Regional Skills Partnership

Annual Report to Welsh Government

April-July 2018

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Section 1: Introduction

The Cardiff Capital Region (CCR) is made up of ten local authorities: Bridgend, Vale of Glamorgan, Cardiff, Rhondda Cynon Taf, Merthyr Tydfil, Caerphilly, Blaenau Gwent, Torfaen, Monmouthshire, and Newport. It has an estimated population of 1.5m,[1] which is 48.7% of the Wales population. Of this population, around 960,000 people are estimated to be of working age (16-64 year of age). The region generates 51% of the total gross value added (GVA) in Wales.[2]

There is significant variation between local economies within the region. For example, some local authorities employ a larger proportion of the workforce in broad sectors, such as production, than others.[3]

Priority Sectors
In our Employment and Skills Plans 2016 and 2017, an analysis of the regional economy based on the gross value added of outputs and size of industrial sectors prioritised five sectors for the region.[4] These were considered to have greatest demand for labour and skills over the next five years and to be of strategic importance. These are:

- advanced materials and manufacturing (AMM);
- construction (CON);
- financial, legal and professional services (FPS);
- the human foundational economy including education, health and social Care (HFE); and
- digital (ICT/digital/creative).

These sectors collectively make up of 78% of gross value added across the regional economy.[5]

In 2018/19 the Regional Skills Partnership (RSP) will extend engagement with employers from across the foundational economy by including hospitality and tourism and will also add aerospace and aviation to sector priorities.

Cardiff Capital Region City Deal
The Cardiff Capital Region City Deal,[6] a £1.28bn City Deal agreed between the UK and Welsh governments, continues to influence capital and infrastructure investment across the region. It plays, and will continue to play, a key role in shaping the future economy of the region. Over the lifetime of the deal, it is envisaged to leverage an additional £4bn of private sector investment to the region and deliver up to 25,000 new jobs. The main areas of the Deal are:

- £1.2 billion investment in the Cardiff Capital Region's infrastructure;
- support for innovation and improving the digital network;
- developing a skilled workforce and tackling unemployment;
- supporting enterprise and business growth; and
- housing development and regeneration.

Infrastructure and Ongoing Developments

There have been significant investments in the region in recent years with more projects planned in the future. There are also other developments, such as policy initiatives, which will have an impact on the region. Some examples of recent investments and developments within the regional economy include:

South Wales Metro

A key part of the Cardiff Capital Region City Deal, this £734m investment will provide better integration across different modes of transport across the region. Additionally, there is an agreement in principle for a £180m re-development of Cardiff's transport hub including £40m to create a new central transport interchange.

Compound Semi-Conductor Cluster

A £38m investment to support the development of the Compound Semiconductor Cluster creating more than 2,000 jobs. This is a joint venture between compound semi-conductor specialists IQE and Cardiff University. It will position the region as a world leader in compound semiconductors. Jobs created from the venture are likely to be highly skilled, specialist and high value-added.

The Mill Housing Development, Cardiff

A £100m on-going housing development in West Cardiff transforming a 53-acre derelict industrial site into an 800 home urban village. The project was estimated to have created 1,000 jobs during the construction and to have produced a significant number of apprenticeships and training opportunities to the local community.

Transport for Wales New Headquarters

Transport for Wales has chosen to base its new headquarters at Pontypridd's new Taff Vale Park. The redevelopment of the park is supported by £30m from Rhondda Cynon Taf Council, £10m from Welsh Government, and £7m from the European Regional Development Fund. The new headquarters will have several hundred staff located at the headquarters for the new not-for-profit company. Improved connectivity at Pontypridd will mean a wide catchment area of potential employees, particularly across the valleys, for Transport for Wales, the Metro operator and delivery partners.

Ministerial Taskforce for the South Wales

Aware that the South Wales valleys have a unique set of deep-rooted challenges, reflected in quality and length of life as well as educational attainment and skills, the Ministerial Taskforce for South Wales was set up in 2016 to work with public sector and third sector organisations to achieve more than 60 priority actions. These include: closing the employment gap between South Wales Valleys and the rest of Wales; creating new, secure and sustainable jobs supported by the right skills; and creating new strategic hubs. Crucially, actions also include plans to support the foundational and digital economy, business start-ups and job creation opportunities around infrastructure investment in the region.

Developments in neighbouring regions will also have an impact upon the Cardiff Capital Region. They are likely to offer employment opportunities to workers within the region, benefits to businesses through supply-chains, and other spin offs. Examples of two major developments in neighbouring regions include:

Hinkley Point
The construction of a large two-reactor nuclear power plant in Somerset, at an estimated cost of £18bn, is also likely to have an impact on the region. It is likely to be a place of employment for those within our region.

The Swansea Bay City Deal
The £1.3bn investment covering Swansea and West Wales will bring further investment to Wales. The Deal encompasses 11 projects across four key themes; economic acceleration, life science and well-being, energy, and smart manufacturing.

Other developments in the South West of England, particularly around Bristol, must also be considered going forward. The ending of the Severn Bridge tolls in December 2018 is likely to bring benefits to the region which we will continue to monitor.

Challenges
When identifying challenges in previous years, we recognised that they were deep rooted, long-term and would require appropriate solutions. They therefore remain unchanged. It is important to note that this report is about predicted demand related to industrial requirements and not the wider purposes of education and the overall size and shape of educational provision in the region will have a range of drivers. This advice has not separately considered wider issues of NEET, BAME, Widening Access, and social inclusion. We would hope that it supports that agenda but is not replacing the need for that to take place. We also need to consider any current or future changing parameters due to governmental policy shifts. Social Care is a good example of this.

1. Raising GVA
We recognised the need to develop employment and skills in the regional labour market that support investment strategies and achieve economic growth. Infrastructure investment in the region and neighbouring areas will have a substantial impact on demand for current employment and skills.

