



University
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**FIFE WORKFORCE MODELLING STUDY
FINAL REPORT**

March 2014

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1. INTRODUCTION

Background

There is a growing acceptance across Scotland that the supply of appropriate skills and qualifications is an important driver of economic competitiveness through impacts on employee productivity and adaptability. Publicly funded education provision therefore needs to become more focussed on raising the long term employability of learners and meeting the employment and skills needs of employers. It is in this context that the Fife Economy Partnership and Opportunities Fife Partnership have commissioned this research, which sets out to deliver a ***bespoke workforce planning model for Fife***.

Workforce Planning

Workforce planning, as a concept, looks to the future and is dependent on the quality of information that is available. Notwithstanding the challenges involved with workforce planning, there is merit in carrying it out in Fife for the following reasons.

- Fife is a region of notable scale with 366,000 residents and 126,000 jobs. Furthermore, while over one-fifth of Fife's employed residents do commute to for example Edinburgh and Dundee, Fife's businesses are largely dependent on Fife's residents for its workforce. Understanding and responding to the skills needs of Fife's businesses will therefore enhance the employment opportunities for Fife's residents.
- Fife has a mixed economy in terms of key sectors and types of employers. These include a number of large employers which typically find it easier to communicate their future employment and skills needs. This is important for the Fife economy as a whole as these employers not only employ many Fife residents but also drive a local supply chain – thereby Fife's larger employers potentially also reflect the skills needs of other, smaller Fife employers.
- Fife is served by Fife-wide organisations such as Fife Council and Fife College (following the merger of Adam Smith College, Carnegie College and Elmwood College) and their Fife-wide coverage enables them to deliver more effectively the skills solutions that Fife's employers and residents require.
- Finally, the timing of the research is opportune as Fife College is in the process of reviewing its curriculum and structures following its merger and the workforce planning research can help ensure its changes best reflect the needs of Fife's employers and residents.

Research Aims

The workforce planning model aims to provide robust labour market intelligence around the demand for and supply of skills in Fife, which can then inform partners' decision-making on the most effective package of skills investment for promoting and supporting the long-term development of Fife's economy. Specifically the research aims to triangulate the key labour market trends and messages from a variety of sources to form a coherent and informed understanding of labour market demand and supply in Fife both now and looking forward to the next 3-5 years. These sources include:

- Nationally available demographics, skills, employment and business statistical data.
- Data requests from Fife College and Skills Development Scotland around the provision of skills in Fife.
- Labour market research and projections at the national and sectoral levels.
- Interviews with key stakeholders from the public and private sector.
- An e-survey of Fife employers.

The findings from the different research components have been drawn together to produce the following outputs:

- An analysis of the Fife labour market with clear statements of the key skills needs within Fife's key economic sectors.
- Recommendations on how the workforce planning model can be enhanced to provide the Fife Economy Partnership and Opportunities Fife Partnership with the mechanisms to undertake the modelling on an ongoing basis.

Report Structure

The report is structured as follows:

- **Chapter 2** – Analysis of Fife Labour Market – Demand Side.
- **Chapter 3** – Analysis of Fife Labour Market – Supply Side.
- **Chapter 4** – Analysis of Fife's Labour Market Entrants.
- **Chapter 5** – Fife's Key Sectors.
- **Chapter 6** – Stakeholder Views of Fife Workforce Planning Arrangements.
- **Chapter 7** – Conclusions and Recommendations.

2. FIFE LABOUR MARKET – DEMAND SIDE

Introduction

This chapter sets out the employment and business base within Fife. This includes analysis over time by looking at recent trends and future projections to understand how Fife's economy is changing. In doing so, the chapter aims to identify which sectors are the priorities for future skills interventions in Fife.

Employment by Sector

Fife had 126,300 jobs in 2012 and Figure 2.1 provides the breakdown of total employment by sector. It shows that Fife's major sectors of employment were:

- Health – 20,500 jobs.
- Manufacturing – 15,200 jobs.
- Retail – 14,300 jobs.

In comparison to Scotland's sectoral profile, there are broad similarities between Fife and Scotland which mean that trends at the national level can justifiably be applied to the Fife level. However, there are also differences between the two profiles – most notably, Fife had proportionately:

- More manufacturing, retail (which includes online retailers such as Amazon), and public administration and defence jobs.
- Fewer jobs in professional, scientific and technical (which includes legal, accountancy, HQ, R&D, consultancy, advertising, and marketing activities) and business administration and support services (which includes office admin, rental activities, travel agents, and employment agencies activities).

Figure 2.1: Total Employment by Sector, 2012

	Fife		Scotland	
	Number	%	Number	%
Agriculture, forestry & fishing	200	0.2	82,400	3.4
Mining, quarrying & utilities	2,600	2.1	64,800	2.7
Manufacturing	15,200	12.1	183,400	7.6
Construction	5,900	4.7	125,000	5.2
Motor trades	2,200	1.7	39,800	1.6
Wholesale	4,100	3.2	73,600	3.0
Retail	14,300	11.3	240,900	9.9
Transport & storage	4,100	3.2	96,300	4.0
Accommodation & food services	8,000	6.3	167,100	6.9
Information & communication	4,500	3.6	58,100	2.4
Financial & insurance	3,500	2.8	91,300	3.8
Property	1,000	0.8	33,300	1.4
Professional, scientific & technical	5,600	4.4	172,500	7.1
Business administration & support services	6,400	5.1	182,700	7.5
Public administration & defence	10,300	8.1	145,500	6.0
Education	10,500	8.3	179,700	7.4
Health	20,500	16.2	376,200	15.5
Arts, entertainment, recreation & other services	7,400	5.8	113,200	4.7
Total (all industries)	126,300	100	2,425,900	100

Source: Business Register and Employment Survey

Over time, trend data for 2009 to 2012 shows that Fife has experienced a loss of 6,500 (or 5% of) jobs. This rate of decrease is greater than the 4% reduction across Scotland. At the sectoral level, the Business Register and Employment Survey data presented in Figure 2.2 can be questioned – most notably around the 3,400 increase in Fife’s public administration and defence employment and also the 3,400 decrease in education employment¹. Notwithstanding this, the trends for Fife during this difficult economic period were for:

- Small employment growth in transport and storage, manufacturing, and mining, quarrying and utilities.
- Declines in many sectors but greatest in construction, accommodation and food services, business administration and support services, information and communications (which includes publishing, broadcasting, ICT and software activities), and health.

Figure 2.2: Change in Employment by Sector, 2009 to 2012

	Fife		Scotland	
	Change	% Change	Change	% Change
Agriculture, forestry & fishing	0	0.0	1,200	1.5
Mining, quarrying & utilities	100	4.0	3,000	4.9
Manufacturing	300	2.0	-7,900	-4.1
Construction	-1,400	-19.2	-21,500	-14.7
Motor trades	-400	-15.4	-3,900	-8.9
Wholesale	-200	-4.7	-4,400	-5.6
Retail	-500	-3.4	-10,400	-4.1
Transport & storage	400	10.8	-9,900	-9.3
Accommodation & food services	-1,300	-14.0	-15,600	-8.5
Information & communication	-900	-16.7	-7,700	-11.7
Financial & insurance	-700	-16.7	-2,900	-3.1
Property	0	0.0	1,700	5.4
Professional, scientific & technical	0	0.0	9,100	5.6
Business administration & support services	-900	-12.3	400	0.2
Public administration & defence	3,400	49.3	-7,300	-4.8
Education	-3,400	-24.5	-15,900	-8.1
Health	-800	-3.8	-11,400	-2.9
Arts, entertainment, recreation & other services	-100	-1.3	6,100	5.7
Total (all industries)	-6,500	-4.9	-97,200	-3.9

Source: Business Register and Employment Survey

Summarising Figures 2.1 and 2.2, the key points of difference between the Fife and Scotland employment profiles are:

- Fife has a strong manufacturing sector that has also bucked national trends in generating employment growth between 2009 and 2012.
- Fife has proportionately more public sector services jobs, which puts it at risk from further cuts to public sector expenditure.

¹ This appears to be the result of c.2,400 jobs in Fife being reassigned in the BRES return from education to public administration and defence between 2011 and 2012.

- In terms of private sector services, Fife has proportionately more retail jobs but fewer professional services jobs ranging from finance, business, ICT, legal and marketing jobs.
- The tourism and hospitality sector is hard to clearly identify from the sectoral splits provided but combining accommodation and food services with arts, entertainment, recreation and other services would suggest the sector makes an important employment contribution.

Employment by Occupation

Accurate employment data by occupation at local authority level is not readily available. Figure 2.3 uses the Annual Population Survey Workplace Analysis data to show the occupational breakdown of the jobs in Fife by sector. The data needs to be interpreted with caution due to statistical confidence issues but it gives an indication of where the occupations are predominantly found.

- 17% of Fife's jobs are in professional occupations.
- 13% are in skilled trades occupations.
- 12% are in associate professional and technical occupations.

Figure 2.3: Total Employment by Occupation and Sector in Fife, 2013

	Agriculture & Fishing	Energy & Water	Manufacturing	Construction	Retail, Distribution & Hospitality	Transport & Communications	Banking, Finance & Insurance	Public Sector Services	Other Services	Total
Managers and Senior Officials	-	-	800	-	5,600	-	1,700	1,000	-	9,100
Professional	-	-	1,100	800	-	700	2,800	16,400	-	21,800
Associate Professional and Technical	-	-	2,100	1,600	600	-	4,300	5,500	1,000	15,100
Administrative and Secretarial	-	-	1,000	900	1,300	-	2,900	6,100	1,000	13,200
Skilled Trades	1,000	-	4,900	5,500	4,100	-	-	1,600	-	17,100
Caring, Leisure and Other Service	-	-	-	-	-	-	1,000	10,700	2,300	14,000
Sales and Customer Service	-	-	700	-	10,800	1,500	1,200	-	-	14,200
Plant, Process and Machine Operatives	-	-	2,200	700	1,000	4,000	-	-	-	7,900
Elementary	-	-	-	-	8,000	1,600	2,100	2,700	2,200	16,600

Source: Annual Population Survey (Workplace Analysis) Oct 2012-Sep 2013 data

Employment Projections

Projections by Sector

Looking forward, employment projections by sector are presented first. At the Scotland level, UK Commission for Employment and Skills (UKCES) Working Futures projections for 2010 to 2020 indicate that:

- Scotland will see net employment growth of 2% or 51,000 jobs.
- By broad industrial group (with a more detailed breakdown not available), there is expected to be:
 - Growth in business and other services; trade, accommodation and transport; and construction.

- Decline in manufacturing, primary sector and utilities, and public sector services.

Figure 2.4: Employment by Broad Industrial Group across Scotland, 2010 and 2020

	2010	2020	Change	% Change
Primary Sector and Utilities	116,000	103,000	-13,000	-11.2
Manufacturing	179,000	152,000	-27,000	-15.1
Construction	179,000	199,000	20,000	11.2
Trade, Accommodation and Transport	690,000	717,000	27,000	3.9
Business and Other Services	670,000	727,000	57,000	8.5
Non-Market Services	693,000	681,000	-12,000	-1.7
Total	2,528,000	2,579,000	51,000	2.0

Source: UKCES Working Futures Projections 2010-2020

If these UKCES projections for Scotland are applied to Fife's employment profile in 2012 (see Figure 2.1), Fife would see its total number of jobs increase by approximately 2,500 jobs by 2020. By sector, this would involve:

- Employment growth in:
 - Business and other services (c.+2,400 jobs in Fife).
 - Trade, accommodation and transport (c.+1,300 jobs in Fife).
 - Construction (c.+700 jobs in Fife).
- Employment reductions in:
 - Manufacturing (c.-2,200 jobs in Fife).
 - Public sector services (c.-700 jobs in Fife).
 - Primary sector and utilities (c.-300 jobs in Fife).

Below the national level projections, Figure 2.5 shows projections produced by Experian for Fife from 2013 to 2020. It projects more positive employment growth than the UKCES projections indicate with Fife seeing net growth of 7% or 10,400 jobs in the period to 2020.

