

Regional Skills Assessment



Fife Scottish Funding Council Scottish Enterprise Promoting further and higher education **•** • • • • •

Acknowledgement

The Regional Skills Assessment Steering Group (Skills Development Scotland, Scottish Enterprise, the Scottish Funding Council and the Scottish Local Authorities Economic Development Group) would like to thank SQW for their highly professional support in the analysis and collation of the data that forms the basis of this Regional Skills Assessment.

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1 Introduction

1.1 The purpose of Regional Skills Assessments

This document is one of a series of Regional Skills Assessments (RSAs), which have been produced to provide a **high quality and consistent source of evidence about economic and skills performance and delivery at a regional level.** The RSAs are intended as a resource that can be used to identify regional strengths and any issues or mismatches arising, and so inform thinking about future planning and investment at a regional level.

1.2 The development and coverage of RSAs

The content and geographical coverage of the RSAs was decided by a steering group comprising Skills Development Scotland, Scottish Enterprise, the Scottish Funding Council and extended to include the Scottish Local Authorities Economic Development Group during the development process. It was influenced by a series of discussions with local authorities and colleges, primarily about the most appropriate geographic breakdown. The approach adopted was guided by a recognition that:

- · across the public sector agencies, different regional geographies are used
- · each RSA should be built up from a local authority basis
- any single local authority should not be split across RSAs, but a local authority could be included in more than one.

The geographies for which the RSAs are available are set out in Table 1.1.

Table 1.1 RSA coverage

RSA	Local authorities covered	
Aberdeen City and Shire	Aberdeen City	
	Aberdeenshire	
Ayrshire	East Ayrshire	
	North Ayrshire	
	South Ayrshire	
Edinburgh and the Lothians	East Lothian	
	Edinburgh City	
	Midlothian	
	West Lothian	
Fife	Fife	-
Forth Valley	Clackmannanshire	
	Falkirk	
	Stirling	
Glasgow & Clyde Valley ¹	East Dunbartonshire	
	East Renfrewshire	
	Glasgow City	
	Inverclyde	
	North Lanarkshire	
	Renfrewshire	
	South Lanarkshire	
	West Dunbartonshire	
Glasgow Region	East Dunbartonshire	
	East Renfrewshire	
	Glasgow City	
Lanarkshire Region	East Dunbartonshire	-
	North Lanarkshire	
	South Lanarkshire	
South of Scotland	Scottish Borders	
	Dumfries & Galloway	
Tayside	Angus	
	Dundee	
	Perth & Kinross	
West Region	East Renfrewshire	
	Inverclyde	
	Renfrewshire	
	West Dunbartonshire	

Source: SQW

¹ The Glasgow & Clyde Valley area incorporates the three college regions of Glasgow, Lanarkshire and West. Separate RSAs have been produced for each of these meaning that the constituent local authorities are covered in more than one RSA.

The RSAs are factual documents, drawing primarily on secondary data. For most indicators, data is presented for the region, Scotland and the UK. Although, for some, data is not available for RSA regions and has been presented for wider geographies². There is commentary provided around each, focussing on trends and differences with the national averages. The RSA does not seek to draw conclusions about the performance of the region, but rather ends with a series of questions to prompt discussion and reflection at a local level.

The data was the most up to date available at the time of writing. The cut off point for routine data (i.e. that which is produced at regular intervals) was March 2014. In addition, each RSA contains data from the General Register Office for Scotland's population projections and the UK Commission for Employment and Skills' Employer Skills Survey and Working Futures reports, which became available at a later stage. They were also updated with the latest School Leaver Destination Results and Modern Apprenticeship statistics, which became available in June 2014.

1.3 Document structure

The document is structured as follows:

- Chapter 2 Context
- Chapter 3 Economic performance
- Chapter 4 Profile of the workforce
- Chapter 5 People and skills supply
- Chapter 6 Education and training provision
- Chapter 7 Skills mismatches
- Chapter 8 Employment and skills outlook
- Chapter 9 Questions arising.

² The datasets affected are the UK Commission for Employment and Skills' (UKCES) Employer Skills Survey and Working Futures results, covered in Chapters 7 and 8. The RSA regions affected are Edinburgh & the Lothians and Fife, which are combined in the UKCES data, as well as Glasgow, Lanarkshire and West, which are covered by Glasgow & Clyde Valley.

Section 2 Context

2 Context

2.1 Introduction

This section looks at the context to the RSA covering in brief the:

- · global economic context
- · national policy context.

2.2 Economic context

The RSAs have been developed following a period of depressed economic performance. Scotland entered recession over five years ago and the effects of this will continue to have an impact for a considerable time to come. This runs through the evidence presented. However, the data also picks up the beginnings of the recovery. The latest Scottish Government State of the Economy report (published in April 2014) concluded that the **recovery in the Scottish economy is progressing and consolidating**. This is based on:

- the fact that Scotland's economy grew by 1.6% during 2013, the first calendar year since 2007 with four quarters of growth. Economic output is now expected to surpass its pre-recession peak during the first half of 2014
- survey evidence pointing to growing confidence across the majority of sectors in Scotland and the outlook amongst key trading partners has improved over the last year
- improving outlook being reflected strongly in the aggregate labour market indicators, with employment rising over the year and unemployment falling. Employment is now back above pre-recession levels and at its highest level on record in Scotland. However, unemployment and inactivity remain above prerecession levels.

The global recovery also accelerated during 2013 and expectations are that the momentum will be maintained in 2014, with the International Monetary Fund (IMF) expecting growth in 2014 to exceed 2013. The UK is expected to be amongst the fastest growing of the G8 group of countries.

The recession has impacted on different parts of the economy in different ways:

- · to date, much of the recovery has been consumption-led
- the labour market has changed since 2008 unemployment did not rise as much as feared and there
 was an increase in participation amongst women and older workers, however youth unemployment has
 risen, as has underemployment
- productivity growth in Scotland and the UK has been weak in the recovery period. This is in contrast to
 previous recessions and the experience of other countries.

Section 2 Context

2.3 National Policy

The development of the Scotland's economy is guided by a number of strategies. The **Government's Economic Strategy**, produced in 2011, aims to deliver faster sustainable economic growth with opportunities for all to flourish. It is built around six strategic priorities:

- · supportive business environment
- · learning, skills and wellbeing
- transition to a low carbon economy
- infrastructure, development and place
- · effective government
- equity.³

The refreshed **Skills Strategy**, produced in 2010, sets out the Scottish Government's commitment to training and skills and aims for a flexible, responsive, partnership approach to meeting Scotland's skills needs. It has four priority themes:

- empowering people to ensure they have the opportunity to access the right advice, support and opportunities
 to acquire the skills and attributes to both contribute to and benefit from future economic success;
- supporting employers by better understanding and assessing the skills they need for future success, and ensuring that the supply of skills, training and qualifications can be responsive to this;
- simplifying the skills system to ensure that it is more coherent and easy to understand for individuals and employers; and
- strengthening partnerships and collective responsibility between public, private and third sectors to help improve skills and the contribution they make towards achieving Scotland's social and economic aspirations.⁴

A key element in meeting employer need has been the development of **Skills Investment Plans (SIPs)**. This work has been led by Skills Development Scotland. SIPs have or are being developed to cover each of the Government's identified Growth Sectors (described in more detail in Chapter 4) and other key sectors of the economy.

There is also a **national strategy to promote youth employment**⁵. This was developed in light of the difficulties faced by young people during the economic recession and acknowledges that securing employment for young people is a key component in determining their future life chances and earnings. This includes **Opportunities for All**, which offers all 16-19 year olds not in work, education or training a place in learning or training.

The **Commission for Developing Scotland's Young Workforce** published its final report, Education Working for All⁶, in June 2014 and recognised the important role of RSAs in aligning vocational education and training to the needs of industry. The extensive information provided by the RSAs can be used in addressing some of the recommendations made by the report.

On the skills supply side, the most significant change in recent years has been the programme of **college regionalisation** implemented by the Scottish Government during 2012/13. This has resulted in a number of colleges merging or working in much closer collaboration to ensure provision is efficient, high quality, and tailored to local needs. Full details of the mergers can be found in Annex C.

³ http://www.scotland.gov.uk/Topics/Economy/EconomicStrategy

⁴ http://www.scotland.gov.uk/Topics/Education/skills-strategy/overview

⁵ Action for Jobs - Supporting Young Scots into Work: Scotland's Youth Employment Strategy.

Available at http://www.scotland.gov.uk/Publications/2012/06/9210/0

⁶ http://www.scotland.gov.uk/Resource/0045/00451746.pdf

3 Economic Performance

Summary

- the Fife economy generated 5% of all Scottish output in 2012
- the impact of the recession on the regional economy has been more marked than across both Scotland and the UK, though there are signs of a recent return to growth
- GVA per employee in Fife is significantly below the Scottish average, although it has grown more quickly than across Scotland from 2005-12
- Fife has relatively large production and public services sector, together accounting for 54% of economic output
- levels of productivity in Fife are some way below both the Scottish and UK averages. However, these have been increasing in recent years resulting in a slight narrowing of the productivity gap
- there has been a slight increase in the rate of new business start-ups in Fife since 2009, but not to the degree seen in Scotland more widely
- patterns of company support suggest that Fife's ICT sector in particular offers potential for future growth
- business expenditure on R&D in Fife is below the national average.

Table 3.1 Headline Performance Indicators

	Fife	Scotland
Economic Growth		
Total GVA 2012 (£bn)	£5.1	£106.3
Average Annual GVA Growth Rate 2009-2012	-2.0%	-1.7%
Productivity		
GVA per Employee 2012	£30,100	£43,700
Change in GVA per Employee 2005-2012	7%	2%
Business Base		
Businesses Birth Rate per 10,000 adults 2012	25	33
Business Investment in R&D per head of population 2012	£88	£133

Section 3 Economic Performance

3.1 Introduction

This section looks at the economic performance of Fife covering:

- gross value added
- productivity
- earnings
- business base.

3.2 Gross Value Added (GVA)

The Fife economy generated 5% of all Scottish output in 2012.

Output from the Fife economy (as measured by Gross Value Added) was £5.1bn in 2012⁷. **This amounted** to 5% of total Scottish output of £106.3bn.

Fife's economy is strongly dependent on production and public services.

The Fife economy is **strongly driven by the public services and real estate** sectors: the production sector accounts for nearly a third (30%) of the area's output; and public services for nearly a quarter (24%). The production sector is particularly large relative to Scotland as a whole.

Table 3.2 GVA by sector 2011

	Fife	Scotland
Agriculture, forestry & fishing	1%	1%
Business services	7%	10%
Construction	7%	7%
Retail, transport, accommodation & food	16%	18%
Financial services	3%	7%
Information & communication (ICT)	2%	3%
Production	30%	19%
Public services	24%	22%
Real estate	5%	10%
Other services	4%	3%

Source: ONS Regional Accounts Percentages based on GVA in current basic prices

The impact of the recession on the Fife economy has been more marked than across Scotland and the UK.

The Fife economy saw steady growth between 2002 and 2006, with a net rise in GVA of 12% over this period (albeit with a dip in the growth between 2004 and 2005). However, since 2004, the average annual growth rate for the area has been below that of Scotland and the UK.

Between 2007 and 2010, Fife saw sharp year-on-year contractions in its economy. This decline has arrested in recent years, with GVA stabilising over the period 2010-2012. There is, however, little evidence to indicate any sustained return to growth.





Source: ONS Regional Accounts Index based on GVA in real prices

3.3 Productivity

The Fife economy is less productive than the Scottish economy as a whole, although have been increasing in recent years.

Productivity (as measured by GVA per worker) in the Fife economy amounted to £30,100 in 2012. This was 69% of the Scottish average of £43,700 and even further behind the UK average of £47,800.

The value of GVA generated per worker in Fife increased by 7% between 2005 and 2012, higher than the increases of 2% across Scotland and 3% for the UK. This resulted in a slight narrowing of the productivity gap between the region and Scotland / UK.

Figure 3.2 GVA per Worker 2005-2012



Source: ONS Regional Accounts Calculations based on GVA in real prices

3.4 Earnings

The earnings of full-time workers in Fife are below the Scottish and UK averages.

Full-time workers in Scotland earned an average of \pounds 508 per week in 2013, relative to a UK average of \pounds 518⁸. The equivalent figure for Fife was lower at \pounds 460.

It is important to note that these figures are **workplace-based**. That is, they refer to the earnings of those whose job is located in the area, rather than those that live there. For areas that experience large commuting flows, the differences can be substantial. It may be the case that many Fife residents travel out of the area to work in higher paying jobs located elsewhere, such as Edinburgh.