2. Skills Gaps and Shortages
Projected labour demands exceed the expected numbers of entrants within some occupations creating skills shortages whilst skills gaps increase as the demand for skills evolves in response to changing working methods, utilising new technology and introducing automation.

The supply of labour to meet these demands is dependent on a number of factors including:

1) appropriate training provision in the region for all ages, taking into account the need to **train the trainers** in current and changing skills needs;
2) retention of a workforce who may be lured away by higher salaries elsewhere in the UK, and
3) provision for the upskilling of adults who are inactive or already in the workforce, to meet the changing skills requirements of replacement jobs, particularly with the adoption of digital skills and Industry 4.0.

3. Qualification Levels
Qualifications levels in the Cardiff Capital Region exceed Wales' average but still do not meet forecast higher-level skills demand, which continues to increase. 54% of those in

employment are forecast to hold qualifications at Level 4 or above by 2024, with an overall decline in those with no or low qualifications predicted. The exception is for caring, personal service and administrative occupations which predicts increases in demand for Level 2 and Level 3 qualifications, driven in part by mandatory requirements.

4. Apprenticeships

Only 13% of employers utilise apprenticeships and just 1.5% of year 11 school children went directly into apprenticeships last year. The introduction of the Apprenticeship levy is leading to increased demand for Apprenticeships, particularly across large and public sector organisations and in some sectors is outstripping the supply and availability of Apprenticeship funding. However, challenges still remain regarding perceptions, including parity with academic routes and apprenticeship vacancies to attract school leavers directly into work. In addition, there continues to be a need to increase the number and range of apprenticeship opportunities, including higher and degree apprenticeships.

5. Careers Advice and Guidance

We recognised there is a mismatch between subject areas chosen by learners and those occupations within the economy that offer the greatest prospect for employment, earnings and career development. Forecast skills shortages may be reduced if careers advisors, teachers and industry representatives can collaborate to effectively market opportunities to parents and students with emphasis on the Regional Priority Sectors.

6. Unemployment and Economic Inactivity

Across the region there are high unemployment costs and projected skills shortages due to demographic trends such as an ageing population and ageing workforce.

7. Improving Learner Outcomes

We recognised the need to further improve the outcomes of learners in the region. However, there are limitations to destinations data which make this a difficult task.

8. Brexit and European Union Funding

The effect of Brexit on the region continues to be difficult to ascertain given the future relationship of the United Kingdom and European Union remains unknown. We recognise this is likely to have a significant impact on labour force in terms of migration as well as the loss of European Union funding to the region.

Section 2: Priorities for the Region

The 2017 Cardiff Capital Region Employment and Skills Plan identified eight Regional Priorities for Employment and Skills, six are being retained as a context and framework for future delivery and are detailed within the Cardiff Capital Region City Deal five-year Strategic Business Plan alongside a commitment to work with DWP on the co-design of the work and health programme.

1. **Delivering employment and skills support for industry, infrastructure and other investments to enable growth** - creating tailored and flexible solutions through regional academies or centres of excellence that can respond to the needs identified and utilising social clauses to maximise the skills engagement and employment potential of any investment, including employment and skills support to build local supply

chains/value chains and developing the capacity and capability within the education system to respond.

2. **Supporting industry through priority sectors to address skills gaps and shortages** – responses to specialist or technical skills demands as defined by individual sectors, plus common or cross cutting skills needs such as digital skills, leadership and management, train the trainer, 'people and personal skills' or soft skills and adult skills programmes.

3. **Developing higher level skills to future-proof the workforce** – increase the range of higher-level qualifications in technical subjects and to meet the demand for managers, professionals and associate professionals in ICT/digital, professional services and manufacturing at Level 4 and beyond. Innovate learning to encourage and support learner aspirations to achieve higher level skills, providing accelerated learning and pathways to encourage progression beyond levels 2 and 3. Improve learner attainment across the region to meet forecasted higher level skills demand.

4. **Increasing the number and range of apprenticeships** – increase the number and range of apprenticeships offered and maximise the demand from employers in response to the Apprenticeship Levy. Extend the range of higher level apprenticeships and introduce degree apprenticeships as an alternative, and cost effective, route to higher-level qualifications, with greater opportunity to progress into employment. Support shared apprenticeships in response to demand from industry and particularly SMEs.

5. **Improving industry engagement with education and marketing of career opportunities and pathways** – develop sustained engagement by industry with schools and colleges to foster education/industry links. Support continuous professional development of teachers and tutors in industry relevant skills. Improve information/intelligence and marketing of career options linked to employment opportunities, use industry engagement to challenge perceptions and promote parity between vocational pathways, apprenticeships and academic qualifications.

6. **Developing a regional employability plan to get more people into work** – develop a regional plan to engage economically inactive and unemployed people, including ex-offenders and encourage them back into work with appropriate training and pre- and post-employment support. Utilise social clauses in contracts to create employment and placement opportunities for those seeking work.

The final two of the eight regional priorities for employment and skills remain valid, but there is recognition that the remit does not rest with the Regional Skills Partnership. The need to improve destination data will rely on action determined by the Welsh Government and to succession plan for European Funded programmes is integral to the work of the Regional Engagement Team (RET). Whilst the Regional Skills Partnership has an interest and would wish to support these developments, it is accepted that the primary responsibility and the resource for any action to address these priorities is with the agencies mentioned and not with the Regional Skills Partnership.

7. **Improving destination data for better learner outcomes** – destination data needs to be improved. Quality data in higher education is able to demonstrate learner outcomes and the impact and value of skills investment; this needs to be extended across further

education and work-based learning. Longer term measures could identify pathways to employment, relevance of learning and movement within and across different occupations to measure learner outcomes over time.