The Experian projections also provide data at a more detailed sectoral level than the UKCES projections and indicate that:

- Greatest employment growth in Fife will be in accommodation, food services and recreation (i.e. tourism and hospitality); professional and other private services; wholesale and retail trade; and construction.
- Two sectors are projected to experience employment decline and these are public administration and defence; and a small decline in manufacturing.

Figure 2.5: Fife Employment Projections, 2013 to 2020

	2013	2020	Change	% Change
Agriculture, Forestry & Fishing	2,000	2,100	100	5.0
Extraction & Mining	200	200	0	0.0
Utilities	2,300	2,500	200	8.7
Manufacturing	15,600	15,400	-200	-1.3
Construction	8,400	9,600	1,200	14.3
Wholesale & Retail	21,300	22,700	1,400	6.6
Transport & Storage	4,100	4,700	600	14.6
Accommodation, Food Services & Recreation	14,400	17,000	2,600	18.1
Information & communication	5,400	6,300	900	16.7
Finance & Insurance	3,400	3,700	300	8.8
Professional & Other Private Services	18,800	21,500	2,700	14.4
Public Administration & Defence	6,800	4,900	-1,900	-27.9
Education	15,300	15,800	500	3.3
Health	11,800	12,800	1,000	8.5
Residential Care & Social Work	10,700	11,800	1,100	10.3
Total	140,500	150,900	10,400	7.4

Source: Experian Forecasts for Fife Council

The main point of contention with the UKCES and Experian projections is the projected employment reduction in manufacturing. As outlined earlier, Fife has a strong manufacturing sector and has experienced employment growth in recent years. This allied to this research's employer consultations would suggest that employment levels in Fife's manufacturing sector (if including advanced manufacturing and engineering) are likely to remain steady and potentially increase.

Projections by Occupation

Turning to employment projections by occupation, the UKCES Working Futures Scotland projections for 2010 to 2020 show that the number of jobs created through replacement demand (i.e. labour turnovers and retirements) will far exceed the number created through expansion demand.

- 1,075,000 jobs will be created through replacement demand.
- 50,000 jobs created by expansion demand.

By broad occupational grouping, the Scotland projections indicate that the number of job opportunities (expansion demand plus replacement demand) will be:

- Greatest in professional; associate professional and technical occupations; and managers and senior officials occupations.
- Fewest in plant, process and machine operatives; and administrative and secretarial occupations. Nevertheless, these will still require 24,000 and 70,000 workers respectively.

Figure 2.6: Employment Demand by Occupation across Scotland, 2010 to 2020

	Expansion Demand	Replacement Demand	Net Demand
Managers and Senior Officials	31,000	127,000	158,000
Professional	58,000	247,000	305,000
Associate Professional and Technical	35,000	142,000	177,000
Administrative and Secretarial	-37,000	107,000	70,000
Skilled Trades	-24,000	102,000	78,000
Caring, Leisure and Other Service	13,000	92,000	105,000
Sales and Customer Service	-3,000	76,000	73,000
Plant, Process and Machine Operatives	-26,000	50,000	24,000
Elementary	3,000	132,000	135,000
Total	50,000	1,075,000	1,125,000

Source: UKCES Working Futures Projections 2010-2020

Applying the Scotland projections to Fife's employment by occupation profile (see Figure 2.3), Figure 2.7 shows how national trends would impact on demand levels within Fife.

- In total, there is projected to be a 5,700 jobs growth in the top three occupational groupings. Combined with replacement demand, net demand would equate to 35,700 jobs.
- Despite reductions in administrative and secretarial, skilled trades and plant, process and machine operatives employment, each will require future workers.
- In total, net employment demand in Fife is projected to be 63,500 jobs.

Figure 2.7: Employment Demand by Occupation Projections Applied to Fife, 2010 to 2020

	Expansion Demand	Replacement Demand	Net Demand
Managers and Senior Officials	+1,300	12,000	13,300
Professional	+2,600	11,000	13,600
Associate Professional and Technical	+1,800	7,000	8,800
Administrative and Secretarial	-1,500	4,000	2,500
Skilled Trades	-1,300	6,000	4,700
Caring, Leisure and Other Service	+1,000	7,000	8,000
Sales and Customer Service	0	5,000	5,000
Plant, Process and Machine Operatives	-1,000	2,000	1,000
Elementary	0	7,000	7,000
Total	+2,500	61,000	63,500

Source: UKCES Working Futures Projections 2010-2020

Implications for Fife Strategies

In October 2013, the *Fife Economic Strategy 2013-2023 'Growing a Vibrant Fife Economy'* was launched. Within the strategy, it sets out the need to invest in the following key sectors:

- Fife as a **Centre of Excellence for Energy and Renewables** – which refers to all forms of energy.

- **Tourism** – with the aspiration of making Fife a sustainable, first class tourism destination, with a year round economy, where businesses are growing and visitors return year after year.

Supporting the Fife Economic Strategy, the Opportunities Fife (2013) **STEM (Science, Technology, Engineering and Maths): Enriching Life in Fife Strategy** proposes a coherent strategic approach, driven by industry, to ensure that the education and skills delivered within Fife are able to drive forward growth and success within STEM-related industries. Within it, Fife's main employment sectors where STEM skills are required are set out as:

- **Construction and civil engineers.**
- Users of **data and data management.**
- **Energy** professionals.
- **Engineering** – including electrical, mechanical, systems and renewables.
- **Food and drink** industry.
- **Health sector** (therapists, nurses, doctors, pharmacists, midwives, theatre staff and paramedics).
- **ICT and technology.**
- **Leisure and tourism.**
- **Research and Development.**

This research provided a valuable opportunity to ratify these sectors based on the statistical data presented above and the views of the public and private sector stakeholders interviewed. From the data, Fife's key sectors would appear to be:

- **Health and care sector** is Fife's largest employing sector and NHS Fife is one of Fife's largest employers. Figure 2.1's definition of the health sector includes social care and residential care, which fits with stakeholders' wider interpretation of the health sector in Fife.
- **Energy (including renewables) and engineering/manufacturing.** Figure 2.1 shows that manufacturing is Fife's second largest employing sector but the stakeholder interviews made it clear that it is more appropriate to consider Fife's wider energy and engineering/manufacturing sector as they are all closely connected to one another. Fife is seen to have a very strong, diverse and growing sector with a number of high quality firms operating in, for example, electronics, defence, mechanical, and energy/renewables.
- **Retail** is Fife's third largest employing sector and Fife has many retail centres that predominantly serve the local population rather than attracting shoppers from beyond Fife. Stakeholders recognised the importance of retail in terms of providing a large number of entry level jobs for residents but did not view it as key sector for the purposes of this research due to the low skills requirements to enter a retail job. However, it is also important to note that Amazon and other online retailers also fall within the retail sector and account for approximately 5% of Fife's 14,300 retail jobs. These jobs require skills that align more with Fife's 4,100 wholesale jobs than shopfloor staff – for example, distribution, warehousing, logistics and forklift driving.

In addition to the sectors above, stakeholders identified the following sectors as particularly important for the Fife economy.

- **Construction and civil engineering.** Stakeholders understood that Fife has a good number of established construction firms, many of whom are part of the Fife Construction Forum. The sector is subject to cyclical trends but the prospects look favourable with the construction of the new Queensferry Crossing and an expected upturn in house building.
- **Food and drink.** The sector is seen as important to Fife as it includes Fife's strong agricultural sector and also its food and drink manufacturers, which

range from large employers (e.g. Diageo, Quaker Oats, Kettles, Meridian Salmon Group and Carrs) to many smaller, award winning producers.

- **ICT and technology.** While Fife is not seen to have a significant ICT/software sector in its own right, stakeholders recognised the strong demand for ICT, telecoms and software skills across the Fife economy and from Edinburgh and Dundee.
- **Tourism and hospitality.** The tourism and hospitality sector is very important to St Andrews and North East Fife, but there are also tourism attractions across other parts of Fife. The support for cultural tourism also presents an opportunity as it embraces Fife's creative industries and small craft-based businesses.

In addition to the sectors outlined within the Fife strategies, stakeholders also felt that the importance to Fife of the following sectors should not be overlooked – although (like retail) they were not viewed as key sectors for the purposes of this research.

- **Financial and business services** – Fife has a notable financial and business services sector based mainly in the Dunfermline area that serves the Edinburgh financial services sector. Big employers include Lloyds and Nationwide, while there are also financial services contact centres.
- **Higher Education** – St Andrews University is one of the UK's leading universities and has a very strong international reputation.

However, two sectors set out in the Fife STEM strategy had limited stakeholder awareness and are hard to identify within the statistical data. These are:

- **Data and data management** – the sector identified in the STEM Strategy was not suggested by stakeholders as a key sector for Fife. This is likely to be because data and data management is a core function of other sectors and not a distinct sector in itself. It also proved difficult to generate a statistical definition of the sector – albeit it could relate to financial and business services.
- **Research and Development** – similar to the above, R&D was not suggested by stakeholders as a key sector for Fife but this is likely to be because R&D functions are considered part of other sectors, such as energy and renewables, engineering and manufacturing, and food and drink.

Finally, and in many cases underpinning the sectors outlined above, is **Fife's small business base**. A number of stakeholders highlighted the important role that the small business base within Fife plays and their importance is illustrated in Figure 2.8. It shows that:

- 80% of Fife's businesses are micro-businesses with up to 9 employees. A further 10% employ 10-19 employees.
- In terms of employment, Fife's micro-businesses provide 17% of Fife's employment. Small and medium enterprises (SMEs) of up to 250 employees provide 71% of Fife's jobs.

Figure 2.8: Fife's Business Base by Size of Business, 2012/2013

	Number of Businesses	% of Total Businesses	Employment	% of Total Employment
0-4 employees	6,465	61.3	9,900	7.8
5-9 employees	1,945	18.4	11,200	8.9
10-19 employees	1,085	10.3	14,700	11.6
20-49 employees	700	6.6	23,100	18.3
50-99 employees	195	1.8	12,600	10.0
100-249 employees	115	1.1	18,600	14.7
250-499 employees	30	0.3	9,800	7.8
500+ employees	20	0.2	26,400	20.9
Total	10,555	100	126,300	100

Source: Business data from ONS Business Activity, Size and Location 2013; Employment data from Business Register and Employment Survey (2012 data)

Chapter Summary

From the analysis of Fife's employment and business base, the key points are:

- Fife's main employment sectors are health (which includes social care and residential care), manufacturing and retail.
- Manufacturing as part of the wider sector 'Energy and engineering/manufacturing' is seen to be particularly important for Fife and appears to be bucking the national trend by sustaining and even increasing the number of jobs in the sector.
- Over time, Fife is expected to see growth in professional and business services, and retail and tourism. However, it is at risk of further cuts to public sector services employment.
- By occupation, there will be demand for all occupations due to replacement demand. However, net demand will be greatest at the professional, technical and managerial levels.
- In consultation with stakeholders, it was decided that the key sectors that the workforce planning modelling should focus on are:
 - Construction and civil engineering.
 - Energy and engineering/manufacturing.
 - Food and drink.
 - Health and care.
 - ICT and technology.
 - Tourism and hospitality.

3. FIFE LABOUR MARKET – SUPPLY SIDE

Introduction

This chapter looks at the supply side of the labour market and specifically Fife's working age population to assess whether in broad terms Fife's population meets labour market demand.

Population

In 2012, Fife had a total population of 366,200 people and a working age population of 234,700 people. Comparing its age profile to that of the Scotland average, Figure 3.1 shows:

- Fife had proportionately more residents aged 50-64 and 65 and above.
- Fife had proportionately fewer 25-39 year olds.

Between 2008 and 2012, Fife's population grew by 6,200 people or 1.7%, which is slightly below the Scottish increase of 2.1%.