Table 3.3 Median Gross Weekly Earnings 2013⁹

	Full-Tim	Full-Time Workers		
	Median Weekly Earnings	% of Scottish average		
Fife	£460	90%		
Scotland	£508	100%		
UK	£518	102%		

Source: Annual Survey of Hours and Earnings Figures are in current basic prices

⁸ 'Average' refers to median. Full-time workers are defined as those who work more than 30 paid hours per week or those in teaching professions working 25 paid hours or more per week.

⁹ Figures are workplace-based, rather than resident basedprofessions working 25 paid hours or more per week.

3.5 Business Base

The total number of businesses in Fife has been static in recent years in contrast to growth across Scotland as a whole.

There were 10,600 registered businesses in Fife in 2013¹⁰. This was the same as in 2008 **in contrast to growth of 2% across Scotland as a whole**. At the UK level, there was a 1% fall in the total number of registered businesses over the period.

Table 3.4 Number of businesses 2008-2013

		Change	2008-13	
	2008	2013	No	%
Fife	10,600	10,600	-100	-1%
Scotland	195,300	198,300	3,000	2%
UK	2,643,200	2,625,500	-17,700	-1%

Source: ONS, UK Business: Activity, Size and Location

All figures have been rounded to 100 and calculations have been carried out on the unrounded figures

The structure of the business base in Fife is broadly similar to Scotland as a whole with professional services, retail and construction accounting for the highest shares of registered firms in the area. At 14%, **retail** accounts for the highest share of registered businesses in Fife, and the second largest share within Scotland.

The second largest category of Fife businesses is **professional**, **scientific and technical**, which has a similarly large share across Scotland. This is a broad category and includes lawyers, accountants, architects, engineers, marketing and advertising companies.

Table 3.5 Businesses by Sector 2013

	Fife	Scotland
Agriculture, forestry & fishing	6%	9%
Production	7%	5%
Construction	10%	9%
Motor trades	3%	3%
Wholesale	4%	4%
Retail	14%	12%
Transport & storage	3%	3%
Accommodation & food services	8%	8%
Information & communication	4%	4%
Finance & insurance	2%	2%
Property	2%	3%
Professional, scientific & technical	13%	15%
Business admin & support	5%	6%
Public admin & defence	1%	2%
Education	4%	3%
Health	7%	6%
Arts, entertainment & other services	8%	7%
Total	10,600	198,300

Source: ONS, UK Business: Activity, Size and Location

The majority of companies in both Fife and Scotland are micro-businesses employing fewer than 10 people. The remainder are mainly SMEs with up to 50 employees.

Around four in every five registered businesses in both Fife and Scotland are micro firms employing fewer than 10 people. A further 16-17% are SMEs with 10-49 employees and a relatively small proportion (<4%) employ more than 50 people.

When interpreting these figures, it is worth noting that whilst large firms (with 250+ employees) represent less than 1% of the overall business base in Scotland, they are an important source of job opportunities. In 2013, large companies employed over 50% of all people working in Scotland.



Figure 3.3 Businesses by Sizeband 2013

Source: ONS, UK Business: Activity, Size and Location Base: 10,600 Fife; 198,300 Scotland

The business birth rate in Fife has been relatively stable over the past decade, although there has been a slight increase in the rate of new business start-ups since 2009.

There were 25 new business registrations in Fife per 10,000 residents in 2012. This was substantially lower than the averages for Scotland and the UK, standing at 33 and 42 per 10,000 residents respectively.

The new business birth rate has been relatively stable across all three geographies shown over the past decade. In Scotland and the UK, there has been a noticeable upturn in the start rate since 2009, something which is fairly common during times of recession as people look for alternative ways to earn a living in the face of declining job opportunities¹¹. Nevertheless, the **rise in the business birth rate in Fife has been modest** in comparison to Scotland and the UK more widely.



Figure 3.4 Business Birth Rates per 10,000 Population 2005-2012

Source: ONS, UK Business: Activity, Size and Location

Patterns of company support suggest that Fife firms operating in ICT offer significant potential for future growth.

Scottish Enterprise (SE) works with companies across Scotland that are identified as offering potential for future growth. These 'account managed' companies take many forms – they range from start-ups to large companies and are found in both established and emerging sectors. They vary in size and scale, but each has been selected as a result of their significant growth potential. SE offers intensive, tailored support to help them fulfil this growth potential.

SE was working with 1,890 account managed companies across Scotland in January 2014. Of these, 101 were based in Fife accounting for 5% of the Scottish total – in line with the region's share of Scottish businesses.

Figure 3.5 shows that a substantial number of account managed companies in Fife (38 of 101, 38%) are in **enabling technologies/ICT** – suggesting that this sector may be one of the main drivers for growth in the area. Across Scotland more widely, ICT accounts for one of the largest shares of account managed companies, as do **energy (oil & gas) and food & drink.**



Figure 3.5 SE Account Managed Companies in Fife, January 2014

Source: Scottish Enterprise Base: All Account Managed Companies in Fife (101)

Business expenditure on R&D in Fife is notably lower than the national averages.

Private sector investment in research and development is widely considered to be a key driver of economic performance, productivity growth and competitiveness. Scottish firms have historically underinvested in R&D activities when compared to their counterparts across the rest of the UK and Europe¹².

The Scottish Government publish annual statistics on Business Enterprise Research and Development (BERD) expenditure. In 2012, BERD expenditure in Scotland amounted to $\pm 707m - 4\%$ of the UK total of $\pm 17bn$ and 0.6% of national GDP.

Looking at the relative performance of regions within Scotland on this measure, Figure 3.6 shows that in 2012:

- BERD expenditure per head of population in Scotland amounted to less than half that of the UK
- · Edinburgh & the Lothians had the highest level of BERD per head of all Scottish regions
- Aberdeen City & Shire also performs reasonably well on this measure with spend per head above the Scottish average
- BERD per head in the Fife amounted to just 66% of the Scottish average and 17% of the UK average.





Source: Scottish Government; SQW Calculations

These variations in levels of business expenditure on R&D can be attributed to the industrial structure and nature of companies operating within each of the regions. The high levels of spend per head in Edinburgh & the Lothians is the result of particularly high levels of R&D investment by **manufacturing** companies based in both Edinburgh and West Lothian.

The only other region with levels of business expenditure on R&D above the Scottish average is Aberdeen City & Shire. In contrast to Edinburgh & the Lothians, the majority of this comes from firms operating in the **service** sector.

The regions with the lowest levels of spend per head on R&D are the predominantly rural areas of the South of Scotland, Ayrshire and Forth Valley. These regions are less likely to be home to national or international company headquarters when compared to Edinburgh and Aberdeen City & Shire, and also have lower representation of research intensive industries.

4 Profile of the Workforce

Summary

- there were 126,300 people working in Fife in 2012, representing 5% of the Scottish workforce
- the largest employing industries in the region are health, retail and manufacturing
- relative to the Scottish economy as a whole, Fife has above average concentrations of employment across a range of sectors including water supply & waste, and manufacturing
- Fife's industrial structure is similar to Scotland as a whole, but with a slight bias to manufacturing and public services
- Fife has **relatively low representation** within most of the Scottish Government Growth Sectors, with the **exception of tourism**
- Fife residents were slightly more likely to be employed in skilled trade and elementary occupations, and less likely to be employed in professional and administrative occupations than across Scotland
- recent patterns of company support point to potential future job opportunities across a range of sectors including energy, food & drink, and forestry industries.

Table 4.1 Headline Performance Indicators

	Fife	Scotland
Jobs		
Total Employment 2012	126,300	2,425,900
% Change in Employment 2009-2012	-5%	-4%
Industrial Structure		
% Employment in Private Sector	67%	71%
% Employment in Growth Sectors	22%	27%
Occupational Profile		
% Employment in professional occupations 2013	18%	20%
% Change in Employment in professional occupations 2005-2013	27%	22%

4.1 Introduction

This section looks at the profile of the existing workforce in Fife covering:

- · total employment
- industrial structure
- occupational profile.

4.2 Total Employment

In recent years, Fife has seen a net fall in total employment.

There were 126,300 people working in Fife in 2012. This was 5% lower than in 2009, slightly faster than the equivalent decline of 4% across Scotland. Nevertheless, it suggests that employment in Fife through the economic downturn has followed a similar pattern to Scotland as a whole.

Table 4.2 Total Employment 2009-12

	2009	2012	No.	%
Fife	132,800	126,300	-6,500	-5%
Scotland	2,523,100	2,425,900	-97,100	-4%
GB	27,858,200	27,872,500	14,300	0%

Source: Business Register and Employment Survey

4.3 Industrial Structure

Fife's industrial structure is similar to Scotland as a whole, but with a slight bias to manufacturing and public services.

Table 4.3 shows that for both Fife and Scotland as a whole, the largest employing sector is **health**, in both cases accounting for 16% of all jobs. The sector with the second largest share of total jobs is **manufacturing**, employing 10% of all people working in the region compared to 8% nationally. Fife also has slightly above average employment in **public services**.

Table 4.3 Employment by Broad Industry Sector 2012

	Fife	Fife		
	Total	%	Total	%
Agriculture, forestry & fishing	-	-	82,400	3%
Mining, quarrying & utilities	2,600	2%	64,800	3%
Manufacturing	15,200	10%	183,400	8%
Construction	5,900	6%	125,000	5%
Motor trades	2,200	2%	39,800	2%
Wholesale	4,100	4%	73,600	3%
Retail	14,300	11%	240,900	10%
Transport & storage	4,100	5%	96,300	4%
Accommodation & food services	8,000	7%	167,100	7%
Information & communication	4,500	1%	58,100	2%
Financial services	3,500	3%	91,300	4%
Property	1,000	1%	33,300	1%
Professional, scientific & technical	5,600	5%	172,500	7%
Business services	6,400	6%	182,700	8%
Public admin & defence	10,300	8%	145,500	6%
Education	10,500	8%	179,700	7%
Health	20,500	16%	376,200	16%
Arts, entertainment & other services	7,400	4%	113,200	5%
Total	126,300	100%	2,425,900	100%

Source: Business Register and Employment Survey

- The local authority employment figures from BRES exclude farm agriculture (SIC subclass 01000), meaning that it is not possible to get an accurate estimate of employment in agriculture, fishing and forestry at a regional level from this source

The Top 20 employing industries in Fife are dominated by public services, retail and hospitality.

Official employment estimates can be separated into 616 separate sub-sectors based on Standard Industrial Classification (SIC) codes. This type of analysis makes it possible to look at the industrial structure of an area in a greater level of detail than the broad categories covered in the previous section.

Figure 4.1 shows the top 20 employing industries in Fife out of a total of 616. Around half (45%) of the workforce in the region was employed in these industries in 2012, with concentrations in:

- **public services** hospitals are the single largest employers in the region and the source of over 8,000 jobs. Public administration, education, social work and public order & safety are also all amongst the top 20 employing sectors
- **retail** supermarkets (retail of food, drinks, tobacco, etc) represent the second largest employing sector in the region and the source of over 6,000 jobs in 2012. Clothes shops also feature within the top 20
- tourism & hospitality restaurants, hotels and bars are important sources of job opportunities in Fife, together accounting for nearly 7,000 jobs in the area.

Figure 4.1 Top 20 Employing Industries in Fife 2012



Source: Business Register and Employment Survey

Fife has above average concentrations of employment in a number of sectors including manufacturing, ICT, and public administration and defence.

When looking at the industrial structure of a region, it is useful to consider how this differs to other areas or the country as a whole as a means of identifying **specialisms and potential areas of competitive advantage.** A common approach to this involves comparing the share of jobs within a particular industry with the average for the country as a whole. An additional dimension to this type of analysis involves looking at whether employment in these sectors is increasing or decreasing – this provides a further indicator of the relative potential offered by a particular industry.

In simple terms, sectors where there is a high concentration of employment and which are also growing could be considered to offer the most potential for future growth. Conversely, industries where there is a below average concentration of employment and which are also in decline could be considered to offer less potential as drivers of future growth.

Figure 4.2 provides a snapshot of Fife's industrial structure in these terms. All industries to the right of the vertical axis are those within which the region has **above average concentrations of employment relative to Scotland as a whole.** The vertical axis represents changes in employment between 2009 and 2012. All industries above the axis experienced employment growth over this period, whilst those below experienced employment decline.