8. **Developing succession plans for European Union funded programmes post-Brexit**
   Monitor Brexit developments and assess risk/impact on service delivery currently supported by ESF operations via the CCRCD RSP EU Funding work stream. Working through the Regional Engagement Team (RET), facilitate a working group to include, Welsh Government, WLGA and WEFO that will share intelligence, consider plans to mitigate risks and explore the availability of WEFO held data sets that could support this work.

   Through the regional ESF networks, explore content of operations, RME plans and exit strategies. Consider how information on best practice can best be shared within region to inform future programmes. This will provide:
   - Recommendations for Welsh Government with regards to the development of future regional investment, skills and employability programmes.
   - Inform the City Deal Skills for the Future programme and Employability Plan of the future impact of Brexit in relation to the delivery of skills and employability interventions.

Section 9: Labour Market Intelligence

Methodology

We have used Labour Market Intelligence to inform our stakeholder engagement and skills plans. Our aim has been to start with the best long term projections available for the region; to test whether they hold true to date; and to develop further intelligence and data on the current situation within individual industrial sectors. We have provided an analysis of our priority sectors.

The Regional Labour Market Intelligence Reports (RLMIR) contain a range of data which help to paint a picture of the current labour market and projections going forward.[7] To improve our analysis, we have procured access to Emsi Labour Market data.[8][9] For this year, we have used this data to supplement our analysis, provide additional context, and to probe specific questions we have raised using publicly available data from the RLMIR. We will further investigate how this data can be used in our planning over the coming years.

The Working Futures 2014-2024 data provides employment estimates and broad directions of travel for many industries. Where possible and robust, we have compared these estimates with current data to assess whether sectors within the regional economy are growing and/or shrinking in line with earlier projections. By doing this, we can get an insight into the relative 'health' of an industry and can use it as the basis of our analysis. Building upon this analysis, we have used additional data from sources such as the most recent Employer Skills Survey to provide further context on specific gaps and shortages[10] in these sectors.

It should be noted that, while Working Futures offers robust long-term projections, the usual caveats around using long-term projections apply. The most recent report is from 2014 and

there will be variables over the past four years which have impacted on the economy, hence variations between projections and actuals. The most recent report was released before the European Union Referendum of 2016 which will have had, and will continue to have, a significant impact of the region.

Comparisons for different industrial sectors using different data sources can be challenging. Data sources typically tend to use the internationally recognised Standard Industrial Classification codes (SIC Codes) to categorise industrial activity into different sectors. These codes are at four different levels ranging from the broadest groupings (such as manufacturing) to highly detailed and specific categories within each sector (such as the manufacture of tobacco products). There can be significant variations in terms of which categories and agglomerations different data sources use. Additionally, there can be issues around what data is available at different geographies, with data typically getting harder and harder to obtain at smaller geographies. Where possible, and where data between sources has a fit, we have made these comparisons. Where we have encountered difficulties making these comparisons, we have detailed some of the issues and added caveats around the comparison. A full table of our comparisons by industrial sector are available in the annex.

Production
Due to variations in the categorisations of data, comparisons for the advanced materials and manufacturing sector are difficult to make. For the purposes of robust analysis, comparisons have been made across the production sector which includes some other manufacturing industries.[11] Employment in the production sector was projected to fall from 82,200 people to 72,200 between 2014 and 2024. It is estimated that as of 2016 there were 82,100 employed in the sector. The sector, counter to projections, appears to be largely unchanged in terms of the number of people it employs. This suggests that within the region, the production sector is proving to be relatively stable and continues to be a significant employer.

Table 1 Sub-Sector Employment Figures

Sub-Sector	Estimated number of people employed 2014	Projected number of employees 2024	Estimated number of employee as of 2016
Food drink and tobacco	10900	11100	
Mining and quarrying	-	-	
Rest of manufacturing	52400	47400	82100
Electricity and gas	3400	3800	
Water and sewerage	6200	7200	
Engineering	9300	6700	

The sector has a reported skills shortage of 10% which is the second highest across the region. There is a reported skills gap of 25% which is the highest in the region. This suggests that the labour market is currently not meeting the needs of this sector.

Emsi data suggests that the most prevalent occupations for the manufacturing industry within our region are; production managers and directors; metal working production and maintenance; food, drink and tobacco process operatives; elementary storage occupations; packers, bottlers, canners and fillers.

Construction

Table 2 Construction Employment Figures

Sub-Sector	Estimated number of people employed 2014	Projected number of employees 2024	Estimated number of employees as of 2016
Construction	43200	46900	45000

The Construction sector was projected to grow from 43,200 people to 46,900 between 2014-2024. It is estimated that as of 2016 there were 45,000 people employed in the sector. The sector is showing modest growth in terms of employment numbers as projected. The sector has a reported skills shortage of 8% and a reported skills gap of 16% which are both slightly above average for the region.

Emsi data suggest that prevalent occupations within this sector for the region are; electricians and electrical fitters, production managers and directors in construction, elementary construction occupations, carpenters and joiners, plumbers and heating and ventilating engineers. The Construction Industry Training Board (CITB)[12] has estimated that the following occupations within the construction sector have seen the greatest demand across the region in 2017: wood traders and interior fit-out; non-construction professional, technical, IT and other office based staff; plumbing and heating, ventilation and air conditioning trades; other construction process managers; electrical trades and installation; bricklayers; painters and decorators.

The Human Foundational Economy

Table 3 Human Foundational Economy Employment Figures

Sub-Sector	Estimated number of people employed 2014	Projected number of employees 2024	Estimated number of employees as of 2016
Public admin. and defence	43800	43400	
Education	67600	66900	205200
Health and social work	102200	105800	

The human foundational economy (health, social care and education) is a priority sector for the region. Working Futures 2014-2024 projected employment in education to experience a small fall from 67,600 in 2014 to 66,900 in 2024. Employment in human health and social work activities is expected to rise from 102,200 in 2014 to 105,800 in 2024.