Figure 3.1: Fife Population by Age, 2012

	Fife		Scotland	
	Number	%	Number	%
0-15	64,374	17.6	914,671	17.2
16-24	42,526	11.6	628,760	11.8
25-39	63,413	17.3	1,002,020	18.9
40-49	54,908	15.0	795,765	15.0
50-64	73,846	20.2	1,046,633	19.7
65+	67,153	18.3	925,751	17.4
Working Age Population	234,693	66.5	3,473,178	65.4
Total Population	366,220	100	5,313,600	100

Source: General Register Office for Scotland Mid-Year Population Estimates

Migration is a key contributor to Fife's population growth and GROS migration statistics show that Fife has benefited from average net migration from other parts of Scotland of approximately 1,300 per annum between 2008-09 and 2011-12.

Figure 3.2: Net Scottish Migration to Fife

	2008-09	2009-10	2010-11	2011-12
Net Population Migration to Fife	+1,151	+1,622	+1,819	+590

Source: GROS

By age group, Figure 3.3 shows that Fife has net in-migration from other parts of Scotland across all age groups. The exception is the net out-migration of 20-24 year olds who may move away for higher education or other employment opportunities, but the numbers are relatively small.

Figure 3.3: Net Scottish Migration to Fife by Age, 2009-2011 Average

	0-15	16-19	20-24	25-39	40-49	50-64	65+	Total
Net Migration	+243	+690	-78	+284	+128	+178	+89	+1,530

Source: GROS

In addition to the net migration to and from other parts of Scotland, there is also the attraction of overseas economic migrants. Using National Insurance Number (NINo) registrations, Figure 3.4 shows that Fife has on average attracted approximately 1,800 NINo registrations per annum between 2008-09 and 2011-12 – although there are no statistics available on how many have since left Fife.

Figure 3.4: NINo Registrations in Fife

	2008-09	2009-10	2010-11	2011-12
NINo Registrations in Fife	1,930	1,410	2,080	1,730

Source: DWP NINo registrations data

Looking forward, GROS 2010-based **population projections** expect Fife's and Scotland's total population to grow by 5% between 2010 and 2020 and also age.

- Fife's working age population is projected to decrease by 2,400 with the reduction coming in the 16-29 and 30-49 populations.
- Significant increases in the 65-74 and 75+ populations will see a 16,400 increase in the 65+ population.

Some caution is, however, needed when interpreting the 65+ population increase because many of these people will continue to be economically active. For example, between 2008 and 2013, the number of Fife residents aged 65+ in employment has increased from 3,600 to 5,500 (Annual Population Survey data).

Figure 3.5: Population Projections, 2010 to 2020

	Fife		Scotland	
	Change	% Change	Change	% Change
0-15	4,100	6.3	46,800	5.1
16-29	-3,300	-5.0	-55,200	-5.7
30-49	-5,600	-5.8	-34,000	-2.4
50-64	6,500	9.0	110,900	10.9
65-74	7,900	22.6	102,400	21.6
75+	8,500	29.2	92,900	22.9
Total	18,100	5.0	263,700	5.1

Source: General Register Office for Scotland 2010-Based Population Projections

Travel to Work Flows

Along with migration levels, travel to work patterns influence labour supply. Figure 3.6 shows the travel to work data for Fife for 2011 from the Annual Population Survey commuter flows data. It shows:

- 77% of Fife's employed residents work in Fife. The remainder commute elsewhere for work and the proportion appears to be rising (2001 Census data showed that 18% worked outside of Fife, compared to 23% in 2011).
- Of the jobs in Fife, around 90% of them are held by Fife residents. This shows how important Fife's indigenous workforce is to Fife's employers.
- In total, Fife has a net commuting outflow of 24,500 people.

Figure 3.6: Fife Travel to Work Flows, 2011

	Number	%
Fife Employed Residents:		
- Working in Fife	128,500	77
- Working outside Fife	39,000	23
Fife Jobs taken by Fife Residents		
- Held by Fife residents	128,500	90
- Held by non-Fife residents	14,500	10

Source: Annual Population Survey Commuter Flows

Note: The latest travel to work data by sector or occupation is from the 2001 Census and this was deemed out of date for the purposes of this study.

Characteristics of Working Age Population

Turning to the characteristics of Fife's working age population, Figure 3.7 begins by showing the **employment status** of Fife's working age population compared to Scotland's. It shows that the two profiles are close but the small differences are:

- Fife has a lower employment rate and higher unemployment rate than Scotland.
- The proportion who are economically inactive is marginally smaller in Fife.

Figure 3.7: Employment Status of Working Age Population, 2013

	Fife		Scotland	
	Number	Percentage	Number	Percentage
In Employment	162,700	69.8	2,398,000	70.7
Unemployed	17,400	9.7	206,400	7.9
Economically Inactive – Want a Job	13,900	6.0	203,600	6.0
Economically Inactive – Not Want a Job	39,200	16.8	584,000	17.2
Working Age Population	233,100	100.0	3,392,000	100.0

Source: Annual Population Survey October-September

In terms of **qualification profile**, Figure 3.8 shows that there are few differences between the highest level of qualification held by Fife's working age population and the Scottish average. Where there are differences, it would appear that Fife is able to progress its unqualified residents into lower level qualifications. For example, 14% of Fife's working age population are qualified at NVQ Level 1, compared with 10% for Scotland as a whole.

Figure 3.8: Qualification Profile of Working Age Population, 2012

	Fife		Scotland	
	Number	Percentage	Number	Percentage
NVQ 4+	88,600	38.1	1,303,000	38.5
NVQ 3	33,200	14.3	497,000	14.7
Trade Apprenticeships	11,700	5.0	179,600	5.3
NVQ 2	33,800	14.5	493,900	14.6
NVQ 1	32,600	14.0	341,700	10.1
Other Qualifications	11,500	5.0	207,300	6.1
No Qualifications	21,000	9.0	361,000	10.7
Working Age Population	232,400	100	3,383,500	100

Source: Annual Population Survey January-December 2012

Finally, Figures 3.9 sets out the **occupations** that Fife residents are employed in – as opposed to the jobs that are located in Fife (see Figure 2.3).

- The main occupations that Fife residents work in are professional; skilled trades; associate professional and technical; and elementary occupations.
- Compared to the Scottish profile, Fife has:
 - More residents working in skilled trades; sales and customer service; managers and senior officials; and elementary occupations.
 - Fewer residents working in professional; administrative and secretarial; and caring, leisure and other service occupations.

Figure 3.9: Total Employment by Occupation, 2013

	Fife		Scotland	
	Number	%	Number	%
Managers and Senior Officials	15,400	9.2	211,000	8.5
Professional	30,400	18.1	490,800	19.9
Associate Professional and Technical	21,100	12.5	314,100	12.7
Administrative and Secretarial	16,900	10.0	269,200	10.9
Skilled Trades	21,500	12.8	273,400	11.1
Caring, Leisure and Other Service	14,300	8.5	230,400	9.3
Sales and Customer Service	17,000	10.1	223,600	9.1
Plant, Process and Machine Operatives	10,100	6.0	158,100	6.4
Elementary	20,400	12.1	282,000	11.4
Total	168,200	100	2,469,600	100

Source: Annual Population Survey

Chapter Summary

The analysis of Fife's population suggests that Fife is in a relatively strong position in terms of responding to future labour market changes.

- It has net in-migration from other parts of Scotland, as well as attracting migrants from overseas.
- Fife's population is expected to continue to grow.
- Fife has the ability to attract some of its net 24,500 out commuters to work in Fife – and many of these will be highly skilled.
- Fife's working age population compares favourably with the wider Scottish population in terms of qualifications held and occupations worked in.

4. FIFE LABOUR MARKET ENTRANTS

Introduction

To be considered alongside Chapter 3, this chapter provides analysis of Fife's labour market entrants in terms of its school leavers, college leavers and Modern Apprentices to assess how well the current and future supply of skills matches labour market demand.

Fife's Schools

Looking first at Fife's schools, Figure 4.1 shows S4 pupil attainment against Scotland as a whole.

- Fife has a higher proportion achieving English and Maths at SCQF Level 3 than the Scottish average.
- However, for the other/higher level indicators, Fife's schools perform below the Scottish average – with the gap widening the higher the attainment level.

Figure 4.1: S4 School Pupil Attainment, 2011-12

	Fife		Scotland	
	Number	%	Number	%
English and Maths at SCQF Level 3	3,824	95.5	51,986	94.1
5 Awards at SCQF Level 3 or above	3,725	93.0	51,890	93.9
5 Awards at SCQF Level 4 or above	3,127	78.1	44,312	80.2
5 Awards at SCQF Level 5 or above	1,372	34.3	20,679	37.4
Total	4,005	100.0	55,243	100.0

Source: Scottish Government Attainment and Leaver Destinations Supplementary Data

On leaving school, 89.7% of Fife's school leavers entered a positive destination in 2012/13, which was below the Scotland rate of 91.4%. By destination type, Figure 4.2 shows that Fife had:

- A higher proportion entering FE (37%) than across Scotland (28%).
- A smaller proportion entered employment (14%) than across Scotland (21%).

Other differences of note are the smaller proportion of Fife school leavers entering higher education and a higher proportion entering unemployment.

Figure 4.2: School Leaver Destinations (Initial Destination Figures), 2012/13

	Fife		Scotland	
	Number	%	Number	%
Higher Education	1,280	34.6	19,269	36.5
Further Education	1,347	36.5	14,658	27.8
Training	130	3.5	2,615	5.0
Employment	510	13.8	10,769	20.4
Voluntary Work	11	0.3	271	0.5
Activity Agreements	35	0.9	694	1.3
Unemployed Seeking	303	8.2	3,735	7.1
Unemployed Not Seeking	66	1.8	620	1.2
Unknown	13	0.4	170	0.3
Total	3,695	100.0	52,801	100.0

Source: Skills Development Scotland

Looking in more depth at the HE and FE starters, of the 35% or 1,280 Fife school leavers who entered HE in 2012/13:

- 61% progressed on to an HE institution – and the main universities entered were:
 - University of Edinburgh – 16%.
 - University of Dundee – 14%.
 - Heriot-Watt University – 9%.
 - Edinburgh Napier University – 7%.
 Only 3% started at the St Andrews University.
- 37% progressed on to an FE college – and the main colleges entered were:
 - Fife College – 82%.
 - Dundee and Angus College – 7%.
 - Edinburgh College – 5%.

Of the 37% or 1,347 Fife school leavers who entered FE in 2012/13, 83% progressed on to Fife College. Indeed, by combining the HE and FE starts at Fife College, 57% of Fife's school leavers who enter HE or FE enrol with Fife College – thereby showing how central Fife College is to developing Fife's future workforce. At HE level, Edinburgh's and Dundee's universities in particular have a key role to play in developing Fife's future workforce.

Finally, and in relation to school leavers' preparedness for the world of work, the e-survey of Fife's employers found that only 9% of the 48 employers agreed that Fife's school leavers were well prepared for the world of work.

