal (*GFirst, 2011*). The proposal outlines four core priorities, one of which, Connection, is about working with partners to develop the right planning environment and infrastructure, and encourage investment and sustainable growth. One of the ambitions over the next three years is to have 'attracted investment and stimulated the market to provide superfast broadband for 75% of the County and a programme for full coverage by 2016'.

Currently across Gloucestershire, there is a diverse pattern of activity, access and competition levels for broadband. GFirst is in the process of preparing a Strategic Local Broadband Plan to provide the overall approach for the delivery of the next generation access broadband for the County. Fast, reliable download and upload capability is an essential and crucial element in tackling such issues as the competitiveness of Gloucestershire's businesses, the need to improve public sector service delivery efficiency and the need for all residents to be able to access the internet.

Gloucestershire, in conjunction with Herefordshire was successful in their bid to become one of four 'pilots' in the UK to gain funding from the £530 million made available by BDUK, to pilot a new technological solution to the provision of next generation access broadband across the rural areas of southern Herefordshire and the Forest of Dean.

The pilot project forms Phase 1 of a wider roll out of high speed broadband infrastructure across the whole of rural Herefordshire and Gloucestershire. The procurement process commenced on June 2011 with the issue of the Contract Notice, and the contract will be a single procurement across the two counties.

Table 6.6: Low speed internet by parliamentary constituency, 2010

	Population in low speed areas	% of population in low speed areas
Cheltenham	20,375	19.9%
Cotswold	33,523	34.5%
Forest of Dean	36,285	42.0%
Gloucester	3,215	3.0%
Stroud	38,107	38.6%
Tewkesbury	24,617	25.7%
UK	11,130,026	18.1%

Source: Point Topic, 2010

Other Infrastructure and Utilities

The Gloucestershire Strategic Infrastructure Development Plan (SIDP) is under review following the Coalition Governments decision to revoke the Regional Spatial Strategies. However, many of the findings related to the County's current energy and water supply, made in the SIDP Phase 1 Infrastructure Baseline report *(Gloucestershire County Council, 2009a)* still stand:

- Gas - Key gas infrastructure (ie the distribution network) is provided in Gloucestershire by a combination of National Grid and Wales and West Utilities
- Electricity - The electricity distribution network is managed by Central Networks and Southern Electric, but can be used by a variety of energy suppliers including renewable energy sources such as wind turbines
- Water supplies - Primary responsibility for providing and maintaining water supply and waste water infrastructure in Gloucestershire falls to four companies each operating within certain geographical catchments; Wessex Water (South), Severn Trent (majority), Thames Water (east) and Welsh Water (wastewater in the Forest of Dean).

Renewable Energy

Renewable energy is described in a number of ways. *Natural England (2011)* describes it as 'energy that occurs naturally and continuously in the environment, such as energy from crops, the sun, wind or waves, and is essentially inexhaustible'.

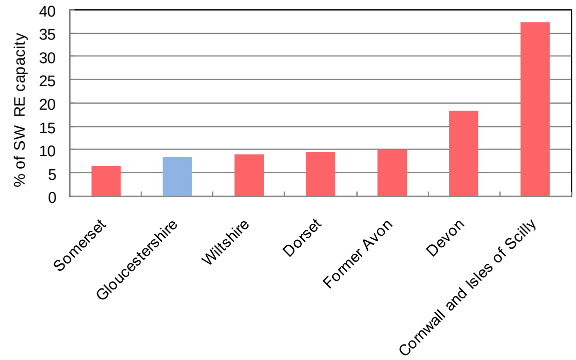
The total renewable energy installed capacity in Gloucestershire as at January 2011 was 31.40 MW, (54% from renewable electricity sources and 46% from renewable heat sources).

Renewable Electricity:
Renewable electricity sources include advanced treatment of waste, hydro, landfill gas, onshore wind, sewage gas, and solar Photovoltaic (PV).

In January 2011, there were 388 renewable electricity projects installed in Gloucestershire, with a total capacity of 17.064 Mega Watts. Figure 6.7 shows this accounted for 8.5% of the South West's total renewable electricity capacity, which is similar to most of the authorities in the South West, with the exception of Devon and Cornwall and the Isles of Scilly, who account for 18.5% and 37.4% respectively.

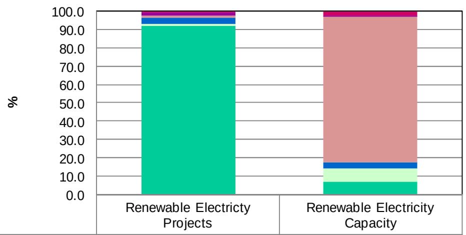
Figure 6.8 illustrates the type of renewable electricity projects present in Gloucestershire. It shows that Solar PV accounted for the majority (92%) of projects. However, Solar PV only generates 7.3% of renewable electricity, with the majority (79.8%) of renewable electricity capacity generated by landfill gas projects.

Figure 6.7: Contribution to the South West's total renewable energy capacity, 2011



Source: Renewable Energy Progress Report: South West 2011 Annual Survey, Regensw, 2011

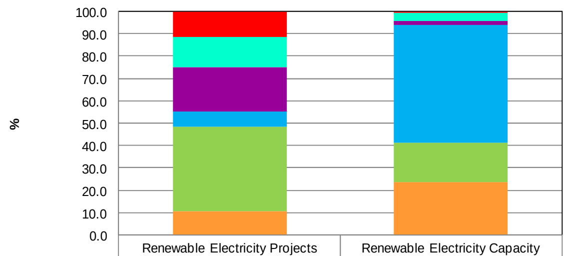
Figure 6.8: Renewable electricity in Gloucestershire, 2011



	Renewable Electricty Projects	Renewable Electricity Capacity
Advanced treatment of waste	0.5	2.1
Hydro	1.5	0.3
Landfill gas	1.0	79.8
Onshore wind	3.9	3.4
Sewage gas	0.8	7.1
Solar PV	92.3	7.3

Source: Renewable Energy Progress Report: South West 2011 Annual Survey, Regensw, 2011

Figure 6.9: Renewable electricity by district, 2011



	Renewable Electricity Projects	Renewable Electricity Capacity
Cheltenham	11.1	0.7
Cotswold	13.7	3.3
Forest of Dean	19.8	1.7
Gloucester	7.0	52.8
Stroud	37.6	17.5
Tewkesbury	10.8	24.0

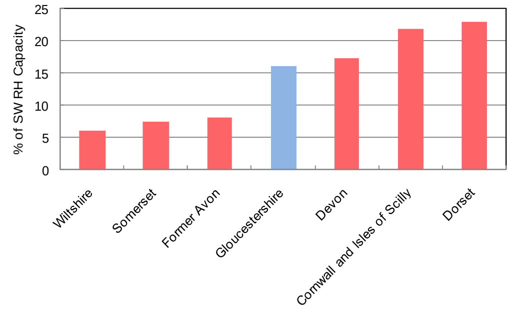
Source: Renewable Energy Progress Report: South West 2011 Annual Survey, Regensw, 2011

Stroud district accounts for the largest proportion of Gloucestershire's renewable electricity projects. However, Gloucester City and Tewkesbury districts account for the highest capacity of installed renewable electricity, due to the location of highly productive landfill sites (i.e. Hempsted and Wingmoor Farm).

Renewable Heat:
Renewable heat sources include the advanced treatment of waste, biomass, heat pumps and solar thermal.

In January 2011, there were 670 renewable heat projects in Gloucestershire, with a total capacity of 14.332 Mega Watts. Figure 6.10 shows this accounted for 16% of the South West's total renewable heat capacity, which was somewhere in the middle when compared to other authorities in the South West.

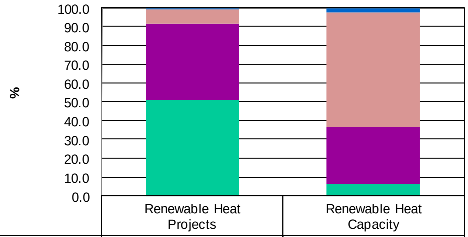
Figure 6.10: Contribution to the South West's total renewable heat capacity, 2011



Source: Renewable Energy Progress Report: South West 2011 Annual Survey, Regensw, 2011

Figure 6.11 illustrates the type of renewable heat projects present in Gloucestershire. It shows that solar thermal and heat pumps accounted for the majority of projects. However, the largest proportion of renewable heat is generated by biomass, which provides 61% of the renewable heat capacity.

Figure 6.11: Renewable heat in Gloucestershire, 2011

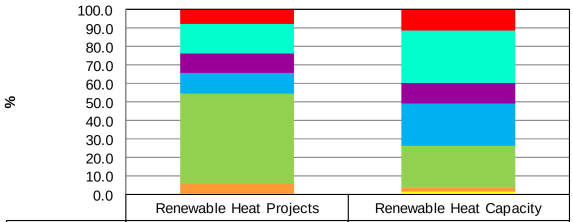


	Renewable Heat Projects	Renewable Heat Capacity
Advanced Treatment of Waste	0.3	2.4
Biomass	7.8	61.0
Heat Pumps	40.4	30.1
Sewage Gas	0.0	0.0
Solar Thermal	51.5	6.5

Source: Renewable Energy Progress Report: South West 2011 Annual Survey, Regensw, 2011

At district level according to Figure 6.12 the largest proportion amounting to 48% of heat projects are located in Stroud. This district along with Gloucester and Cotswold districts also accounts for a significant proportion of Gloucestershire's total renewable heat capacity.

Figure 6.12: Renewable heat by district, 2011



	Renewable Heat Projects	Renewable Heat Capacity
Cheltenham	7.5	11.4
Cotswold	16.3	28.1
Forest of Dean	10.6	11.1
Gloucester	11.0	22.8
Stroud	48.2	22.7
Tewkesbury	6.0	2.3
Unallocated	0.4	1.7

Source: Renewable Energy Progress Report: South West 2011 Annual Survey, Regensw, 2011

Future Renewable Energy:
The Gloucestershire Renewable Energy Study (*Gloucestershire County Council, 2011*) provides an estimate of the total energy resource potentially available from different sources of renewable energy in Gloucestershire. However, it does not consider potential sites or take into account whether this level of uptake would be desirable or viable in practice. The main findings are summarised in Table 6.7, it shows that large scale wind projects offer the greatest potential for renewable electricity in Gloucestershire, while biomass offers the greatest potential to generate renewable heat.

Table 6.7: Future renewable energy

	Electrical Output (MWh/year)	Heat Output (MWh/year)
Large and Medium Scale Wind	11,609,000	0
Small Wind	41,873	0
Hydro	18,396	0
Biomass	513,000	1,026,000
Waste	59,000	665,000
Total	12,241,406	1,691,300

Source: Renewable Energy Study: Phase 2 - Resource Assessment, Gloucestershire County Council, 2011c

6.2 Environmental Sustainability

6.2.1 Natural and Historic Environment

Gloucestershire has a high quality natural and historic environment, which attracts people to the area to both live and work, and for the purposes of leisure and tourism. The majority of the County's 265,000 hectares are rural and it is important to recognise the need to protect and enhance the Gloucestershire environment while taking into account both economic and environmental needs.