Contemporary comparisons for these industries using publicly available government data sources are not possible as the data for the region is available only at broad sector level, which also includes public administration and defence. At this level, the sector was projected to grow from 213,600 to 216,100 employees over the period. However, as of 2016, it was estimated to have shrunk to 205,200. At a Wales level, both education and human health and social work activities have seen falls in employment numbers between 2014 and 2016, with the latter showing a significant fall from 209,400 to 205,100, against the projected trend.

Education has a reported a skills shortage of 2% which is the second smallest in Wales. It has a reported skills gap of 19%. Health and social work has a reported skills shortage of 5% and a reported skills gap of 13% which are both slightly below average for the region.

These numbers demonstrate a need to further interrogate the human foundational economy as the sector's current trajectory appears to be at odds with projections. To better understand this, we have used Emsi data which suggests a decline in employment in human, health and social work activities across the region between 2013-2016 before a large rise in 2017. Additionally, care workers and home carers, and nurses, are reported to be the two fastest growing occupations in the region and vacancy data shows this industry has been advertising for roles. Hospital activities is also reported to be the fastest growing industry in terms of employment. Given this, we believe that this fall in employment may not be representative of the medium-term trend.

The most prevalent occupations within this sector for the region according to Emsi are; care workers and home carers; nurses; nursing auxiliaries and assistants; and primary and nursery education teaching professionals.

We will continue to monitor employment numbers within this sector over the coming years and further consult with industry representatives to better understand the direction of travel for this sector and to assess where challenges may lie. We will plan accordingly if the sector is not growing as predicted.

Financial, Legal and Professional Services

Another priority sector for the region is financial, legal and professional services. Sub-sectors within this priority sector show a mixed picture. Employment in real estate is showing a very small drop counter to projections. Finance and insurance is showing modest growth in line with projections. Professional services and support services were estimated to employ 90,100 people as of 2016 which is close to the combined projected 92,700 for 2024. This suggests these sub-sectors may be growing at a faster rate than anticipated.

Table 4 Financial & Professional Services Employment Figures

Sub-sector	Estimated number of people employed 2014	Projected number of employees 2024	Estimated number of employees as of 2016
Finance and insurance	19500	23400	20900
Real estate	11900	12900	11800
Professional services	34500	39400	90100
Support services	48900	53300	

Finance and insurance has a reported skills shortage of 4% which is amongst the smallest for the region. It has a reported skills gap of 23% which is amongst highest in Wales. This suggests that while the sector has few problems hiring new staff or calling upon the labour force, its workforce does require additional training and support. Real estate, professional services, and support services have reported skills shortages of 6% and skills gaps of 13% which are close to average for the region.

Emsi data suggests that the most prevalent jobs in the region within this sector are bank and post office clerks; pensions and insurance clerks and assistances; finance and investment analysts and advisers; financial institution managers and director; and financial accounts managers.

ICT and Digital Technologies

Comparisons for ICT and digital sectors are not easy and present a significant challenge with current publicly available datasets. ICT is becoming embedded in more and more sectors as the economy transitions to a 'digital economy'. Activities prioritised by our region can cut across several industries - particularly creative and arts.[13] To overcome this challenge, and using Emsi, we have been able to create an ICT and digital technologies aggregation of industries that matches what the UK government consider to be digital economy industries.[14]

Emsi data suggests that this priority sector employs 21,010 people as of 2017. By 2024, it is estimated to employ 24,057 people. The most prevalent jobs for this sector within the region are programmers and software development professionals; information technology and telecommunications professionals; IT specialist managers; sales accounts and business development managers; IT business analysts, architects and systems designers.

It is not possible to identify skills gaps and shortages across this sector due to the way the Employment and Skills Survey is categorised. Given these limitations, we will consider the ICT and digital technologies to be an area requiring greater attention when planning our Business Skills Survey in future years.

Vacancies

While we have a picture of employment figures in individual sectors, understanding the number of vacancies in industries is more challenging.

Emsi data allows us to see the number of vacancies across the region for individual occupations. While this does not provide a sectoral breakdown of vacancies, it does provide additional intelligence and plays a crucial role in showing where career opportunities exist.

Table 5 Regional Vacancies

Occupation (SOC)	Unique Postings (Jan 2016-May 2018)	Median Posting Duration (Days)
Nurse	12,960	31
Book-keepers, payroll managers and wages clerks	7,225	30
Care workers and home carers	6,407	33
Sales accounts and business development managers	6,364	30
Business sales executives	5,748	30
Customer service occupations n.e.c	5,630	30
Programmers and software development professionals	5,505	30
Primary and nursery education teaching professionals	4,424	33
Other administrative occupations n.e.c	4,004	20
Metal working production and maintenance fitters	3,982	30

Source: Emsi 2018.1 data

Skills Gaps and Shortages across All Sectors

The Employer Skills Survey has not been updated since our last report and therefore our intelligence remains unchanged. We will assess the results of the new Employer Skills Survey, due in summer 2018, and plan accordingly.

Industry-led Action Plans

Regional Priority	Sector Group	Recommendations	Actions
1: Delivering employment and skills support for industry, infrastructure and other investments to enable growth	ICT/D	Superfast Business Cymru: skills utilisation and company uptake	Market Superfast Business Cymru opportunity http://bit.ly/2msWSQM
2: Supporting industry through priority sectors to address skills gaps and shortages	CON	Train the trainer programme to include training and assessment of new methods such as Offsite, Modular, digital technologies	Training providers to develop staff in the areas identified
	CON	Develop qualification and work with FE/HE provider	Map existing qualifications to new role such as Design manager, where no match exists, develop qualification pathway and identify providers
	FPS	Training current and future leaders: basic and higher-level numeracy and literacy skills (not just among entry level employees).	Traditional further and higher education courses. Tailored technical and non-technical training, including from the private sector.
	FPS	Support SME supply chain to engage with further and higher education delivery on skills.	Work with further and higher education to address skills shortages in programming, operation and analysis. SME supply chain – sector groups and supply side. Support engagement with schools in these areas, e.g. First Campus
	FPS	Digital analytics, documentation and security – legal, financial and business. Work with locally-based and headquartered companies	Support embedding of LTC4 in the region and encourage business engagement. On the supply side further education is tasked to develop new courses as identified. Skills Priorities Programme in full to help identifying potential outside Qualifications in Wales.
	FPS	Growing the employment pool - careers engagement between companies and delivery (schools and higher education) and peer-to-peer to identify and develop opportunities for school programmes with apprenticeship pathways at entry level for large companies, including online marketing price comparison sites and insurance companies - ensure these map to future progression.	Government to consider bespoke work-based learning strategy that sits within award frameworks but that support 'bite-size', just-in-time learning for employees and not just whole awards.