Figure 4.3: Fife Employer Views of Preparedness of School Leavers

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
School leavers are well prepared for world of work	0	9	44	20	27

Source: Fife Employer Survey

Fife College

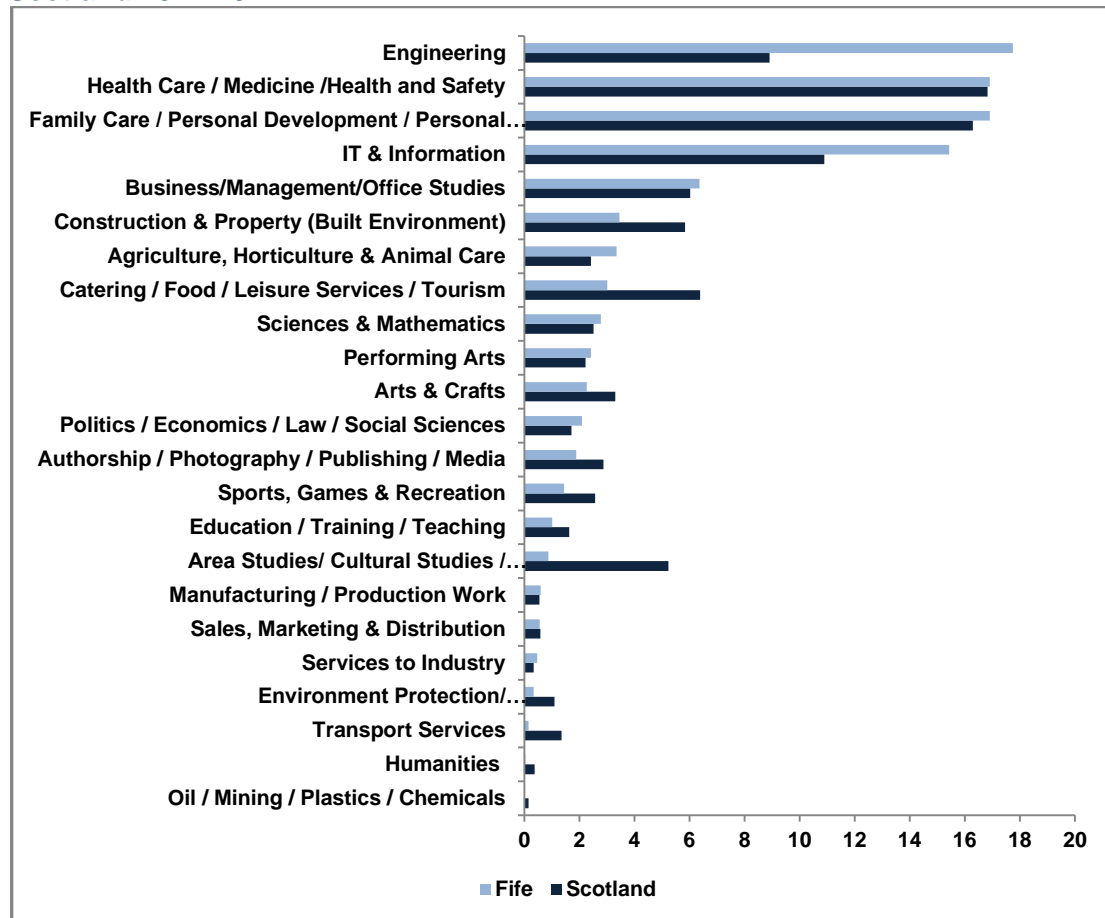
Having outlined the important role played by Fife College, Figure 4.4 shows the SFC-funded enrolments by subject superclass area in the 2012-13 academic year. It shows that the highest numbers of enrolments in Fife College were in:

- Engineering – 4,473 enrolments.
- Health Care, Medicine, Health and Safety – 4,263 enrolments.
- Family Care, Personal Development, Personal Care and Appearance – 4,263 enrolments.
- IT and Information – 3,889 enrolments.

Benchmarking the distribution of enrolments in Fife College against Scotland's colleges as a whole provides an indication of whether Fife College has an appropriate balance in terms of supporting Fife's key sectors. Figure 4.4's snapshot picture of enrolments in 2012/13 (Figure 4.7 later provides change over time data to analyse trends in enrolment numbers), Fife College had proportionately:

- More enrolments in engineering, and IT and information – thereby aligning with the energy and engineering/manufacturing, and ICT and technology sectors.
- Fewer enrolments in construction and property; catering, food, leisure services and tourism; and area studies, cultural studies, languages and literature – which potentially has implications for the construction and civil engineering, and tourism and hospitality sectors.

Figure 4.4: SFC-Funded Enrolments by Subject Superclass, Fife College and Scotland 2012-13

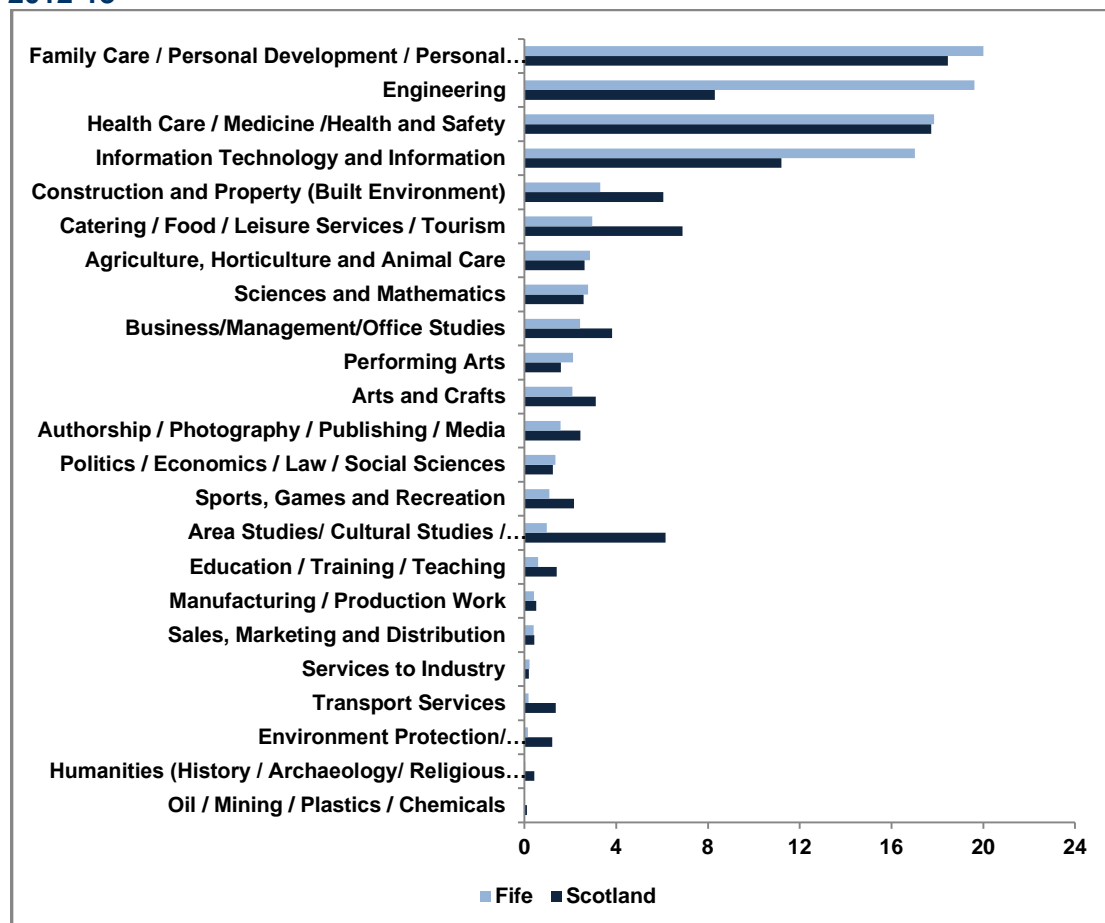


Source: Skills Funding Council Infact Database

Figures 4.5 and 4.6 build on the analysis above by breaking down total enrolments in Figure 4.4 to enrolments in FE courses and HE courses. Beginning with FE enrolments, FE enrolments account for 82% of Fife College's total enrolments, compared with 84% across Scotland's colleges. By subject superclass, Figure 4.5 shows:

- Fife College's four main subject superclasses from Figure 4.4 are again clearly shown and account for 75% of all FE enrolments.
- Compared to all of Scotland's colleges, Fife College has proportionately:
 - More engineering; and IT and information FE enrolments.
 - Fewer construction and property; catering, food, leisure services and tourism; and area studies, cultural studies, languages and literature enrolments.

Figure 4.5: FE Enrolments by Subject Superclass, Fife College and Scotland 2012-13



Source: Skills Funding Council Infact Database

In terms of HE enrolments, which account for 18% of Fife College's total enrolments, Figure 4.6 shows:

- Fife College's main HE courses by number of enrolments are in:
 - Business, management and office studies.
 - Health care, medicine, and health and safety.
 - Engineering.
 - IT and information.
- Compared to all of Scotland's colleges, Fife College has proportionately:
 - More business, management and office studies; and agriculture, horticulture and animal care (delivered by Elmwood College prior to the merger to Fife College) HE enrolments.
 - Fewer engineering HE enrolments.

Figure 4.6: HE Enrolments by Subject Superclass, Fife College and Scotland 2012-13



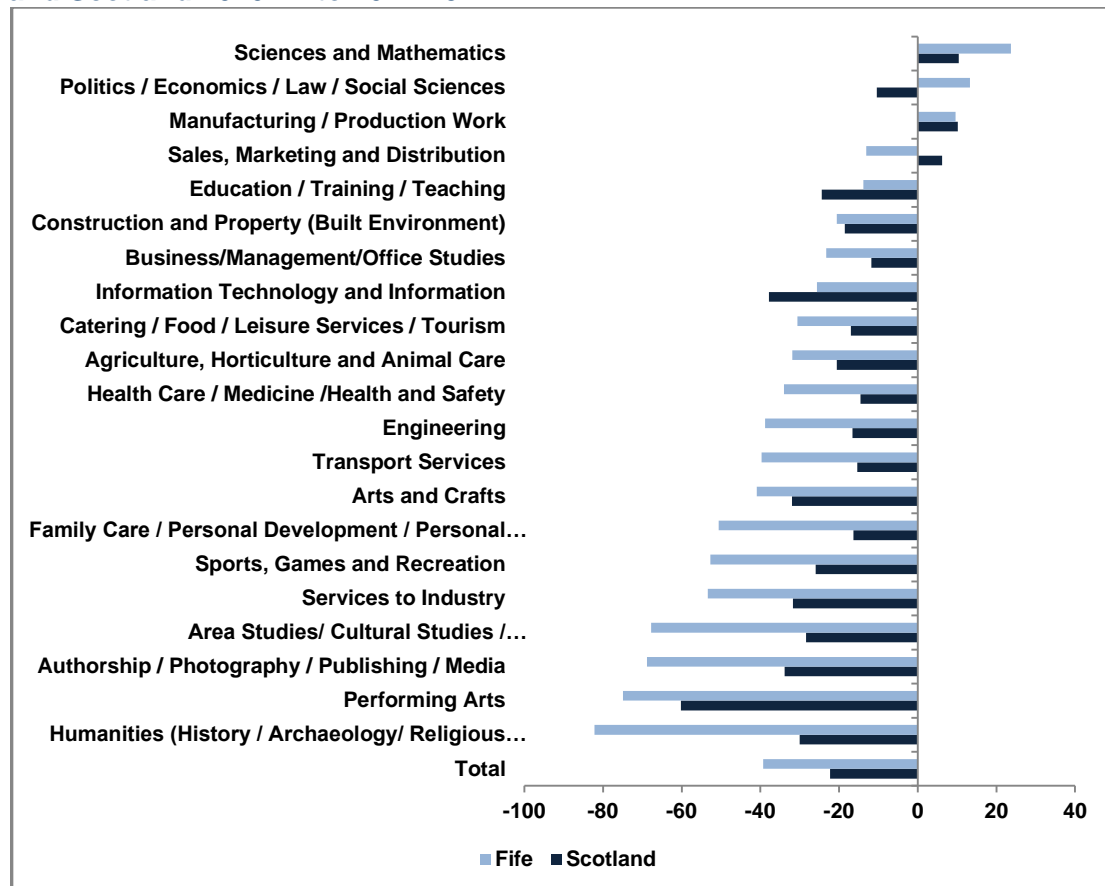
Source: Skills Funding Council Infact Database

The final chart shows how the number of total enrolments has changed from 2010/11 to 2012/13 in Fife College and Scotland's colleges as a whole. This is important to understand as it provides an indication of whether Fife College is increasingly aligning its curriculum to Fife's key sectors. Figure 4.7 charts percentage change and shows:

- Overall, there has been a 39% reduction in the number of total enrolments in Fife College. Across Scotland's colleges the reduction was 22%.
- By subject superclass there have been reductions across almost all categories. The exceptions for Fife College have been sciences and mathematics, social sciences, and manufacturing and production work.
- The subject superclasses where Fife College has seen a proportionately smaller reduction in enrolments than across Scotland (and allowing for the 39% to 22% difference overall) are:
 - Education, training and teaching.
 - IT and information.
 - Construction and property.
 - Arts and crafts.
- The subject superclasses where Fife College has seen a proportionately greater reduction in enrolments than across Scotland (again allowing for the 39% to 22% difference overall) are:
 - Family care, personal development, personal care and appearance.
 - Engineering.