Gloucestershire is renowned for the diversity and scenic beauty of its landscape and wildlife, due to the varied geology, geomorphology, soils and land use within the County and the fact that Gloucestershire is the location for three key rivers - the Severn, the Thames and the Wye. For further information about the geography of Gloucestershire, please see Chapter 2.

6.0 Sustainable Economic Growth

Areas of Outstanding Natural Beauty
The Cotswolds Area of Outstanding Natural Beauty (AONB) covers over half the County and is the largest AONB in England and Wales. Parts of the Wye Valley AONB and Malvern Hills AONB are also in Gloucestershire.

The Forest of Dean
In 1938 the Forestry Commission designated the 10,700 hectares of the Forest of Dean and the adjacent woodlands of the Wye Valley as the first National Forest Park in England. This recognised both the scenic value of the woodland landscape and the desirability of promoting the recreational role of the Forest.

Designated Nature Conservation Sites
The great variety of wildlife that is found in Gloucestershire is emphasised by the large number of sites that have international, national or local designations. These include the Severn Estuary and adjacent Walmore Common which are recognised under international agreements as Ramsar Sites and Special Protection Areas (SPAs) for the wildfowl that flock to the area in the winter.

There are seven Special Areas of Conservation (SACs) which will form part of the Europe-wide Natural 2000 series of important wildlife sites. There are over 120 statutory Sites of Special Scientific Interest (SSSIs) covering approximately 3% of the County area and over 750 recognised Key Wildlife Sites (KWS) covering approximately 5% of the County area (*Gloucestershire Biodiversity Partnership, 2011*).

Biodiversity and Ecosystems
Natural areas in the County include; Limestone grasslands and beech woodlands in the Cotswolds; ancient woodlands, acid grasslands, bogs and heaths in the Forest of Dean and Wye Valley; the floodplain in the Severn Vale; and the Cotswold Water Park.

In 2006 the Natural Environment and Rural Communities Act (NERC) came into force. This legislation means that all Local Authorities and other public bodies in England and Wales have a duty to promote and enhance biodiversity in all of their various functions.

The Gloucestershire Biodiversity Partnership has developed a Local Biodiversity Framework which sets out strategic objectives, activities and a spatial vision in order to guide ecosystem and wildlife conservation in the County over the coming years. Ecosystem services provide goods for our benefit (eg fresh water, timber and food), regulate our environment (eg climate, flood, pollination) and provide cultural value (eg recreation, education, art and sense of place). These services depend on biodiversity and are important for economic health and our well-being.

Historic Environment
Gloucestershire has a rich and diverse historic environment, a resource that includes archaeological sites, historic buildings and settlements, and a landscape that is the product of the human management of the environment over many thousands of years. The County Council Historic Environment Record holds over 33,000 individual records detailing sites spanning the full range of human history up to the Second World War. Some of these sites and structures are designated, they include over 400 archaeological sites that are Scheduled Monuments, more than 7,900 Listed Buildings, Conservation Areas in the historic centres of towns and villages, Registered Parks and Gardens, and Registered Battlefields.

Across the County locally distinctive historic sites, settlements and landscapes contribute to the diversity of the Gloucestershire environment. The Cotswolds are internationally known for their prehistoric archaeological sites (eg Neolithic burial sites or long barrows such as Belas Knapp), Roman settlements such as the rural villa sites of Chedworth and Great Witcombe, and towns like Cirencester which, as *Corinium*, was the second largest town in Roman Britain. From the more recent past, the historic stone buildings of the 16th century onwards give the area its distinctive identity.

In the west of the County the Forest of Dean has a long history as a medieval forest with its own laws and customs. Its extractive industries (coal, iron and stone, some of which have prehistoric origins), and the transport industries that served them, have helped to shape the landscape and settlement pattern.

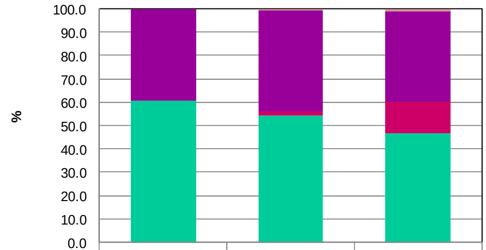
Although more famous for its regency architecture Cheltenham began its history as a small medieval town in an area settled in the Roman period, while Gloucester is perhaps best known for its Roman origins as a military fort and then town, and for its superb surviving medieval and later buildings such as the Cathedral, Blackfriars Priory, the New Inn and The Fleece.

The Vale and the Severn estuary also have their distinctive histories. The structures of the cloth industry of the Stroud valleys still dominate much of the local environment through the surviving mill buildings and their associated housing. Along the Severn estuary the landscape evidences the changing sea level over time, associated land reclamation and sea defence, and the human exploitation of the estuary for transport (historic harbours, for example, at Lydney), and fishing (in the extensive fish traps and fish weirs in the inter-tidal zone).

6.2.2 Waste and Recycling

The disposal of waste is an important economic and environmental issue due to the environmental pressures created by the use of transport and landfill sites and the increasing costs associated with disposing of waste.

Figure 6.13: Destination of municipal waste,'09/10



	Gloucestershire	South West	England
Other	0.0	0.6	1.0
Recycled/ composted	39.2	43.3	38.6
Incineration	0.0	1.8	13.6
Landfill	60.7	54.3	46.8

Source:Local Authority collected waste for England - Annual Statistics, 2010, DEFRA

In 2009/2010 over 1,100,000 tonnes of waste was managed in Gloucestershire, this waste was made up of four main types; municipal waste, commercial and industrial waste, construction and demolition waste and hazardous waste. Commercial and industrial waste, accounted for 375,000 tonnes which was the largest proportion of the total, followed by municipal waste, amounting to almost 300,000 tonnes of the overall waste.

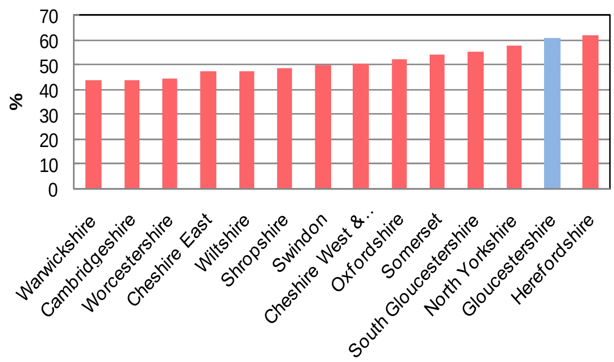
As a general rule municipal waste is collected by the District Councils and disposed of by the County Council whilst other types of waste are collected and disposed of by private waste management companies.

Gloucestershire County Council is responsible for developing a Mineral and Waste Development Framework (MWDF), this sets out how Gloucestershire's mineral resources and waste should be managed in the future and where.

The Waste Core Strategy (*Gloucestershire County Council, 2010*) forms part of this framework, it will provide the spatial outline for sustainable waste management in the County, determining the appropriate provision of waste management facilities and providing the policy basis for land use decisions for waste management for all waste streams, up to 2027.

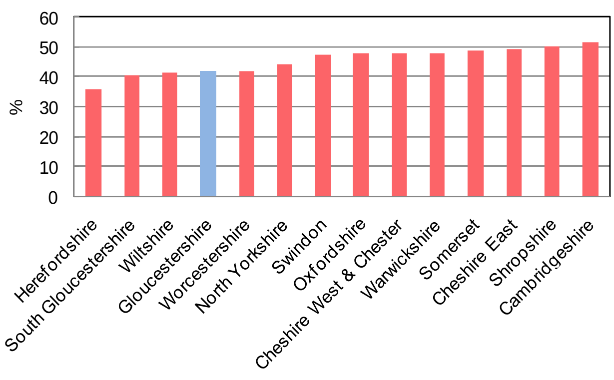
The generic Waste Core Strategy is complemented by the Joint Municipal Waste Management Strategy 2007-2020 (*Gloucestershire Waste Partnership, 2008*). This strategy has been adopted by all seven Local Authorities in Gloucestershire and focuses specifically on how municipal waste will be collected and disposed of.

Figure 6.14: Proportion of municipal waste sent to landfill, Gloucestershire and its neighbours, 09/10 (NI193)



Source: Local Authority collected waste for England Annual Statistics, 2010, DEFRA

Figure 6.15: Proportion of municipal waste recycled/composted, Gloucestershire and its neighbours, 09/10



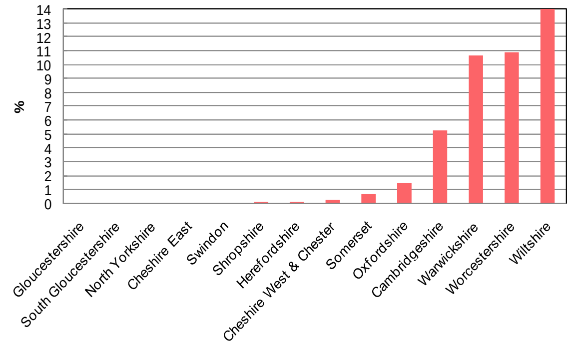
Source: Local Authority collected waste for England - Annual Statistics, 2010, DEFRA

Municipal waste is waste that is produced by households, together with 'trade' waste which is collected by local authorities from shops, businesses and from road sweepings. In 2009/10, 61% of Gloucestershire's municipal waste was sent to landfill, this was significantly higher than the national and regional averages as shown in Figure 6.13. Conversely, although regional levels of recycling were higher than those recorded in Gloucestershire, the County performance was above the national average.

6.0 Sustainable Economic Growth

Figures 6.14, 6.15 and 6.16 shows that Gloucestershire is not performing as well as its statistical and adjoining neighbours, with the second highest proportion of waste going to landfill, recycling the third lowest amount of waste, and little use made of incineration and other methods. However, there are signs of improvement, the proportion of municipal waste Gloucestershire sent to landfill declined from 66% in 2006/07 to 61% in 2009/10 and during the same period levels of recycling increased.

Figure 6.16: Proportion of municipal waste incinerated or disposed of in other ways, Gloucestershire and its neighbours, 2009/10



Source: Local Authority collected waste for England - Annual Statistics, 2010, DEFRA

Household waste, accounted for over 90% of Gloucestershire's municipal waste in 2009/10. Table 6.8 shows the amount of household waste collected in Gloucestershire, equates to around 471.3 kg per person. Stroud district produces the lowest amount per head, while Cheltenham is the highest waste producing district.