Regional Priority	Sector Group	Recommendations	Actions
	FPS	Digital futures and automation: identify opportunities to grow understanding of artificial intelligence and upskilling of new and existing workforce in digital skills, programming, operation and analysis.	Engage further and higher education with businesses (SMEs) at different levels to inform progression routes into fintech opportunities. e.g. Blockchain, ICT cluster engagement.
	FPS	Developing a portfolio of new and existing offers that delivers on 4 core strands, supports regional upskilling and promotes the Cardiff Capital Region as a destination for inward investment- showcasing good practice: legal, business, financial and digital.	Increase further education/work-based learning availability of training to certification e.g. the Association of Accounting Technicians (AAT), the Institute of Chartered Accountants in England and Wales (ICAEW) and the Association of Chartered Certified Accountants (ACCA) to promote the full range of routes into these professions.
	FPS	Developing a portfolio of new and existing offers that delivers on 4 core strands, supports regional upskilling and promotes the Cardiff Capital Region as a destination for inward investment- showcasing good practice: high-level apprenticeships and degree apprenticeship programmes for all ages.	Further and higher education to promote a range of demand-led cyber security awards including work with the Open University and Tech Partnership on apprenticeships and high-level work-based learning degree programmes. Worldwide recognition of certification looking to innovation in flexible awards, online delivery, higher apprenticeships through ICT/digital and links to the National Cyber Security Academy and National Software Academy. Several providers but a regionally coherent offer.
	FPS	Developing a portfolio of new and existing offers that delivers on 4 core strands, supports regional upskilling and promotes the Cardiff Capital Region as a destination for inward investment- showcasing good practice: graduate master degree programme – expand industry-led opportunity to roll-out similar programmes at different levels across sub-sectors.	Support transition from European funded support of local graduates for the financial sector to placements in local businesses across legal, financial and business supported by higher education teaching staff to gain academic awards. Course content informed by business – to be explored with higher education and the Welsh Government department of Skills, Higher Education and Lifelong Learning (SHELL) and the Higher Education Funding Council for Wales (HEFCW). Level 6/7 apprenticeships with a flexible validation document offering work-based and higher-level learning bespoke to regional needs.
	HFE	Maintain the Skills Priorities Programme for further education and increase the timescales of the programme i.e. 3-5 years to enable better strategic planning	Welsh Government to consider recommendations for the SPP.
	HFE	Recruit and develop existing staff to meet increasing demand for Welsh language skills within the education workforce and support the Welsh Government aim of 1 million Welsh speakers by 2050	Improve the promotion of career pathways for Welsh speaking staff into education sector

Regional Priority	Sector Group	Recommendations	Actions
	HFE	Identify the future skills needs of the HFE cluster and the impact of key drivers including the Well-being of Future Generations (Wales) Act 2015.	This requires further work by the group to set objectives and timescales.
	HFE	To develop a proposal for a Social Care Support Worker programme that facilitates bite sized accredited learning to support and care for individuals in their homes.	Scope out the potential for a Social Care Support Worker Programme including the potential impact on bed capacity and savings to the sector
	HFE	Identify funding/support available for continuing professional development (train the trainer) for all teachers, trainers and assessors across schools, further education institutions, higher education institutions, work-based learning and specialist provision.	Work with RET teams to explore opportunities for funding support and development of a fund for the education workforce
	HFE	Produce clear recommendations of future skill needs.	Produce a clear plan for future skills needs of the HFE workforce
	HFE	Research and address portability and transferability of qualifications across health and social care, with a focus on progression from health to social care.	Cross-map social care and health qualifications to identify portability. T&Cs will be a challenge in this area between from Social Care to Health
	HFE	Review the health services future transformation programmes and plan for workforce skill needs.	Include in the Planning & Funding Template
	ICT/D	Workforce for a digital economy - a focus on doubling the digitally skilled workforce in the Cardiff Capital Region.	Specific initiatives to address gender, diversity and age barriers.
	ICT/D	Workforce for a digital economy - recognising the importance of the ICT/digital sector to the future prosperity of the region;	Working to ensure access to all for technology across the Cardiff Capital Region. Expand offer of training courses from entry level to specialist skills (with various progression routes, but not specialising too early).
	ICT/D	Definition of ICT essential skills: minimum requirement for up-skilling, cross-sector, whole workforce, with access to skills delivery including teacher training.	Support work with Qualifications Wales to develop a baseline framework for schools: entry level and Level 1-Level 3 progression; and applicable as core transferable skills for all including apprenticeships, unemployed and disadvantaged.
	ICT/D	Definition of ICT essential skills: minimum requirement for up-skilling, cross-sector, whole workforce, with access to skills delivery including teacher training.	Support work with Qualifications Wales to develop a baseline framework for schools: entry level and Level 1-Level 3 progression; applicable as core transferable skills for all including apprenticeships, unemployed and disadvantaged.
	ICT/D	Workforce for a digital economy: recognising the importance of the ICT/digital sector to the future prosperity of the region.	Working to ensure access to all for technology across the Cardiff Capital Region: expand offer of training courses from entry level to specialist skills (with various progression routes, but not specialising too early).