- Health care, medicine, and health and safety.

Figure 4.7: % Change in Total Enrolments by Subject Superclass, Fife College and Scotland 2010-11 to 2012-13



Source: Skills Funding Council Infact Database

While there appears to be a good fit between enrolments and Fife's key sectors, the employer e-survey found that only 18% of the 48 employers agreed or strongly that Fife's college leavers were well prepared for the world of work.

Figure 4.8: Fife Employer Views of Preparedness of College Leavers

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
College leavers are well prepared for world of work	2	16	42	7	33

Source: Fife Employer Survey

Modern Apprenticeships

Figure 4.9 presents the Modern Apprenticeship data for Fife by occupational grouping. In total, there were 1,613 MA starts in 2012-13, with a further 1,016 from April-November 2013. By occupational grouping, the most MA starts were in:

- Construction and related – 406 MA starts from April 2012 to November 2013.
- Hospitality and tourism – 367 MA starts.
- Retail and customer service – 309 MA starts.
- Transport and logistics – 295 MA starts.
- Engineering – 280 MA starts.

Figure 4.9: Modern Apprenticeship Starts in Fife by Occupational Grouping

	2012-13	Apr-Nov 2013
Admin and Related	80	62
Animal Care, Land and Water-Based	19	2
Automotive	49	46
Chemicals and Biotechnology Related	0	2
Construction and Related	223	183
Creative and Cultural Skills	0	0
Energy	10	0
Engineering	152	128
Financial Services	2	35
Food and Drink	74	28
Hospitality and Tourism	248	119
Management	102	55
Media, Publications and Related	0	1
Other Manufacture	3	9
Other Services	30	15
Personal Services	74	31
Retail and Customer Services	195	114
Sport, Health and Social Care	166	77
Transport and Logistics	186	109
Total	1,613	1,016

Source: Skills Development Scotland

Figure 4.10 shows how the number of MA starts has changed from 2010-11 to 2012-13. This is again important to understand as it provides an indication of whether MAs in Fife are increasingly aligning to Fife's key sectors. Overall Figure 4.10 shows that there has been an increase of 294 MA starts and by occupational grouping:

- The main increases can be seen in transport and logistics, construction and related, and hospitality and tourism.
- There have also been decreases and these have mainly been in automotive, food and drink, and personal services.

Figure 4.10: Modern Apprenticeship Starts in Fife by Occupational Grouping, 2010-11 to 2012-13

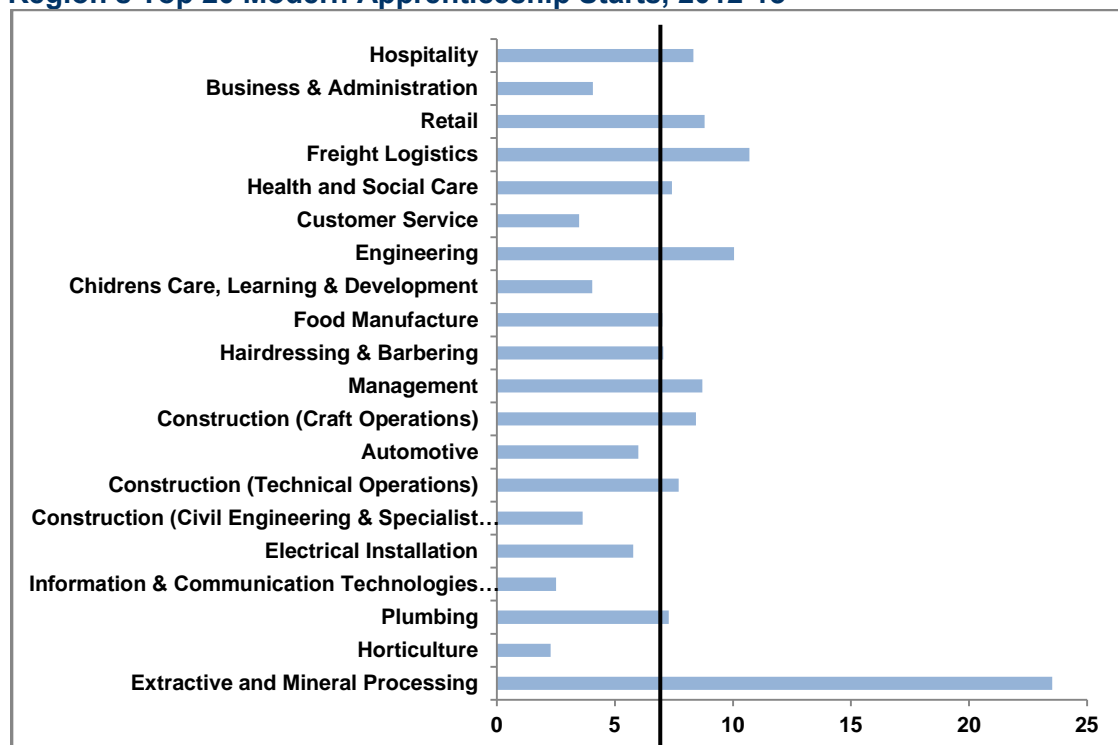
	2010-11	2012-13	Change
Admin and Related	77	80	+3
Animal Care, Land and Water-Based	8	19	+11
Automotive	82	49	-33
Chemicals and Biotechnology Related	3	0	-3
Construction and Related	157	223	+66
Creative and Cultural Skills	9	0	-9
Energy	21	10	-11
Engineering	144	152	+8
Financial Services	11	2	-9
Food and Drink	102	74	-28
Hospitality and Tourism	186	248	+62
Management	102	102	0
Media, Publications and Related	0	0	0
Other Manufacture	0	3	+3
Other Services	9	30	+21
Personal Services	96	74	-22
Retail and Customer Services	174	195	+21
Sport, Health and Social Care	123	166	+43
Transport and Logistics	15	186	+171
Total	1,319	1,613	+294

Source: Skills Development Scotland

Figure 4.11 provides a comparison between the number of MA starts in Fife and Scotland (or in this case the Scottish Enterprise region). It shows what proportion of the Top 20 MA framework starts across the SE region were from Fife, with Figure 4.11 ordered from highest to lowest in terms of MA starts in the SE region. As a benchmark, and as depicted by the line, 7% of all SE region MA starts were from Fife which means any frameworks to the right of the line show Fife is over-represented.

- The main MA frameworks where Fife was over-represented were:
 - Extractive and mineral processing – although this only accounted for 40 MA starts in Fife.
 - Freight logistics – 185 MA starts in Fife.
 - Engineering – 125 MA starts in Fife.
 - Retail – 165 MA starts in Fife.
 - Management – 90 MA starts in Fife.
 - Construction – both craft and technical operations (75 and 45 MA starts in Fife respectively).
- The main MA frameworks where Fife was under-represented were:
 - Horticulture – 5 MA starts in Fife.
 - ICT – 10 MA starts in Fife.
 - Customer Service – 50 MA starts in Fife.
 - Construction (Civil Engineering and Specialist Sector) – 20 MA starts in Fife.
 - Children’s Care, Learning and Development – 45 MA starts in Fife.

Figure 4.11: Fife Modern Apprenticeship Starts as % of Scottish Enterprise Region's Top 20 Modern Apprenticeship Starts, 2012-13



Source: Skills Development Scotland

Note: Line is benchmark position as 7% of all SE region MA starts were from Fife

Chapter Summary

The analysis of Fife's labour market entrants in terms of its school leavers, college leavers and Modern Apprenticeships indicate that:

- Fife's schools could do better in terms of attainment and in preparing pupils for the transition into employment, further and higher education or training.
- Fife College has a central role to play in developing Fife's future workforce with 57% of Fife's school leavers who enter HE or FE enrolling with Fife College.
- Fife College's curriculum in terms of number of enrolments largely aligns with Fife's key sectors – particularly in engineering. However, there are notably low numbers enrolling in catering, food, leisure services and tourism courses.
- Modern Apprenticeship numbers also align well with Fife's key sectors but, at the framework level, ICT MA starts are low.

5. FIFE'S KEY SECTORS

Introduction

This chapter looks at the six key sectors identified as most important to Fife's economy in Chapter 1 – namely:

- Construction and civil engineering.
- Energy and engineering/manufacturing.
- Food and drink.
- Health and care.
- ICT and technology.
- Tourism and hospitality.

For each sector, a standardised profile has been produced that brings together key labour market information from published statistics and research reports (e.g. by Sector Skills Councils), findings from the Fife employer survey, and interviews with key stakeholders. The profiles aim to present the key labour market trends and messages for each sector in a clear and accessible format.

The **employer survey** results presented in the profiles are sector specific. In overall terms, 48 surveys were completed and these tended to be large employers and over half were manufacturing employers (Appendix provides more detail on the profile of the employers completing the survey). For all the returns, the survey finds that:

- 44 of the 48 employers had vacancies in the last 12 months. Of these:
 - 17 had 1-9 vacancies.
 - 18 had 10-49 vacancies.
 - 9 had 50 or more vacancies.
- 34 of the 44 employers had at least one hard to fill vacancy.
- The main reason for the hard to fill vacancies were:
 - 26% found applicants were not of sufficient quality.
 - 16% found there had not been enough applicants.
 - 58% found both of the above reasons applied equally.
- Where the quality of applicants was a problem encountered, employers reported the following issues:
 - 70% with the technical and practical skills looked for.
 - 59% with the work experience required.
 - 48% with the general skills looked for.
 - 37% around poor attitudes, motivation and/or personality.
 - 30% with the qualifications required.
 - 11% other.

The following section sets out the six key sector profiles. This is followed by a Fife workforce planning matrix that attempts to present the occupations in demand by key sector (see Figure 5.1).

CONSTRUCTION AND CIVIL ENGINEERING	
Jobs in Fife	<ul style="list-style-type: none"> • In 2012, c.7,100 jobs in Fife = 6% of all jobs • Between 2009-2012, Fife jobs decreased by 17%
Projections	<ul style="list-style-type: none"> • 4% employment growth across Scotland in 2014-2018 • Equates to c.400 additional jobs and annual recruitment requirement of c.250 jobs in Fife
Fife Entrants	<ul style="list-style-type: none"> • 4% Fife College enrolments versus 6% across Scotland's colleges • 406 Construction and Related MA starts (Apr 12-Nov 13)
Evidence from National Studies	<ul style="list-style-type: none"> • Between 2014 and 2018, employment growth forecast to be strongest for scaffolders (19% increase), construction project managers (14% increase), construction process managers (13% increase) and plant mechanics/fitters (13% increase) • In terms of employment decreases, these are projected to be in construction trade supervisors (17% decrease), plasterers and dry liners (9% decrease), and non-construction operatives (8% decrease) • Accounting for workforce churn, projected demand is greatest for non-construction professional, technical, IT and other office-based staff, painters and decorators, wood trades, and civil engineers
Fife Employer Survey	<ul style="list-style-type: none"> • Limited construction responses but hard to fill vacancies in project managers and draughtspeople • Uncertainty on future business prospects but likely to remain stable. • Vacancies expected for managers (including project managers), skilled tradesmen, semi-skilled construction workers and trainees
Stakeholder Views	<ul style="list-style-type: none"> • Some jobs growth expected in Fife with new Queensferry Crossing and expected upturn in housing construction sector. May also be opportunities around construction of new residential care homes • Fife seen to have good number of established construction firms • Shortages in skilled tradesmen – partly due to tradesman leaving construction during the downturn and not returning to the sector • Important not to overlook the off-site jobs that range from HR, accountancy and IT that construction businesses need
Action Required	<ul style="list-style-type: none"> • Maintain construction MA numbers • Increase college enrolments if construction industry picks up as projected • Employability providers to help re-engage unemployed skilled tradesmen