Since 2006/07, the amount of household waste collected per head of population, has declined in all areas, with the greatest decline occurring in Cotswold district. In terms of our statistical and adjoining neighbours, Gloucestershire sits in a relatively healthy position, producing the fifth lowest amount of household waste per head as shown in Figure 6.17.

Table 6.8: Collected household waste per person, Gloucestershire and districts, 2006-2010

	Collected household waste per person (kg/per person) 2006/07	Collected household waste per person (kg/per person) 2009/10	% change 2006/07 - 2009/10
Cheltenham	451.8	427.3	-5.4
Cotswold	478.9	422.9	-11.7
Forest of Dean	451.8	413.8	-8.4
Gloucester	457.7	409.5	-10.5
Stroud	345.3	316.8	-8.3
Tewkesbury	433.4	410.1	-5.4
Gloucestershire	527.5	471.3	-10.7

Source: Local Authority collected waste for England - Annual Statistics, 2010, DEFRA

Household recycling rates, differ slightly to municipal waste recycling rates. Table 6.9 shows that in 2009/10, 41.6% of household waste was reused, recycled or composted, compared to 39.2% of municipal waste. This compares well with the national average, but is slightly lower than the regional average.

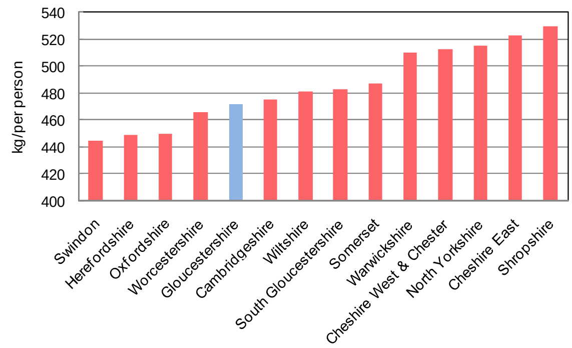
Within Gloucestershire, Stroud district had the lowest levels of household recycling, while Cotswold district had the highest, with 60.4% of household waste being reused, recycled or composted, this makes it the 4th best performing authority in the country. Since 2006/07, the proportion of waste being recycled, reused or composted, has increased in all areas, with the greatest growth by far taking place in Gloucester and Cotswold districts.

It is anticipated that levels of recycling will continue to increase, the Joint Municipal Waste Management Strategy states that at least 60% of Gloucestershire's household waste should be recycled, reused and composted by 2020, some 10% higher than the national target for the same period. Other targets include reducing the growth of Gloucestershire's municipal waste to zero by 2020 and reducing the amount of biodegradable waste sent to landfill to 50,609 tonnes.

However, there are a number of challenges that need addressing in order to meet these targets, including;

- The population and number of households within Gloucestershire is predicted to continue to increase until at least 2026, which will have direct implications on the amount of waste produced
- The cost of collecting, recycling, composting and disposing of Gloucestershire's municipal waste is increasing, it already costs about £30million per year
- The majority of municipal waste is disposed of in landfill sites. However, Gloucestershire's available biodegradable landfill space is declining

Figure 6.17: Collected household waste per person, Gloucestershire and its neighbours,09/10



Source: Local Authority collected waste for England - Annual Statistics, 2010, DEFRA

- There are currently limited facilities available to divert waste away from landfill, and investment is needed in residual waste treatment.

Table 6.9 Proportion of household waste recycles, reused & composted, Gloucestershire and districts, 2006-10

	Household waste sent for reuse, recycling or composting, 2006/07	Household waste sent for reuse, recycling or composting, 2009/10	% change 2006/07-2009/10
Cheltenham	28.3	32.9	16.2
Cotswold	41.0	60.4	47.2
Forest of Dean	35.8	39.8	11.2
Gloucester	21.3	32.1	50.5
Stroud	23.2	25.8	10.9
Tewkesbury	26.4	31.5	19.4
Gloucestershire	33.0	41.6	26.1
South West	37.2	43.5	16.9
England	30.9	39.7	28.3

Source: Local Authority collected waste for England - Annual Statistics, 2010, DEFRA

Residual waste project (Javelin Park)

Many of the challenges raised above could potentially be addressed by the proposed residual waste project at Javelin Park.

Two companies, Complete Circle (a consortium of John Laing, Kepel Seghers and Shanks) and Urbaser Balfour Beatty (A consortium of Urbaser and Balfour Beatty) are bidding to design, develop and operate a new waste facility in Gloucestershire. Both companies are proposing energy from waste facilities on Javelin Park near Gloucester, just off junction 12 of the M5.

This project is about reducing reliance on landfill and changing the way Gloucestershire's household rubbish (residual waste) is managed. It is based on the County achieving 70 per cent recycling by 2030 and the remaining 30 per cent left over going to this facility. It has huge environmental benefits including electricity generation and will save local taxpayers around £150 million over the new facility's lifespan. Other infrastructure is also being explored such as a materials recovery facility and anaerobic digestion, helping to increase recycling and energy recovery.

A preferred bidder will be selected with the aim of awarding a contract in summer 2012, subject to Member approval (*Gloucestershire County Council, 2011h*)

Table 6.10: Summary of projected climate change in Gloucestershire

Long term/seasonal averages	Extremes
• Hotter, drier summers - up to 5.5°C • Milder, wetter winters - up to 3.5°C and 30% wetter • Annual average temperature increase • Rising sea and estuary levels - up to 1m	• More very hot days • More heatwaves • More rain on the wettest days of the year • Summer droughts • Fewer frost nights

Source: Adapting to Climate Change, Gloucestershire County Council, 2009b.

6.2.3 Climate Change

Scientific evidence, suggests climate change presents very serious risks, locally, nationally and globally. The Stern Review (*HM Treasury, 2006*) highlighted some of the potential economic impacts of climate change and suggested that without immediate action, the overall costs and risks of climate change, would be the equivalent of losing at least 5% of global GDP each year. If a wider range of risks and impacts were also taken into account, the estimates could rise to more than 20% of GDP.

The UK's Climate Change Act (2008), was introduced in response to the Stern Review and a number of other studies that also stressed the need to address climate change. The act requires public bodies and statutory undertakings to focus on reducing our carbon emissions and assess the risks of climate change, to enable people to plan and shape places that are resilient and fit for our present and future climate. This has generated a better understanding of the impacts of climate change at a national, regional and local level.

Table 6.10 highlights the potential long term and extreme effects of climate change on Gloucestershire. It is likely that these changes will have specific impacts on particular sectors or areas. Vulnerable areas in Gloucestershire are expected to be agriculture, biodiversity, settlements and business including local government, infrastructure, planning, transport, energy, health and water services.

Gloucestershire County Council showed its commitment to addressing climate change by signing the Nottingham Declaration on Climate Change in 2007. This declaration requires councils to assist communities to reduce greenhouse gas emissions and identify ways to adapt to the projected effects of climate change. In order to deliver this the Council approved the Corporate Climate Change Strategy and Action Plan. The strategy sets out targets on reducing carbon emissions and establishes a framework for action on adapting services, managing the estate, and providing leadership to others.

2007 Floods and their impact on Gloucestershire

The predicted increase in rainfall on the wettest days of the year, may have a serious impact on Gloucestershire. In July 2007, the County was subject to severe flooding, following a series of unusual weather events.

After a very dry April, the summer of 2007 was one of the wettest on record. Heavy rainfall at the end of June led to flooding in some areas in Gloucestershire, both from surface water overloading the drainage systems and very high water levels in rivers and brooks. During July, rains were even heavier. On 20th July, two months' rain fell in just 14 hours. As a result 5,000 homes and businesses were flooded. Tewkesbury was particularly hard hit, with the Severn Trent Waters Mythe water treatment works flooding, which left 135,000 homes (over half the homes in Gloucestershire) and 7,500 businesses without mains water for up to 17 days. In addition Castle Meads electricity substation in Gloucester, was shut down whilst temporary defences were put in place, which left 42,000 people without power in Gloucester for up to 24 hours.

The floods caused significant disruption to residents, businesses and service delivery and had substantial financial consequences in terms of clean up costs and damage to infrastructure. For example the estimated cost to repair the County's roads was £25 million. The cost of the flooding was even greater when lost business was taken into account. A study carried out by the South West Regional Development Agency (*SWRDA, 2008*), measured the economic impacts of the flood, and found that the flooding had an immediate impact on businesses as they were unable to trade effectively due to clean up activities and loss of stock. A number of businesses also felt the flooding would have medium (that year) and long term effects (over the next two or three years) on their profits and turnover. Businesses in the manufacturing, wholesale/retail and hotels/restaurants sectors were found to have been particularly affected.

Immediately after the flooding, a £2 million flood recovery scheme was developed by Business Link, Gloucestershire First and SWRDA. The scheme offered businesses directly affected by the floods grants of up to £2,500, to cover costs for clean up operations, moves to temporary accommodation etc. A marketing campaign was also introduced, to re-promote Gloucestershire and its attractions.

In order to minimise the risk and impact of further flooding, Gloucestershire County Council set up a Flood Risk Management Team to manage its long term flood risk strategy and to lead the way in the development of effective flood resilience and alleviation strategies. Three years on much has been achieved through positive partnership flood risk management work undertaken with District Councils, Environment Agency, Internal Drainage Board, water companies and other partners.

From July 2007 to September 2010, successes have included; producing a leaflet for those property owners with a stream or ditch running through their property; setting up a digital drainage mapping system, an annual cleaning programme for the County's 135,000 gullies, and securing £1.6m funding to protect the nine worst-hit schools.

Flooding is a key concern for the future, around one in twenty Gloucestershire residents live at an address with a '1 in 100 year' flood risk. Two thousand of the people living in these high flood-risk areas are aged 75 or more, and another thousand are infants and toddlers. The flood risk area contains around a thousand business premises, accounting for 19,000 jobs, as well as 13 primary schools and 15 care/residential establishments. (*Gloucestershire County Council, 2011e*).

6.2.4 Carbon Dioxide Emissions

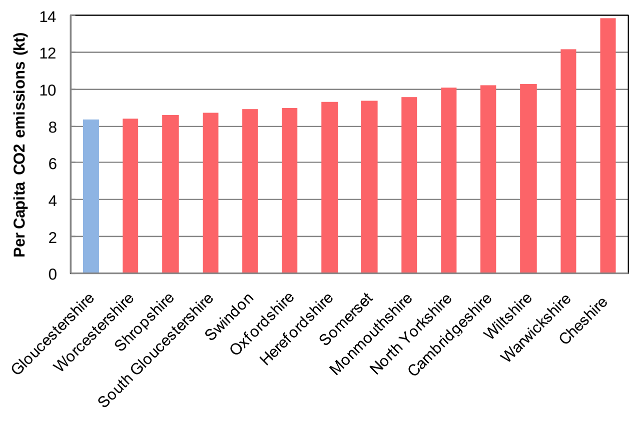
Scientific evidence suggests the release of greenhouse gases in the atmosphere as a result of human activity, is one of the main causes of climate change. Carbon dioxide (CO_2), accounts for the greatest proportion of greenhouse gases and emissions have risen with population and economic growth.