Regional Priority	Sector Group	Recommendations	Actions
	ICT/D	Superfast Business Cymru: business case – engagement with skills/training delivery.	Expand 'Sector Business Benefits' training support to include health education and care. Consider technology and online delivery to improve training and education access for all.
	ICT/D	Superfast Business Cymru: includes building information modelling	Address issues of uptake where Superfast Cymru exists – market opportunity.
	ICT/D	Improve training to increase number of innovation active companies (using technology to innovate their business in addition to efficiency).	Promote skills in SMEs to support entrepreneurs and innovators, supporting the wider ecosystem in South East Wales. Understand and improve range of skills and support availability of part-time/online.
	ICT/D	Workforce for a digital economy: a focus on doubling the digitally skilled workforce in the Cardiff Capital Region	Offer for all sectors e.g. data science/analytics, programming, cyber security, robotics/automation, mobile application technology, digital media/creativity in publishing, ICT and digital workflows. Specific initiatives to address gender, diversity and age barriers.
3: Developing higher level skills to future-proof the workforce	AMM	Instil into management and leadership programmes ambition, innovation, efficiency (improved productivity), vision, succession planning	Review the current offering of leadership and management programmes
	AMM	Instil into management and leadership programmes ambition, innovation, efficiency (improved productivity), vision, succession planning	Provide a list of management and leadership programmes applicable to deliver for manufacturers
	AMM	Instil into management and leadership programmes ambition, innovation, efficiency (improved productivity), vision, succession planning	Develop /source new management and leadership programmes where there are gaps in provision
	AMM	Develop new NOS suite and short programmes for factory automation (Factory 4.0) which should include: Design, Implementation, Monitoring data analytics, Maintaining systems, cyber security	Ensure employers are engaged in this development suitable for upskilling and reducing Skills gaps
	AMM	Ensure trainers and /lecturers have staff development in place to develop cutting edge programmes to support the sector in improving productivity and automation	Develop/ collaborate with cutting edge technology centres across the UK that can deliver the most appropriate solutions for the sector
	CON	Ensure management and leadership provision at Level 4 to encourage people to succession plan	Increase Level 4 short courses and CPD
	CON	Co-ordinated network of provision delivering Civil engineering to meet infrastructure needs across the region	Welsh Government to work with CWIC to lead on identifying a solution
	FPS	Training current and future leaders: technical and subject matter expertise. an increasing need for both	Partnerships, collaboration and broad networks. Experiential learning. Coaching.

Regional Priority	Sector Group	Recommendations	Actions
		traditional and emerging non-technical skills, including specific business, interpersonal and leadership and management skills with growing importance on the need for values and trust	
	FPS	Digital analytics, documentation and security – legal, financial and business. Work with locally-based and headquartered companies	Higher education to develop and promote a joined up approach by the National Cyber Security Academy at the University of South Wales, the Centre of Excellence in Cyber Security Analytics and the National Software Academy in Newport from Cardiff University, and industry in the region and beyond. Promote these two assets as regional strengths and consider hosting a financial and professional services event and showcase at these to support engagement and connectivity.
	HFE	To develop a career pathway for support staff to progress into qualified teachers. (Support staff workforce has grown to 30,000 (Wales) and is now 1:1 with teachers)	Develop of HLTA Higher Apprenticeship programme which will act as a progression to a teaching degree
	HFE	Increase science, technology, engineering and mathematics (STEM) tutors and teacher-training student numbers to meet growing demand for high-tech and specialist provision. (Trend shows a 5 year decline in teacher training numbers for STEM subjects)	Increase the number of teacher places filled for STEM subjects through incentive schemes and marketing activity
	ICT/D	Workforce for a digital economy - recognising the importance of the ICT/digital sector to the future prosperity of the region;	Offer for all sectors e.g. data science/analytics, programming, cyber security, robotics/automation, mobile application technology, digital media/creativity in publishing, ICT and digital workflows.
	ICT/D	Share skills best practice across supply chains.	Push to improve on the 12% of companies currently training in innovation skills. Increase innovation active companies from 25% in the Cardiff Capital Region. Wider message: digital Wales, open data, open innovation.
	ICT/D	Future proofing: high-level digital specialist specific skills e.g. artificial intelligence, building information modelling, fintech, voice recognition security.	Use innovation examples to help to promote the relevance of high-level skills/training offered by higher education, the National Software Academy (Cardiff University), the National Cyber Security Academy (the University of South Wales).
	ICT/D	Future proofing: high-level digital specialist specific skills e.g. artificial intelligence, building information modelling, fintech, voice recognition security.	Use innovation examples to help to promote the relevance of high-level skills/training offered by higher education, the National Software Academy (Cardiff University), the National Cyber Security Academy (the University of South Wales). Drive further education institution core progression skills.