ENERGY AND ENGINEERING/ MANUFACTURING	
Jobs in Fife	<ul style="list-style-type: none"> In 2012, c.12,000 jobs in Fife = 10% of all jobs Between 2009-2012, Fife jobs increased by 4%
Projections	<ul style="list-style-type: none"> 12,000 less jobs in manufacturing but replacement demand of 27,700 jobs across Scotland in 2010-2016 (SEMTA, 2011) Other reports suggest some growth – e.g. Energy Skills Investment Plan (SDS, 2011) quote 52,000-95,000 more jobs in Scotland’s energy industry by 2020, while O’Herlihy & Co’s (2014) Scotland employer survey finds that employment in renewables could increase by 20% in next 12 months Demand greatest for professionals (i.e. skilled engineers), managerial and associate professional/technical roles – i.e. SVQ Level 3 and above
Fife Entrants	<ul style="list-style-type: none"> 18% Fife College enrolments versus 9% across Scotland’s colleges 280 Engineering MA starts and 10 Energy MA starts (Apr 12-Nov 13)
Evidence from National Studies	<ul style="list-style-type: none"> Cogent (2011) and SEMTA (2011) find that 75-80% of workforce are male; 92% of jobs are full-time Shortages at engineer and technician level SEMTA (2011) find skill needs growing for emerging technologies and advanced manufacturing (low carbon, renewables supply chain, composites, printed electronics) Also need for improved management and leadership skills; and lean manufacturing skills
Fife Employer Survey	<ul style="list-style-type: none"> Hard to fill vacancies in wide range of occupations: engineers (electrical, equipment, facilities, industrial, instrumentation, process, product development, production, project, quality, structural integrity, survivability); logistics manager and supervisor; managers, team leaders and supervisors; engineering analysts; chemists; CAD draughtsmen; quality inspectors and technicians; planners; schedulers; CNC machine operators and setters; technicians; slingers; welders; and turners Employers project future jobs growth with vacancies expected in: engineers (acoustics; application development; civil/structural; electrical and electrical design; maintenance; mechanical; planning; process; production; project; proposals; quality; structural integrity; survivability); managers (account; engineering; implementation; manufacturing; production; project; and workshop); planners; buyers, inventory analyst; administration; sales; safety advisor; technicians (maintenance; mechanical; quality); supervisors and team leaders; CNC machinists, programmers and setters; blaster; fabricators; furnaceman; grinder; millers; platers; pipe fitters; turners; welders; and apprentices (including electrical technician, engineer, instrument technician, mechanical technician, and equipment engineer).
Stakeholder Views	<ul style="list-style-type: none"> National shortages reported at all levels – experienced, technical staff in particular – and this is impacting on Fife. This is reinforced by increasing competition for labour from NE Scotland Some employers having to recruit from abroad to fill skilled/technical positions – e.g. welders and fabricators Some employers recruiting from global marketplace to fill high skilled/niche engineers Ageing workforce not currently an issue but likely to grow in importance Need to maintain work with schools to build STEM skills and attract new entrants Challenging for Fife College to keep up to date with new technologies and recruit lecturers
Action Required	<ul style="list-style-type: none"> Requires continued investment in engineering and related subject areas Significant increase in MAs Pathways in place to upskill existing workforce to higher skilled positions

FOOD AND DRINK	
Jobs in Fife	<ul style="list-style-type: none"> In 2012, c.2,200 jobs in Fife = 2% of all jobs – but likely to be higher as does not include agricultural employment Between 2009-2012, Fife jobs increased by 10%
Projections	<ul style="list-style-type: none"> No sectoral projections available
Fife Entrants	<ul style="list-style-type: none"> 3% Fife College enrolments in agriculture, horticulture and animal care versus 2% across Scotland's colleges Also 3% Fife College enrolments in catering, food, leisure and tourism versus 6% across Scotland's colleges 102 Food and Drink MA starts (Apr 12-Nov 13)
Evidence from National Studies	<ul style="list-style-type: none"> The Skills Investment Plan for Scotland's Food and Drinks Sector (SDS, 2013) finds that the characteristics of the food and drink workforce are: an ageing workforce; employment is concentrated in relatively lower skilled occupations; low levels of qualifications. Agricultural and fishing employers are more likely to experience hard-to-fill vacancies and skills gaps Food and drink manufacturers more likely to report a skills gap – which are most evident in machine operative and elementary staff The strategic skills priorities for the food and drink sector in Scotland (SDS, 2013) are: raising the attractiveness of the sector to new entrants and retaining talent; supporting company capacity to innovate; driving leadership and management excellence in the sector; and supporting the development of skills for growth in the workplace
Fife Employer Survey	<ul style="list-style-type: none"> In food and drink manufacture, hard to fill vacancies in account manager, operatives, engineers (e.g. electrical), engineering team leaders, and production managers, supervisors and team leaders Some growth expected with opportunities for production and account managers, engineers (mechanical and electrical), engineering team leaders, finance team, supply chain and logistics, food production operatives, quality control, warehousing,
Stakeholder Views	<ul style="list-style-type: none"> Food and drink manufacture important in Fife with large employers to small, micro businesses. Attractiveness of the sector can be an issue In agriculture, mainly seasonal work. Examples of hard-to-fill vacancies in North and East Fife, with migrant labour employed
Action Required	<ul style="list-style-type: none"> Ensure flow of engineers into food and drink manufacturing

HEALTH AND CARE SECTOR	
Jobs in Fife	<ul style="list-style-type: none"> • In 2012, c.20,500 jobs in Fife = 16% of all jobs • By sub-sector, this is made up of 10,600 human health activities jobs (e.g. NHS Fife), 5,300 social work without accommodation jobs, and 4,200 residential care jobs • Between 2009-2012, Fife jobs decreased by 4% • As of 30th September 2013, NHS Fife employed 8,563 staff plus 515 GPs and General Dental services. From September 2010, there was reduction of 291 staff or 3%.
Projections	<ul style="list-style-type: none"> • 2% or 120 jobs projected employment growth in NHS Fife in 2013-2014 • Growth mainly in nursing and midwifery (53 jobs), doctors (21 jobs), administration services (18 jobs), and allied health professions (14 jobs) • No staff group is projected to see reductions in 2013-2014
Fife Entrants	<ul style="list-style-type: none"> • 17% Fife College enrolments versus 17% across Scotland's colleges • 146 Health and Social Care MA starts (Apr 12-Nov 13)
Evidence from National Studies	<ul style="list-style-type: none"> • Skills for Health (2011) find that few health employers are reporting hard-to-fill vacancies and not viewed as an issue for the sector • 14% of employers report a skills gap. Main skills gaps in planning and organising, problem solving and customer handling skills • Skills and employment priorities facing health sector employers include (Skills for Health, 2011) • Reducing sector's reliance on non-EU migration • Continuing focus on employability and functional skills • Development of roles at NHS Career Framework Levels 3-4 (e.g. Assistant Practitioner roles) and Level 7 (e.g. Advanced Practitioner roles) • Dealing with the impact on ICT on roles and skills • Development of management and leadership • Skills development in small and medium sized healthcare providers
Fife Employer Survey	<ul style="list-style-type: none"> • NHS Fife (2013) report that aside from certain medical specialities, no particular posts in NHS Fife considered to be hard to fill • Staff turnover levels have been steady and were at 8.0% in NHS Fife in 2012/13 • 37% of NHS Fife workforce aged 50 or above – mainly in support services (50% of workforce) and admin roles (43% of workforce)
Stakeholder Views	<ul style="list-style-type: none"> • In care sector: <ul style="list-style-type: none"> • Examples of hard-to-fill vacancies due to attractiveness of sector • Issue of ensuring care workforce qualified to SVQ Level 2 • Also travel to work difficulties due to location of residential care homes and shift patterns.
Action Required	<ul style="list-style-type: none"> • Maintain health and social care MAs and college provision • Build relationship with NHS Fife to help support workforce planning process • Gain stronger understanding of residential care sector within Fife and its employment and skills demands

ICT AND TECHNOLOGY	
Jobs in Fife	<ul style="list-style-type: none"> In 2012, c.4,000 jobs in Fife = 3% of all jobs. However, this does not reflect the number of jobs that rely to varying degrees on good quality ICT skills Between 2009-2012, Fife jobs decreased by 18%
Projections	<ul style="list-style-type: none"> 15% employment growth across Scotland in 2011-2020 (e-skills UK, 2012) Equates to c.600 additional jobs in 2011-2020 and c.600 annual replacement demand in Fife
Fife Entrants	<ul style="list-style-type: none"> Excluding 'IT: Computer Use', 5% Fife College enrolments versus 5% across Scotland's colleges 23 ICT MA starts (Apr 12-Nov 13)
Evidence from National Studies	<ul style="list-style-type: none"> E-skills UK (2012) find that 14% of IT & Telecoms employers across the UK reported hard-to-fill vacancies Technical skills most often sought by employers (in order of demand volume) were: SQL, .NET, Java, C#, SQL Server, Oracle, ASP, JavaScript, Unix and Linux Skills shortages at professional level – e.g. programmers/software developers; web design/development professionals Job-related technical skills most commonly cited by employers as hard to find amongst applicants were: .NET, ASP.NET, Dynamics, SharePoint, Visual Basic/Visual Studio, C# with PHP and VMWare Amongst existing Scottish workforce, main skills gaps were: sales/related, interpersonal and business/related skills; Microsoft (particularly ASP.NET, C and .NET), PHP and Linux skills Emerging trends are cloud computing; green IT; social and mobile computing; 'Big data'/analytics; smart computing, security/data protection
Fife Employer Survey	<ul style="list-style-type: none"> Limited ICT responses but hard to fill vacancies in software developers, test engineers and managers Growth expected and in next 12 months vacancies for software developers, project managers, managed services support engineers, test engineers, directors
Stakeholder Views	<ul style="list-style-type: none"> National shortage in IT and software skills made worse in Fife due to demand from Edinburgh and Dundee – e.g. from financial sector Demand expected to increase – and skills needed across all sectors Challenging for lecturers to keep up to date with new technologies and software
Action Required	<ul style="list-style-type: none"> Increase Fife College places to help train future programme/software designers Ensure college provision responds to future ICT trends Consider whether Fife should aim to become 'Centre of Excellence' for ICT and software skills

TOURISM AND HOSPITALITY	
Jobs in Fife	<ul style="list-style-type: none"> • In 2012, c.11,600 jobs in Fife = 9% of all jobs • Between 2009-2012, Fife jobs decreased by 11%
Projections	<ul style="list-style-type: none"> • 8% employment growth across Scotland in 2013-2020 • Equates to c.900 additional jobs and 3,300 replacement demand in Fife
Fife Entrants	<ul style="list-style-type: none"> • 3% Fife College enrolments versus 6% across Scotland's colleges • 367 Tourism and Hospitality MA starts (Apr 12-Nov 13)
Evidence from National Studies	<ul style="list-style-type: none"> • Scotland's tourism and hospitality jobs are mainly in kitchen and catering assistants (26% of jobs), bar staff (15%), waiting staff (14%), chefs (11%) and restaurant/catering managers (6%) (People1st, 2013) • Other characteristics are: 48% of jobs are part-time; sector has a young workforce with 46% aged under 30; 14% of sector's workforce born overseas, compared with 8% across Scotland's total workforce. • The sector has high labour turnover at 17% • 18% of Scotland's employers have a vacancy; 8% hard-to-fill vacancies • 26% of employers report a skills gap. Main skills lacking were planning and organisation, customer handling, and problem solving skills • Main skills that employers report they will need in the future are customer service skills (88% of employers), management and leadership (69%), sustainability (58%), effective use of social media in a business environment (48%) and e-marketing skills (42%) • The Skills Investment Plan for the Tourism Sector (SDS, 2013) state that the priorities are: improving management, leadership and enterprise in the sector; ensuring staff have the skills to deliver high quality customer experience; raising the attractiveness of the sector to new entrants; and ensuring appropriate and high quality training is available
Fife Employer Survey	<ul style="list-style-type: none"> • Hard to fill vacancies – accounts assistant, chefs, waiting staff, managers (general, accounts and visitor services), greenkeepers, (golf) players' assistants, and housekeeping staff (with good English language skills) • Many are seasonal vacancies • Looking forward, expect stability in next 12 months followed by growth • Expected vacancies in next 12 months – chefs, managers, team leaders, retail assistants, food service/catering assistants, maintenance staff, and seasonal positions (e.g. waiting staff, greenkeepers and players' assistants)
Stakeholder Views	<ul style="list-style-type: none"> • Sector not seen as attractive due to perceived poor levels of pay, long/unsociable hours, and poor career prospects • Travel to work difficulties as main tourism employment found in East Fife and away from Fife's main population centres • Some reliance on migrant workers • Scope to upskill existing workforce to provide higher standard of service
Action Required	<ul style="list-style-type: none"> • Attract more enrolments onto Fife College catering, food, leisure services and tourism courses • Align employability activities to help meet lower skilled tourism vacancies

Chapter Summary

Chapter 5 concludes with a summary of the occupations in demand by key sector as evidenced by labour market projections, national studies, the Fife employer survey and stakeholder views. This has been presented as a Fife workforce planning matrix. In developing the matrix, it is hoped that this will be refreshed and enhanced on an annual basis.