Table 6.11: Total and per capita CO_2 Emissions, Gloucestershire and districts, 2005-2008

	Total CO2 emissions (kt)			CO2 per capita emissions (kt)		
	2005	2008	% change 2004-2008	2004	2008	% change 2004-2008
Cheltenham	642.1	646.1	0.6	5.8	5.7	-1.7
Cotswold	903.5	855.9	-5.3	11	10.2	-7.3
Forest of Dean	711.5	690.6	-2.9	8.7	8.3	-4.6
Gloucester	688.8	670.1	-2.7	6.1	5.8	-4.9
Stroud	1045.9	1048.5	0.2	9.5	9.5	0.0
Tewkesbury	971.7	949.1	-2.3	12.3	11.9	-3.3
Gloucestershire	4963.5	4860.3	-2.1	8.6	8.3	-3.5
South West	42454.2	40516.7	-4.6	8.3	7.8	-6.0
United Kingdom	528162.7	506525.7	-4.1	8.8	8.2	-6.8

Source: Local and Regional CO2 Emissions Estimates for 2005-2008, 2010, DECC

Figure 6.18: Per capita CO_2 emissions, Gloucestershire and statistical neighbours, 2008



Source: Local and Regional CO2 Emissions Estimates for 2005-2008, 2010, DECC

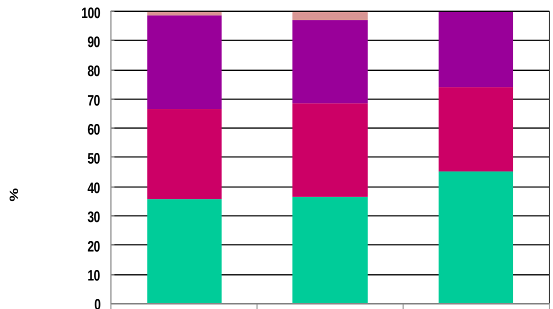
6.0 Sustainable Economic Growth

The threat of climate change led national government to introduce the Climate Change Act (2008), which committed the Country to reducing its carbon emissions by 34% by 2020 and by at least 80% by 2050.

Gloucestershire County Council aims to exceed these targets, cutting emissions by 30% by 2016 (against our 2006/07 baseline) and by 60% by 2021. There has already been some success, with the County's total carbon emissions declining by 7% (4,600 tonnes) since 2006/07.

This success has been recognised by Gloucestershire becoming the first area to be awarded '10:10 County' status, as part of the international campaign to encourage organisations to reduce their carbon emissions (excluding schools) by at least 3% during 2010/11. In order to deliver further reductions, the County Council has published a Carbon Management Programme (*Gloucestershire County Council, 2011f*), outlining 80 individual projects to minimise emissions. These include simple solutions such as improving levels of insulation and replacing old boilers with more energy efficient ones to more complex projects like, installing LEDs for street lighting.

Figure 6.19: Breakdown of C02 emissions, Gloucestershire, South West and the UK, 2008



	Gloucestershire	South West	United Kingdom
Land use, land use change and forestry	1.2	2.6	0.0
Road transport	32.1	28.6	25.6
Domestic	31.0	32.5	29.3
Industry and commercial	35.7	36.4	45.1

Source: Local and Regional CO2 Emissions Estimates for 2005-2008, 2010, DECC

The latest data on carbon emissions is illustrated in Table 6.11. It shows that in 2008, 4,860 kt of carbon dioxide was emitted in Gloucestershire, which equates to around 8.3 kt per capita or per person. Within Gloucestershire, Stroud accounted for the largest proportion of Gloucestershire's total emissions and Cheltenham the lowest. Per capita emissions are at their lowest in the urban districts of Cheltenham and Gloucester and at their highest in Cotswold and Tewkesbury. Between 2005 and 2008 per capita carbon dioxide emissions declined or remained the same in all areas. Total carbon dioxide emissions, also declined in the majority of areas, with the exception of Stroud and Cheltenham, which both experienced a small increase.

Per capita carbon emissions are slightly higher than the South West and national average however, compared to its statistical and adjoining neighbours the County has the lowest emissions as shown in Figure 6.18.

Total emissions can be broken down by the sector they originate from. Figure 6.19 shows that at a local, regional and national level, industry and commerce is the greatest contributor. Given the rural nature of Gloucestershire and high dependency on the car, it is unsurprising that road transport accounts for a greater proportion of emissions in Gloucestershire, than in the South West and United Kingdom. The Gloucestershire NI 186 Delivery Plan (*Gloucestershire Environment Partnership, 2009*), evaluated progress made in tackling carbon dioxide emissions between 2007-10, and predicted that during this period emissions from road transport would increase, while emissions from other sectors were likely to decline.

Air Quality

In addition to contributing significantly to carbon dioxide emissions, road transport is also one of the primary causes of air pollution. Poor air quality can reduce life expectancy in the UK by an average of seven to eight months, it can cost the NHS up to £20 billion a year, contribute to climate change and harm ecosystems and biodiversity (*DEFRA, 2009*).

These concerns led to the introduction of the Environment Act (1995), which required local authorities to review air quality in their area. If improvements were necessary in order to meet national air quality targets then air quality management areas (AQMA) were designated.When an air quality management area has been declared, monitoring continues and an air quality action plan has to be prepared.

There are currently seven air quality management areas in Gloucestershire, these are all areas where the levels of nitrogen dioxide exceed the national objective. Table 6.12 shows

Table 6.12: Location of Gloucestershire's Air Quality Management Areas, 2011

District	Location
Cheltenham	• Lower end of Bath Road and the High Street
Cotswold	• The area around the Air Balloon roundabout junction on the A417
Forest of Dean	• Lydney town centre
Gloucester	• Barton Road • Priory Road • Painswick Road
Tewkesbury	• Tewkesbury town centre

Source: AQMA Maps, 2011, DEFRA

that Stroud is the only district without an air quality management area, while Gloucester is the only area with more than one area.

6.2.5 Transition to a Low Carbon Economy

The economy will have to undergo fundamental changes in order to meet the emission targets required by the Climate Change Act (2008). *Business Link (2011)* suggests this transition to a low carbon economy, presents a number of opportunities and risks for businesses, including;

- Regulations and legal requirements could cost businesses money to bring them into compliance, as well as risks of litigation if they cannot do so. There could also be increases in tax
- The shift towards a low carbon economy, will result in changing consumer attitudes and demands. This will lead to new technology, products and markets and provide many businesses with opportunities. However, energy costs could increase
- As the economy changes, supply chains could be disrupted and physical assets may not be as well protected
- As government demands and policy change, so will the demands and opinions of consumers, retailers and society in general. This could have an impact on business image.

The opportunities created by the move towards a low carbon economy are likely to be exploited in two main ways. Firstly through the development of the low carbon sector and secondly by developing low carbon opportunities in other sectors.

Developing the low carbon sector:

A report by the *Department for Business Innovation and Skills* (*2009b*), identifies the low carbon sector as businesses that are incorporated in the Environmental technologies sector (such as waste management), as well as renewable energy and other emerging low carbon sectors such as alternative fuels, carbon capture and storage and energy management, that are impossible to measure using the existing SIC classification codes.

There are a number of developments taking place within Gloucestershire that may contribute to the development of the low carbon sector, these include:

- The expansion of EDF Energy's head office in Barnwood, Gloucester and Areva (nuclear reactor design), opening an office within the County
- Gloucestershire County Council is investigating the opportunities for wind turbines and solar panels to be installed on council owned property and land
- Proposals have been submitted to develop a 2,000 home eco town in Sharpness. The development would make use of renewable energy and green infrastructure.

Developing low carbon opportunities:

In addition to developing the low carbon sector, opportunities are also available for other sectors to develop low carbon products and services. The greatest opportunities appear to be for businesses in software, electronics and machinery equipment and business and financial services. There is currently no research exploring the impact that developing low carbon opportunities may have on Gloucestershire.

6.3 Housing

The Localism Bill (Department for *Communities and Local Government, 2010a*) sets out a series of proposals with the potential to achieve a substantial and lasting shift in power away from central government and towards local people. Included in the Bill is the reform to make the planning system more democratic and more effective, and to ensure that decisions about housing are taken locally.

This will result in consolidation of all national planning policy guidance (PPGs) into a single, streamlined source; the abolition of regional tier planning Regional Spatial Strategies (RSS) and Local Development Frameworks (LDFs); an increasing focus on local plan making and the introduction of a new local tier of planning to be known as Neighbourhood Plans. These plans are to be supported by a robust evidence base, the nature of which will be provided by new guidance.

Housing delivery has been related to authorities keeping a register of housing sites which could be delivered within the next five years. The number of sites had to meet a projection set out in local planning documents that in turn was derived from the RSS. The proposed planning reforms imply maintaining the five-year land supply approach which will therefore need to be based on a new locally derived housing requirement instead of the RSS structure plan position. In order to explore how best to address the new requirement, Gloucestershire planning authorities commissioned a piece of research which is described in section 6.3.6 on page 23 of this chapter.

In terms of Employment land availability the loss of the LDFs and the introduction of a new type of local plan will also affect the reporting of this data.

6.3.1 Housing Stock

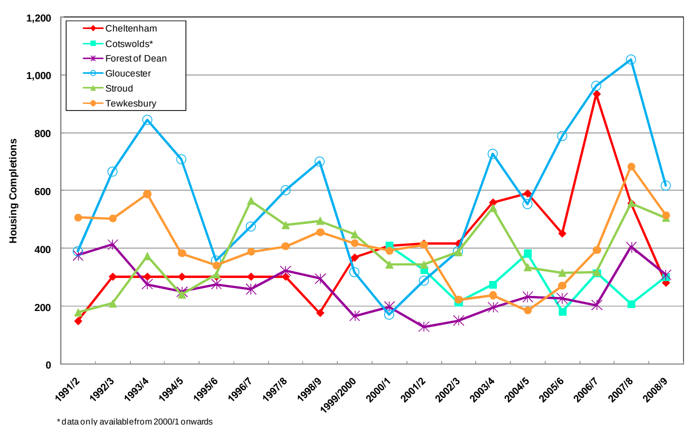
Table 6.13 shows that in 2010, there were an estimated 268,680 dwellings in Gloucestershire. At district level, Cheltenham, Gloucester and Stroud account for the largest proportion of dwellings in the County.