Regional Priority	Sector Group	Recommendations	Actions
	ICT/D	Future proofing: high-level digital specialist specific skills e.g. artificial intelligence, building information modelling, fintech, voice recognition security.	Drive further education institution core progression skills.
	ICT/D	Superfast Business Cymru: skills utilisation and company uptake; business case – engagement with skills/training delivery? Includes building information modelling.	Expand 'Sector Business Benefits' training support to include health education and care. Consider technology and online delivery to improve training and education access for all.
4: Increasing the number and range of apprenticeships	AMM	Instil into management and leadership programmes ambition, innovation, efficiency (improved productivity), vision, succession planning	Develop potential young leaders using new apprenticeship programmes
	AMM	Develop degree apprenticeships with joint working between employers, higher education and work-based providers	Ensure the content of the degree apprenticeship is of the correct standard that gives parity to other degree programmes and is delivered to reflect the employed status of the apprentice and the practical competences that can be achieved
	AMM	Higher and degree apprenticeships to raise the skill level of the work force from level 3 to Level 4 and from Level 4 to Level 6	Work based providers need to be aware of new frameworks such as Master Craftsperson
	AMM	Review apprenticeships to include improved process practice	Include tailored programmes that are specific to technologies with in apprenticeship programmes
	CON	Deliver apprenticeship framework for steel fixing, concrete and form work at levels 2 and 3	Identify provider and deliver apprenticeships where framework already exists such as steel erection and form work.
	CON	Create a pathway of provision to include HNC/Higher Apprenticeship to degree in Building Services Engineering	HEI to reinstate provision
	CON	Support Higher Apprenticeship developments and pilot degree apprenticeships	Welsh Government to fund construction related Higher and Degree Apprenticeships
	FPS	Digital analytics, documentation and security – legal, financial and business. Work with locally-based and headquartered companies	Further and higher education, work-based learning and CILEx to come together to identify opportunities to support pathways in the private sector and for UK Government in Wales. The Welsh Government department of Skills, Higher Education and Lifelong Learning (SHELL) and the Higher Education Funding Council for Wales (HEFCW) are to consider this area for higher and degree apprenticeships.
	FPS	Training current and future leaders: digital and ICT skills	Online training/e-learning/other digital solutions. Higher apprenticeships (and to some extent entry-level apprenticeships).

Regional Priority	Sector Group	Recommendations	Actions
	FPS	Growing the employment pool - careers engagement between companies and delivery (schools and higher education) and peer-to-peer to identify and develop opportunities for school programmes with apprenticeship pathways at entry level for large companies, including online marketing price comparison sites and insurance companies - ensure these map to future progression.	Apprenticeships, higher apprenticeships and high-level degree programmes should map routes in and progression. Programmes of learning are required around digital documentation and security. Companies need to engage in long-term planning to train/future proof against redundancy of call centre staff (automation).
	HFE	To develop capacity in the WBL sector to deliver the new assessment and quality assurance Apprenticeships frameworks for health and social care, particularly at Level 5.	Proposal to be submitted to support the capacity development and building of the WBL workforce in delivering the new health and social care Apprenticeships
	HFE	Develop specific apprenticeships for the Ambulance Service for Level 3 and Level 4	Health sector to work with Wales Apprenticeship Advisory Board to commission the development of an Ambulance Apprenticeship Level 3 and Level 4
	HFE	Improve information around access to funding and support for human foundational economy employers and clarify areas that require employer investment.	Develop a brochure/marketing literature promoting Apprenticeships opportunities to the HFE sector

	HFE	To develop two Higher Level Apprenticeships for the health sector:
		    1. Healthcare Science
		    2. Healthcare Therapy
			Review the current Apprenticeships programmes in England to determine suitability for Wales and work with Wales Apprenticeship Advisory Board to commission programmes

	HFE	Ensure access to all-age Level 2 provision across health and social care in response to mandatory qualification and registration requirements, which in part drives demand.	Continue to support Apprenticeship funding for Health and Social Care Level 2 as a progression pathway to higher levels.
	HFE	Market and promote the value of apprenticeships to employers across the human foundational economy sector, particularly the health sector.	Increase the take up of Apprenticeships in the HFE sector, particularly Health and Social Care
	ICT/D	Definition of ICT essential skills: minimum requirement for up-skilling, cross-sector, whole workforce, with access to skills delivery including teacher training.	Challenge the ongoing review of the vocational ICT portfolio for further education, higher education and apprentices.
5: Improving industry engagement with education and marketing of career opportunities and pathways	AMM	To promote AMM and apprenticeship pathways to students parents and teachers	Ensure that careers information, advice and guidance is up to date with new technologies and reflects the exciting opportunities with in the sector
	AMM	To improve the brand of the sector to Young people, new recruits, Parents and teachers by showing the modern face of manufacturing, ensuring those with	Encourage employers to continue to hold careers events ensuring that parents teachers are involved alongside providers and careers Wales

Regional Priority	Sector Group	Recommendations	Actions
		interest in the sector are supported to meet their potential	
	AMM	To improve the brand of the sector to Young people, new recruits, Parents and teachers by showing the modern face of manufacturing, ensuring those with interest in the sector are supported to meet their potential	Ensure teachers are aware of the fantastic career opportunities that are available in the sector that include job opportunities by publishing career progression paths with case studies from the sector
	AMM	To improve the brand of the sector to Young people, new recruits, Parents and teachers by showing the modern face of manufacturing, ensuring those with interest in the sector are supported to meet their potential	Promote inward investment and infrastructure projects to young people to ensure that they and parents understand the exciting opportunities within the sector
	CON	Support the development and deployment of a CPD accredited programme	Professional bodies to work with further education and higher education to develop and accredit a programme of upskilling for lecturers
	CON	Industry and WJEC to adopt a co-ordinated approach to delivering C&BE challenges	Discuss with WJEC and schools how industry can support the adoption of C&BE Welsh Baccalaureate challenges
	FPS	Growing the employment pool - careers engagement between companies and delivery (schools and higher education) and peer-to-peer to identify and develop opportunities for school programmes with apprenticeship pathways at entry level for large companies, including online marketing price comparison sites and insurance companies - ensure these map to future progression.	Funders and curriculum design to emphasise sector footprint – mapping and next steps for work/study.
	HFE	Review and develop a plan for skills needs in response to the new professional standards and new curriculum for the education workforce.	Identify developments to date and impact of the new standards on the education workforce
	HFE	The human foundational economy cluster to engage with schools/careers work stream to develop and promote career pathways for school leavers into the human foundational economy.	Improve links with employers across all sectors to offer pathways into Health and Social Care and opportunities for 'second chance learners' (Skills for the Future Report)
	HFE	Targeted action to promote career pathways and attract potential recruits into health and social care including action to increase the diversity of the workforce.	Align promotion activity to Welsh Government's Train/Work/Live in Wales campaign.
	ICT/D	Schools, further education, higher education and work-based learning talent pipeline - improve take-up of	Early intervention to build on Digital Competence Framework (including primary school initiatives) and new science and technology Area of Learning and Experience (AoLE),