This analysis tells us that:

- Fife has high levels of specialisation (i.e. concentrations of employment) in a number of sectors including manufacturing, ICT, and public administration and defence
- the area has below average concentrations of employment in most professional service industries including professional, scientific and technical, financial services, and admin & support services
- of those industries within which Fife has high levels of specialisation, public admin & defence was the only one to see significant employment growth between 2009 and 2012
- the others industries within which the region specialises all experienced either job losses or very small rises between 2009 and 2012, although this is perhaps not surprising given that that the time period covered coincides with the global economic recession.



Figure 4.2 Employment Growth and Specialisation in Fife 2009-2012

Source: Business Register and Employment Survey; SQW Calculations

Numbers in brackets represent total jobs 2012

Fife has relatively low representation within most of the Scottish Government Growth Sectors with the exception of tourism.

The Government Economic Strategy for Scotland identifies six Growth Sectors that are considered to offer significant potential to drive future economic growth in Scotland¹³.

Table 4.4 shows that, in employment terms, **tourism and financial & business services** were the largest of the Growth Sectors in the region accounting for 8% and 6% of all jobs respectively.

The only Growth Sector within which Fife has a concentration of employment above the Scottish average is **tourism.** In employment terms, the region is under-represented within each of the other Growth Sectors.

Table 4.4 Growth Sector employment 2012

	Employment in Scotland	Employment in Fife	% share of jobs in Fife	Employment Specialisation [*] (relative to Scotland)
Creative Industries	65,200	3,200	3%	94%
Energy	63,400	2,200	2%	67%
Financial & Business Services	215,600	7,200	6%	64%
Food & Drink	117,900	5,600	4%	91%
Life Sciences	16,000	400	0.3%	48%
Tourism	181,500	9,500	8%	101%

Source: Scottish Government Growth Sector Database; SQW Calculations

Based on the Scottish Government Standard Industrial Classification (SIC) definitions (see Annex A)

*Calculated by comparing the share of employment in the sector in the region with the share of employment in the sector nationally. A score of above 100% indicates a higher share of employment relative to the average for Scotland as a whole. A score of less than 100% indicates a below average concentration of employment relative to Scotland.

Recent patterns of company support point to future job opportunities across a diverse range of sectors including energy, food & drink, and forest industries.

Regional Selective Assistance (RSA) is the main investment grant scheme for businesses located in areas of Scotland designated for regional aid under European Community law (assisted areas). RSA is available to limited companies, sole traders or partnerships for projects that meet a number of criteria¹⁴.

Information on RSA awards can provide a useful indication of where jobs are likely to be created or safeguarded within a given area. However, it is important to note that these jobs are not always fully realised – the estimated job numbers are taken from the grant application form.

Figure 4.3 shows that RSA awards made to firms in Fife between 2010 and 2013 are expected to result in the creation or safeguarding of almost 2,400 jobs in the region. These jobs are across a range of sectors with the modal group being 'Other,' accounting for around 40% of all jobs.

¹³ The Government Economic Strategy, Scottish Government (2011)

¹⁴ To qualify, projects must take place in Scotland within an assisted area; directly create or safeguard jobs; not be offset by job losses elsewhere; involve an element of capital investment; and be mainly funded form the private sector.

Other sectors that were expected to make a notable contribution to employment are energy (over 21%), food & drink, and forestry industries (both 10%).





4.4 Occupational Profile

The occupational profile of Fife residents is very similar to the Scottish average. Fife residents are slightly more likely to be employed in skilled trades.

A very slightly higher share of Fife residents are employed in skilled trade, elementary occupations, and sales & customer services whilst a lower share are employed in professional or administrative occupations than across Scotland. However, these differences are small.

This occupational profile is reflective of the region's industrial structure with a slight bias to manufacturing and construction.

Source: Scottish Enterprise

Table 4.5 Employment by Occupation 2013

	Fife		Scotland	
	Total	%	Total	%
Managers & Senior Officials	15,400	9%	211,000	9%
Professionals	30,400	18%	490,800	20%
Associate Professional & Technical	21,100	13%	314,100	13%
Administrative & Secretarial	16,900	10%	269,200	11%
Skilled Trades	21,500	13%	273,400	11%
Caring, Leisure & Other Services	14,300	9%	230,400	9%
Sales & Customer Services	17,000	10%	223,600	9%
Operatives	10,100	6%	158,100	6%
Elementary occupations	20,400	12%	282,000	11%
Total	167,100	100%	2,452,600	100%

Source: Annual Population Survey. Data covers the period October 2013 – September 2014

See Annex C for further details of what is included within each of the broad occupational groupings

There have been some important changes in the occupational profile of Fife residents over the past decade.

Across the UK and other industrialised nations, there has been a long term shift away from low skilled occupations towards those requiring higher level skills and qualifications. This has been partly driven by globalisation and the impact of technological advancements.

The exception to this trend is the rapid growth of the '**caring, leisure & other service**' occupational group. This includes many people working in tourism and hospitality sectors, but also those working in caring professions. This occupational group is expected to continue to expand as the ageing population drives increased demand for care services.

Figure 4.4 shows that Fife has only partially matched these broader on-going trends. The shift towards higher level skills and occupations can be seen with the 27% rise in professional employment between 2005 and 2013, and with the 9% fall in elementary occupations. Nevertheless, the trends for increasing employment in 'caring, leisure & other services' has not been seen in Fife. Indeed, it was the occupation to see the fastest rate of decline over the depicted period.

Figure 4.4 Change in employment by occupation in Fife 2005-2013



5 People and Skills Supply

Summary

- Fife has experienced **steady population growth** over the past decade but not to the same extent as either Scotland or the UK
- this growth has been concentrated amongst older age groups, with the highest increases amongst those over the age of 45
- population growth in the region is expected to continue over the coming decade, at roughly the same rate as the previous decade and focussed in older age groups
- Fife is home to a relatively high share of children, **but fewer adults in their mid-20s and 30s**, when compared to the Scottish population as a whole
- young people in Fife are more likely to have lower-level qualifications but less likely to have higher level qualifications than across Scotland
- the Fife labour market was **particularly badly impacted by the recession** with a sharp decline in the employment rate and rising unemployment since 2009
- the impact of the recession was particularly marked amongst young people in the region, although there is evidence to suggest that **youth unemployment is now falling** both within the region and across Scotland.

Table 5.1 Headline Performance Indicators	Table 5.1	Headline	Performance	Indicators
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	Fife	Scotland
Population		
Total population 2012	366,200	5,313,600
% Population change 2002-2012	7%	5%
Labour Market Participation		
Employment rate 2013	70%	71%
Unemployment rate 2013	10%	8%
Youth Unemployment		
Total unemployed 16-24 year olds (Feb-13)	2,730	33,190
% Change in unemployed 16-24 year olds (Feb-12 – Feb-13)	-24%	-24%
Qualifications		
% Working age population educated to SCQF Level 7+	38%	39%
% Working age population with no qualifications	9%	11%

Section 5
People and Skills Supply

5.1 Introduction

This section looks at people and skills supply in Fife covering:

- population
- · labour market participation
- qualifications and attainment.

5.2 Population

Population growth in Fife has been slower than in Scotland and the UK.

There were 366,200 people living in Fife in 2012. This was 15,500 more than in 2002 - an increase of 4%. This was slower than the equivalent growth rate of 5% for Scotland 7% for across the UK.

Table 5.2 Total Population

			Change 2002-2012	
	2002	2012	No.	%
Fife	350,700	366,200	15,500	4%
Scotland	5,066,000	5,313,600	247,600	5%
UK	59,365,700	63,705,000	4,339,300	7%

Source: General Register Office for Scotland; Office for National Statistics

Figure 5.1 shows that population growth in Fife between 2002 and 2012 was broadly in line with the Scottish average. Nevertheless, between 2008 and 2012, Fife has lagged slightly behind Scotland in terms of population growth. Over the period, Fife's population growth rate has also been substantially lower than that of the UK.



Figure 5.1 Index of population change 2002-2012

There have been important changes in the age profile of residents in Fife and Scotland over the past decade.

Population growth over the past decade has not been evenly spread across age groups. Figure 5.2 shows:

- a decline in the number of children there were 4% fewer young people under the age of 16 in Fife in 2012 than in 2002, though this was slightly slower than the 5% decrease in this age group across Scotland
- an increase in the number of young adults in their late teens and early 20s there was growth in the 20-24 year old age group in Fife although the 16-19 category remained fairly static
- a contraction in some 'prime' working age groups the key working age groups of 25-34 and 35-44 reduced by 4% and 9% respectively
- a marked ageing of the population –the greatest population increases have been amongst older age groups both within Fife and across Scotland.

Source: General Register Office for Scotland; Office for National Statistics



Figure 5.2 Population change by age band 2002-2012

Source: General Register Office for Scotland

Fife has a below average share of residents in their mid-20s and early 30s.

Figure 5.3 shows that Fife is home to a relatively high share of older individuals (aged 55 to 70), but fewer adults in their mid-20s and early 30s when compared to the Scottish population as a whole.

The proportion of Fife's population consisting of children under the age of 10 is also higher compared to the Scottish population as a whole.

The age profile of Fife residents points to **net out-migration of young adults in their mid-20s to early 30s**, and an influx of adults to the area in their late 30s and 40s with children.





Source: General Register Office for Scotland

Population growth in Fife is expected to continue over the coming decade, at a comparable rate to Scotland as a whole.

Fife's population is expected to continue to grow over the coming decade, at roughly the same rate seen between 2002 and 2012. Total population in the area is expected to reach 380,400 by 2022 – an increase of 4% from 2012. This is in line with the rate of growth expected for Scotland as a whole.

Table 5.3 Projected Population 2012-2022

			Change 2012-2022	
	2012	2022	No.	%
Fife	366,200	380,400	14,200	4%
Scotland	5,313,600	5,519,600	206,000	4%

Source: General Register Office for Scotland

The recent ageing of the population is expected to accelerate over the coming decade, both within Fife and across Scotland as a whole.

The greatest population increases in Fife over the coming decade are expected to be amongst those over the age of 50, matching the forecast trend across Scotland as a whole. Growth in the 75+ age group is forecast to be especially pronounced relative to Scotland more generally.

Looking at other age groups, a 5% increase is expected in the number of young people under the age of 16, but minimal change in those aged 16-29. A decline of 10% is expected in the 'prime' working age group of 30-49 in Fife – over twice the rate of decline expected for this group across Scotland as a whole.

Figure 5.4 Projected Population Change by Age 2012-2022



Source: General Register Office for Scotland

5.3 Labour Market Participation

The employment rate in Fife is slightly below average.

There were 163,200 Fife residents in work in 2013 accounting for 70% of the working age population. This was slightly below the equivalent rate of 71% for Scotland and the UK.

Table 5.4 Resident Employment 2013

	Total	Rate
Fife	163,200	70%
Scotland	2,401,100	71%
UK	28,472,300	71%

Source: Annual Population Survey

Data is based on a sample survey and therefore subject to varying confidence intervals

It is worth noting that the Fife labour market is not self-contained. Many residents in employment travel outside the area to their place of work. Likewise, many of the jobs located in the region are taken by people living outside the area. The only reliable source of data on commuting flows between local authorities in Scotland is the Census. However, the latest figures from the Census 2011 had not been published at the time the Regional Skills Assessments were produced.

The Fife labour market has been particularly badly hit as the recession has progressed with a sharp fall in the employment rate since 2009.

Figure 5.5 shows that as the recession initially started in 2008, the employment rate was actually increasing, bucking the trend in both Scotland and the UK. Indeed in 2009, the Fife employment was higher than the overall rate for Scotland. Between 2009 and 2012, however, Fife's employment rate has fallen sharply, bringing it well below the Scottish average.
Figure 5.5 Employment rate 2005-2013



Source: Annual Population Survey Data is based on a sample survey and therefore subject to varying confidence intervals

Almost 18,000 Fife residents were unemployed and seeking work in 2013.

The **International Labour Organisation (ILO)** definition of unemployment covers those of working age who are out of work, want to work and are actively seeking and available to start work. The **ILO unemployment rate** is the percentage of the economically active population who are unemployed on this measure.

A total of 18,200 Fife residents of working age were unemployed and actively seeking work in 2013. They represented 10% of the economically active population, higher than the equivalent rate of 8% for Scotland.

Table 5.5 ILO unemployment 2013

	Total	Rate
Fife	18,200	10%
Scotland	207,700	8%
UK	2,471,800	8%

Source: Annual Population Survey

Data is based on a sample survey and therefore subject to varying confidence intervals

Unemployment in Fife has increased sharply since 2009 and is still rising.