Figure 5.1: Fife Workforce Planning Matrix

	Managerial	Professional	Skilled / Technical	Semi-Skilled	Unskilled
Construction and Civil Engineering	<ul style="list-style-type: none"> Project managers 	<ul style="list-style-type: none"> Office-based professional, technical and IT staff 	<ul style="list-style-type: none"> Skilled tradesmen – painters and decorators Welders 		<ul style="list-style-type: none"> Trainees
Energy and Engineering / Manufacturing	<ul style="list-style-type: none"> Managers (account; engineering; implementation; manufacturing; production; project; and workshop) 	<ul style="list-style-type: none"> Engineers (electrical, equipment, facilities, industrial, instrumentation, process, product development, production, project, quality) Planners/schedulers 	<ul style="list-style-type: none"> Team leaders and supervisors Technicians (maintenance; mechanical; quality) 	<ul style="list-style-type: none"> CNC operatives and setters Turners Welders 	
Food and Drink	<ul style="list-style-type: none"> Production managers 	<ul style="list-style-type: none"> Mechanical engineers Electrical engineers 	<ul style="list-style-type: none"> Production team leaders and supervisors Quality control 	<ul style="list-style-type: none"> Machine operatives 	
Health and Care		<ul style="list-style-type: none"> Doctors 	<ul style="list-style-type: none"> Nurses and midwives 		<ul style="list-style-type: none"> Care assistants
ICT and Technology	<ul style="list-style-type: none"> Project managers 	<ul style="list-style-type: none"> Software developers Test engineers 			
Tourism and Hospitality	<ul style="list-style-type: none"> Hotel/restaurant managers 		<ul style="list-style-type: none"> Chefs 	<ul style="list-style-type: none"> Greenkeepers 	<ul style="list-style-type: none"> Waiting staff Housekeeping
LEGEND	HIGH PRIORITY – SIGNIFICANT SKILLS ISSUE		MEDIUM PRIORITY – EMERGING SKILLS ISSUE		LOW PRIORITY – NO APPARENT SKILLS ISSUE

6. STAKEHOLDER VIEWS OF WORKFORCE PLANNING ARRANGEMENTS

Introduction

This chapter provides a summary of the views of the stakeholders interviewed in relation to how skills needs are articulated within Fife and how this can be enhanced within a more coherent Fife workforce modelling process.

Existing Arrangements for Employers to Articulate Skills Needs

The interviews highlighted that there are a number of ways in which employers can and do articulate their employment and skills needs. In broad terms, these can be grouped into three main channels as outlined below.

- **Employer groupings** – there are a number of employer groupings that operate in Fife through which employers can articulate their skills needs. These include the Fife Economy Partnership, Federation of Small Business, Chamber of Commerce, Institute of Directors, Fife College's Industry Advisory Boards, Fife Construction Forum, and Fife Tourism Partnership. However, stakeholders stated that:
 - For many of these groupings, their core purpose is not the employment and skills agenda. As such, this agenda competes with other business concerns.
 - When the employment and skills agenda is discussed, it is not clear how the key points of discussion are captured and, above all, relayed to Fife College and other partners.
- **One-to-one employer relationships** – a number of Fife's public sector agencies have one-to-one relationships with Fife employers. These include Scottish Enterprise's account managed companies, Fife Council's Top 100 companies, SDS's employer engagement team, DWP's employer engagement team and Fife College's established relationships with many employers through delivering Modern Apprenticeships and workforce development programmes. Through these relationships, it is apparent that employers discuss their employment and skills needs but it is unclear how this information is shared or brought together by partners to inform more strategic decision making around skills provision in Fife.
- **Business-education activities** – a number of employers are involved with employment and skills activities with Fife's schools and Fife College such as employer presentations, enterprise projects, and work experience placements. In doing so, employers set out the key skills, qualifications and attributes they seek from potential applicants. While positive, stakeholders noted that these arrangements are often *ad hoc* in nature and developed with individual schools rather than being part of a Fife-wide education-business approach. In view of this criticism, Fife Council's 'Culture of Enterprise' initiative that seeks to develop enterprise and employability skills amongst school pupils from P6 upwards is a welcome addition.

In addition to the issues raised of the three channels above, wider challenges that stakeholders also highlighted in relation to employers articulating their employment and skills needs were:

- **Hearing from Small and Medium Enterprises (SMEs)** – some stakeholders believe that Fife's public sector agencies are overly 'big business' focussed and do not place sufficient emphasis on discussing and listening to the skills needs of Fife's SMEs. Employer surveys can potentially engage with SMEs but, as this study's e-survey has found, response rates are typically low. One-to-one discussions and training needs analyses are more effective

mechanisms for hearing from SMEs but these present a significant resourcing challenge for education and training providers.

- **Employers reactive rather than proactive in relation to employment and skills issues** – a challenge for Fife’s education and training providers is that employers often wait too long to discuss their employment and skills needs, which leaves providers little time to respond.

Response of Education and Training Providers to Employer’s Employment and Skills Needs

Overall stakeholders felt Fife’s education and training providers are becoming more responsive to the needs of employers due to partnership structures in Fife becoming more established and effective in their workings. Employers cited the £5m Fife Youth Jobs Contract as a good example of how partners had responded to employer needs by subsidising the cost and thereby reducing the risk to employers of taking on a Modern Apprenticeship in their first year. Key to its success was the fact that the initiative was presented in an easy to understand manner and also targeted at SMEs. Public sector stakeholders pointed to Fife’s employability pipeline that is successfully joining up employability provision to enable Fife’s unemployed residents towards and into employment. They also pointed to the Energy Skills Challenge Fund, managed by Skills Development Scotland (SDS), which enables new entrants into Scotland’s energy sector to pick up qualifications necessary for working in renewables, oil and gas, subsea and micro-renewables.

Partnership working in Fife around the employment and skills agenda is continuing to improve but stakeholders did identify some areas to address. These are as follows:

- **Confusion around employer engagement activities** – from the summary of employer interfaces presented above, it is apparent that individual employers are being approached from a number of organisations. This is proving confusing to some employers, while some feel that the information they provide to one partner is not shared with another. In short, employer engagement activities could be more efficiently delivered in Fife.
- **Partners not signposting employers effectively** – some stakeholders felt that some partners were not signposting employers that they were engaged with to the partner that could best meet their employment and skills needs. To enable more effective signposting, all partners need to be clear on the roles, services and expertise of different agencies.

In terms of the different public sector education and training providers, stakeholders found that:

- **Fife’s schools** largely act independently in relation to working with employers, meaning some schools work well with employers, while others show little interest in working with employers. As outlined earlier, education-business links are *ad hoc* in nature and could be enhanced. Encouragingly the stakeholder interviews held with employers found there was significant interest in supporting schools in their employability and enterprise activities – and this is backed up by the employer e-survey finding that 78% of employers would like to work more closely with Fife’s schools.
- Stakeholders appreciated the difficulties that the merger to form **Fife College** would have had (and will likely continue to have until fully completed) on its operations but they did not believe the merger had affected the College’s relationship with employers and the quality of its provision. Furthermore, stakeholders noted that the composition of Fife College’s SMT shows a commitment to maintaining and building links with Fife’s business base. Fife College’s Industry Advisory Boards are seen as a key mechanism for embedding employers’ skills needs into the curriculum and it was felt

important that the Boards align with Fife's key sectors and have representation from a wide range of employers. As a last point, the employer e-survey found that 82% of employers would like to work more closely with Fife College.

- **St Andrews University** is viewed as a university of international reputation but is seen to be more internationally focused as opposed to meeting the skills needs of Fife employers and residents. It is perceived that few Fife residents attend St Andrews University (Chapter 4 showed that only 3% of Fife's school leavers who entered HE started at St Andrews University) and few graduates stay in Fife after their degree. However, St Andrews' student population does play an important role in meeting the recruitment needs of St Andrews' tourism and hospitality employers, which is supported by the university's Job Shop service (178 employers used the service last year). The Careers Service is also developing an Internship project that is designed to enable students to develop their business skills while also supporting local businesses.

As a summary overview of employers views of Fife's education and training providers, Figure 6.1 shows results from the employer survey relating to the extent they feel providers meet their employment and skills needs. It shows:

- 32% agree that Fife's education and training providers ask them about their employment and skills needs.
- 36% agree that Fife's education and training providers listen to and understand their employment and skills needs.
- 40% agree that Fife's education and training providers respond to their employment and skills needs.

This suggests that Fife's education and training providers could further develop their relationships with employers to better understand their needs, but encouragingly the skills provision developed does appear to meet employer's needs.

Figure 6.1: Fife Employer Perceptions of Education and Training Providers Ability to Meet Employment and Skills Needs (% of Employers)

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
Fife's education and training providers...					
... <u>ask</u> us about our employment and skills needs	2	30	24	26	17
... <u>listen to and understand</u> our employment and skills needs	0	36	29	16	20
... <u>respond to</u> our employment and skills needs	0	40	20	18	22

Source: Fife Employer Survey

Stakeholder Views on Potential Improvements

In asking stakeholders where improvements could be made, they tended to respond with views on how to enhance the workings of Fife's employment and skills system or what the priorities for action should be to enhance Fife's existing and future workforce. This section summarises their views, beginning with how to improve Fife's employment and skills system.

- **Better sharing of information between partners** – employers and public sector partners widely agreed that the labour market information that partners receive (whether published research or anecdotal evidence) should be better circulated amongst partners (and within their internal departments) to improve labour market understanding.

- **Better signposting of employers** – where an employer has an employment and skills issue, it is important that agencies direct them to the most appropriate types of support. This may involve referring the employer to a partner organisation or another department within the same organisation.
- **Identify where employers are upskilling their staff into new, more advanced roles** – employability partners saw the opportunities to support their clients into the jobs that have been vacated by employees' progression into more advanced roles. Indeed, many of the employers interviewed were actively upskilling their existing workforce as they recognised it as a cost-effective and strategic way of addressing their skills and recruitment issues. For public sector partners, a good working relationship with employers is required to understand where there are opportunities to backfill positions and the skills they require from new recruits.
- **Ensure Fife's strategic groupings have access to good quality labour market intelligence** – it is important that the Fife Economy Partnership and Fife College's Industry Advisory Boards have the quality of labour market intelligence they need to make informed decisions about future skills provision in Fife.