Regional Priority	Sector Group	Recommendations	Actions
		ICT/digital related courses in reversing decline with enhanced/flexible use of technology.	emphasising applied approach and positive role models in industry.
	ICT/D	Schools, further education, higher education and work-based learning talent pipeline - improve take-up of ICT/digital related courses in reversing decline with enhanced/flexible use of technology.	Identify core/baseline skills as for entry to digital jobs across a range of sectors. Key examples: degree apprenticeships (including shared models), work-based learning and massive open online courses (MOOCs).
	ICT/D	Training the trainer: keeping abreast of (broad) skills for all teachers and delivery: cross-curricular digital competency; subject specific computing.	Urgent need for (on-line) innovation in training/teaching/future potential for jobs/careers in the Cardiff Capital Region (including qualifications for teachers) through engagement with employers and digital specialists.
	ICT/D	Work with BCS, The Chartered Institute for IT, Computing at Schools and Technocamps.	Technocamps, continuing professional development programmes, Computing at School/BCS, The Chartered Institute for IT and Certificate in Computer Science Teaching accessible for all teachers to develop skills as a Computing teacher. Recognition of competence.
	ICT/D	Marketing – the pitch: ICT/digital technology and innovation strategy using employers, skills and education;	Sector focus on accessibility. A shared pan-sector strategy linking industry, higher education, further education, schools, Digital Tuesday, CoInnovate, Digital 2017, ESTNet, Open Innovation, Tramshed, gaming clubs, Technocamps, Computing at School, BCS, The Chartered Institute for IT, etc.
	ICT/D	Marketing – the pitch: aggregate / share / enhance	Strategy to change the wider public perception of digital/tech/computing careers/skills including an initiative to highlight and promote "10 Great Digital Roles" across all priority sectors in Wales?

Endnotes

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[1] http://sewso.repository.net/IAS/themes/dataabouttheregion/people/tabular?viewId=1546&geoId=1&subsetId=77

[2] http://sewso.repository.net/IAS/themes/lmi/labourmarketintelligence/economicperformance/tabular?viewId=1959&geoId=34&subsetId=125

[3] A detailed breakdown of employment for each Local Authority within the region by Industry is available at http://sewso.repository.net/IAS/themes/lmi/labourmarketintelligence/people%E2%80%93demographics,employment,unemploymentandeconomicinactivity/tabular?viewId=1970&geoId=1&subsetId=77

[4] Annual changes to GVA are small. We have chosen not to carry out a detailed analysis of productivity across the region by industry for this year's report. Data on GVA across the Cardiff Capital Region by NUTS3 region is available at http://sewso.repository.net/IAS/themes/lmi/labourmarketintelligence/economicperformance/tabular?viewId=1959&geoId=34&subsetId=125

[5] A full table showing gross value added for these sectors across the region is available in the appendix https://statswales.gov.wales/Catalogue/Business-Economy-and-Labour-Market/Regional-Accounts/Gross-Value-Added-GDP/gvainwales-by-industry

[6] http://www.cardiffcapitalregioncitydeal.wales/Cardiff_Capital_Region_City_Deal.pdf

[7] The majority of this data is available at the South East Wales Skills Observatory http://sewso.repository.net/IAS/themes/lmi

[8] Emsi 2018.1 data. All data sourced from Emsi UK Analyst

[9] Emsi set of data and tools using a mixture of government sources to produce estimates and projections relating to industrial sectors and occupations. It is widely used by both regional planners and curriculum planners. We are using Emsi to support our analysis and fill in gaps. At the same time, we are using this as an opportunity to check its accuracy and reliability against our existing data and knowledge.

[10] The Employer Skills Survey describe a skills gap as "where an employee is deemed by their employer to be not fully proficient, i.e. is not able to do their job to the required level." A skills shortage is described as "Vacancies which are proving difficult to fill due to the establishment not being able to find applicants with the appropriate skills, qualifications or experience." https://www.gov.uk/government/publications/ukces-employer-skills-survey-2015-uk-report

[11] The Production sector covers Food drink and tobacco; Mining and quarrying; Rest of manufacturing; Electricity and gas; Water and sewerage; Engineering.

[12] https://www.citb.co.uk/global/research/forecasting_wales_future_construction_skills_final_dec2017.pdf

[13] A recent consultation by the Office of National Statistics saw 78% of respondents state that SOC2010 classifications needed updating with a recurring them being that they "are no longer reflective of many roles in the IT/Tech, digital and creative sectors" https://www.ons.gov.uk/aboutus/whatwedo/statistics/consultationsandsurveys/allconsultationsandsurveys/consultationonrevisingthestandardoccupationalclassification2010soc2010

[14] Industries included in this industry, as per their SIC2010 codes are: 26.1 Manufacture of electronic components and boards, 26.2 Manufacture of computers and peripheral equipment, 26.3 Manufacture of communication equipment, 26.4 Manufacture of consumer electronics, 26.8 Manufacture of magnetic and optical media, 46.5 Wholesale of information and communication equipment, 58.2 Software publishing, 61.1 –61.9 Telecommunications, 62 Computer programming, consultancy and related activities, 63.1 – 63.9 Information service activities, 95.1 Repair of computers and communication equipment, 58.1 Publishing activities, 59.1 – 59.2 Motion picture, video and television programme production, sound recording and music publishing activities, 60.1 Radio broadcasting Department for Culture, Media and Sport, 60.2 Television programming and broadcasting activities https://backup.ons.gov.uk/wp-content/uploads/sites/3/2015/10/What-defines-the-Digital-Sector.pdf

This document is available in Welsh / Mae'r ddogfen hon ar gael yn Gymraeg