Prior to 2009, the unemployment rate in Fife had plateaued to around 6%. However, it rose sharply between 2009 and 2011, and then again between 2012 and 2013. In contrast to Scotland and the UK, where unemployment has stabilised since 2010 and is now starting to fall, unemployment in Fife was still rising in 2013.





Source: Annual Population Survey

Data is based on a sample survey and therefore subject to varying confidence intervals

Unemployment amongst young people aged 16-24 does now appear to be falling, both within Fife and across Scotland.

Through direct contact with individuals and partnership working, Skills Development Scotland gathers information about 16-17 year olds who have been identified as unemployed and seeking employment, education or training. Combined with the claimant count for 18-24 year olds, this can be used to estimate total unemployment amongst the 16-24 year old age group.

Table 5.6 shows that there were 2,730 known unemployed 16-24 year olds in Fife in February 2014. This was 870 less than the previous year, a decline of 24% which was in line with the change across Scotland as a whole.

Table 5.6 Unemployment amongst 16-24 year olds, 2013-14

			Change 2013-14	
	Feb-13	Feb-14	No.	%
Fife	3,600	2,730	-870	-24%
Scotland	43,740	33,190	-10,550	-24%

Source: Skills Development Scotland administrative database; Department for Work and Pensions

The impact of the recession was particularly marked amongst young people in the area.

Figure 5.7 shows change in the claimant count for 16-24 year old since 2005. It should be noted that this measure excludes many unemployed 16-17 year olds who are not eligible to claim Jobseekers Allowance (JSA). It is therefore only a partial measure of unemployment amongst this age group. However, it is useful for examining longer term trends.

The number of 16-24 year olds claiming JSA **increased rapidly** across all areas shown between 2008 and 2010. After a period of fluctuation, unemployment has been falling since 2012.

The latest figures for 2014 show the 16-24 year old claimant counts for Fife are **still above pre-recession** (2005) levels, unlike Scotland and the UK which have now returned to their 2005 levels.



Figure 5.7 Index of claimant count for 16-24 year olds, 2005-2014

Source: Department for Work and Pensions

5.4 Qualifications and Attainment

Since the onset of the recession in 2008, more school leavers have been choosing to stay in further education rather than enter the labour market.

Figure 5.8 shows that there has been an increase in the proportion of school leavers in Fife entering both further and (especially) higher education since 2007/08. There has been an equivalent decline in the proportion of school leavers in the region going directly into employment or unemployment.

This is similar to the national trend and suggests that many young people are choosing to stay in education longer in the face of declining job opportunities.





Source: Scottish Government School Leaver Destination Survey

School leavers in Fife are less likely to enter higher education and employment, but more likely to enter further education than their counterparts across the rest of Scotland.

Figure 5.9 shows that, despite the recent increase, the share of school leavers in Fife entering higher education is slightly below the national average. However, compared to Scotland as a whole, a substantially larger proportion of leavers in Fife go into further education.

The share of Fife leavers in employment is lower than the Scottish average while the share of leavers that are unemployed is slightly higher than the national figure.

Figure 5.9 School leaver destinations 2012/13



Source: Scottish Government School Leaver Destination Survey

Young people in Fife are more likely to have lower-level qualifications but less likely to have higher level qualifications than across Scotland.

Figure 5.10 shows that a slightly lower proportion of young people aged 16-24 in Fife are educated to SCQF 5-12¹⁵ than across Scotland as a whole. This could be partly driven by the net out-migration of young people in this age group and lower progression to higher education as highlighted earlier in this chapter. A higher share of young people in the region are qualified to SCQF 1-4 than nationally (22% relative to 11%).



Figure 5.10 Qualification profile of young people (16-24) 2012

Source: Annual Population Survey

These differences in the qualification profile of Fife residents balance out to a certain extent when looking at all people of working age.

When looking at the working age population as a whole, the proportion of Fife residents educated to SCQF 7-12 is roughly in line with the national average. Indeed, the proportion holding SCQF 5-12 is very close to that of Scotland as a whole.



Figure 5.11 Qualification profile of the working age population (16-64) 2012

Source: Annual Population Survey

6 Education and Training Provision

Summary

- over 1,900 Fife residents started Modern Apprenticeships (MAs) in 2012/13 46% more than in 2010/11
- the most common MA frameworks taken up by Fife residents are hospitality, freight logistics and retail
- the age profile of Fife's modern apprentices was generally older than Scotland as a whole
- over 17,000 students went to Fife FE institutions in 2012/13
- the three most frequently studied subjects amongst full-time students at Fife FE institutions were care, engineering, and hairdressing & beauty therapies
- the University of St Andrews attracted over 10,000 students in 2012/13. This was 21% higher than in 2007/08 – seven times the equivalent increase of 3% across the Scottish University sector as a whole
- St Andrews is a national and international institution, drawing the **vast majority of its students from outside the region, with** almost half coming from outside the UK
- the most popular subject for students at the University of St Andrews were historical & philosophical studies, physical sciences, European languages and biological sciences.

6.1 Introduction

This section looks at current investment and participation in post-16 education and training in Fife covering:

- Modern Apprenticeships
- college provision
- university provision
- graduate destinations.

6.2 Modern Apprenticeships

There were over 1,900 apprenticeship starts in Fife in 2013/14.

A total of 1,930 Fife residents started Modern Apprenticeships (MAs) in 2013/14¹⁶. A further 1,650 left the programme in that year. Of these, 78% had achieved their MA – that is, they successfully completed the programme. Across Scotland, the MA achievement rate was 77%.

Table 6.1 Modern Apprenticeships 2013/14

				Achievements
	MA Starts	MA Leavers	MA Achievements	as % of Leavers
Fife	1,930	1,650	1,290	78%

Source: Skills Development Scotland Based on the home area of trainees

There has been a net increase in the annual number of new MA starts in Fife in recent years.

There was a 46% increase in the total number of new MA starts in Fife between 2010/11 and 2012/13, although the figures did plateau somewhat between 2011/12 to 2012/13 before increasing again sharply in the most recent year.

Table 6.2 Modern Apprenticeship Starts 2010/11 – 2013/14

					Change 2010/11 - 2013/14	
	2010/11	2011/12	2012/13	2013/14	No.	%
Fife	1,320	1,670	1,610	1,930	610	46%

Source: Skills Development Scotland

Based on the home area of trainees

The most common MA frameworks taken up by Fife residents are hospitality, freight logistics and retail.

Figure 6.1 shows that the top 20 MA frameworks taken up by Fife residents cover a broad range of frameworks. **Hospitality** accounted for the highest number of new starts in 2012/13, followed by **freight logistics**, **retail**, **engineering** and **construction** (**technical**).

Figure 6.1 Top 20 MA Frameworks in Fife 2013/14



Source: Skills Development Scotland Total MA Starts in 2013/14 = 1,930 Based on the home area of trainees

Overall, **38% of all new MA starts in the region were female** in 2013/14, slightly below the average of 41% for Scotland as a whole.

There are notable gender differences in the take up of MAs by framework, with women accounting for the vast majority of trainees on **health & social care**, **hairdressing and childcare** frameworks. For others, including **freight**, **engineering and construction-related frameworks**, women accounted for relatively few new starts.

The age profile of MAs in Fife is older than that of Scotland as a whole.

Less than half (43%) of all new MA starts in Fife in 2013/14 were aged 16-19, compared to 52% across Scotland as a whole. Conversely, the proportion of MA starts amongst 20 to 24 year olds was 2 percentage points higher than across Scotland as a whole, and for 25+ was 7 percentage points higher. In other words, the age profile of MAs in Fife is older than across the Scotlish programme as a whole.



Figure 6.2 Age profile of new MA starts 2013/14

Source: Skills Development Scotland Based on the home area of trainees

The vast majority of MAs in both the Fife and Scotland are on Level 2 or Level 3 frameworks.

Figure 6.3 shows that more than half (61%) of all new MA starts in Fife in 2013/14 were at Level 3 and a further 32% were at Level 2. The remaining 7% were at Levels 4/5, a higher share than the 3.5% seen across all Scottish MAs. Overall, Fife residents on MAs were more likely to be on higher level frameworks than across Scotland as a whole.

Figure 6.3 Modern Apprenticeship Starts by Level 2013/14



Source: Skills Development Scotland Based on the home area of trainees

MAs on service sector frameworks are more likely to be at Level 2, whilst those on engineering, construction and manufacturing-related frameworks are more likely to be at Level 3.

Figure 6.4 shows that many service sector MAs (including **hospitality, retail, health & social care and hairdressing**) are at Level 2. Notable exceptions to this include **business & administration, customer service and childcare** where in 2013/14, MA starts were more likely to be at Level 3.

The majority of MAs on **automotive, engineering, construction and manufacturing-related** frameworks are at Level 3 or above. As noted earlier in this chapter (Figure 6.1), these are also the frameworks most likely to be taken up by males.





Source: Skills Development Scotland Total MA Starts in 2013/14 = 1,930 Based on the home area of trainees

6.3 College Provision

The region's needs, in terms of college provision, are served through Fife College and the Elmwood campus of Scotland's Rural College (SRUC). Fife College is the focus for the analysis within this section and the SRUC is covered in the next section.

Fife College was formed in 2013/14 as a result of a merger of Carnegie and Adam Smith Colleges. However, some of the data is only available on the old college basis and that is how it has been presented here.

Measuring college participation and provision.

For the purposes of this report, we are using the following two measures of college participation and provision:

- headcount this is a count of the total number of individual students (a student is counted once no matter how many courses they attend throughout the year)
- SUMs (Student Unit of Measurement) this equates to approximately 40 hours of planned learning classroom-based attendance on a program of study.

When reviewing college provision it is useful to consider both of these measures. Headcount provides information on student volumes and overall levels of college participation, whilst SUMs provides a better indication of the levels of resource committed by colleges across subject areas.

It should be noted that, due to rounding, figures presented in this chapter may differ from those published elsewhere by the Scottish Funding Council.

The majority of Fife residents that attend college do so within the region.

There were 17,700 Fife residents at Scottish colleges in 2012/13. Figure 6.5 shows that over half (55%) of these attended Adam Smith College. A further 28% were in other colleges within Fife, with the remainder elsewhere.

Figure 6.5 Fife residents at colleges in Scotland 2012/13



Source: Scottish Funding Council Base = All Fife residents at Scottish colleges, 17,700

Fife College draws the majority of its student population from within the region.

Over three quarters (77%) of all students at Fife College in 2012/13 lived in Fife. The remainder coming from outside the region, mainly from Edinburgh, East Lothian, Perth and Kinross and West Lothian.



Figure 6.6 Home area of Fife FE students 2012/13

Source: Scottish Funding Council Base: Headcount, 18,200

The age and gender profile of Fife College students is broadly in line with the Scottish college sector as a whole.

There were 18,200 students at Fife College in 2012/13, accounting for 8% of all Scottish college students. This was slightly higher than the region's share of national population (7%).

A higher share of Fife College students were aged 16-19 relative to other colleges in Scotland (35% relative to 32%). Young people in this age group were more likely to be on full-time courses demonstrated by the fact that they make up 35% of student headcount, but account for 49% of all SUMs.

Over half (51%) of Fife FE students were female in 2012/13, slightly below the Scottish average of 53%. The share of Fife students living in areas ranked amongst the 10% most deprived in Scotland was 8% in 2012/13, relative to 16% across the rest of the college sector.

Table 6.3 Profile of college students 2012/13

	Total	% female	% aged 16-19	From 10% most deprived areas
Headcount:				
Fife College	18,200	51%	35%	8%
Rest of Scotland	215,960	53%	32%	16%
SUMS:				
Fife College	148,740	53%	49%	8%
Rest of Scotland	1,695,400	52%	50%	17%

Source: Scottish Funding Council

The top three subject areas for full-time students at Fife College are care, engineering, and hairdressing, beauty & complementary therapies.

Care was the top subject for full-time students at Fife College in 2012/13 accounting for 14% of all full-time SUMs. This was followed by **engineering and hairdressing, beauty & complementary therapies**, which combined to account for a further 23%. The remaining full-time SUMs were spread across a broad range of subject areas including business services, construction and ICT.

Figure 6.7 Full-time provision at Fife College by subject area 2012/13



Source: Scottish Funding Council Base: Total SUMs for full-time students, 114,300 The majority of full-time **engineering**, **construction and computing & ICT** students at Fife College were males. By contrast, women accounted for the majority of full-time places on **care**, **hairdressing & beauty**, **art & design and hospitality**, **and education & training** courses at the College in 2012/13. This is similar to the gender breakdown in these subjects across the Scottish college sector as a whole.