In terms of the priorities for action around the Fife employment and skills agenda, stakeholders put forward the following:

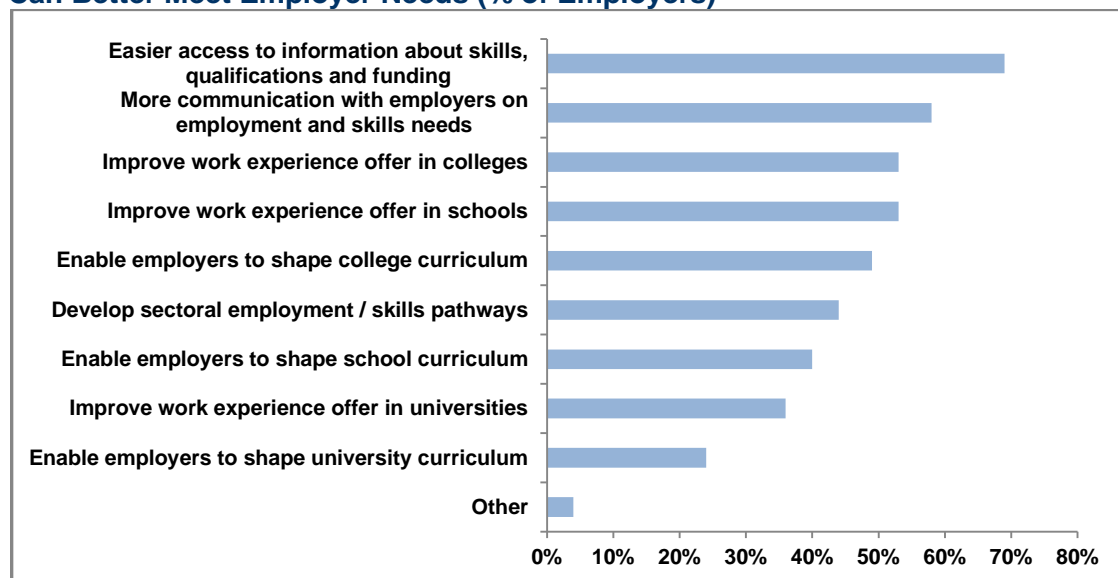
- **Get behind the STEM agenda** – employers and public sector partners both emphasised the importance of continuing to promote the STEM agenda and deliver on Fife's STEM strategy to support the development of Fife's economy.
- **Improve understanding of world of work** – stakeholders believed it important to keep exposing school pupils and college students to the qualities and attitudes sought by employers, and the world of work more generally. This ranges from stronger business-education activities, tweaking national education standards and frameworks to meet Fife's needs, and enhanced careers guidance and employability skills training.
- **Develop clear career pathways** – it is important that there are career pathways in place within Fife that enable young people to progress from school to college and onto university degrees within strategically important occupational groupings – such as engineers and software developers. This will likely involve arrangements with other Scottish universities, with links already in place between Fife College and some employers with (for example) Abertay, Napier and Strathclyde universities.
- **Retain Fife's school and college leavers in Fife** – linked to the point above, some stakeholders felt it important to consider approaches that could retain Fife's talented new entrants to stay in Fife. For example, there were suggestions of employer sponsorship agreements and placement/internship programmes that would build relationships between Fife's students and employers that could develop into more permanent employment.
- **Consider shared/pooled Modern Apprenticeship scheme in Fife** – to enable more SMEs to take on MAs, some stakeholders felt different approaches could be trialled in Fife. For example:
 - MAs could be centrally employed by (for example) Fife Council and rotated across different employers during their first and second years, before both employer and MA fully commit to their final years.
 - Shared apprenticeships across small employers that reduce the demands and costs for a single employer.
- **Review public transport provision to ease travel to work difficulties** – while always an extremely difficult challenge to overcome, the distances between places of work and Fife's centres of population and transport

availability and costs do impact on the ability of tourism, care and agriculture employers to fill their vacancies with Fife residents.

Again to summarise the views of employers, Figure 6.2 shows the results from the employer survey on how Fife's education and training system can better meet their employment and skills needs. It suggests that employers would prioritise:

- Improved access to information about the skills, qualification and funding support that could be available to them.
- More communication with employers on their employment and skills needs – which corresponds to Figure 6.1's findings.
- Enhancing the work experience offer both in Fife College and Fife's schools.

Figure 6.2: Fife Employer Views on How Fife's Education and Training System Can Better Meet Employer Needs (% of Employers)



Source: Fife Employer Survey

Chapter Summary

The overriding impression from the stakeholder interviews is that there is real commitment from public sector partners and employers to address the current and future employment and skills needs in Fife. The challenge is how to best harness this commitment through effective partnership working that leads to skills provision that meets the needs of Fife's employers and residents. The key points from the chapter are:

- The need to collate and share labour market intelligence from Fife's employers and wider evidence in a more strategic manner.
- Ensure that the views of Fife's employers – and particularly its SMEs – are more widely heard.
- Develop a more strategic approach on how to engage employers – both in terms of better understanding their employment and skills needs and in their involvement in business-education activities.
- Continue to embed employability, enterprise and career management skills in Fife's school pupils and students so that they are better prepared for the world of work.

7. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The research has drawn on a wide range of available labour market sources to develop a Fife workforce planning model. In doing so, it has underlined the importance for the Fife economy of meeting the skills needs of six key sectors, maintaining and/or increasing uptake in FE and Modern Apprenticeship subject areas that align with these key sectors, and supporting employers in trying to recruit for current and future hard-to-fill vacancies. However, despite the research's findings, it is important to emphasise that this research should simply be the starting point of a Fife workforce modelling process that can be enhanced and refined in future years. Through undertaking the research, and re-iterating what was stated in the Introduction, workforce planning is a meaningful exercise for Fife but it depends on the quality of the information that the model can build on. As such, partners and employers alike need to commit to the process and reflect on the model's findings.

Recommendations

The recommendations consist of two parts. The first summarises the 'actions required' set out within the sector profiles in Chapter 5, the second sets out the recommendations for how the Fife workforce model can be enhanced in the future.

Beginning with the 'actions required' by sector, Figure 7.1 provides a summary overview of the recommended actions that Fife's partners should consider in supporting the long-term development of the Fife economy.

Figure 7.1: Summary of Actions Required by Sector

	Recommended Actions
Construction and civil engineering	<ul style="list-style-type: none"> • Maintain construction MA numbers • Increase college enrolments if construction industry picks up as projected • Employability providers to help re-engage unemployed skilled tradesmen
Energy and engineering/ manufacturing	<ul style="list-style-type: none"> • Sector requires continued investment in engineering and related subject areas • Significant increase in engineering MAs needed to meet future demands • Pathways should be established to upskill existing workforce to higher skilled positions
Food and drink	<ul style="list-style-type: none"> • Ensure flow of engineers into food and drink manufacturing – e.g. through MAs
Health and care	<ul style="list-style-type: none"> • Maintain health and social care MAs and college provision • Build relationship with NHS Fife to help support workforce planning process • Gain stronger understanding of residential care sector within Fife and its employment and skills demands
ICT and technology	<ul style="list-style-type: none"> • Increase Fife College places to help train future programme/software designers • Ensure college provision responds to future ICT trends • Consider whether Fife should aim to become 'Centre of Excellence' for ICT and software skills
Tourism and hospitality	<ul style="list-style-type: none"> • Attract more enrolments onto Fife College catering, food, leisure services and tourism courses • Align employability activities to help meet lower skilled tourism vacancies

The second set of recommendations refers to the Fife workforce model that has been developed for this research and specifically considers where the model could be improved moving forward. It is recommended that the modelling exercise is formally undertaken on an annual basis.

Review Fife College Industry Advisory Boards

Fife College's Industry Advisory Boards are an important interface between the college, employers and other partners to ensure that college provision meets the needs of Fife's employers. To maximise their effectiveness, it is important that:

- The groups are aligned to Fife's key sectors.
- The membership of each group is reviewed on a regular basis to ensure there is a strong representative mix of employers, e.g. to include SMEs.
- The groups have access to high quality labour market intelligence which will enable members to give more informed advice.
- Other industry groupings are kept informed of the Industry Advisory Board's work.

It is also proposed that the Industry Advisory Boards report on a bi-annual or annual basis to the Fife Economy Partnership (or a specific Fife Employer Skills Panel set up within the Fife Economy Partnership with responsibility for employment and skills issues) to inform their strategic approach to Fife's economic development.

Local groupings to take ownership of sectoral profiles

The research has produced labour market profiles for each of Fife's key sectors. It is proposed that industry groupings within Fife take ownership of their relevant sector profile so that they are kept up-to-date and relevant. The industry groupings could be Fife College's Industry Advisory Boards or other established groups such as the Fife Construction Forum and Fife Tourism Partnership. Specifically the groupings should aim to:

- Distribute the profile amongst the group's membership in order to:
 - Gain feedback on the accuracy and value of the profile.
 - Encourage members to engage with and contribute to the profile.
- Tailor the profile to better meet Fife's needs, which may include challenging other agencies (e.g. Sector Skills Councils and industry bodies) to provide up-to-date, different or Fife-specific labour market information.
- Update the profiles on at least an annual basis.

There is clearly a resourcing issue here in terms of ensuring the profiles' upkeep and perhaps Fife Council or Fife College could support the industry groupings in preparing the updated profiles.

Better recording and sharing of employer employment and skills needs

Chapter 6 highlighted the number of different interfaces where employers are asked about or communicate their employment and skills needs. The report grouped these as employer groupings, one-to-one employer relationships and business-education activities. There is therefore a significant amount of recruitment, skills and training intelligence that is being gained from Fife's employers through a variety of routes, but it is not being formally collated and then shared across partners. To address this, it is proposed that partner agencies maximise the intelligence that is received on an ongoing basis by signing up to a standardised process of recording and sharing employers' recruitment, training and skills issues. This would consist of:

- A summary record taken of an employer's recruitment, training and skills issues.
- The record is then shared with partner agencies who can potentially offer the support required by the employer, provided the employer agrees to the information being shared.

- The record is also sent to the relevant Industry Advisory Board to provide it with ongoing labour market intelligence that can inform its decision making.

Establish destinations of Fife learners

Information on the destinations of leavers from Fife College and the occupations they progressed onto is a gap in the workforce model. This information by the type and skills levels of training they were engaged in will help partners make more informed decisions on the cost-effectiveness of different skills programmes and courses. The Skills Funding Council is currently piloting destination information from colleges, and this will begin to be rolled out in 2014/15. Fife College should strongly commit to this process as the information gained will be extremely valuable to the workforce modelling.

More effective employer engagement

To bring about more effective employer engagement, it is proposed that actions are taken on two fronts.

- ***Build on existing employer relationships to increase e-survey responses.*** For the employer e-survey to be a meaningful labour market intelligence resource that partners can have confidence in, the response rate needs to be increased. Partners should assess whether employment and skills questions can be integrated into other employer surveys that are sent out to Fife employers – for example through the FSB and Chamber of Commerce – with the results to these questions shared with partners and built into the workforce modelling process.
- ***Consider setting up a Fife Employer Skills Panel*** – to provide a prominent employer skills voice in Fife, it is proposed that a Fife Employer Skills Panel is established consisting of a small number of employers across Fife's key sectors. The Panel, which could be a sub-set of the Fife Economy Partnership, would be convened on a six-monthly basis to discuss and report on the key skills issues affecting the Fife economy – thereby tying in with the performance review processes outlined below.

Review our effectiveness annually

It is important that the workforce modelling process is reviewed on an annual basis to assess the progress that has been made over the last 12 months, and what future actions are required to better ensure employer needs are met. The review process would consist of the following:

1. ***Establish a baseline position*** – using the information contained within this report (and other information as appropriate), a concise baseline position of how well Fife employer needs are currently being met should be established. This would contain a small number of headline indicators that are maintained as part of a management information system.
2. ***Produce six-monthly update reports*** – to alert partners to employment and skills developments and challenges, six-monthly update reports should be produced drawing on the headline indicators discussed above and other intelligence coming from employers.
3. ***Annual review*** – key partners should convene once a year to formally review how well the workforce planning process is working. The review should follow an update of the baseline position and consultation with key public and private sector partners (including the Fife Employer Skills Panel) to understand what can and should be improved upon further.

APPENDIX: SUMMARY OF EMPLOYER SURVEY COMPLETORS

Figure A1.1: Main Sector Employer Operated In

	Percentage
Manufacturing	48
Other	15
Professional, scientific and technical	6
Arts, entertainment and recreation	6
Property	6
Education	4
Accommodation and food services	4
Construction	4
ICT	2
Agriculture, forestry and fisheries	2
Public administration and defence	2
Transport, storage and distribution	2

Source: Fife Employer Survey

Figure A1.2: Size of Employers by Number of Employees in Fife

	Percentage
1-9 employees	4
10-49 employees	18
50-99 employees	26
100-249 employees	18
250+ employees	34

Source: Fife Employer Survey