Table 6.13: Number of Dwellings in Gloucestershire, 1991-2010

Area	1991 Census		2001 Census		2010 CLG	
	Number	% of total	Number	% of total	Number	% of total
Cheltenham	46,140	20.5	49,960	20.2	54,410	20.3
Cotswold	33,510	14.9	36,830	14.9	39,620	14.7
Forest of Dean	30,840	13.7	33,650	13.6	35,600	13.2
Gloucester	42,490	18.9	46,990	19.0	52,980	19.7
Stroud	42,830	19.0	45,980	18.6	49,870	18.6
Tewkesbury	29,580	13.1	33,430	13.5	36,200	13.5
Gloucestershire	225,380		246,830		268,680	

Source: Census of Population, 1991 & 2001,ONS, Crown Copyright Reserved
Table 100: Dwelling stock: Number of Dwellings by Tenure and district: England, 2010b, CLG

Figure 6.20: Housing completions, 1991-2008



Source: Cheltenham, Cotswold, Forest of Dean, Gloucester, Stroud and Tewkesbury, Annual Monitoring Reports

The number of new housing completions, is monitored on an annual basis at district level. Table 6.14 shows that between 1991 and 2008, 39,360 houses were completed in Gloucestershire. The largest number of new house completions were recorded in Cheltenham, Gloucester and Tewkesbury districts.

Figure 6.20 illustrates the number of annual house completions since 1991. It shows that between 2000/1 and 2007/8 all districts, with the exception of Cotswold district, experienced an upward trend in the number of household completions. However, the start of the recession, meant the housing market underwent rapid contraction, resulting in a fall in the number of household completions in the year 2008/9 for all districts apart from Cotswold district.

6.3.2 Housing Type and Tenure

An areas' housing profile can have a significant impact on the local economy. Table 6.15 shows that in 2001, a higher proportion of Gloucestershire's dwellings were detached or semi detached, than at regional or national level. Within Gloucestershire, the Forest of Dean, Stroud and Tewkesbury districts were characterised by particularly high levels of detached and semi detached housing, with these type of properties, accounting for more than 70% of total housing stock.

In contrast to the high levels of detached and semi-detached housing, the proportion of flats/maisonettes/apartments in Gloucestershire were considerably lower than in the South West and England and Wales.

Table 6.14: Housing completions, 1991- 2008

	Number	% of total
Cheltenham	7,130	18
Cotswolds*	2,623	7
Forest of Dean	4,702	12
Gloucester	10,624	27
Stroud	6,962	18
Tewkesbury	7,319	19
Gloucestershire	39,360	

Source: Cheltenham, Cotswold, Forest of Dean, Gloucester, Stroud and Tewkesbury, Annual Monitoring Reports
*Data only available from 2000 onwards

This situation was replicated at district level, with the exception of Cheltenham, where the proportion of flats/ maisonettes/apartments exceeded the regional and national average, reflecting the characteristics of a more urban setting.

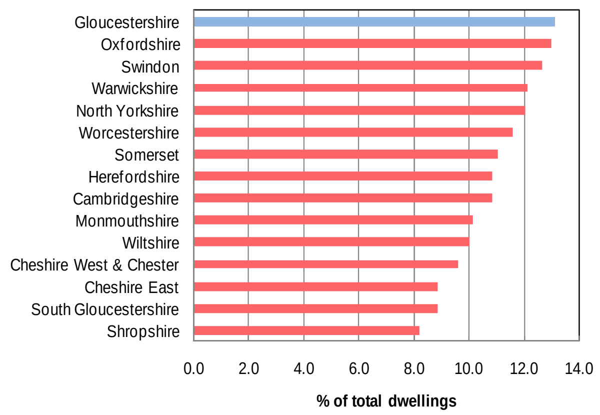
Table 6.15: Housing types, 2001

	Detached	Semi-detached	Terraced	Flat/maisonette/ apartment	Temporary structure
Cheltenham	18.3	33.8	22.4	24.7	0.8
Cotswold	37.7	30.0	21.3	10.1	0.9
Forest of Dean	45.7	34.5	13.0	5.8	1.0
Gloucester	20.3	41.6	23.4	14.1	0.5
Stroud	37.7	33.2	18.7	9.8	0.6
Tewkesbury	34.8	35.2	17.8	9.8	2.3
Gloucestershire	31.2	34.9	19.8	13.1	1.0
South West	31.0	28.0	23.9	16.2	0.8
England	22.6	31.7	25.9	19.4	0.4

Source: 2001, Census of Population, ONS, Crown Copyright Reserved

Although the levels of flats/maisonettes/ apartments, were lower in Gloucestershire than in the South West, England and Wales, Figure 6.21 shows that when compared to its statistical and adjoining neighbours, Gloucestershire had the highest proportion of flats/maisonettes/ apartments again reflecting the particular urban/rural split nature of the County.

Figure 6.21: Flats/ maisonettes/apartments, Gloucestershire and its neighbours, 2001



Source: 2001 Census of Population, ONS, Crown Copyright Reserved

Table 6.16 shows that in 2001, 74.4% of dwellings in Gloucestershire were owner occupied. This was higher than the levels recorded at regional and national level. Within Gloucestershire, levels of home ownership were at their highest in the rural districts of Tewkesbury, Stroud and the Forest of Dean. Interestingly the lowest levels of home ownership were recorded in Cotswold district which may be indicative of the high price of housing within this area.

Levels of private renting were lower in Gloucestershire, than in the South West and England. However, the level of private renting in Cheltenham and Gloucester districts exceeded the regional and national figures, perhaps reflecting the affluence of the County.

Table 6.16: Housing tenure, 2001

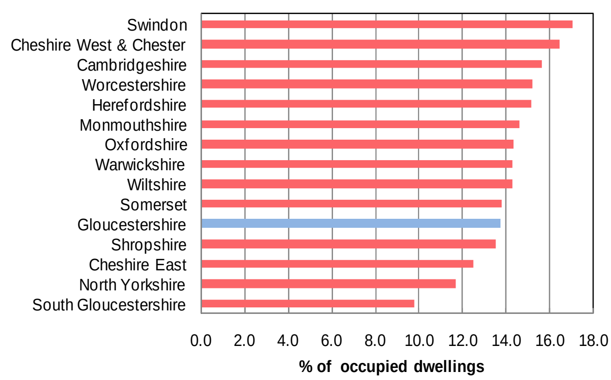
	Owner occupied	Privately rented	Socially rented	Lives rent free
Cheltenham	71.7	13.0	13.3	1.9
Cotswold	69.0	12.0	14.3	4.7
Forest of Dean	76.7	7.0	14.2	2.2
Gloucester	74.9	9.4	14.1	1.6
Stroud	76.2	7.2	14.3	2.3
Tewkesbury	78.6	7.5	12.1	1.8
Gloucestershire	74.4	9.5	13.7	2.4
South West	73.2	11.1	13.5	2.2
England	68.9	9.9	19.2	2.0

Source: 2001 Census of Population, ONS, Crown Copyright Reserved

Compared to national figures, the amount of socially rented housing in Gloucestershire was relatively low but close to the South West average. Within Gloucestershire there was very little difference in the levels of social housing, with the lowest figure of 12.1% recorded in Tewkesbury district and the highest figure of 14.3% recorded in Cotswold and Stroud districts.

The remaining 2.4% of Gloucestershire's housing stock was occupied by people who live rent free. This figure was higher than those recorded at regional and national level and noticeably higher in Cotswold district accounting for 4.7% of dwellings.

Figure 6.22: Socially rented housing, Gloucestershire and its neighbours, 2001



Source: 2001 Census of Population, ONS, Crown Copyright Reserved

When compared to its statistical and adjoining neighbours, Gloucestershire sits somewhere in the middle in terms of its levels of owner occupied housing, privately rented housing and housing lived in rent free. However, Figure 6.22 shows, that when it comes to social housing, Gloucestershire has lower levels of social housing than the majority of its statistical and adjoining neighbours.

High levels of owner occupied housing and low levels of rented housing, have traditionally been seen as a strength in an area and an indicator of affluence. However, increased house prices have in recent years

Table 6.17: Proportion of second residences, 2001

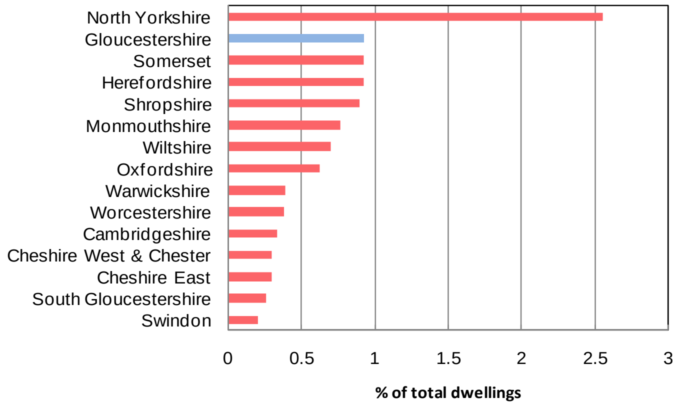
	Second residence/holiday accomodation
Cheltenham	0.4
Cotswold	3.2
Forest of Dean	0.8
Gloucester	0.1
Stroud	0.7
Tewkesbury	0.8
Gloucestershire	0.9
South West	1.8
England	0.6

Source: 2001Census of Population, ONS, Crown Copyright Reserved

turned this into a weakness as low levels of rented housing and high house prices are less likely to attract young people to settle in the area.

This issue is exacerbated by the presence of second homes, which limit the amount of housing stock available to local people and increase prices.

Figure 6.23: Second residence/holiday accommodation, Gloucestershire and its neighbours, 2001



Source: 2001 Census of Population, ONS, Crown Copyright Reserved

Table 6.17 shows, that in 2001, 0.9% of dwellings in Gloucestershire were second homes or holiday accommodation. This was higher than the national figure, but lower than the figure recorded for the South West. Within Gloucestershire, the levels of second residence/ holiday accommodation were particularly high in Cotswold district, where 3.2% of all dwellings were second homes or holiday accommodation. This is not surprising given that the district is an AONB and a popular tourist destination.

Figure 6.23 shows that Gloucestershire has relatively high levels of second homes and holiday accommodation, compared to its statistical and adjoining neighbours, again reflecting the attractive environment Gloucestershire has to offer.