Special programmes account for the highest share of part-time provision at Fife College.

Special programmes accounted for the largest share of Fife College provision in 2012/13 (20% of all parttime SUMS). As with full-time students, **engineering** and **care** were also popular, accounting for 16% and 15% of all part-time SUMS respectively.



Figure 6.8 Part-time college provision in Fife by subject area 2012/13

Source: Scottish Funding Council Base: Total SUMs for part-time students, 31,350

The vast majority of part-time **engineering and construction** students at Fife College are males, whilst women accounted for the majority of places on part-time **care** and **hairdressing** courses at the college in 2012/13. Indeed, for many of the other subject areas shown, women accounted for a larger proportion of part-time places than men. This is similar to the split across the Scottish college sector as a whole.

Over a fifth of students at Fife College are on HE level courses.

Fife College delivers courses at both Further Education (FE) and Higher Education (HE) Level. FE is defined as SCQF Levels 1-6 and HE is defined as SCQF Level 7+. See Annex D for an overview of the SCQF.

Over a fifth (23%) of all students at Fife College in 2012/13 were on HE level courses, with the remainder studying at FE level. Compared to the FE/HE split across the entire Scottish college sector, Fife College had a slightly higher proportion studying at HE.

HE level courses account for a higher share of overall college provision (as measured by SUMs) than headcount, both at Fife College and across Scotland. This suggests that HE provision is more likely to be on a full-time basis than FE.



Figure 6.9 College Provision by Level of Qualification Aim 2012/13

Source: Scottish Funding Council

6.4 Scotland's Rural College

Scotland's Rural College (SRUC) was formed in October 2012 as a result of a merger between Barony, Elmwood and Oatridge Colleges and Scotland's Agricultural College (SAC). The SRUC has six campuses located in Aberdeen, Ayr, Broxburn, Cupar, Dumfries and Edinburgh. In this section, we profile students studying at these campuses in 2012/13.

There are six SRUC campuses across Scotland, with a combined total of over 5,000 students in 2012/13.

There were a total of 5,220 students at the SRUC in 2012/13. Figure 6.10 shows that Oatridge and Barony are the largest of the six campuses, accounting for almost two thirds (64%) of the total. A further 18% attended Elmwood Campus, with the remainder spread across the other three smaller campuses.

Figure 6.10 Headcount of students at SRUC by campus 2012/13



Source: Scottish Funding Council Base: Total headcount (5,220)

The majority of SRUC students are young people under the age of 25, but there are variations in the age profile of students between campuses.

Across all campuses combined, the majority (61%) of SRUC students were under the age of 25 in 2012/13, with the remaining 39% aged over 25. The larger campuses of Oatridge, Barony and Elmwood had the highest shares of students over the age of 25, with the smaller campuses having a younger overall age profile.

Table 6.4 Headcount of students at SRUC by age 2012/13

	15 and under	16-19	20-24	over 25	Total
Barony Campus, Dumfries	10%	30%	16%	44%	1,350
Craibstone Campus, Aberdeen	0%	43%	23%	34%	210
Elmwood Campus, Cupar	6%	35%	21%	38%	960
King's Buildings Campus, Edinburgh	0%	37%	36%	27%	360
Oatridge Campus, Broxburn	14%	34%	11%	40%	1,990
Riverside Campus, Ayr	0%	35%	33%	32%	350
Total (all campuses combined)	9%	34%	18%	39%	5,220

Source: Scottish Funding Council

NB: All figures have been rounded to the nearest 10, percentages have been calculated on the unrounded figures

Males account for over three quarters of all students at the SRUC.

Figure 6.11 shows that the majority (67%) of all SRUC students were male in 2012/13. Again, there are differences across campuses with the largest three (Barony, Oatridge and Elmwood) having the highest shares of male students. The gender profiles of students at Craibstone, King's Buildings and Riverside campuses were more balanced.

Figure 6.11 Headcount of students at SRUC by gender 2012/13



% of all students

Source: Scottish Funding Council Base: Total headcount (5,220)

The SRUC offers both HE and FE level provision, with differences between campuses.

The King's Buildings, Riverside and Craibstone campuses of the SRUC deliver HE level provision only. Oatridge, Barony and Elmwood offer both HE and FE level courses. The balance of provision at Oatridge and Barony is much more towards FE.

Elmwood is more mixed with 56% of students studying at FE level in 2012/13, relative to 44% studying at HE level. Of the six campuses, Elmwood had the highest volume of students studying at HE level in 2012/13.



Figure 6.12 Headcount of SRUC students by campus and level of study, 2012/13

Source: Scottish Funding Council Base: Total headcount (5,220)

6.5 University Provision

Aside from SRUC, the University of St Andrews is the only Higher Education Institution with a campus in Fife. The main focus for this section is therefore on the range of provision available at St Andrews and the profile of students studying there.

It is noted that many Fife residents study at the Open University (OU). These are included in our summary of where residents go to study (Figure 6.13). However, they are excluded from the remainder of the analysis within this section, which focuses exclusively on institutions with a campus located within the region.

Universities located within Dundee and Edinburgh attract high numbers of students from the Fife region.

Over 9,000 Fife residents were at Scottish universities in 2012/13. Nearly a fifth of these (19%) were at the University of Dundee and a further 13% were involved in Open University courses. The remainder attended universities across the country, with institutions in Edinburgh and Dundee attracting the highest numbers.

Figure 6.13 Fife residents at universities 2012/13



Number of Fife residents at Scottish universities

Source: Scottish Funding Council Base: All Fife residents at Scottish universities, 9,600

The University of St Andrews is an international institution, drawing the vast majority of its students from outside the region and many from overseas.

Figure 6.14 shows that 5% of students at the University of St Andrews in 2012/13 were from the Fife region. A fifth (20%) were from elsewhere in Scotland, with a further 27% coming from elsewhere in the UK.

The University also attracts substantial numbers of international students, with almost half (48%) of the student population in 2012/13 coming from outside the UK in 2012/13. Across the Scottish university sector as a whole, 21% of students come from outside the UK.



Figure 6.14 Home area of University of St Andrews students prior to study 2012/13

The number of students at the University of St Andrews has increased substantially in recent years.

There were 10,310 students at the University of St Andrews in 2012/13, accounting for 4% of the Scottish total of 247,370.

There was a substantial increase of 21% in the total number of students at St Andrews between 2007/08 and 2012/13. This is substantially more than the 3% in all university students across Scotland over this period.

Table 6.5 University students 2007/08 & 2012/13

			Change 2007/08 - 2012/13	
	2007/08	2012/13	Total	%
University of St Andrews	8,540	10,310	1,770	21%
Scotland	239,940	247,370	7,430	3%

Source: Scottish Funding Council

Figures have been rounded to the nearest 10 and percentages have been calculated on the unrounded figures Base: All students at Scottish Universities

This increase in students at the University of St Andrews appears to have peaked in 2011/12, but declined in the most recent year for which data is available. This is similar, although more pronounced, than the trend for the Scottish university sector as a whole over the period. Despite this recent decline, total student numbers in both St Andrews and Scotland were higher in 2012/13 than in 2007/08.





Source: Scottish Funding Council

The majority of students at the University of St Andrews are female and under the age of 25.

Women accounted for 57% of all those at the University of St Andrews in 2012/13, matching the Scottish average. Figure 6.16 shows that a much higher share of students at St Andrews are under the age of 25 when compared to the Scottish university sector as a whole (81% relative to 61%).





Students by Subject

The most popular subject for students at St Andrews is **social studies**, accounting for 2,200 students in 2012/13. **Historical & philosophical studies, physical sciences, European languages and biological sciences** are also amongst the top subjects studied by students at the university.

Figure 6.17 Students at the University of St. Andrews by subject 2012/13



Source: Scottish Funding Council

Females account for the majority of students across almost all subject areas, with the only notable exceptions being **computer sciences**, **mathematics**, **and physical sciences** where the majority of students are males.

6.6 Graduate Destinations

Total Graduates

There were around 3,900 graduates from the University of St Andrews in 2012/13, accounting for 5% of all graduates from Scottish HEIs in that year. The majority (67%) of these graduated from first or other undergraduate degrees and the remainder were postgraduates.



Figure 6.18 Graduates from the University of St Andrews by level of study 2012/13

Source: Scottish Funding Council Base: 3,874

HESA Destinations of Leavers Survey

The Higher Education Statistics Authority (HESA) carries out an annual survey of leavers from Higher Education Institutes (HEIs) across the UK. The survey gathers information from graduates on what they are doing six months after graduation. A total of 1,419 University of St Andrews graduates completed the survey in 2011/12.

The remainder of this chapter looks at the destinations of these graduates based on the results of the survey. When interpreting the findings, it is worth bearing in mind that it is carried out fairly soon after graduation (six months) and so the results are unlikely to represent the 'final' destination of many of the respondents. However, they do provide useful insight into the graduate labour market and immediate prospects of those graduating from HEIs.

The majority of graduates from the University of St Andrews were in employment six months after graduation.

Just under half (47%) of known St Andrews graduates were in full-time employment six months after graduation in 2011/12. A further 7% were in part-time employment. These were both lower than the equivalent rates of 53% and 11% for Scotland as a whole.

St Andrews graduates are **almost twice as likely to go on to further study** immediately following graduation as their counterparts from other Scottish HEIs (29% relative to 15%).



Figure 6.19 Employment status of new graduates 2011/12

University of St. Andrews All Scottish Universities

Source: HESA Destination of Leavers Survey; Scottish Funding Council

The vast majority of graduates from the University of St Andrews find work outside the region following completion of their course.

Figure 6.20 shows that University of St Andrews graduates go on to find employment across the world, including 42% in England. Eleven per cent of St Andrews graduates find work in Fife immediately following graduation.

Figure 6.20 Location of employment of University of St Andrews graduates 2011/12



Source: HESA Destination of Leavers Survey; Scottish Funding Council Base: 839 known University of St Andrews graduates in employment

University of St Andrews graduates are slightly less likely to go into professional occupations and more likely to go into associate professional and technical posts than graduates from other Scottish HEIs combined.

Around half (51%) of all employed graduates from all other Scottish universities were working in **professional occupations** six months after graduation in 2011/12. The equivalent figure for St Andrews graduates was lower at 47%.

Conversely, St Andrews graduates are more likely to go into **associate professional & technical roles** than those from other Scottish HEIs combined.

Figure 6.21 Graduate employment by occupation 2011/12



Source: HESA Destination of Leavers Survey; Scottish Funding Council Bases: University of St Andrews, 840; Scotland, 27,428

A relatively high proportion of graduates from St Andrews go on to work in education and professional, scientific and technical occupations immediately following graduation.

Over a fifth (23%) of all known graduates from the University of St Andrews were working in **education** six months after graduation in 2011/12. This is substantially higher than the equivalent figure of 14% for all graduates from Scottish HEIs. St Andrews graduates were also more likely to find work in **financial services** and **professional, scientific & technical professions.**

By contrast, there were several sectors in which a lower proportion of St Andrews graduates found work relative to all graduates from Scottish HEIs. The most notable examples included **health & social work**.

Figure 6.22 Industry of known graduates in employment 2011/12



Source: HESA Destination of Leavers Survey; Scottish Funding Council Bases: University of St Andrews, 830; Scotland, 26,529

7 Skills Mismatches

Summary

- data is not available from the UKCES Employer Skills Survey for Fife only and so wider regional data for Edinburgh, Fife & the Lothians has been used throughout this chapter
- the majority of employers in Edinburgh, Fife & the Lothians have recruited in the past 2-3 years and many have taken on leavers from Scottish education institutions
- most employers recruiting leavers from Scottish schools, colleges and universities report that the recruits were well or very well prepared for work
- of those employers that report leavers from Scottish education to be poorly prepared, the main reasons cited were a lack of world / life experience, poor attitude or lack of motivation or lack of required skills or competencies
- employers in the region were **more likely to report a vacancy** than the Scottish average, and had more experience of hard to fill and skill shortage vacancies
- Fife has above average concentrations of employment in tourism and ICT. Skills Investment Plans have been produced for each of these sectors, highlighting a series of **priority actions to address current and future skills gaps and shortages**¹⁸.

	Edinburgh, Fife &	Scotland
	the Lothians	
Recruitment		
% establishments that have recruited in past 2-3 years	72%	67%
% establishments that have recruited anyone	32%	26%
to their first job on leaving a Scottish school,		
college or university in past 2-3 years		
Vacancies		
% establishments with a current vacancy	18%	15%
% establishments with a hard-to-fill vacancy	7%	6%
% establishments with a skills shortage vacancy	6%	3%
Skills Gaps		
% establishments with skills gaps	21%	19%
Skills gaps as a % of the workforce	5%	6%

Table 7.1 Headline Performance Indicators

7.1 Introduction

There is no direct measure of the mismatches between the demand for and supply of skills within an economy. Inferences about the balance of the two are typically made through employer reports of skills and recruitment challenges. This section looks at potential skills mismatches within Edinburgh, Fife & the Lothians based on the 2013 UKCES Employer Skills Survey results covering:

- · recruitment activity
- vacancies
- skills gaps.

Data is not available from the UKCES Employer Skills Survey for Fife only, so wider regional data for Edinburgh, Fife & the Lothians has been used throughout this chapter.

A total of 1,322 Edinburgh, Fife & the Lothians employers completed the survey, representing 5% of all employers and 10% the workforce in the region. The results have been reweighted to be representative of the employer base across the region as a whole.

The majority of employers in Edinburgh, Fife & the Lothians have recruited over the past 2-3 years, around a third of whom have taken on leavers from Scottish education institutions.

Almost three quarters (72%) of employers in Edinburgh, Fife & the Lothians reported having recruited in the last 2-3 years, compared to 67% across Scotland. Employers in Edinburgh, Fife & the Lothians were also more likely to have recruited directly from Scottish schools, colleges or universities over this period (32% of recruits compared to a Scottish average of 26%).

Figure 7.1 Recruitment



Source: UKCES Employer Skills Survey 2013 Base: All establishments

The majority of employers recruiting leavers from Scottish schools, colleges and universities report that the recruits are well or very well prepared for work.

Employers that reported having recruited from Scottish education institutions were asked to rate the preparedness of these recruits for work. Figure 7.2 shows that the majority of employers in the region and across Scotland considered these recruits to be **well or very well prepared for work.** University leavers achieved the highest ratings on this measure, whilst school leavers achieved the lowest.



Figure 7.2 Work-readiness of Scottish education leavers

Source: UKCES Employer Skills Survey 2013 Base: All establishments that have recruited from Scottish education leavers

Of those employers that considered recruits from Scottish education to be poorly or very poorly prepared for work, the main reasons cited were:

- · lack of working world / life experience or maturity
- · poor attitude / personality or lack of motivation
- · lack of required skills or competencies.

7.2 Vacancies

The proportion of employers with hard to fill and skills shortage vacancies was slightly higher in Edinburgh, Fife & the Lothians than across Scotland.

At the time of the survey, 18% of Edinburgh, Fife & the Lothians employers reported having at least one vacancy. Seven percent had a vacancy that was hard to fill and 6% had a skills shortage vacancy¹⁹. The incidence of both hard to fill and skills shortage vacancies was slightly higher in Edinburgh, Fife & the Lothians than across Scotland.

Figure 7.3 Vacancies



Source: UKCES Employer Skills Survey 2013 Base: All establishments

Hard-to-fill and skills shortage vacancies account for less than 1% of the workforce in both Edinburgh, Fife & the Lothians and Scotland.

Looking at skills shortages and hard-to-fill vacancies as a proportion of the workforce, Figure 7.4 shows that the incidence of these types of vacancies is low both within the region and across Scotland, accounting for less than 1% of the total workforce.





Source: UKCES Employer Skills Survey 2013 Base: All employment

Around a fifth of Edinburgh, Fife & the Lothians employers report that not all of their staff are fully proficient.

A skills gap exists when an employer thinks that a worker does not have the required skills to perform their job with full proficiency. Just over a fifth (21%) of employers in Edinburgh, Fife & the Lothians report that they have at least one skill gap, broadly similar to the Scottish average of 19%. The share of the overall workforce in Edinburgh, Fife & the Lothians that is considered not to be fully proficient (5%) is similar to the average for Scotland (6%).





% establishments with a skills gap % workforce with a skills gap

Source: UKCES Employer Skills Survey 2013 Bases: All establishments; all employment The highest incidences of skill gaps in Edinburgh, Fife & the Lothians were spread across a number of occupational groups including those employed in skilled trades, care, leisure, sales and customer services, operatives and elementary occupations.

Across all occupations, 5% of the workforce in both Edinburgh, Fife & the Lothians were considered not to be fully proficient at their job, compared to a Scotland average of 6%. However, this rises slightly to 6% when looking at those employed in **skilled trades, caring, leisure and other services, sales and customer services, and operative occupations** and 7% for **elementary staff.**



Figure 7.6 Density of skill gaps by occupation

% of all in employment with a skills gap

Source: UKCES Employer Skills Survey 2013 Bases: All employment

The majority of employers reporting a skills gap say that this is having a minor impact on how their business performs.

Three-fifths (61%) of Edinburgh, Fife & the Lothians employers with a skills gap reported that this was having an impact on their business. The main impacts cited include **increased workload for other staff, higher operating costs, difficulties introducing new working practices and difficulties meeting quality standards.**



Figure 7.7 Do skills gaps impact on your business?

Source: UKCES Employer Skills Survey 2013 Base: All employers in Edinburgh, Fife & the Lothians with a skills gap

Other research to identify skills issues and challenges for the tourism sector in Scotland has highlighted a series of priority areas for action.

As highlighted earlier in this report (Table 4.4), Fife has a high concentration of employment in tourism. The sector employed 9,500 people in the region in 2012, accounting for 8% of all jobs.

A Skills Investment Plan (SIP) to support the tourism sector in Scotland was published in March 2013. It was developed on behalf of the Scottish Government by Skills Development Scotland, working with industry partners including the Scottish Tourism Alliance and the Tourism Skills Group.

The SIP identified a series of priorities and resultant actions for industry stakeholders and partners was developed. This focussed on:

- · improving management, leadership and enterprise in the sector
- · ensuring staff have the skills to deliver a high quality visitor experience
- · raising the attractiveness of the sector to new entrants
- ensuring appropriate and high quality training is available to the sector.

A Skills Investment Plan has also been produced for the ICT and digital technologies sector in Scotland.

A total of 4,500 people were working in the information and communication sector in Fife in 2012 (Table 4.3). The sector accounted for 4% of all jobs in the region, double the equivalent figure of 2% for Scotland.

A SIP for Scotland's ICT and digital technologies sector was published in March 2014. It was developed on behalf of the Scottish Government by Skills Development Scotland, working with an industry-led steering group including the Technology Advisory Group, as well as partners from education and the public sector.

The SIP identified a series of priorities and resultant actions for industry stakeholders and partners were identified. These focussed on:

- responding to the immediate need for ICT and digital technology skills through an industry-led academy and a talent attraction campaign
- · broadening the future talent pipeline for ICT and digital technology skills
- · working together to make the education system more responsive to the needs of employers
- · raising the profile of the ICT and digital technology sector and careers.

A Skills Investment Plan has been produced for the engineering and advanced manufacturing sector in Scotland.

Fife has an above average concentration of employment in manufacturing compared to the Scotland average. A SIP to support the ambitions of Scotland's engineering and advanced manufacturing sector was published in August 2014. It was facilitated on behalf of the Scottish Government by Skills Development Scotland, working with sector employers, key stakeholders and partners from education and the public sector.

The Engineering and Advanced Manufacturing SIP identified a series of priorities and resultant actions for industry stakeholders and partners. These focussed on:

- · attracting and retaining high class talent in the sector and addressing gender imbalance
- creating and developing an effective supply pipeline
- simplifying the landscape and improving the way in which the skills system responds to employer needs.

In addition, it should be noted that SIPs have also been produced for the following sectors:

- Energy
- Food and drink
- Financial services
- ICT
- Life sciences.

Plans are also in place for the production of SIPs for Chemical Sciences, Construction and Creative Industries in 2014.

All SIPs can be viewed on http://www.ourskillsforce.co.uk/spotlight-on-industry

Skills Challenges and issues for the heath and care sector have been outlined.

The forecast ageing population and changing composition of households in Scotland will be a major driver for the health and social care sector, resulting in it being an important sector across all regions and Scotland as a whole. As outlined in the recently published Highlands and Island SIP²⁰ the skills challenges and key issues for the sector include:

- challenges in recruitment for health and social care professionals, particularly in non-graduate roles an important issue given that future demand is expected to be concentrated in health and social care professionals
- · addressing the ageing profile of the sector's workforce
- · increasing awareness amongst young people of the wide range of health sector careers available
- the need to achieve the smart and effective use of resources through innovative service delivery, including utilising technology in the delivery of services.
8 Employment and Skills Outlook

Summary

- the results of the Working Futures forecasts are not available for Fife. However, they are available for the wider Edinburgh, Fife & the Lothians region and this is the focus for the analysis within this chapter
- employment in Edinburgh, Fife & the Lothians is expected to rise modestly until 2016 with the pace of employment growth quickening from then until 2022. The trend is roughly in line with Scotland as a whole
- the greatest employment increases in Edinburgh, Fife & the Lothians over the coming decade are expected to come from health and social work, professional services and information technology
- the long term decline in employment within traditional industries, such as **manufacturing, mining and agriculture,** is set to continue. There are also expected to be job losses in **public administration, defence and education**
- replacement demand will result in over 253,000 job openings in the region over the coming decade. These openings will occur across all types of jobs, including those that are expected to decline in net terms
- the majority of job openings in Edinburgh, Fife & the Lothians over the coming decade will require individuals with **higher level skills and qualifications**. There will be limited opportunities available to those with low or no qualifications at all.

Table 8.1 Headline Performance Indicators

	Edinburgh, Fife & the Lothians	Scotland
Expansion Demand		
Forecast net employment change 2012-2022	47,500	140,400
Forecast % employment change 2012-2022	7%	5%
Replacement Demand		
Replacement demand 2012-2022	253,400	1,035,700
Replacement demand as % of current workforce	40%	39%

8.1 Introduction

Demand for skills is derived from the demand for goods and services and the resultant industrial and occupational patterns of employment, which were covered in detail in Chapter 4. Determining the future demand for skills requires an examination of predicted changes in employment by sector, as well as the occupational profile of sectors.

This section considers evidence of likely future demand for skills in the Edinburgh, Fife & Lothians economy covering:

- total employment
- · employment by gender and status
- sectoral outlook
- · changing occupational structure and replacement demands
- · demand for qualifications.

8.2 An introduction to the data

The employment projections presented within this chapter are based on the Working Futures 2012-2022 study published by the UK Commission for Employment and Skills²¹. The methodological approach to developing the Working Futures projections is set out in detail in the accompanying Technical Report²².

The results are intended to provide a benchmark for thinking about the future. **As with any forecasts, they should not be regarded as a precise prediction of what will necessarily happen.** Rather, they indicate a likely future, given a continuation of past patterns of behaviour and performance. If policies and patterns of behaviour are changed, then alternative futures might be achieved.

The results provide a **consistent and systematic benchmark view** across the whole of the UK economy and labour market. They are indicative of general trends and orders of magnitude, given the assumptions set out in detail in the main Working Futures report. They also show how the more detailed results for particular sectors, occupations and regions fit into a broader macroeconomic context, covering all these in a consistent, systematic and comparable manner. **They were produced in autumn 2013 and based on the most up to date information available at that time.**

The results of the Working Futures forecasts are not available for Fife. However, they are available for the wider **Edinburgh**, **Fife & the Lothians** region and this is the focus for the analysis within this chapter.

²¹ Wilson, R. A., R. Beaven, M. May-Gillings, G. Hay and J. Stevens (2014). Working Futures 2012-2022: Main Report. UK Commission for Employment and Skills: Wath on Dearne.

²² Wilson, R. A., R. Beaven, M. May-Gillings, G. Hay and J. Stevens (2014) Working Futures 2012-2022: Technical Report. UK Commission for Employment and Skills: Wath on Dearne.

8.3 Total employment

Employment growth in Edinburgh, Fife & the Lothians is expected to outpace Scotland as a whole over the coming decade.

There are expected to be 690,000 jobs in Edinburgh, Fife & the Lothians by 2022, an increase of 7% from the total in 2012²³. This is above the employment growth rate expected for both Scotland and the UK as a whole (5% and 6% respectively).