Table 6.18: Mean House prices, Quarter 2, 2010

	Mean House Price
Cheltenham	£244,919.36
Cotswold	£325,509.47
Forest of Dean	£220,186.58
Gloucester	£161,706.05
Stroud	£232,393.73
Tewkesbury	£231,510.81
Gloucestershire	£230,500.60
South West	£225,729.63
England	£234,524.73

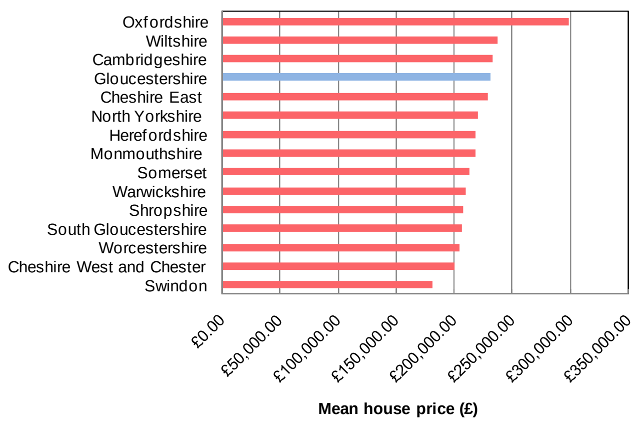
Source: Table 581, Housing market; mean house prices based on Land Registry data, 2010c, CLG

6.3.3 House Prices and Volume of Sales

In the second quarter of 2010, the mean price of property in Gloucestershire was £230,500.60. This was higher than the regional average but lower than the national figure. Across Gloucestershire there was considerable variation, with prices ranging from £161,706.05 in Gloucester district to £325,509.47 in Cotswold district.

Gloucestershire's property prices are relatively high when compared to its statistical and adjoining neighbours. Figure 6.24 shows that of Gloucestershire's fourteen statistical and adjoining neighbours, property prices are only higher in Cambridgeshire, Oxfordshire and Wiltshire.

Figure 6.24: Mean house prices, Gloucestershire and neighbours, Quarter 2, 2010



Source: Table 581, Housing market; mean house prices based on Land Registry data, 2010c, CLG

Figure 6.25 tracks local, regional and national house prices between 2000 and 2010. House prices steadily increased between quarter 1 of 2000 and quarter 3 of 2007. However, as a result of the economic downturn, house prices entered a period of decline between quarter 4 of 2007 and quarter 1 of 2009, after which they began to recover. Interestingly, house prices appear to be recovering at a faster rate, nationally than in the South West and Gloucestershire, with house prices in England exceeding local figures for the first time since Quarter 1 of 2000.

The economic downturn also affected the number of house sales, with Figure 6.26 showing there was a considerable decline in the number of house sales in Gloucestershire and England between quarter 3 of 2007 and quarter 1 of 2009. The number of house sales then increased, before falling again in Quarter 1 of 2010.

Cheltenham and Gloucester districts generally account for the largest proportion of Gloucestershire's house sales which is not surprising given that these areas, have the largest share of Gloucestershire's total housing stock.

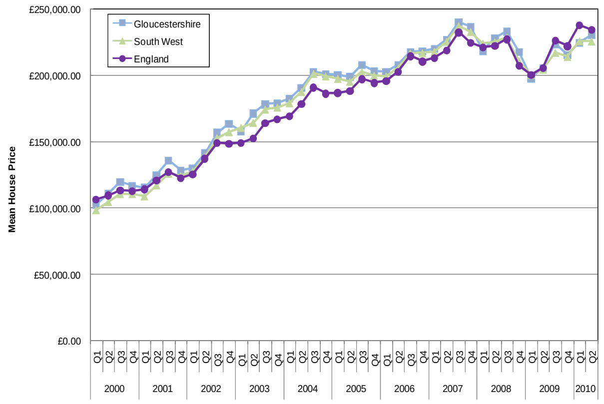
6.3.4 Housing Affordability

In areas where house prices are high, housing affordability is often an issue. The most common indicator of housing affordability, is the ratio between lower quartile incomes and lower quartile house prices. This allows an assessment of whether people with the lowest incomes can afford the cheapest housing.

Table 6.19 shows that in 2009, someone earning a lower quartile sum in Gloucestershire, required 7.19 times their earnings to purchase a lower quartile priced property. This is higher than the England average (6.28), but lower than the regional average (7.63). Figure 6.27 illustrates that when compared to its statistical and adjoining neighbours, Gloucestershire is about average in terms of housing affordability.

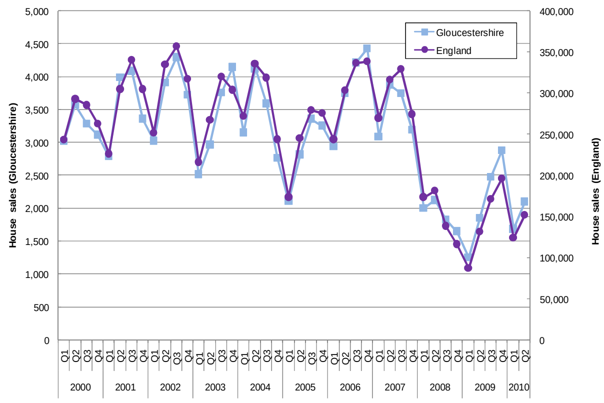
Within Gloucestershire there is considerable variation in housing affordability. Housing is most affordable in Gloucester, with an affordability ratio of 6.14, unsurprisingly housing is least affordable in Cotswold district, where an individual earning a lower quartile sum, would require 10.88 times their income to purchase a lower quartile priced property.

Figure 6.25: Mean house prices, Gloucestershire, South West and England, 2000-2010



Source: Table 581, Housing market; mean house prices based on Land Registry data, 2010c, CLG

Figure 6.26: Property sales, Gloucestershire and England, 2000-2010



Source: Table 584, Housing market, property sales based on Land Registry data, 2010d, CLG

Given that mortgage lenders, tend to favour mortgages that are no more than four times an individuals salary (*Thisismoney.co.uk,2011*), Gloucestershire's income to house price ratio, may make it difficult for first time buyers to get on the property market. This may result in the out migration of young people or alternatively encourage people to commute into Gloucestershire for work, while living in areas where housing is cheaper.

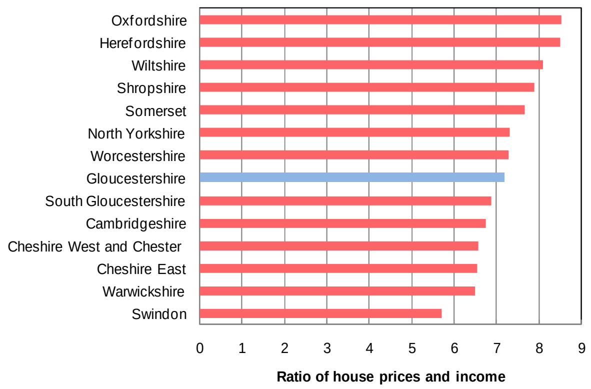
Table 6.19: Ratio of house price and income, 2009

	Ratio
Cheltenham	7.27
Cotswold	10.88
Forest of Dean	7.04
Gloucester	6.14
Stroud	7.38
Tewkesbury	6.94
Gloucestershire	7.19
South West	7.63
England	6.28

Source: Table 576, Ratio of lower quartile house price to lower quartile earnings, 2010e, CLG

Figure 6.28 shows that between 1997 and 2007, housing affordability became an increasingly important issue, with the ratio between income and house prices, growing by around 100% at national, regional and local level. Following the economic downturn in 2008, the ratio between house prices and income fell, this reflects the fall in house prices discussed in the previous section.

Figure 6.27: Ratio of house prices and income, Gloucestershire and its neighbours, 2009



Source: Table 576, Ratio of lower quartile house price to lower quartile earnings, 2010e, CLG

6.3.5 Affordable housing

In order to address the issue of housing affordability, the labour government's planning policy, placed a strong emphasis on the need for local authorities to increase the provision of affordable housing.

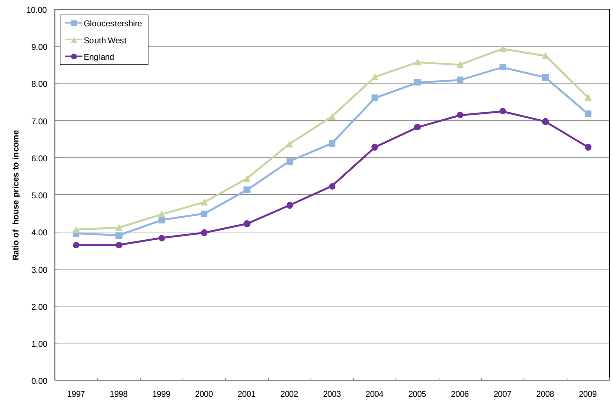
Affordable housing is defined as socially rented and intermediate housing, provided to specified eligible households whose needs are not met by the market. It should meet the needs of eligible households including availability at a cost low enough for them to afford, determined with regard to local incomes and local house prices *(CLG, 2010f).*

Table 6.20 shows the number of additional affordable dwellings provided between 2006 and 2010, this includes new build properties and existing, private sector properties that have been purchased for use as an affordable home.

Between 2006 and 2010, around 2,500 additional affordable homes, were provided in Gloucestershire. At district level, the largest number of affordable homes were provided in Gloucester district, while the smallest number were provided in Cotswold district.

The number of affordable homes provided each year, generally follow a similar pattern in each locality. The number of affordable homes provided were at their highest, in the years 2007-08 or 2008-09, after which they declined, presumably reflecting the impact of the economic downturn.

Figure 6.28: Ratio of house prices and income, Gloucester shire, South West and England 1997-2009



Source: Table 576, Ratio of lower quartile house price to lower quartile earnings, 2010e, CLG

Table 6.20: Additional affordable dwellings, 2006-2010

	2006-07	2007-08	2008-09	2009-10	2006-2010
Cheltenham	30	60	70	30	190
Cotswold	20	0	60	10	90
Forest of Dean	10	30	10	10	60
Gloucester	60	70	70	150	350
Stroud	0	60	30	40	130
Tewkesbury	30	80	70	50	230
Glouceserhire	150	300	310	290	1,050
South West	1,480	2,160	2,570	2,490	8,700
England	19,630	23,530	24,600	24,610	92,370

Source: Table 1008, Additional affordable dwellings provided by local authority Area, 2010g, CLG

6.3.6 Future Housing Requirements

The key aim of the Housing Demography study (*Gloucestershire County Council, 2011g*) commissioned by Gloucestershire County Council and District planning authorities was to explore the role of new housing provision in the population dynamics in Gloucestershire districts, the interaction between new housing and economic growth and alternative population projection scenarios based on trend and employment assumptions.

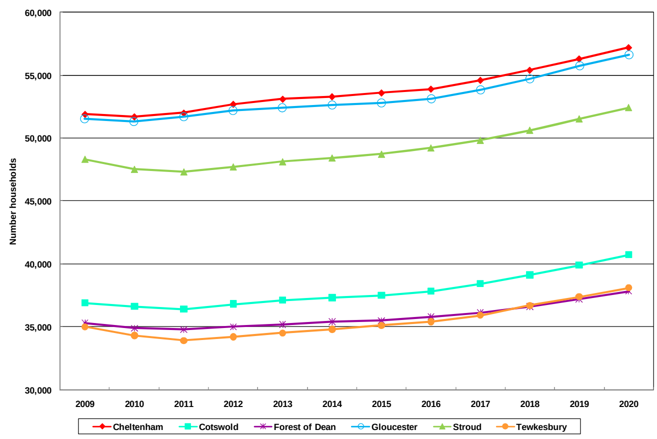
Two modelling tools, the Local Economic Forecasting Model (LEFM) and the POPGROUP forecasting modelling suite were used to provide household projections for the six districts of Gloucestershire.

Projected household numbers for Gloucestershire as depicted in Figure 6.29 are related to the employment-based scenario and expected to increase by 9% from 258,900 in 2009 to 282,800 in 2020, less than the trend-based projections which point to an increase of 12% by 2020.

Not unsurprisingly Cheltenham and Gloucester account for the highest numbers and Tewkesbury and the Forest of Dean the lowest.

These findings are intended to form part of a wider Gloucestershire Housing Evidence Review, which includes a local housing need, affordability, and detailed econometric forecasting model. The full suite of research will provide the robust and defendable

Figure 6.29: Household projections (Employment based) for the districts of Gloucestershire



Source: Gloucestershire Housing Evidence Review, 2011, Gloucestershire County Council evidence base for generating future local housing requirements to be included in emerging local district Local Development Frameworks (LDFs).

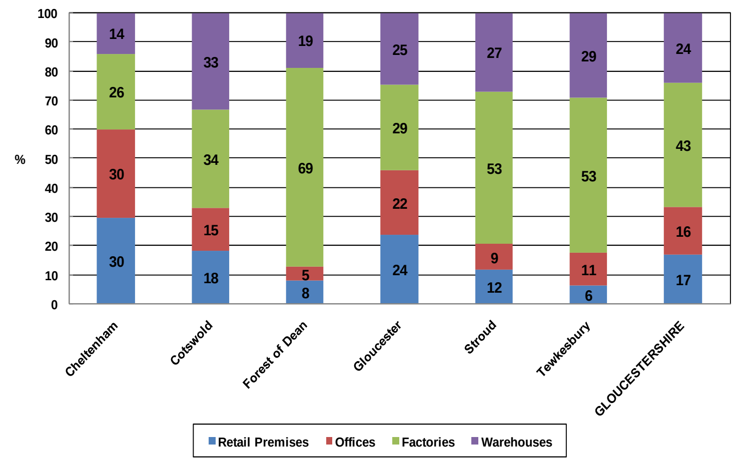
6.4 Employment land

6.4.1 Industrial Floorspace

Figure 6.30 shows the relative proportion of existing floorspace across the districts relating to retail, office factory and warehouse premises in 2008.

It's clear that the Forest of Dean, Stroud and Tewkesbury districts have the highest proportion of factory floorspace among the districts but also in relation to the other industrial floorspace existing within their area. Cheltenham and Gloucester districts have a fairly even spread of floorspace usage.

Figure 6.30: District and County industrial floorspace



Source: Valuation Office Agency, 2008, Neighbourhood Statistics ONS Crown Copy right Reserved

Table 6.21 shows that in 2008 the total floorspace relating to retail, office, factory and warehouse premises in Gloucestershire was about 6.5 million square metres accounting for around 16,000 premises. Some 65% of the total floorspace was taken up by factory and warehouse premises in the County. Of the six districts, Gloucester had the largest floorspace amounting to 1,400 square metres accounting for just over a fifth of total floorspace area in Gloucestershire. Not surprisingly Cotswold district had the smallest industrial floorspace at around 700 square metres.

Table 6.21: Change in industrial floorspace between 2005 and 2008 for Gloucestershire and districts

Floorspace	Cheltenham		Cotswold		Forest of Dean		Gloucester		Stroud		Tewkesbury		Gloucestershire	
	2008 ('000 sq metres)	Change 2005 to 2008 ('000 sq metres)	2008 ('000 sq metres)	Change 2005 to 2008 ('000 sq metres)	2008 ('000 sq metres)	Change 2005 to 2008 ('000 sq metres)	2008 ('000 sq metres)	Change 2005 to 2008 ('000 sq metres)	2008 ('000 sq metres)	Change 2005 to 2008 ('000 sq metres)	2008 ('000 sq metres)	Change 2005 to 2008 ('000 sq metres)	2008 ('000 sq metres)	Change 2005 to 2008 ('000 sq metres)
Retail Premises	347	26	139	4	67	0	337	35	131	5	69	8	1,090	78
Offices	358	12	112	16	41	2	319	6	99	7	127	24	1,056	67
Factories	307	-5	257	-6	587	32	418	-17	594	-15	593	30	2,756	19
Warehouses	163	17	254	21	161	-10	353	-51	303	2	325	41	1,559	20
Total	1,175	50	762	35	856	24	1,427	-27	1,127	-1	1,114	103	6,461	184

Source: Valuation Office Agency, 2005-2008, Neighbourhood Statistics ONS Crown Copyright Reserved

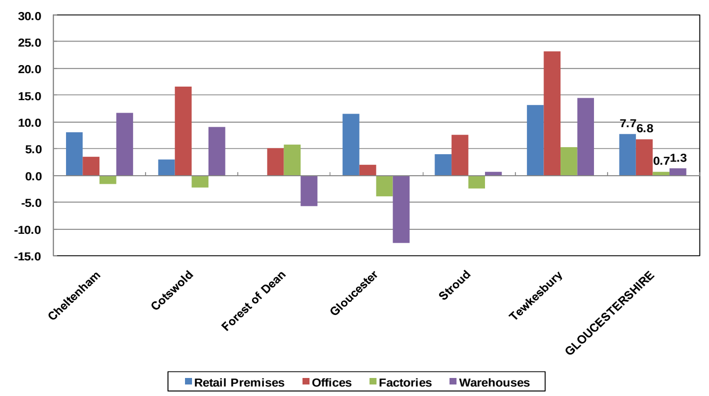
Table 6.21 also shows that for Gloucestershire the total stock grew by 184,000 square metres between 2005 and 2008 with retail premises and offices increasing the most amounting to 145,000 square metres. Factories and warehousing space grew slightly amounting to 39,000 square metres.

The districts present a different picture with Tewkesbury experiencing the most growth overall amounting to 10% and an increase of 103,000 square metres with the highest growth in office, warehousing and retail premises.

Retail premise stock

Not unexpectedly the growth of retail premise stock was concentrated in Gloucester and Cheltenham districts with an increase of 26,000 square metres and 35,000 square metres as shown in Table 6.21 representing a 12% and 8% increase respectively as portrayed in Figure 6.31. Tewkesbury experienced the highest percentage increase of 13% but with a comparatively small stock of retail premises this represents a much smaller increase in floorspace of 8,000 square metres.

Figure 6.31: Percentage change in stock by area between 2005 and 2008



Source: Valuation Office Agency, 2005-2008, Neighbourhood Statistics ONS Crown Copyright Reserved

Office stock
Growth in office stock was greatest in Tewkesbury district with an increase of 24,000 square metres representing 23% growth followed by Cotswold district with an increase of 16,000 square metres reflecting a 17% growth between 2005 and 2008 as shown in Table 6.21 and Figure 6.31. Both Stroud and the Forest of Dean districts although having relatively small areas of office stock experienced healthy increases of 8% and 5% growth respectively.

Factory stock
In terms of factory stock, although this stock accounts for 42% of the total floorspace in the County only the Forest of Dean and Tewkesbury districts experienced growth amounting to 5% each, creating a total of 62,000 square metres as Table 6.21 and Figure 6.31 show. Gloucester district underwent the greatest decline in factory floorspace of 4% equating to 17,000 square metres.

Warehouse stock
Changes in warehouse stock between 2005 and 2008 show a mixed picture with a large decline in shown in Gloucester district amounting to -13% relating to a reduction of 51,000 square metres of floorspace while Tewkesbury district warehouse floorspace increased by 41,000 square metres reflecting a growth of 14% over that period.

Rateable Value per square metre
The value of retail premises across the County was quite varied in 2008 as shown in Table 6.22. Cheltenham had the highest value at £145 m^2 compared to the South West at £114m^2 and national figure of £130m^2. Cotswold district was relatively high at £108m^2 for retail premises which perhaps reflected the tourism appeal of some of its market towns. Factory space was the cheapest in the Forest of Dean at £19m^2 compared to the regional and national value of £29m^2. Office space values varied across the County with the Forest of Dean at £41m^2 and Stroud at £56m^2, the cheapest, compared to £86m^2 in Cheltenham and £88m^2 in Tewkesbury, both similar to the regional figure and much lower than the national figure of £121m^2 which was of course influenced by London and the South East values.

6.5 Existing and Future Development Sites and Employment land

Table 6.22 Rateable value per metre squared for the districts of Gloucestershire, South West and England, 2008

	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	South West	England
Retail premises	145	108	55	113	76	108	114	130
Offices	86	68	41	72	56	88	86	121
Factories	33	33	19	34	29	31	29	29
Warehouses	45	33	25	37	28	48	36	40

Source: Valuation Office Agency, 2008, Neighbourhood Statistics ONS Crown Copyright Reserved