Table 8.2 Forecast net change in total employment 2012-2022 (000s)

			Change 2012-2022	
	2012	2022	No.	%
Edinburgh, Fife & the Lothians	640	690	50	7%
Scotland	2,650	2,790	140	5%
UK	31,930	33,780	1,850	6%

Source: Working Futures 2012-2022

All figures have been rounded to the nearest 10, percentages have been calculated on the unrounded figures

Total employment in the region is expected to fall slightly to 2016, before increasing steadily to 2022.

Figure 8.1 shows that employment in Edinburgh, Fife & the Lothians is expected to rise each year until 2022 at least, picking up particularly from 2016 onwards. Throughout the next decade, employment growth in the region is forecast to be faster than that of Scotland and the UK more generally.





Source: Working Futures 2012-2022

²³ The Working Futures employment estimates for 2012 are higher than those presented in Chapter 5 as they include both employees and self-employed.

8.4 Employment by gender and status

The structure of employment in Edinburgh, Fife & the Lothians in terms of gender and status is not expected to change significantly over the coming decade.

In 2012, women accounted for 49% of all people working in Edinburgh, Fife & the Lothians. This is expected to remain roughly the same in 2022. Male full-time workers are expected to continue to account for the largest share of the workforce by 2022. Male part-time working is expected to increase slightly, however women will remain much more likely to be employed on a part-time basis than men.



Figure 8.2 Employment by gender and status in Edinburgh, Fife & the Lothians 2012 and 2022

Source: Working Futures 2012-2022 Base: 2012 = 641,000; 2022 = 688,000

8.5 Sectoral outlook

The greatest employment increases in Edinburgh, Fife & the Lothians over the coming decade are expected to come from health and social work, professional services and information technology.

There are expected to be over 13,000 more jobs in **health and social work** in Edinburgh, Fife & the Lothians in 2022 than in 2012, an increase of 15%. Substantial increases in employment are also expected for **professional services**, information technology and finance and insurance.

In percentage terms, employment in **information technology** is expected to increase at the fastest rate over the period (+40%), with a net increase of over 10,000 jobs expected in the sector by 2022.

Public admin & defence is forecast to experience the greatest contraction in employment over the coming decade, with around 3,000 fewer people expected to be working in the sector by 2022. The long term decline in employment within traditional industries, such as **manufacturing**, **agriculture and mining**, is also set to continue.

As noted at the outset of this chapter, these results are intended to provide a benchmark for thinking about the future. As with any forecasts, **they should not be regarded as a precise prediction of what will necessarily happen.** Rather, they indicate a likely future, given a continuation of past patterns of behaviour and performance. If policies and patterns of behaviour are changed, then alternative futures might be achieved.



Figure 8.3 Forecast net employment change 2012-2022

Source: Working Futures 2012-2022

The sectoral outlook for Edinburgh, Fife & the Lothians broadly mirrors that for Scotland as a whole. The differences are in the scale of change expected – the direction of travel is the same for each of the sectors shown.

8.6 Changing occupational structure and replacement demands

Job opportunities arising to replace those who retire or move on will be many times greater than those arising from growth.

Expansion demand in the Edinburgh, Fife & the Lothians economy is expected to result in 47,500 new job opportunities between 2012 and 2022. However, replacement demand – to replace those who retire, change occupations or move away – will result in 253,400 job openings in the region over this period. **These openings will occur across all types of jobs, including those that are expected to decline in net terms.**

Managers, professionals and associate professionals combined will be the source of over half (55%) of all job openings in region to 2022. They are each expected to experience both expansion and replacement demand over the coming decade.

The only other occupational grouping expected to experience expansion and replacement demand is **caring**, **leisure & other services**. This includes many people working in tourism and hospitality sectors, but also those working in caring professions. The continued expansion of this occupational group is partly the result of an ageing population driving increased demand for care services.

All other occupational groupings are expected to experience a decline in net terms, resulting in a rebalancing of the occupational structure of the region towards higher skilled occupations. This is a continuation of a long term trend within the UK and other industrialised nations, partly driven by globalisation and the impact of technological advancements.

Table 8.3 Expansion and replacement demand by occupation in Edinburgh, Fife & the Lothians 2012-2022

Total	47,500	253,400	300,900	100%
Elementary	-2600	28,500	26,000	9%
Operatives	-4,300	12,300	8,000	3%
Sales & customer service	-800	20,400	19,600	7%
Caring, leisure & other service	12,000	21,300	33,300	11%
Skilled trades	-5,500	22,400	16,900	6%
Administrative & secretarial	-7,600	38,000	30,400	10%
Associate professional & tech.	14,000	30,600	44,600	15%
Professionals	30,500	55,000	85,500	28%
Managers, directors & senior officials	11,800	24,800	36,600	12%
	Expansion Demand	Replacement Demand	Total requirement to 2022	% of Total Requirement

Source: Working Futures 2012-2022

All figures have been rounded to the nearest 100 and percentage calculations have been carried out on the unrounded figures

8.7 Demand for Qualifications

The majority of job opportunities in Edinburgh, Fife & the Lothians over the coming decade will require individuals with higher level qualifications. There will be limited opportunities available to those with low or no qualifications.

Of the 30,900 job openings expected to arise in Edinburgh, Fife & the Lothians between 2012 and 2022, the majority (76%) will require individuals qualified to SCQF Level 7 or above²⁴. Of these, 17% will require postgraduate-level qualifications at SCQF Levels 11-12.

The remaining opportunities available will mainly be for individuals qualified to Level 5 / 6. There will be limited opportunities available to those qualified below this level or with no qualifications at all.

Table 8.4 Demand for qualifications in Edinburgh, Fife & the Lothians 2012-2022

Total	47,500	253,400	300,900	100%
SCQF 11-12	27,800	22,800	50,600	17%
SCQF 7-10	79,400	97,900	177,300	59%
SCQF 6	-18,300	51,700	33,300	11%
SCQF 5	-14,200	41,900	27,700	9%
SCQF 1-4	-14,200	24,600	10,400	3%
No Qualifications	-13,000	14,600	1,600	1%
	Expansion Demand	Replacement Demand	Net Requirement to 2022	% of Net Requirement

Source: Working Futures 2012-2022

All figures have been rounded to the nearest 100 and percentage calculations have been carried out on the unrounded figures

9 Questions Arising

This report has taken a detailed look at the Fife economy, labour market and people and skills supply. It has also considered evidence of where future employment opportunities in the region are likely to come from and the skills and qualifications that will be required to access these. The intention is that this will provide a useful resource for policy makers and others operating across the economic, skills and employment landscape in Scotland to inform future planning at a regional level.

The development of the Regional Skills Assessments has been based almost exclusively on analysis of secondary data, but there is no substitute for local knowledge in the interpretation of the findings. This final section identifies a potential list of questions arising from the evidence. This is intended as a starting point for discussion and the identification of issues amongst interested parties.

Questions arising from the evidence include:

- what are the implications of the current industrial mix of the Fife economy on existing skills provision within the region? Does anything need to change?
- what are the implications of the expected change in the industrial and occupational structure of the region on future skills provision? Again, will anything need to change to ensure that future demand can be met?
- in what ways is the changing age structure of the population likely to impact on:
 - the ability to meet future employer demand for people and skills?
 - participation in further and higher education?
 - · demand for public services more widely?
- is enough being done to address the range of gender imbalances apparent in pathways being followed by young people?
- do we know enough about the challenges faced by young people, particularly those from deprived areas, when transitioning from school to college, university, training or employment?
- to what extent will the current qualification mix in the region need to change in order to meet anticipated future demand? In what ways is it likely to need to change?
- how can the region maximise the opportunities likely to arise from the Scottish Government Growth Sectors in which it specialises?
- what are the longer term implications of the recent increase in the numbers of young people staying in education longer thereby delaying entry to the labour market?
- does anything need to be done to increase employers' perceptions of the work-readiness of school and college leavers?

This is by no means a definitive list of questions arising, but should hopefully provide a useful starting point for interpreting the findings and thinking about how they might be used to inform decision making and resource allocation at a regional level.

Annex A SIC Definitions of Growth Sectors

Table A.1 shows the Scottish Government growth sector definitions as based on SIC 2007.

Table A.1 Growth Sector definition by SIC2007

Growth sector	SIC 2007 definition
Creative Industries	SIC 73.11: Advertising agencies
(including digital)	SIC 73.12: Media representation
	SIC 71.11: Architectural activities
	SIC 90.03: Artistic creation (70%)
	SIC 47.78/1: Retail sale in commercial art galleries
	SIC 31.09: Manufacture of other furniture
	SIC 16.29: Manufacture of other wood products (30%)
	SIC 32.12 Manufacture of jewellery and related products
	SIC 32.13: Manufacture of imitation jewellery and related articles
	SIC 23.41 Manufacture of ceramic household and ornamental articles (35%)
	SIC 23.49 Manufacture of other ceramic products (35%)
	SIC 23.13 Manufacture of hollow glass (15%)
	SIC 23.19 Manufacture of other glass (15%)
	SIC 47.79/1: Retail sale of antiques and antique books
	SIC 95.24: Repair of furniture and home furnishings
	SIC 13: Manufacture of textiles (25%)
	SIC 14: Manufacture of wearing apparel (20%)
	SIC 15: Manufacture of leather and related products (20%)
	SIC 74.1: Specialised design activities (25%)
	SIC 71.12/1: Engineering design activities for industrial process and production
	SIC 74.1: Specialised design activities (75%)
	SIC 90.01: Performing arts
	SIC 90.02: Support activities to performing arts
	SIC 90.04: Operation of arts facilities
	SIC 78.10/1: Motion picture, television and other theatrical casting
	SIC 59.2: Sound recording and music publishing activities
	SIC 18.20/1: Reproduction of sound recording
	SIC 32.2: Manufacture of musical instruments
	SIC 74.20/1: Portrait photographic activities
	SIC 74.20/2: Other specialist photography (not including portrait photography)
	SIC 74.20/9: Other photographic activities (not including portrait and other specialist
	photography and film processing) n.e.c.
	SIC 18.20/2: Reproduction of video recording
	SIC 59.11/1: Motion picture production activities
	SIC 59.11/2: Video production activities
	SIC 59.12: Motion picture, video and television programme post-production activities (25%)
	SIC 59.13/1: Motion picture distribution activities
	SIC 59.13/2: Video distribution activities
	SIC 59.14: Motion picture projection activities

Growth sector	SIC 2007 definition
	SIC 58.21: Publishing of computer games
	SIC 62.01/1: Ready-made interactive leisure and entertainment software development
	SIC 59.11/3: Television programme production activities
	SIC 59.13/3: Television programme distribution activities
	SIC 59.12: Motion picture, video and television programme post-production activities (75%)
	SIC 60.1: Radio broadcasting
	SIC 60.2: Television programming and broadcasting activities
	SIC 90.03: Artistic creation (30%)
	SIC 58.11: Book publishing
	SIC 58.13: Publishing of newspapers
	SIC 58.14: Publishing of journals and periodicals
	SIC 58.19: Other publishing activities
	SIC 18.11: Printing of newspapers
	SIC 18.129: Other printing (not labels)
	SIC 18.13: Pre press and media services
	SIC 63.91: News agency activities
	SIC 91.01: Libraries and archive activities
	SIC 58.29 Other software publishing
	SIC 62.01/2: Business and domestic software development
	SIC 62.02: Computer consultancy activities
	SIC 85.52: Cultural Education
Energy (including	SIC 05: Mining of coal and lignite
renewables)	SIC 06: Extraction of crude petroleum and natural gas
	SIC 09: Mining support service activities
	SIC 19: Manufacture of coke and refined petroleum products
	SIC 20.14: Manufacture of other organic based chemicals
	SIC 35: Electricity, gas, steam and air conditioning supply
	SIC 36: Water collection, treatment and supply
	SIC 38.22: Treatment and disposal of hazardous waste
	SIC 71.12/2 Engineering related scientific and technical consulting activities
	SIC 74.90/1 Environmental consulting activities
Financial & Business	SIC 64.1: Monetary intermediation
Services	SIC 64.3: Trusts, funds and similar financial entities
	SIC 64.9: Other financial service activities, except insurance and pension funding
	SIC 65: Insurance, reinsurance and pension funding, except compulsory social security
	SIC 66: Activities auxiliary to financial services and insurance activities
	SIC 69.1: Legal activities
	SIC 69.2: Accounting, bookkeeping and auditing activities; tax consultancy
	SIC 70.2: Management consultancy activities
	SIC 71.129: Other engineering activities (not including engineering design for industrial
	process and production or engineering related scientific and technical
	consulting activities)