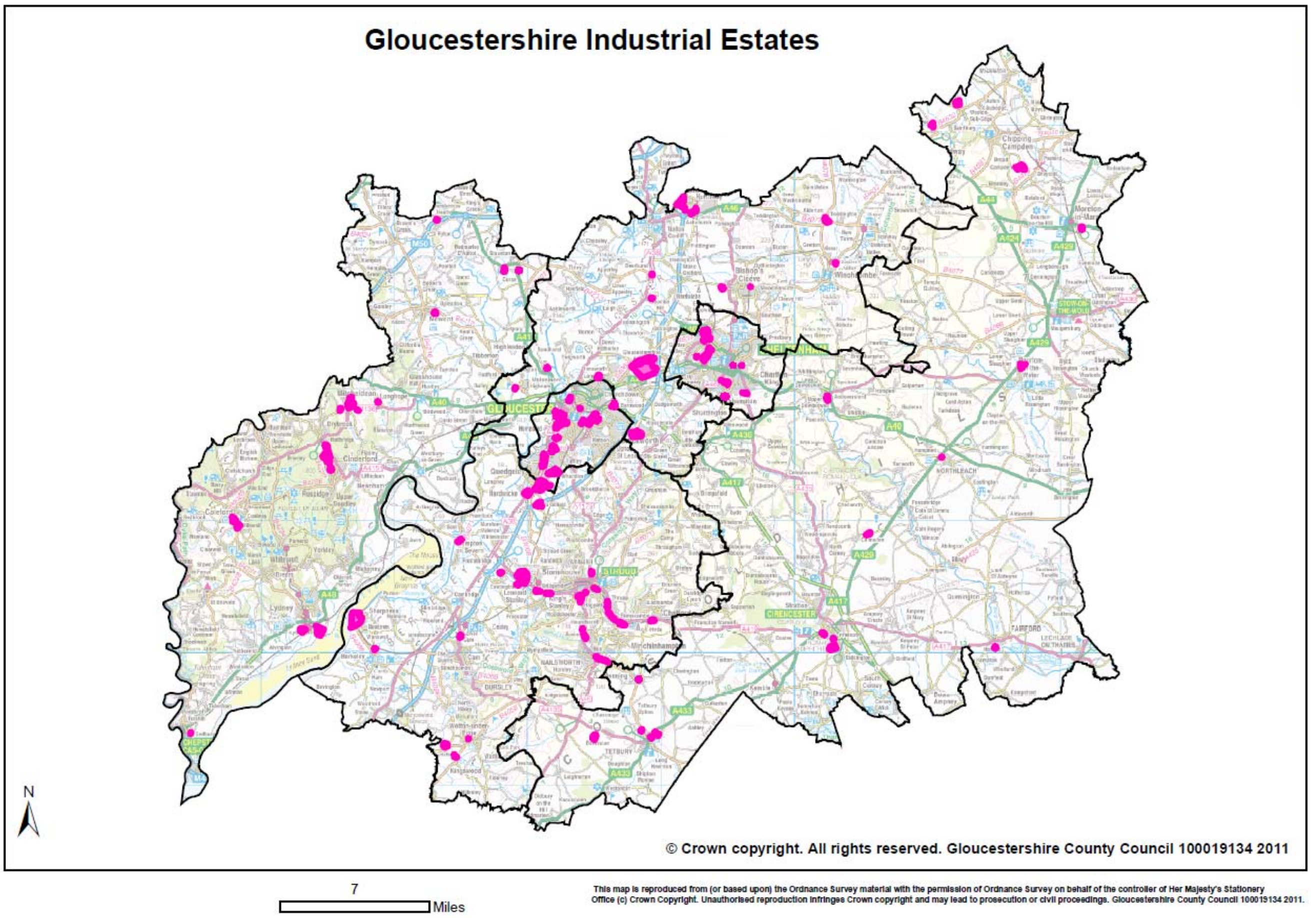
Although there is a wealth of information relating to existing employment sites mainly through the medium of Local Plans, there is considerable inconsistency across the County in terms of age of the data and method of reporting. However, an idea of where existing development is located, the mix of activities and number of employees involved, at a level of geography that can be sensibly managed would provide a critical benchmark.

Similarly, information about future development and employment land demand and availability is fragmented and at various stages of reporting.

Both of these issues need to be addressed, however, with the planning system in a state of flux in addition to the associated policy changes emanating from central government, it was not in the scope of this edition of the LEA to attempt to cover this aspect.

Figure 6.32 is probably the best indicator at present of where industrial activity is located in Gloucestershire.

Figure 6.32: Industrial Estates in Gloucestershire



6.0 Sustainable Economic Growth

Key points:

- Efficient transport infrastructure and services are vital to Gloucestershire to allow residents to access employment, education and services and to enable customers and suppliers to access businesses. However, it is a challenge, given the County's size and population distribution
- Funding for transport is likely to reduce over the coming years, which will effect future developments in Gloucestershire's transport infrastructure
- Gloucestershire has a well developed strategic road network with M5 motorway running north-south through the county and providing good links to Birmingham and the north, Bristol and the South West and the wider motorway network
- Gloucestershire's road network has been getting busier, with the average daily traffic flow increasing by 6.1% between 2000 and 2006
- Congestion is a problem in many parts of the County including; A417/Birdlip/Nettleton Bottom/Air Balloon, Tewkesbury road to M5, A40 west of Severn and between Gloucester and Cheltenham, town and city centres of Cheltenham and Gloucester
- There are no rail freight terminals in Gloucestershire, which means the County is heavily reliant on road deliveries
- Gloucestershire has an efficient rail infrastructure, with good links to London and other major cities. However, it is difficult to 'cross the County' by rail. For example to travel from Moreton in Marsh to Gloucester is not possible on one line
- Gloucestershire's urban and inter-urban bus services generally operate regularly and at peak times. However, in the more remote rural areas bus services are often infrequent . They are therefore not viable as commuter bus services and residents may have difficulty accessing key services by public transport
- In order to save £2 million from their £5 million transport budget Gloucestershire County Council is reviewing its bus services. Changes made following the review are likely to have a significant impact on accessibility, particularly in rural areas, where buses are often heavily subsidised
- Gloucestershire Airport is regularly used for private chartered flights and offers commercial flight to limited destinations. Several major airports are easily accessible from Gloucestershire including Bristol, Birmingham, Cardiff and London Heathrow
- Levels of car ownership in Gloucestershire are high particularly in the more rural areas
- In many parts of the County, especially the Forest of Dean, broadband services are slow. However, Gloucestershire, was successful in their bid to become one of four 'pilots' in the UK to gain funding to pilot a new technological solution to the provision of next generation access broadband in the Forest of Dean
- Gloucestershire has a high quality landscape and a number of important cultural sites. These are important assets to the County's economy.
- A key challenge for Gloucestershire and all other areas is how to sustain economic growth whilst reducing the amount of waste sent to landfill, the consumption of resources and emissions of greenhouse gases.
- The proportion of municipal waste sent to landfill declined from 66% in 2006/07 to 61% in 2009/10
- Gloucestershire County Council states that by 2020 at least 60% of the County's household waste should be recycled, reused and composted, this compares to 41.6% in 2009/10

6.0 Sustainable Economic Growth

- The impact of climate change on the County may be significant. Modelling suggests there will be drier hotter summers, wetter winters, more intense rainfall and increased risk of more extreme weather events
- Areas that are expected to be vulnerable to the impact of climate change include agriculture, biodiversity, settlements and business including local government, infrastructure, planning, transport, energy, health and water services
- Gloucestershire County Council aims to cut its carbon emissions by 30% by 2016 (against the 2006/07 baseline) and by 60% by 2021
- Industry and commerce is the greatest contributor to carbon emissions in Gloucestershire. However, road transport accounts for a greater proportion of emissions in Gloucestershire, than regionally and nationally
- In order to reduce our carbon emissions the economy will undergo some fundamental changes. These changes will require the low carbon sector to grow and provide opportunities for other sectors to develop low carbon products and services
- In 2010 there were an estimated 268,680 dwellings in Gloucestershire. At district level, Cheltenham, Gloucester and Stroud account for the largest proportion of dwellings in the County
- The number of new housing completions in Gloucestershire amounted to 39,400 houses between 1991 and 2008. The largest number of completions were in Cheltenham, Gloucester and Tewkesbury
- In 2001, 74% of dwellings in Gloucestershire were owner occupied, this was higher than the national averages. Conversely levels of private and social renting were low.
- Gloucestershire has relatively high levels of second homes and holiday accommodation in comparison with it's statistical and adjoining neighbours
- House prices in Gloucestershire are relatively high when compared to the regional average and its statistical and adjoining neighbours.
- in 2009, someone earning a lower quartile sum in Gloucestershire, required 7.19 times their earnings to purchase a lower quartile priced property, this is higher than the national average.
- Gloucestershire's income to house price ratio, may make it difficult for first time buyers to get on the property market. This may result in the out migration of young people
- Between 2006 and 2010, around 2,500 additional affordable homes, were provided in Gloucestershire. At district level, the largest number of affordable homes were provided in Gloucester district, while the smallest number were provided in Cotswold district
- Projected household numbers for Gloucestershire are expected to increase by 9% from 258,900 in 2009 to 282,800 in 2020. Unsurprisingly Cheltenham and Gloucester account for the highest numbers and Tewkesbury and the Forest of Dean the lowest
- The Forest of Dean, Stroud and Tewkesbury districts have the highest proportion of factory floorspace among the districts but also in relation to other industrial floorspace
- In 2008 the total floorspace relating to retail, office, factory and warehouse premises in Gloucestershire was about 6.5million square metres accounting for about 16,000 premises
- 65% of the County's total floorspace was taken up by factory and warehouse premises
- Between 2005 and 2008 Gloucestershire total stock grew by 184,000 square metres with retail premises and offices increasing the most amounting to 145,000 square metres

6.0 Sustainable Economic Growth

Strengths	Weaknesses
• Gloucestershire has a well developed road and rail network that provides good links to areas outside the County • Several major airports are easily accessible from Gloucestershire including Bristol, Birmingham, Cardiff and London Heathrow • Gloucestershire has a high quality landscape and a number of important cultural sites. These are important assets to the County's economy. • Gloucestershire became the first area to be awarded '10:10 County' status, as part of the international campaign to encourage organisations to reduce their carbon emissions (excluding schools) by at least 3% during 2010/11	• Congestion is a problem in many parts of the County, including; A417/Birdlip/Nettleton Bottom/Air Balloon, Tewkesbury road to M5, A40 west of Severn and between Gloucester and Cheltenham, town and city centres of Cheltenham and Gloucester • Residents in rural areas may have difficulties accessing key services using public transport • High dependency on the car • Broadband speeds are currently inadequate in many areas • The County sends a high proportion of its municipal waste to landfill, conversely rates of recycling, incineration and other methods of waste disposal are low • House prices are relatively high which may make it difficult for first time buyers to get on the property market
Opportunities	**Threats**
• Improvement in transport infrastructure including the approved Kemble - Swindon redoubling will further improve Gloucestershire's accessibility • Waterway network, Sharpness docks • Improvements in the broadband infrastructure may create new opportunities for businesses • Residual Waste Project (Javelin Park) • The transition to a low carbon economy may present considerable opportunities for business development within the Gloucestershire economy, particularly for the Manufacturing and Environmental technologies sectors • Projected household numbers for Gloucestershire are expected to increase by 9% from 258,900 in 2009 to 282,800 in 2020 • Joined up approach to employment and housing land and workspace planning and delivery	• Funding for transport is likely to reduce over the coming years, which will effect future developments in Gloucestershire's transport infrastructure • The implications of the bus review • The impact of climate change on the County may be significant. Modelling suggests there will be drier hotter summers, wetter winters, more intense rainfall and increased risk of more extreme weather events • Need to reduce greenhouse gas emissions, resource consumption and the amount of waste sent to landfill • Projected household numbers for Gloucestershire are expected to increase by 9% from 258,900 in 2009 to 282,800 in 2020

Definitions

1. **Goods vehicles** include some larger light goods vehicles and small buses and coaches, medium goods vehicles and heavy rigid and articulated lorries.

2. **Large Goods vehicles** include articulated lorries of 3 axle and above.

3. Other types of service includes park and ride services and community transport.

4. Gloucestershire's **statistical and adjoining neighbours** are based on the Chartered Institute of Public Financing and Accountancy (CIPFA) Nearest Neighbour model. They are: Cambridgeshire, Cheshire East, Cheshire West and Chester, Herefordshire, Monmouthshire, North Yorkshire, Oxfordshire, Shropshire, Somerset, South Gloucestershire, Swindon, Warwickshire, Wiltshire and Worcestershire.

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