Growth sector	SIC 2007 definition
	SIC 73.2: Market research and public opinion polling
	SIC 74.3: Translation and interpretation activities
	SIC 78.109: Activities of employment placement agencies (other than motion picture,
	television and other theatrical casting) n.e.c.
	SIC 78.3: Other human resources provision
	SIC 82.1: Office administrative and support activities
	SIC 82.2: Activities of call centres
	SIC 82.3: Organisation of conventions and trade shows
	SIC 82.91: Activities of collection agencies and credit bureaus
Food & Drink	SIC 01: Crop and animal production, and hunting and related service activities
(including	SIC 03.14: Fishing and Aquaculture
agriculture &	SIC 10: Manufacturing of Food Products
fisheries)	SIC 11: Manufacturing of Beverages
Life Sciences	SIC 21: Manufacture of basic pharmaceutical products and pharmaceutical preparations
	SIC 26.6: Manufacture of irradiation, electromedical and electrotherapeutic equipment
	SIC 32.5: Manufacture of medical and dental instruments and supplies
	SIC 72.11: Research and experimental development on biotechnology
	SIC 72.19: Other research and experimental development on natural sciences
	and engineering
Sustainable Tourism	SIC 55.1: Hotels and similar accommodation
	SIC 55.2: Holiday and other short-stay accommodation
	SIC 55.3: Camping grounds, recreational vehicle parks and trailer parks
	SIC 56.1: Restaurants and mobile food service activities
	SIC 56.3: Beverage serving activities
	SIC 79.12: Tour operator activities
	SIC 79.9: Other reservation service and related activities
	SIC 91.02: Museum activities
	SIC 91.03: Operation of historical sites and buildings and similar visitor attractions
	SIC 91.04: Botanical and zoological gardens and nature reserve activities
	SIC 93.11: Operation of sports facilities
	SIC 93.199: Other sports activities (not including activities of racehorse owners) nec
	SIC 93.21 Activities of amusement parks and theme parks
	SIC 93.29: Other amusement and recreation activities

Source: SQW analysis of http://www.scotland.gov.uk/Topics/Statistics/Browse/Business/Publications/GrowthSectors

Annex B Standard Industrial Classifications

SIC Section	SIC Division
Agriculture, forestry	Crop and animal production, hunting and related service activities
& fishing (A)	Forestry and logging
	Fishing and aquaculture
Mining, quarrying &	Mining of coal and lignite
utilities (B,D and E)	Extraction of crude petroleum and natural gas
	Mining of metal ores
	Other mining and quarrying
	Mining support service activities
	Electricity, gas, steam and air conditioning supply
	Water collection, treatment and supply
	Sewerage
	Waste collection, treatment and disposal activities; materials recovery
Manufacturing (C)	Manufacture of food products
	Manufacture of beverages
	Manufacture of tobacco products
	Manufacture of textiles
	Manufacture of wearing apparel
	Manufacture of leather and related products
	Manufacture of paper and paper products
	Printing and reproduction of recorded media
	Manufacture of coke and refined petroleum products
	Manufacture of chemicals and chemical products
	Manufacture of rubber and plastic products
	Manufacture of other non-metallic mineral products
	Manufacture of basic metals
	Manufacture of fabricated metal products, except machinery and equipment
	Manufacture of computer, electronic and optical products
	Manufacture of electrical equipment
	Manufacture of machinery and equipment n.e.c.
	Manufacture of motor vehicles, trailers and semi-trailers
	Manufacture of other transport equipment
	Manufacture of furniture
	Other manufacturing
	Repair and installation of machinery and equipment
Construction (F)	Construction of buildings
	Civil engineering
	Specialised construction activities
Motor trades (Part G)	Wholesale and retail trade and repair of motor vehicles and motorcycles
Wholesale (Part G)	Wholesale trade, except of motor vehicles and motorcycles
Retail (Part G)	Retail trade, except of motor vehicles and motorcycles

SIC Section	SIC Division
Transport & storage	Land transport and transport via pipelines
(inc postal) (H)	Water transport
	Air transport
	Warehousing and support activities for transportation
	Postal and courier activities
Accommodation & food	Accommodation
services (I)	Food and beverage service activities
Information &	Publishing activities
communication (J)	Programming and broadcasting activities
	Telecommunications
	Computer programming, consultancy and related activities
	Information service activities
Financial &	Financial service activities, except insurance and pension funding
insurance (K)	Insurance, reinsurance and pension funding, except compulsory social security
	Activities auxiliary to financial services and insurance activities
Property (L)	Real estate activities
Professional, scientific	Legal and accounting activities
& technical (M)	Activities of head offices; management consultancy activities
	Architectural and engineering activities; technical testing and analysis
	Scientific research and development
	Advertising and market research
	Other professional, scientific and technical activities
	Veterinary activities
Business administration	Rental and leasing activities
& support services (N)	Employment activities
	Security and investigation activities
	Services to buildings and landscape activities
	Office administrative, office support and other business support activities
Public administration	Public administration and defence; compulsory social security
& defence (O)	
Education (P)	Education
Health (Q)	Human health activities
	Residential care activities
<u> </u>	Social work activities without accommodation
Arts, entertainment,	Creative, arts and entertainment activities
recreation & other	Libraries, archives, museums and other cultural activities
services (R,S,T and U)	Gambling and betting activities
	Sports activities and amusement and recreation activities
	Activities of membership organisations
	Repair of computers and personal and household goods
	Other personal service activities
	Activities of households as employers of domestic personnel
	Activities of extraterritorial organisations and bodies

Annex C Standard Occupational Classifications

SOC Major Group	SOC Minor Group
Managers, Directors	Chief Executives and Senior Officials
& Senior Officials (1)	Production Managers and Directors
	Functional Managers and Directors
	Financial Institution Managers and Directors
	Managers and Directors in Transport and Logistics
	Senior Officers in Protective Services
	Health and Social Services Managers and Directors
	Managers and Directors in Retail and Wholesale
	Managers and Proprietors in Agriculture Related Services
	Managers and Proprietors in Hospitality and Leisure Services
	Managers and Proprietors in Health and Care Services
	Managers and Proprietors in Other Services
Professional Occupations	Natural and Social Science Professionals
(2)	Engineering Professionals
	Information Technology and Telecommunications Professionals
	Conservation and Environment Professionals
	Research and Development Managers
	Health Professionals
	Therapy Professionals
	Nursing and Midwifery Professionals
	Teaching and Educational Professionals
	Legal Professionals
	Business, Research and Administrative Professionals
	Architects, Town Planners and Surveyors
	Welfare Professionals
	Librarians and Related Professionals
	Quality and Regulatory Professionals
	Media Professionals
Associate Professional	Science, Engineering and Production Technicians
Technical Occupations	Draughtspersons and Related Architectural Technicians
(3)	Information Technology Technicians
	Health Associate Professionals
	Welfare and Housing Associate Professionals
	Protective Service Occupations
	Artistic, Literary and Media Occupations
	Design Occupations
	Sports and Fitness Occupations
	Transport Associate Professionals
	Legal Associate Professionals
	Business, Finance and Related Associate Professionals
	Sales, Marketing and Related Associate Professionals
	Conservation and Environmental Associate Professionals

SOC Major Group	SOC Minor Group
	Public Services and Other Associate Professionals
Administrative and	Administrative Occupations: Government and Related Orgs
Secretarial	
Occupations (4)	Administrative Occupations: Finance
	Administrative Occupations: Records
	Other Administrative Occupations
	Administrative Occupations: Office Managers and Supervisors
	Secretarial and Related Occupations
Skilled Trades	Agricultural and Related Trades
Occupations (5)	Metal Forming, Welding and Related Trades
•••••p• (•)	Metal Machining, Fitting and Instrument Making Trades
	Vehicle Trades
	Electrical and Electronic Trades
	Skilled Metal, Electrical and Electronic Trades Supervisors
	Construction and Building Trades
	Building Finishing Trades
	Construction and Building Trades Supervisors
	Textiles and Garments Trades
	Printing Trades
	Food Preparation and Hospitality Trades
	Other Skilled Trades
Caring, Leisure and Other	Childcare and Related Personal Services
Service Occupations (6)	Animal Care and Control Services
	Caring Personal Services
	Leisure and Travel Services
	Hairdressers and Related Services
	Housekeeping and Related Services
	Cleaning and Housekeeping Managers and Supervisors
Sales and Customer	Sales Assistants and Retail Cashiers
Service Occupations (7)	Sales Related Occupations
	Sales Supervisors
	Customer Service Occupations
	Customer Service Managers and Supervisors
Process, Plant and	Process Operatives
Machine Operatives (8)	Plant and Machine Operatives
	Assemblers and Routine Operatives
	Construction Operatives
	Road Transport Drivers
	Mobile Machine Drivers and Operatives
	Other Drivers and Transport Operatives
Elementary Occupations	Elementary Agricultural Occupations
(9)	Elementary Construction Occupations

SOC Major Group	SOC Minor Group		
	Elementary Process Plant Occupations		
	Elementary Administration Occupations		
	Elementary Cleaning Occupations		
	Elementary Security Occupations		
	Elementary Sales Occupations		
	Elementary Storage Occupations		
	Other Elementary Services Occupations		

Annex D Scottish Credit and Qualifications Framework

THE SCOTTISH CREDIT AND QUALIFICATIONS FRAMEWORK

This Frantework diagram has been produced to show the manistraam Scotlash qualifications already credit railed by SQA and HEIs. However, there are a diverse number of learning programmes on the Frantework, which, due to the imitations of this format, cannot be represented here. For more information, please wait the EQQF website at www.scotl.org.uk to view the interactive version of the Frantework or search the Database, N.B. MA Frameworks have a notional level on the SQDF, but all component parts are credit rated

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SCOF Levels			Qualifications of Higher Education Institutions		
12				Doctoral Degree	Protessional Apprenticeship
11	Some SQA qualifications are changing between 2013-2016. See www.sqa.org.uk/readyreckoner			Masters Degree, Integrated Masters Degree, Post Graduate Diploma, Post Graduate Certificate	Professional Apprenticeshi SVQ 5
10				Honours Degree, Graduate Diploma, Graduate Certificate	Professional Apprenticeshi
9			Professional Development Award	Bachelors / Ordinary Degree, Graduate Diploma, Graduate Certificate	Technical Apprenticeship SVO 4
8		Higher National Diploma		Diploma Of Higher Education	Technical Apprenticeship SVO 4
7	Advanced Higher Scottish Baccalaureate	Higher National Certificate		Certificate Of Higher Education	Modern Apprenticeship SVQ 3
6	Higher		î j		Modern Apprenticeship SVQ 3
6	National 5 Intermediate 2				Modern Apprenticeship SVO 2
4	National 4 Intermediate 1	National Certificate	National Progression Award		SVO 1
з	National 3 Access 3				
2	National 2 Access 2				
1	National 1 Access 1				

Annex E College Regions & Mergers

College Region	College(s)	Details of Merger(s)	
Aberdeen and Aberdeenshire	North East Scotland College	Merger of Aberdeen College and	
		Banff and Buchan College	
Ayrshire	Ayrshire College	Merger of Ayr College; James Watt	
		College Kilwinning Campus; and	
		Kilmarnock College	
Borders	Borders College	N/A	
Central	Forth Valley College	N/A	
Dumfries and Galloway	Dumfries & Galloway College	N/A	
Edinburgh and Lothians	Edinburgh College	Merger of Edinburgh's Telford	
		College; Jewel & Esk College; and	
		Stevenson College Edinburgh	
Fife	Fife College	Merger of Adam Smith College;	
		Carnegie College; and SRUC	
		non-land based element	
Glasgow	Glasgow Kelvin College	Merger of John Wheatley College;	
		North Glasgow College and Stow	
		College	
	Glasgow Clyde College	Merger of Anniesland College;	
		Cardonald College; and Langside	
		College	
	City of Glasgow College	Merger of Central College Glasgow;	
		Glasgow College of Nautical Studies;	
		and Glasgow Metropolitan College	
Lanarkshire	South Lanarkshire College	N/A	
	New College Lanarkshire	Merger of Coatbridge College;	
		Cumbernauld College and Motherwell	
		College	
Land Based	Scotland's Rural College (SRUC)	Merger of Barony College; Elmwood	
		College; Oatridge College and	
		Scottish Agricultural College	
Tayside	Dundee and Angus College	Merger of Angus College and Dundee	
-		College	
West	West College Scotland	Merger of Clydebank College; James	
	-	Watt College Inverclyde Campus; and	
		Reid Kerr College	
West Lothian	West Lothian College	N/A	
N/A	Newbattle Abbey College	N/A	



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